TBM Spoil Waste Categorisation Report

TBM Spoil Waste Cat Report No:	C02.0120220412104134_02	This report is attached as part of a WCR form referencing WGT-302-000-WKN-CJH-105-SWI-0001_01

1. Motherhub Summary

Source TBM/Bin at Pivot	1	Source Geological Domain	1
Approx. Source Tunnel Chainage From	160	Approx. Source Tunnel Chainage To	175
Approx. Rings From	68	Approx. Rings To	74
Foaming Agent	TamSoil 287AC	Water Source	Potable (City West Water)
For BSF Holding Bay No:	C02.01	Start of Filling From (Time / date)	16/03/2022
Tonnes Put in Holding Bay No:	8157.68	Finish of Filling (Time / Date)	28/03/2022
Classified Volume (LCM)	4000	Spoil Classification Decision	NPIW Containment
Sampling Ratio (samples per LCM)	1: 111.11	Approx. Bank Cubic Meters (BCM)	2868.17

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, is samples were collected at 8am, noon and 4 pm, the time window for the noon sample is between 10 am and 2 pm. That is this sample "belongs" to all truck loaded in this time window

Table 3.1 - Applicable Sample ID's

Table 3.1 - 1 Applicable Sample ID's

Applicable Spoil Sample ID's		
SX_IB_20220316_08_17_SS_Primary_ALS	SX_IB_20220317_00_11_SS_Primary_ALS	SX_IB_20220328_04_00_SS_Primary_EUF
SX_IB_20220316_08_20_SS_Duplicate_ALS	SX_IB_20220317_03_58_SS_Primary_EUF	SX_IB_20220328_04_11_SS_Primary_ALS
SX_IB_20220316_08_22_SS_Triplicate_EUF	SX_IB_20220317_04_08_SS_Primary_ALS	SX_IB_20220328_07_41_SS_Primary_ALS
SX_IB_20220316_08_36_SS_Primary_EUF	SX_IB_20220317_07_53_SS_Duplicate_ALS	SX_IB_20220328_07_45_SS_Duplicate_ALS
SX_IB_20220316_12_12_SS_Primary_EUF	SX_IB_20220317_07_53_SS_Primary_ALS	SX_IB_20220328_07_46_SS_Triplicate_EUF
SX_IB_20220316_12_25_SS_Primary_ALS	SX_IB_20220317_07_54_SS_Triplicate_EUF	SX_IB_20220328_08_06_SS_Primary_EUF
SX_IB_20220316_16_12_SS_Primary_EUF	SX_IB_20220317_08_03_SS_Primary_EUF	SX_IB_20220328_11_51_SS_Primary_EUF
SX_IB_20220316_16_15_SS_Duplicate_EUF	SX_IB_20220327_19_56_SS_Primary_ALS	SX_IB_20220328_11_59_SS_Primary_ALS
SX_IB_20220316_16_16_SS_Triplicate_ALS	SX_IB_20220327_20_01_SS_Primary_EUF	SX_IB_20220328_15_44_SS_Primary_EUF
SX_IB_20220316_16_22_SS_Primary_ALS	SX_IB_20220327_23_57_SS_Primary_ALS	SX_IB_20220328_15_47_SS_Duplicate_EUF
SX_IB_20220316_19_52_SS_Primary_ALS	SX_IB_20220328_00_07_SS_Primary_EUF	SX_IB_20220328_15_48_SS_Triplicate_ALS
SX_IB_20220316_19_56_SS_Primary_EUF	SX_IB_20220317_00_02_SS_Primary_EUF	SX_IB_20220328_15_50_SS_Primary_ALS
Total Sample Numbers	36	Ratio Acceptable
Primary Sample Numbers	26	Yes
Classified Volume (LCM)	4000 m^3	
Volume: Sample Number Ratio (Samples per LCM)	1: 111.11	

3.2 Data Quality Compliance with SAQP

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

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

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

3.3 Selection of the Spoil Sample Testing Regime

Table 3.3 - 1 Selection of the Spoil Sample Testing Regime

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

3.4 Spoil Compliance with SAQP Criteria for Containment Cell

Table 3.4 - 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 TC0 ?	**No**
D. Is testing pursuant to IWRG 655.1 required for spoil in this Holding Bay, because the spoil comes from Exception Zone 3 (See SAQP Section 5.4) ?	**No**
E. Has spoil testing for IWRG 621.1 Parameters been triggered by results of spoil water tests for previous Holding Bays of spoil from this geological domain?	**No**
Outcome from IWRG 621.1 testing (if needed)	
F. If Yes to one or more Questions A, B, C or E, (and not NOC< applicable background concentrations) then do test results for IWRG 621.1 (see Table 3.4-2) 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**
If Yes to either or both of Question E or F, then Spoil is Not Suitable for Containment; Go to Section 3.5. Otherwise, it is Suitable for Containment	
Notes: 1. Criteria taken from EPA Grandfathered Classifications for TBM Spoil (2020/476 (SO 9042848)), and from the EPA approved EMP for Hi Quality's Containment Cell	

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

IWRG 621.1 Exceedance Test Results												
Chemical	**Unit**	**LOR**	**No. of 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	36*	26	1: 111.11	36	15	23.14	24.86	38	20	NPIW-Containment - considered to be naturally occurring chemical, see comment 1 (Section 4)
Copper	mg/kg	5	36*	26	1: 111.11	36	43	62.75	66.05	110	100	NPIW-Containment
Nickel	mg/kg	5	36*	26	1: 111.11	36	114	161.6	169	230	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:	C02.0120220412104134_02	This report is attached as part of a WCR form referencing WGT-302-000-WKN-CJH-105-SWI-0001_01

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

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

PFAS Test Results											
Chemical	Unit	LOR	No. of samples	No. of primary samples	No > LOR	Min	Mean	95% UCL on Mean	Max	Upper Limiting Criteria for NPIW Containment	Spoil Category for PFAS
Total PFAS Concentrations											
Total PFOS	ug/kg	5	36*	26	0	N/A	N/A	N/A	<5	N/A	NPIW-Containment
Total PFOA	ug/kg	5	36*	26	0	N/A	N/A	N/A	<5	N/A	NPIW-Containment
Total PFHxS	ug/kg	5	36*	26	0	N/A	N/A	N/A	<5	N/A	NPIW-Containment
ASLP (pH= 5) PFAS Concentrations											
PFOA	ug/L	0.01	36*	26	0	N/A	N/A	N/A	<0.01	56	NPIW-Containment
PFOS+PFHxS	ug/L	0.01	36*	26	0	N/A	N/A	N/A	<0.01	7	NPIW-Containment
ASLP (pH= 7) PFAS Concentrations											
PFOA	ug/L	0.01	36*	26	0	N/A	N/A	N/A	<0.01	56	NPIW-Containment
PFOS+PFHxS	ug/L	0.01	36*	26	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)

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:	C02.0120220412104134_02	This report is attached as part of a WCR form referencing WGT-302-000-WKN-CJH-105-SWI-0001_01

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:	C02.0120220412104134_02	This report is attached as part of a WCR form referencing WGT-302-000-WKN-CJH-105-SWI-0001_01

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:	C02.0120220412104134_02	This report is attached as part of a WCR form referencing WGT-302-000-WKN-CJH-105-SWI-0001_01

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:	C02.0120220412104134_02	This report is attached as part of a WCR form referencing WGT-302-000-WKN-CJH-105-SWI-0001_01

4. Comments and Limitations

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

	Golder therefore concluded that the nickel is likely associated with geochemical enrichment rather than added contamination. The Golder study found that based on review of the depth, site history and the geochemical association of elements, the reported elevated concentrations of arsenic and nickel are considered representative of geogenic conditions and are not expected to be associated with contamination.
2.	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. Spoil from a "Zone of Exception" applies a sampling ratio of only Primary Samples to LCM to categorise spoil as per the SAQP revision 5. Sample to categorised volume ratio in zones of exception is to be as per IWRG702 with 1 primary spoil sample categorising a maximum 250 m3 of spoil.
4.	Loose Cubic metres (LCM) to mass (tonnes) conversion ratio used is 1 LCM:1.6 tonnes
5.	This report has been prepared in accordance with industry recognised standards and procedures current at the time of the work. The report presents the results of the assessment based on the quoted scope of works (unless otherwise agreed in writing) for the specific purposes of the engagement by the Client. No warranties expressed or implied, are offered to any third parties and no liability will be accepted for use of this report by third parties.
6.	All information provided by third parties has been assumed to be correct and complete. Agon does not assume any liability for misrepresentation of information by third parties or for matters not visible, accessible or present on the subject site.
7.	Opinions and judgements expressed herein are based on Agon's understanding of current regulatory standards and should not be construed as legal opinions. No responsibility is accepted for use of any part of this report in any other context or for any other purpose or by third parties other than those listed above.
8.	This report should be read in full.

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:	**C02.0120220412104134_02**	**This report is attached as part of a WCR form referencing WGT-302-000-WKN-CJH-105-SWI-0001_01**

ATTACHMENT A: TABULATED RESULTS

									Metals							
									Arsenic	Cadmium	Copper	Chromium (III+VI)	Chromium (hexavalent)	Lead	Mercury	Molybdenum
									mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL									2	0.4	5	2	0.5	5	0.1	2
EPA PFAS Classification - Tunnel Zone - 2019/404 (SO 9038429) Threshold																
EPA PFAS Classification - Tunnel Zone - 2019/405 (SO 9038560) Threshold																
EPA PFAS Classification - Tunnel Zone - 2019/406 (SO 9038561) Threshold																
EPA PFAS Classification - Tunnel Zone - No option for disposal threshold																
EPA Victoria IWRG621 Category B Leached Upper Limits																
EPA Victoria IWRG621 Category B Upper Limits									2,000	400	20,000		2,000	6,000	300	4,000
EPA Victoria IWRG621 Category C Leached Upper Limits																
EPA Victoria IWRG621 Category C Upper Limts									500	100	5,000		500	1,500	75	1,000
EPA Victoria IWRG621 Fill Upper Limits									20	3	100		1	300	1	40
Location Code	**Field ID**	**Sample Code**	**Date**	**Lab Report Number**	**Lab Name**	**Sample Type**	**Parent Sample**									
C02.01	SX_IB_20220316_08_17_SS_Primary_ALS	EM2204736001	16/03/2022	EM2204736	ALSE-Melbourne	Normal			18	<1	47	82	<1.0	<5	<0.1	<5
C02.01	SX_IB_20220316_08_17_SS_Primary_ALS	EM2204736009	16/03/2022	EM2204736	ALSE-Melbourne	Normal										
C02.01	SX_IB_20220316_08_20_SS_Duplicate_ALS	EM2204736002	16/03/2022	EM2204736	ALSE-Melbourne	Field_D	EM2204736001		17	<1	63	89	<1.0	<5	<0.1	<5
C02.01	SX_IB_20220316_08_20_SS_Duplicate_ALS	EM2204736010	16/03/2022	EM2204736	ALSE-Melbourne	Field_D	EM2204736009									
C02.01	SX_IB_20220316_08_22_SS_Triplicate_EUF	M22-Ma34700	16/03/2022	872036	MGT	Interlab_D	EM2204736001		22	<0.4	72	120	<1	<5	<0.1	<5
C02.01	SX_IB_20220316_08_22_SS_Triplicate_EUF	M22-Ma34708	16/03/2022	872036	MGT	Interlab_D	EM2204736001									
C02.01	SX_IB_20220316_08_22_SS_Triplicate_EUF	M22-Ma34716	16/03/2022	872036	MGT	Interlab_D	EM2204736009									
C02.01	SX_IB_20220316_08_36_SS_Primary_EUF	M22-Ma34701	16/03/2022	872036	MGT	Normal			35	<0.4	71	130	<1	<5	<0.1	<5
C02.01	SX_IB_20220316_08_36_SS_Primary_EUF	M22-Ma34709	16/03/2022	872036	MGT	Normal										
C02.01	SX_IB_20220316_08_36_SS_Primary_EUF	M22-Ma34717	16/03/2022	872036	MGT	Normal										
C02.01	SX_IB_20220316_12_12_SS_Primary_EUF	M22-Ma34702	16/03/2022	872036	MGT	Normal			18	<0.4	58	120	<1	<5	<0.1	<5
C02.01	SX_IB_20220316_12_12_SS_Primary_EUF	M22-Ma34710	16/03/2022	872036	MGT	Normal										
C02.01	SX_IB_20220316_12_12_SS_Primary_EUF	M22-Ma34718	16/03/2022	872036	MGT	Normal										
C02.01	SX_IB_20220316_12_25_SS_Primary_ALS	EM2204736003	16/03/2022	EM2204736	ALSE-Melbourne	Normal			17	<1	57	96	<1.0	<5	<0.1	<5
C02.01	SX_IB_20220316_12_25_SS_Primary_ALS	EM2204736011	16/03/2022	EM2204736	ALSE-Melbourne	Normal										
C02.01	SX_IB_20220316_16_12_SS_Primary_EUF	M22-Ma34703	16/03/2022	872036	MGT	Normal			21	<0.4	60	120	<1	<5	<0.1	<5
C02.01	SX_IB_20220316_16_12_SS_Primary_EUF	M22-Ma34711	16/03/2022	872036	MGT	Normal										
C02.01	SX_IB_20220316_16_12_SS_Primary_EUF	M22-Ma34719	16/03/2022	872036	MGT	Normal										
C02.01	SX_IB_20220316_16_15_SS_Duplicate_EUF	M22-Ma34704	16/03/2022	872036	MGT	Field_D	M22-Ma34703		38	<0.4	110	130	<1	<5	<0.1	<5
C02.01	SX_IB_20220316_16_15_SS_Duplicate_EUF	M22-Ma34712	16/03/2022	872036	MGT	Field_D	M22-Ma34711									
C02.01	SX_IB_20220316_16_15_SS_Duplicate_EUF	M22-Ma34720	16/03/2022	872036	MGT	Field_D	M22-Ma34719									
C02.01	SX_IB_20220316_16_16_SS_Triplicate_ALS	EM2204736004	16/03/2022	EM2204736	ALSE-Melbourne	Interlab_D	M22-Ma34703		18	<1	55	88	<1.0	<5	<0.1	<5
C02.01	SX_IB_20220316_16_16_SS_Triplicate_ALS	EM2204736012	16/03/2022	EM2204736	ALSE-Melbourne	Interlab_D	M22-Ma34719									
C02.01	SX_IB_20220316_16_22_SS_Primary_ALS	EM2204736005	16/03/2022	EM2204736	ALSE-Melbourne	Normal			15	<1	46	64	<1.0	<5	<0.1	<5
C02.01	SX_IB_20220316_16_22_SS_Primary_ALS	EM2204736013	16/03/2022	EM2204736	ALSE-Melbourne	Normal										
C02.01	SX_IB_20220316_19_52_SS_Primary_ALS	EM2204736006	16/03/2022	EM2204736	ALSE-Melbourne	Normal			17	<1	52	94	<1.0	<5	<0.1	<5
C02.01	SX_IB_20220316_19_52_SS_Primary_ALS	EM2204736014	16/03/2022	EM2204736	ALSE-Melbourne	Normal										
C02.01	SX_IB_20220316_19_56_SS_Primary_EUF	M22-Ma34705	16/03/2022	872036	MGT	Normal			22	<0.4	67	130	<1	<5	<0.1	<5
C02.01	SX_IB_20220316_19_56_SS_Primary_EUF	M22-Ma34713	16/03/2022	872036	MGT	Normal										
C02.01	SX_IB_20220316_19_56_SS_Primary_EUF	M22-Ma34721	16/03/2022	872036	MGT	Normal										
C02.01	SX_IB_20220317_00_02_SS_Primary_EUF	M22-Ma34706	16/03/2022	872036	MGT	Normal			30	<0.4	69	140	<1	<5	<0.1	<5
C02.01	SX_IB_20220317_00_02_SS_Primary_EUF	M22-Ma34714	16/03/2022	872036	MGT	Normal										
C02.01	SX_IB_20220317_00_02_SS_Primary_EUF	M22-Ma34722	16/03/2022	872036	MGT	Normal										
C02.01	SX_IB_20220317_00_11_SS_Primary_ALS	EM2204736007	17/03/2022	EM2204736	ALSE-Melbourne	Normal			21	<1	66	96	<1.0	<5	<0.1	<5
C02.01	SX_IB_20220317_00_11_SS_Primary_ALS	EM2204736015	17/03/2022	EM2204736	ALSE-Melbourne	Normal										
C02.01	SX_IB_20220317_03_58_SS_Primary_EUF	M22-Ma34707	16/03/2022	872036	MGT	Normal			26	<0.4	79	150	<1	<5	<0.1	<5
C02.01	SX_IB_20220317_03_58_SS_Primary_EUF	M22-Ma34715	16/03/2022	872036	MGT	Normal										
C02.01	SX_IB_20220317_03_58_SS_Primary_EUF	M22-Ma34723	16/03/2022	872036	MGT	Normal										
C02.01	SX_IB_20220317_04_08_SS_Primary_ALS	EM2204736008	17/03/2022	EM2204736	ALSE-Melbourne	Normal			21	<1	56	83	<1.0	<5	<0.1	<5
C02.01	SX_IB_20220317_04_08_SS_Primary_ALS	EM2204736016	17/03/2022	EM2204736	ALSE-Melbourne	Normal										
C02.01	SX_IB_20220317_07_53_SS_Duplicate_ALS	EM2204843002	17/03/2022	EM2204843	ALSE-Melbourne	Field_D	EM2204843001		17	<1	43	81	<1.0	<5	<0.1	<5
C02.01	SX_IB_20220317_07_53_SS_Duplicate_ALS	EM2204843012	17/03/2022	EM2204843	ALSE-Melbourne	Field_D	EM2204843011									
C02.01	SX_IB_20220317_07_53_SS_Primary_ALS	EM2204843001	17/03/2022	EM2204843	ALSE-Melbourne	Normal			18	<1	48	83	<1.0	<5	<0.1	<5
C02.01	SX_IB_20220317_07_53_SS_Primary_ALS	EM2204843011	17/03/2022	EM2204843	ALSE-Melbourne	Normal										
C02.01	SX_IB_20220317_07_54_SS_Triplicate_EUF	M22-Ma36468	17/03/2022	872310	MGT	Interlab_D	EM2204843001		28	<0.4	73	110	<1	5.0	<0.1	<5
C02.01	SX_IB_20220317_07_54_SS_Triplicate_EUF	M22-Ma36478	17/03/2022	872310	MGT	Interlab_D	EM2204843001									
C02.01	SX_IB_20220317_07_54_SS_Triplicate_EUF	M22-Ma36486	17/03/2022	872310	MGT	Interlab_D	EM2204843011									
C02.01	SX_IB_20220317_08_03_SS_Primary_EUF	M22-Ma36469	17/03/2022	872310	MGT	Normal			25	<0.4	75	130	<1	5.5	<0.1	<5
C02.01	SX_IB_20220317_08_03_SS_Primary_EUF	M22-Ma36479	17/03/2022	872310	MGT	Normal										
C02.01	SX_IB_20220317_08_03_SS_Primary_EUF	M22-Ma36487	17/03/2022	872310	MGT	Normal										
C02.01	SX_IB_20220327_19_56_SS_Primary_ALS	EM2205473009	27/03/2022	EM2205473	ALSE-Melbourne	Normal			21	<1	59	110	<1.0	<5	<0.1	<5
C02.01	SX_IB_20220327_19_56_SS_Primary_ALS	EM2205473018	27/03/2022	EM2205473	ALSE-Melbourne	Normal										
C02.01	SX_IB_20220327_20_01_SS_Primary_EUF	M22-Ma57514	27/03/2022	874920	MGT	Normal			35	<0.4	59	110	<1	<5	<0.1	<5

								Metals							
								Arsenic	Cadmium	Copper	Chromium (III+VI)	Chromium (hexavalent)	Lead	Mercury	Molybdenum
								mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
C02.01	SX_IB_20220327_20_01_SS_Primary_EUF	M22-Ma57523	27/03/2022	874920	MGT	Normal									
C02.01	SX_IB_20220327_20_01_SS_Primary_EUF	M22-Ma57532	27/03/2022	874920	MGT	Normal									
C02.01	SX_IB_20220327_23_57_SS_Primary_ALS	EM2205468001	27/03/2022	EM2205468	ALSE-Melbourne	Normal		20	<1	54	84	<0.5	<5	<0.1	<2
C02.01	SX_IB_20220327_23_57_SS_Primary_ALS	EM2205468003	27/03/2022	EM2205468	ALSE-Melbourne	Normal									
C02.01	SX_IB_20220328_00_07_SS_Primary_EUF	M22-Ma57495	28/03/2022	874916	MGT	Normal		33	<0.4	66	130	<1	6.5	<0.1	<5
C02.01	SX_IB_20220328_00_07_SS_Primary_EUF	M22-Ma57497	28/03/2022	874916	MGT	Normal									
C02.01	SX_IB_20220328_00_07_SS_Primary_EUF	M22-Ma57499	28/03/2022	874916	MGT	Normal									
C02.01	SX_IB_20220328_04_00_SS_Primary_EUF	M22-Ma57496	28/03/2022	874916	MGT	Normal		20	<0.4	60	110	<1	<5	<0.1	<5
C02.01	SX_IB_20220328_04_00_SS_Primary_EUF	M22-Ma57498	28/03/2022	874916	MGT	Normal									
C02.01	SX_IB_20220328_04_00_SS_Primary_EUF	M22-Ma57500	28/03/2022	874916	MGT	Normal									
C02.01	SX_IB_20220328_04_11_SS_Primary_ALS	EM2205468002	28/03/2022	EM2205468	ALSE-Melbourne	Normal		28	<1	54	98	<0.5	<5	<0.1	<2
C02.01	SX_IB_20220328_04_11_SS_Primary_ALS	EM2205468004	28/03/2022	EM2205468	ALSE-Melbourne	Normal									
C02.01	SX_IB_20220328_07_41_SS_Primary_ALS	EM2205583001	28/03/2022	EM2205583	ALSE-Melbourne	Normal		17	1	63	96	<1.0	<5	<0.1	<5
C02.01	SX_IB_20220328_07_41_SS_Primary_ALS	EM2205583009	28/03/2022	EM2205583	ALSE-Melbourne	Normal									
C02.01	SX_IB_20220328_07_45_SS_Duplicate_ALS	EM2205583002	28/03/2022	EM2205583	ALSE-Melbourne	Field_D	EM2205583001	18	1	64	106	<1.0	<5	<0.1	<5
C02.01	SX_IB_20220328_07_45_SS_Duplicate_ALS	EM2205583010	28/03/2022	EM2205583	ALSE-Melbourne	Field_D	EM2205583009								
C02.01	SX_IB_20220328_07_46_SS_Triplicate_EUF	M22-Ma60485	28/03/2022	875283	MGT	Interlab_D	EM2205583001	22	<0.4	61	120	<1	<5	<0.1	<5
C02.01	SX_IB_20220328_07_46_SS_Triplicate_EUF	M22-Ma60493	28/03/2022	875283	MGT	Interlab_D	EM2205583001								
C02.01	SX_IB_20220328_07_46_SS_Triplicate_EUF	M22-Ma60501	28/03/2022	875283	MGT	Interlab_D	EM2205583009								
C02.01	SX_IB_20220328_08_06_SS_Primary_EUF	M22-Ma60484	28/03/2022	875283	MGT	Normal		24	<0.4	67	120	<1	<5	<0.1	<5
C02.01	SX_IB_20220328_08_06_SS_Primary_EUF	M22-Ma60492	28/03/2022	875283	MGT	Normal									
C02.01	SX_IB_20220328_08_06_SS_Primary_EUF	M22-Ma60500	28/03/2022	875283	MGT	Normal									
C02.01	SX_IB_20220328_11_51_SS_Primary_EUF	M22-Ma60486	28/03/2022	875283	MGT	Normal		31	<0.4	69	130	<1	5.5	<0.1	<5
C02.01	SX_IB_20220328_11_51_SS_Primary_EUF	M22-Ma60494	28/03/2022	875283	MGT	Normal									
C02.01	SX_IB_20220328_11_51_SS_Primary_EUF	M22-Ma60502	28/03/2022	875283	MGT	Normal									
C02.01	SX_IB_20220328_11_59_SS_Primary_ALS	EM2205583003	28/03/2022	EM2205583	ALSE-Melbourne	Normal		20	<1	59	93	<1.0	<5	<0.1	<5
C02.01	SX_IB_20220328_11_59_SS_Primary_ALS	EM2205583011	28/03/2022	EM2205583	ALSE-Melbourne	Normal									
C02.01	SX_IB_20220328_15_44_SS_Primary_EUF	M22-Ma60487	28/03/2022	875283	MGT	Normal		33	<0.4	73	130	<1	<5	<0.1	<5
C02.01	SX_IB_20220328_15_44_SS_Primary_EUF	M22-Ma60495	28/03/2022	875283	MGT	Normal									
C02.01	SX_IB_20220328_15_44_SS_Primary_EUF	M22-Ma60503	28/03/2022	875283	MGT	Normal									
C02.01	SX_IB_20220328_15_47_SS_Duplicate_EUF	M22-Ma60488	28/03/2022	875283	MGT	Field_D	M22-Ma60487	20	<0.4	62	120	<1	<5	<0.1	<5
C02.01	SX_IB_20220328_15_47_SS_Duplicate_EUF	M22-Ma60496	28/03/2022	875283	MGT	Field_D	M22-Ma60495								
C02.01	SX_IB_20220328_15_47_SS_Duplicate_EUF	M22-Ma60504	28/03/2022	875283	MGT	Field_D	M22-Ma60503								
C02.01	SX_IB_20220328_15_48_SS_Triplicate_ALS	EM2205583004	28/03/2022	EM2205583	ALSE-Melbourne	Interlab_D	M22-Ma60487	23	<1	57	102	<1.0	<5	<0.1	<5
C02.01	SX_IB_20220328_15_48_SS_Triplicate_ALS	EM2205583012	28/03/2022	EM2205583	ALSE-Melbourne	Interlab_D	M22-Ma60503								
C02.01	SX_IB_20220328_15_50_SS_Primary_ALS	EM2205583005	28/03/2022	EM2205583	ALSE-Melbourne	Normal		24	<1	65	102	<1.0	<5	<0.1	<5
C02.01	SX_IB_20220328_15_50_SS_Primary_ALS	EM2205583013	28/03/2022	EM2205583	ALSE-Melbourne	Normal									

Statistics

Number of Results	36	36	36	36	36	36	36	36
Number of Detects	36	2	36	36	0	4	0	0
Minimum Concentration	15	<0.4	43	64	<0.5	5	<0.1	<2
Minimum Detect	15	1	43	64	ND	5	ND	ND
Maximum Concentration	38	1	110	150	<1	6.5	<0.1	<5
Maximum Detect	38	1	110	150	ND	6.5	ND	ND
Average Concentration *	23	0.38	63	108	0.49	2.8	0.05	2.4
Median Concentration *	21	0.35	61.5	110	0.5	2.5	0.05	2.5
Standard Deviation *	6.1	0.21	12	20	0.058	1	0	0.35
95% UCL (Student's-t) *	24.86	0.438	66.05	113.9	0.502	3.132	0.05	2.515
% of Detects	100	6	100	100	0	11	0	0
% of Non-Detects	0	94	0	0	100	89	100	100

* A Non Detect Multiplier of 0.5 has been applied.

Environmental Standards

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

							PAH															
		Nickel	Selenium	Silver	Tin	Zinc	PAHs (Vic EPA List)	Benzo(b+j+k)fluoranthene	Acenaphthene	Acenaphthylene	Anthracene	Benz(a)anthracene	Benzo(a)pyrene TEQ calc (zero)	Benzo(a)pyrene TEQ (LOR)	Benzo(a)pyrene TEQ calc (Half)	Benzo(a) pyrene	Benzo(b+j)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Chrysene	Dibenz(a,h)anthracene	Fluoranthene
		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	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	2	5	5	0.5	1	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
EPA PFAS Classification - Tunnel Zone - 2019/404 (SO 9038429) Threshold																						
EPA PFAS Classification - Tunnel Zone - 2019/405 (SO 9038560) Threshold																						
EPA PFAS Classification - Tunnel Zone - 2019/406 (SO 9038561) Threshold																						
EPA PFAS Classification - Tunnel Zone - No option for disposal threshold																						
EPA Victoria IWRG621 Category B Leached Upper Limits																						
EPA Victoria IWRG621 Category B Upper Limits		12,000	200	720		140,000	400									20						
EPA Victoria IWRG621 Category C Leached Upper Limits																						
EPA Victoria IWRG621 Category C Upper Limts		3,000	50	180	500	35,000	100									5						
EPA Victoria IWRG621 Fill Upper Limits		60	10	10	50	200	20									1						
Location Code	**Field ID**																					
C02.01	SX_IB_20220316_08_17_SS_Primary_ALS	117	<5	<2	<10	75	<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
C02.01	SX_IB_20220316_08_17_SS_Primary_ALS																					
C02.01	SX_IB_20220316_08_20_SS_Duplicate_ALS	129	<5	<2	<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
C02.01	SX_IB_20220316_08_20_SS_Duplicate_ALS																					
C02.01	SX_IB_20220316_08_22_SS_Triplicate_EUF	180	<2	<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
C02.01	SX_IB_20220316_08_22_SS_Triplicate_EUF																					
C02.01	SX_IB_20220316_08_22_SS_Triplicate_EUF																					
C02.01	SX_IB_20220316_08_36_SS_Primary_EUF	180	<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
C02.01	SX_IB_20220316_08_36_SS_Primary_EUF																					
C02.01	SX_IB_20220316_08_36_SS_Primary_EUF																					
C02.01	SX_IB_20220316_12_12_SS_Primary_EUF	160	<2	<2	<10	95			<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
C02.01	SX_IB_20220316_12_12_SS_Primary_EUF																					
C02.01	SX_IB_20220316_12_12_SS_Primary_EUF																					
C02.01	SX_IB_20220316_12_25_SS_Primary_ALS	140	<5	<2	<10	91	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	1.2	0.6	<0.5		<0.5		<0.5	<0.5	<0.5
C02.01	SX_IB_20220316_12_25_SS_Primary_ALS																					
C02.01	SX_IB_20220316_16_12_SS_Primary_EUF	170	<2	<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
C02.01	SX_IB_20220316_16_12_SS_Primary_EUF																					
C02.01	SX_IB_20220316_16_12_SS_Primary_EUF																					
C02.01	SX_IB_20220316_16_15_SS_Duplicate_EUF	230	<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
C02.01	SX_IB_20220316_16_15_SS_Duplicate_EUF																					
C02.01	SX_IB_20220316_16_15_SS_Duplicate_EUF																					
C02.01	SX_IB_20220316_16_16_SS_Triplicate_ALS	143	<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
C02.01	SX_IB_20220316_16_16_SS_Triplicate_ALS																					
C02.01	SX_IB_20220316_16_22_SS_Primary_ALS	114	<5	<2	<10	68	<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
C02.01	SX_IB_20220316_16_22_SS_Primary_ALS																					
C02.01	SX_IB_20220316_19_52_SS_Primary_ALS	137	<5	<2	<10	83	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	1.2	0.6	<0.5		<0.5		<0.5	<0.5	<0.5
C02.01	SX_IB_20220316_19_52_SS_Primary_ALS																					
C02.01	SX_IB_20220316_19_56_SS_Primary_EUF	170	<2	<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
C02.01	SX_IB_20220316_19_56_SS_Primary_EUF																					
C02.01	SX_IB_20220316_19_56_SS_Primary_EUF																					
C02.01	SX_IB_20220317_00_02_SS_Primary_EUF	180	<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
C02.01	SX_IB_20220317_00_02_SS_Primary_EUF																					
C02.01	SX_IB_20220317_00_02_SS_Primary_EUF																					
C02.01	SX_IB_20220317_00_11_SS_Primary_ALS	181	<5	<2	<10	116	<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
C02.01	SX_IB_20220317_00_11_SS_Primary_ALS																					
C02.01	SX_IB_20220317_03_58_SS_Primary_EUF	210	<2	<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
C02.01	SX_IB_20220317_03_58_SS_Primary_EUF																					
C02.01	SX_IB_20220317_03_58_SS_Primary_EUF																					
C02.01	SX_IB_20220317_04_08_SS_Primary_ALS	137	<5	<2	<10	82	<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
C02.01	SX_IB_20220317_04_08_SS_Primary_ALS																					
C02.01	SX_IB_20220317_07_53_SS_Duplicate_ALS	118	<5	<2	<10	72	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	1.2	0.6	<0.5		<0.5		<0.5	<0.5	<0.5
C02.01	SX_IB_20220317_07_53_SS_Duplicate_ALS																					
C02.01	SX_IB_20220317_07_53_SS_Primary_ALS	132	<5	<2	<10	82	<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
C02.01	SX_IB_20220317_07_53_SS_Primary_ALS																					
C02.01	SX_IB_20220317_07_54_SS_Triplicate_EUF	180	<2	<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
C02.01	SX_IB_20220317_07_54_SS_Triplicate_EUF																					
C02.01	SX_IB_20220317_07_54_SS_Triplicate_EUF																					
C02.01	SX_IB_20220317_08_03_SS_Primary_EUF	200	<2	<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
C02.01	SX_IB_20220317_08_03_SS_Primary_EUF																					
C02.01	SX_IB_20220317_08_03_SS_Primary_EUF																					
C02.01	SX_IB_20220327_19_56_SS_Primary_ALS	152	<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
C02.01	SX_IB_20220327_19_56_SS_Primary_ALS																					
C02.01	SX_IB_20220327_20_01_SS_Primary_EUF	160	<2	<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

									PAH												
		Nickel	Selenium	Silver	Tin	Zinc	PAHs (Vic EPA List)	Benzo(b+j+k)fluoranthene	Acenaphthene	Acenaphthylene	Anthracene	Benz(a)anthracene	Benzo(a)pyrene TEQ calc (zero)	Benzo(a)pyrene TEQ (LOR)	Benzo(a)pyrene TEQ calc (Half)	Benzo(a) pyrene	Benzo(b+j)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Chrysene	Dibenz(a,h)anthracene	Fluoranthene
		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
C02.01	SX_IB_20220327_20_01_SS_Primary_EUF																					
C02.01	SX_IB_20220327_20_01_SS_Primary_EUF																					
C02.01	SX_IB_20220327_23_57_SS_Primary_ALS	129	<5	<2	<5	76	<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
C02.01	SX_IB_20220327_23_57_SS_Primary_ALS																					
C02.01	SX_IB_20220328_00_07_SS_Primary_EUF	170	<2	<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
C02.01	SX_IB_20220328_00_07_SS_Primary_EUF																					
C02.01	SX_IB_20220328_00_07_SS_Primary_EUF																					
C02.01	SX_IB_20220328_04_00_SS_Primary_EUF	160	<2	<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
C02.01	SX_IB_20220328_04_00_SS_Primary_EUF																					
C02.01	SX_IB_20220328_04_00_SS_Primary_EUF																					
C02.01	SX_IB_20220328_04_11_SS_Primary_ALS	140	<5	<2	<5	94	<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
C02.01	SX_IB_20220328_04_11_SS_Primary_ALS																					
C02.01	SX_IB_20220328_07_41_SS_Primary_ALS	174	<5	<2	<10	102	<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
C02.01	SX_IB_20220328_07_41_SS_Primary_ALS																					
C02.01	SX_IB_20220328_07_45_SS_Duplicate_ALS	169	<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
C02.01	SX_IB_20220328_07_45_SS_Duplicate_ALS																					
C02.01	SX_IB_20220328_07_46_SS_Triplicate_EUF	170	<2	<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
C02.01	SX_IB_20220328_07_46_SS_Triplicate_EUF																					
C02.01	SX_IB_20220328_07_46_SS_Triplicate_EUF																					
C02.01	SX_IB_20220328_08_06_SS_Primary_EUF	170	<2	<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
C02.01	SX_IB_20220328_08_06_SS_Primary_EUF																					
C02.01	SX_IB_20220328_08_06_SS_Primary_EUF																					
C02.01	SX_IB_20220328_11_51_SS_Primary_EUF	180	<2	<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
C02.01	SX_IB_20220328_11_51_SS_Primary_EUF																					
C02.01	SX_IB_20220328_11_51_SS_Primary_EUF																					
C02.01	SX_IB_20220328_11_59_SS_Primary_ALS	173	<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
C02.01	SX_IB_20220328_11_59_SS_Primary_ALS																					
C02.01	SX_IB_20220328_15_44_SS_Primary_EUF	190	<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
C02.01	SX_IB_20220328_15_44_SS_Primary_EUF																					
C02.01	SX_IB_20220328_15_44_SS_Primary_EUF																					
C02.01	SX_IB_20220328_15_47_SS_Duplicate_EUF	160	<2	<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
C02.01	SX_IB_20220328_15_47_SS_Duplicate_EUF																					
C02.01	SX_IB_20220328_15_47_SS_Duplicate_EUF																					
C02.01	SX_IB_20220328_15_48_SS_Triplicate_ALS	151	<5	<2	<10	93	<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
C02.01	SX_IB_20220328_15_48_SS_Triplicate_ALS																					
C02.01	SX_IB_20220328_15_50_SS_Primary_ALS	162	<5	<2	<10	93	<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
C02.01	SX_IB_20220328_15_50_SS_Primary_ALS																					

Statistics

Number of Results	36	36	36	36	36	18	18	36	36	36	36	36	36	36	36	18	36	18	36	36	36
Number of Detects	36	0	0	0	36	0	0	0	0	0	0	0	36	36	0	0	0	0	0	0	0
Minimum Concentration	114	<2	<2	<5	68	<0.5	<1	<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
Minimum Detect	114	ND	ND	ND	68	ND	ND	ND	ND	ND	ND	ND	1.2	0.6	ND	ND	ND	ND	ND	ND	ND
Maximum Concentration	230	<5	<2	<10	150	<0.5	<1	<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
Maximum Detect	230	ND	ND	ND	150	ND	ND	ND	ND	ND	ND	ND	1.2	0.6	ND	ND	ND	ND	ND	ND	ND
Average Concentration *	162	1.8	1	4.9	105	0.25	0.5	0.25	0.25	0.25	0.25	0.25	1.2	0.6	0.25	0.25	0.25	0.25	0.25	0.25	0.25
Median Concentration *	165.5	1.75	1	5	106	0.25	0.5	0.25	0.25	0.25	0.25	0.25	1.2	0.6	0.25	0.25	0.25	0.25	0.25	0.25	0.25
Standard Deviation *	26	0.76	0	0.58	21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95% UCL (Student's-t) *	169	1.964	1	5.025	111.3	0.25	0.5	0.25	0.25	0.25	0.25	0.25	1.2	0.6	0.25	0.25	0.25	0.25	0.25	0.25	0.25
% of Detects	100	0	0	0	100	0	0	0	0	0	0	0	100	100	0	0	0	0	0	0	0
% of Non-Detects	0	100	100	100	0	100	100	100	100	100	100	100	0	0	100	100	100	100	100	100	100

* A Non Detect Multiplier of 0.5 has been applied.

Environmental Standards

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

								BTEX						TRH								
		Fluorene	Indeno(1,2,3-cd)pyrene	Naphthalene	Phenanthrene	Pyrene	PAHs (Sum of total)	Benzene	Ethylbenzene	Toluene	Xylene (o)	Xylene (m & p)	Xylene Total	C6-C10	C6-C10 (F1 minus BTEX)	C10-C16	C10-C16 (F2 minus Naphthalene)	C16-C34	C34-C40	C10-C40 (Sum of total)	C6-C9	C10-C14
		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	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	0.1	0.1	0.1	0.1	0.2	0.3	10	10	50	50	100	100	50	10	20
EPA PFAS Classification - Tunnel Zone - 2019/404 (SO 9038429) Threshold																						
EPA PFAS Classification - Tunnel Zone - 2019/405 (SO 9038560) Threshold																						
EPA PFAS Classification - Tunnel Zone - 2019/406 (SO 9038561) Threshold																						
EPA PFAS Classification - Tunnel Zone - No option for disposal threshold																						
EPA Victoria IWRG621 Category B Leached Upper Limits																						
EPA Victoria IWRG621 Category B Upper Limits							400	16													2,600	
EPA Victoria IWRG621 Category C Leached Upper Limits																						
EPA Victoria IWRG621 Category C Upper Limts							100	4													650	
EPA Victoria IWRG621 Fill Upper Limits							20	1													100	
Location Code	**Field ID**																					
C02.01	SX_IB_20220316_08_17_SS_Primary_ALS	<0.5	<0.5	<0.5	<0.5	<0.5		<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<20	<20	<50	<50	<100	<100	<50	<20	<50
C02.01	SX_IB_20220316_08_17_SS_Primary_ALS																					
C02.01	SX_IB_20220316_08_20_SS_Duplicate_ALS	<0.5	<0.5	<0.5	<0.5	<0.5		<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<20	<20	<50	<50	<100	<100	<50	<20	<50
C02.01	SX_IB_20220316_08_20_SS_Duplicate_ALS																					
C02.01	SX_IB_20220316_08_22_SS_Triplicate_EUF	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.2	<0.3	<20	<20	<50	<50	<100	<100	<100	<20	<20
C02.01	SX_IB_20220316_08_22_SS_Triplicate_EUF																					
C02.01	SX_IB_20220316_08_22_SS_Triplicate_EUF																					
C02.01	SX_IB_20220316_08_36_SS_Primary_EUF	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.2	<0.3	<20	<20	<50	<50	<100	<100	<100	<20	<20
C02.01	SX_IB_20220316_08_36_SS_Primary_EUF																					
C02.01	SX_IB_20220316_08_36_SS_Primary_EUF																					
C02.01	SX_IB_20220316_12_12_SS_Primary_EUF	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.2	<0.3	<20	<20	<50	<50	<100	<100	<100	<20	<20
C02.01	SX_IB_20220316_12_12_SS_Primary_EUF																					
C02.01	SX_IB_20220316_12_12_SS_Primary_EUF																					
C02.01	SX_IB_20220316_12_25_SS_Primary_ALS	<0.5	<0.5	<0.5	<0.5	<0.5		<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<20	<20	<50	<50	<100	<100	<50	<20	<50
C02.01	SX_IB_20220316_12_25_SS_Primary_ALS																					
C02.01	SX_IB_20220316_16_12_SS_Primary_EUF	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.2	<0.3	<20	<20	<50	<50	<100	<100	<100	<20	<20
C02.01	SX_IB_20220316_12_25_SS_Primary_ALS																					
C02.01	SX_IB_20220316_16_12_SS_Primary_EUF	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.2	<0.3	<20	<20	<50	<50	<100	<100	<100	<20	<20
C02.01	SX_IB_20220316_16_12_SS_Primary_EUF																					
C02.01	SX_IB_20220316_16_12_SS_Primary_EUF																					
C02.01	SX_IB_20220316_16_15_SS_Duplicate_EUF	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.2	<0.3	<20	<20	53	53	<100	<100	<100	<20	58
C02.01	SX_IB_20220316_16_15_SS_Duplicate_EUF																					
C02.01	SX_IB_20220316_16_15_SS_Duplicate_EUF																					
C02.01	SX_IB_20220316_16_16_SS_Triplicate_ALS	<0.5	<0.5	<0.5	<0.5	<0.5		<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<20	<20	<50	<50	<100	<100	<50	<20	<50
C02.01	SX_IB_20220316_16_16_SS_Triplicate_ALS																					
C02.01	SX_IB_20220316_16_22_SS_Primary_ALS	<0.5	<0.5	<0.5	<0.5	<0.5		<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<20	<20	<50	<50	<100	<100	<50	<20	<50
C02.01	SX_IB_20220316_16_22_SS_Primary_ALS																					
C02.01	SX_IB_20220316_19_52_SS_Primary_ALS	<0.5	<0.5	<0.5	<0.5	<0.5		<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<20	<20	<50	<50	<100	<100	<50	<20	<50
C02.01	SX_IB_20220316_19_52_SS_Primary_ALS																					
C02.01	SX_IB_20220316_19_56_SS_Primary_EUF	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.2	<0.3	<20	<20	<50	<50	<100	<100	<100	<20	<20
C02.01	SX_IB_20220316_19_56_SS_Primary_EUF																					
C02.01	SX_IB_20220316_19_56_SS_Primary_EUF																					
C02.01	SX_IB_20220317_00_02_SS_Primary_EUF	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.2	<0.3	<20	<20	<50	<50	<100	<100	<100	<20	<20
C02.01	SX_IB_20220317_00_02_SS_Primary_EUF																					
C02.01	SX_IB_20220317_00_02_SS_Primary_EUF																					
C02.01	SX_IB_20220317_00_11_SS_Primary_ALS	<0.5	<0.5	<0.5	<0.5	<0.5		<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<20	<20	<50	<50	<100	<100	<50	<20	<50
C02.01	SX_IB_20220317_00_11_SS_Primary_ALS																					
C02.01	SX_IB_20220317_03_58_SS_Primary_EUF	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.2	<0.3	<20	<20	<50	<50	<100	<100	<100	<20	<20
C02.01	SX_IB_20220317_03_58_SS_Primary_EUF																					
C02.01	SX_IB_20220317_03_58_SS_Primary_EUF																					
C02.01	SX_IB_20220317_04_08_SS_Primary_ALS	<0.5	<0.5	<0.5	<0.5	<0.5		<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<20	<20	<50	<50	<100	<100	<50	<20	<50
C02.01	SX_IB_20220317_04_08_SS_Primary_ALS																					
C02.01	SX_IB_20220317_07_53_SS_Duplicate_ALS	<0.5	<0.5	<0.5	<0.5	<0.5		<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<20	<20	<50	<50	<100	<100	<50	<20	<50
C02.01	SX_IB_20220317_07_53_SS_Duplicate_ALS																					
C02.01	SX_IB_20220317_07_53_SS_Primary_ALS	<0.5	<0.5	<0.5	<0.5	<0.5		<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<20	<20	<50	<50	<100	<100	<50	<20	<50
C02.01	SX_IB_20220317_07_53_SS_Primary_ALS																					
C02.01	SX_IB_20220317_07_54_SS_Triplicate_EUF	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.2	<0.3	<20	<20	<50	<50	<100	<100	<100	<20	<20
C02.01	SX_IB_20220317_07_54_SS_Triplicate_EUF																					
C02.01	SX_IB_20220317_07_54_SS_Triplicate_EUF																					
C02.01	SX_IB_20220317_08_03_SS_Primary_EUF	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.2	<0.3	<20	<20	<50	<50	<100	<100	<100	<20	<20
C02.01	SX_IB_20220317_08_03_SS_Primary_EUF																					
C02.01	SX_IB_20220317_08_03_SS_Primary_EUF																					
C02.01	SX_IB_20220327_19_56_SS_Primary_ALS	<0.5	<0.5	<0.5	<0.5	<0.5		<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<20	<20	<50	<50	<100	<100	<50	<20	<50
C02.01	SX_IB_20220327_19_56_SS_Primary_ALS																					
C02.01	SX_IB_20220327_20_01_SS_Primary_EUF	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.2	<0.3	<20	<20	<50	<50	<100	<100	<100	<20	<20

								BTEX						TRH								
		Fluorene	Indeno(1,2,3-cd)pyrene	Naphthalene	Phenanthrene	Pyrene	PAHs (Sum of total)	Benzene	Ethylbenzene	Toluene	Xylene (o)	Xylene (m & p)	Xylene Total	C6-C10	C6-C10 (F1 minus BTEX)	C10-C16	C10-C16 (F2 minus Naphthalene)	C16-C34	C34-C40	C10-C40 (Sum of total)	C6-C9	C10-C14
		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
C02.01	SX_IB_20220327_20_01_SS_Primary_EUF																					
C02.01	SX_IB_20220327_20_01_SS_Primary_EUF																					
C02.01	SX_IB_20220327_23_57_SS_Primary_ALS	<0.5	<0.5	<0.5	<0.5	<0.5		<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<10	<10	<50	<50	<100	<100	<50	<10	<50
C02.01	SX_IB_20220327_23_57_SS_Primary_ALS																					
C02.01	SX_IB_20220328_00_07_SS_Primary_EUF	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.2	<0.3	<20	<20	<50	<50	<100	<100	<100	<20	<20
C02.01	SX_IB_20220328_00_07_SS_Primary_EUF																					
C02.01	SX_IB_20220328_00_07_SS_Primary_EUF																					
C02.01	SX_IB_20220328_04_00_SS_Primary_EUF	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.2	<0.3	<20	<20	<50	<50	<100	<100	<100	<20	<20
C02.01	SX_IB_20220328_04_00_SS_Primary_EUF																					
C02.01	SX_IB_20220328_04_00_SS_Primary_EUF																					
C02.01	SX_IB_20220328_04_11_SS_Primary_ALS	<0.5	<0.5	<0.5	<0.5	<0.5		<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<10	<10	<50	<50	<100	<100	<50	<10	<50
C02.01	SX_IB_20220328_04_11_SS_Primary_ALS																					
C02.01	SX_IB_20220328_07_41_SS_Primary_ALS	<0.5	<0.5	<0.5	<0.5	<0.5		<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<20	<20	<50	<50	<100	<100	<50	<20	<50
C02.01	SX_IB_20220328_07_41_SS_Primary_ALS																					
C02.01	SX_IB_20220328_07_45_SS_Duplicate_ALS	<0.5	<0.5	<0.5	<0.5	<0.5		<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<20	<20	<50	<50	<100	<100	<50	<20	<50
C02.01	SX_IB_20220328_07_45_SS_Duplicate_ALS																					
C02.01	SX_IB_20220328_07_46_SS_Triplicate_EUF	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.2	<0.3	<20	<20	<50	<50	<100	<100	<100	<20	<20
C02.01	SX_IB_20220328_07_46_SS_Triplicate_EUF																					
C02.01	SX_IB_20220328_07_46_SS_Triplicate_EUF																					
C02.01	SX_IB_20220328_08_06_SS_Primary_EUF	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.2	<0.3	<20	<20	<50	<50	<100	<100	<100	<20	<20
C02.01	SX_IB_20220328_08_06_SS_Primary_EUF																					
C02.01	SX_IB_20220328_08_06_SS_Primary_EUF																					
C02.01	SX_IB_20220328_11_51_SS_Primary_EUF	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.2	<0.3	<20	<20	<50	<50	<100	<100	<100	<20	<20
C02.01	SX_IB_20220328_11_51_SS_Primary_EUF																					
C02.01	SX_IB_20220328_11_51_SS_Primary_EUF																					
C02.01	SX_IB_20220328_11_59_SS_Primary_ALS	<0.5	<0.5	<0.5	<0.5	<0.5		<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<20	<20	<50	<50	<100	<100	<50	<20	<50
C02.01	SX_IB_20220328_11_59_SS_Primary_ALS																					
C02.01	SX_IB_20220328_15_44_SS_Primary_EUF	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.2	<0.3	<20	<20	<50	<50	<100	<100	<100	<20	<20
C02.01	SX_IB_20220328_11_59_SS_Primary_ALS																					
C02.01	SX_IB_20220328_15_44_SS_Primary_EUF	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.2	<0.3	<20	<20	<50	<50	<100	<100	<100	<20	<20
C02.01	SX_IB_20220328_15_44_SS_Primary_EUF																					
C02.01	SX_IB_20220328_15_44_SS_Primary_EUF																					
C02.01	SX_IB_20220328_15_47_SS_Duplicate_EUF	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.2	<0.3	<20	<20	<50	<50	<100	<100	<100	<20	<20
C02.01	SX_IB_20220328_15_47_SS_Duplicate_EUF																					
C02.01	SX_IB_20220328_15_47_SS_Duplicate_EUF																					
C02.01	SX_IB_20220328_15_48_SS_Triplicate_ALS	<0.5	<0.5	<0.5	<0.5	<0.5		<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<20	<20	<50	<50	<100	<100	<50	<20	<50
C02.01	SX_IB_20220328_15_48_SS_Triplicate_ALS																					
C02.01	SX_IB_20220328_15_50_SS_Primary_ALS	<0.5	<0.5	<0.5	<0.5	<0.5		<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<20	<20	<50	<50	<100	<100	<50	<20	<50
C02.01	SX_IB_20220328_15_50_SS_Primary_ALS																					

Statistics

Number of Results	**36**	**36**	**36**	**36**	**36**	**18**	**36**	**36**	**36**	**36**	**36**	**36**	**36**	**36**	**36**	**36**	**36**	**36**	**36**	**36**	**36**
Number of Detects	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**1**	**0**	**0**	**0**	**0**	**1**
Minimum Concentration	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.1**	**<0.1**	**<0.1**	**<0.1**	**<0.2**	**<0.3**	**<10**	**<10**	**<50**	**<50**	**<100**	**<100**	**<50**	**<10**	**<20**
Minimum Detect	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**53**	**53**	**ND**	**ND**	**ND**	**ND**	**58**
Maximum Concentration	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.2**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<20**	**<20**	**53**	**53**	**<100**	**<100**	**<100**	**<20**	**58**
Maximum Detect	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**53**	**53**	**ND**	**ND**	**ND**	**ND**	**58**
Average Concentration *	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.075**	**0.15**	**0.15**	**0.15**	**0.18**	**0.2**	**9.7**	**9.7**	**26**	**26**	**50**	**50**	**38**	**9.7**	**19**
Median Concentration *	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.075**	**0.15**	**0.15**	**0.15**	**0.175**	**0.2**	**10**	**10**	**25**	**25**	**50**	**50**	**37.5**	**10**	**25**
Standard Deviation *	**0**	**0**	**0**	**0**	**0**	**0**	**0.025**	**0.1**	**0.1**	**0.1**	**0.076**	**0.051**	**1.2**	**1.2**	**4.7**	**4.7**	**0**	**0**	**13**	**1.2**	**10**
95% UCL (Student's-t) *	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.0821**	**0.179**	**0.179**	**0.179**	**0.196**	**0.214**	**10.05**	**10.05**	**27.09**	**27.09**	**50**	**50**	**41.07**	**10.05**	**21.67**
% of Detects	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**3**	**0**	**0**	**0**	**0**	**3**
% of Non-Detects	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**97**	**97**	**100**	**100**	**100**	**100**	**97**

* A Non Detect Multiplier of 0.5 has been applied.

Environmental Standards

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

		TPH			Organochlorine Pesticides																	
		C15-C28	C29-C36	+C10-C36 (Sum of total)	Aldrin	Dieldrin	Aldrin + Dieldrin	DDD	DDT	4,4-DDE	DDT+DDE+DDD	Endosulfan I	Endosulfan II	Endrin	Endrin ketone	Endrin aldehyde	Endosulfan sulphate	Chlordane	Chlordane (cis)	Chlordane (trans)	Hexachlorobenzene	Heptachlor
		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	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		50	50	50	0.03	0.03	0.03	0.05	0.05	0.05	0.05	0.03	0.03	0.03	0.05	0.03	0.03	0.03	0.03	0.03	0.03	0.03
EPA PFAS Classification - Tunnel Zone - 2019/404 (SO 9038429) Threshold																						
EPA PFAS Classification - Tunnel Zone - 2019/405 (SO 9038560) Threshold																						
EPA PFAS Classification - Tunnel Zone - 2019/406 (SO 9038561) Threshold																						
EPA PFAS Classification - Tunnel Zone - No option for disposal threshold																						
EPA Victoria IWRG621 Category B Leached Upper Limits																						
EPA Victoria IWRG621 Category B Upper Limits				40,000			4.8				50							16				4.8
EPA Victoria IWRG621 Category C Leached Upper Limits																						
EPA Victoria IWRG621 Category C Upper Limts				10,000			1.2				50							4				1.2
EPA Victoria IWRG621 Fill Upper Limits				1,000																		
Location Code	**Field ID**																					
C02.01	SX_IB_20220316_08_17_SS_Primary_ALS	<100	<100	<50	<0.05	<0.05	<0.30	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		<0.05	<0.05	<0.10	<0.03	<0.03	<0.05	<0.05
C02.01	SX_IB_20220316_08_17_SS_Primary_ALS																					
C02.01	SX_IB_20220316_08_20_SS_Duplicate_ALS	<100	<100	<50	<0.05	<0.05	<0.30	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		<0.05	<0.05	<0.10	<0.03	<0.03	<0.05	<0.05
C02.01	SX_IB_20220316_08_20_SS_Duplicate_ALS																					
C02.01	SX_IB_20220316_08_22_SS_Triplicate_EUF	<50	<50	<50	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1			<0.05	<0.05
C02.01	SX_IB_20220316_08_22_SS_Triplicate_EUF																					
C02.01	SX_IB_20220316_08_22_SS_Triplicate_EUF																					
C02.01	SX_IB_20220316_08_36_SS_Primary_EUF	<50	<50	<50	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1			<0.05	<0.05
C02.01	SX_IB_20220316_08_36_SS_Primary_EUF																					
C02.01	SX_IB_20220316_08_36_SS_Primary_EUF																					
C02.01	SX_IB_20220316_12_12_SS_Primary_EUF	<50	<50	<50	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1			<0.05	<0.05
C02.01	SX_IB_20220316_12_12_SS_Primary_EUF																					
C02.01	SX_IB_20220316_12_12_SS_Primary_EUF																					
C02.01	SX_IB_20220316_12_25_SS_Primary_ALS	<100	<100	<50	<0.05	<0.05	<0.30	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		<0.05	<0.05	<0.10	<0.03	<0.03	<0.05	<0.05
C02.01	SX_IB_20220316_12_25_SS_Primary_ALS																					
C02.01	SX_IB_20220316_16_12_SS_Primary_EUF	<50	<50	<50	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1			<0.05	<0.05
C02.01	SX_IB_20220316_16_12_SS_Primary_ALS																					
C02.01	SX_IB_20220316_16_12_SS_Primary_EUF																					
C02.01	SX_IB_20220316_16_15_SS_Duplicate_EUF	<50	<50	58	<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
C02.01	SX_IB_20220316_16_15_SS_Duplicate_EUF																					
C02.01	SX_IB_20220316_16_15_SS_Duplicate_EUF																					
C02.01	SX_IB_20220316_16_16_SS_Triplicate_ALS	<100	<100	<50	<0.05	<0.05	<0.30	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		<0.05	<0.05	<0.10	<0.03	<0.03	<0.05	<0.05
C02.01	SX_IB_20220316_16_16_SS_Triplicate_ALS																					
C02.01	SX_IB_20220316_16_22_SS_Primary_ALS	<100	<100	<50	<0.05	<0.05	<0.30	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		<0.05	<0.05	<0.10	<0.03	<0.03	<0.05	<0.05
C02.01	SX_IB_20220316_16_22_SS_Primary_ALS																					
C02.01	SX_IB_20220316_19_52_SS_Primary_ALS	<100	<100	<50	<0.05	<0.05	<0.30	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		<0.05	<0.05	<0.10	<0.03	<0.03	<0.05	<0.05
C02.01	SX_IB_20220316_19_52_SS_Primary_ALS																					
C02.01	SX_IB_20220316_19_56_SS_Primary_EUF	<50	<50	<50	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1			<0.05	<0.05
C02.01	SX_IB_20220316_19_56_SS_Primary_EUF																					
C02.01	SX_IB_20220316_19_56_SS_Primary_EUF																					
C02.01	SX_IB_20220317_00_02_SS_Primary_EUF	<50	<50	<50	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1			<0.05	<0.05
C02.01	SX_IB_20220317_00_02_SS_Primary_EUF																					
C02.01	SX_IB_20220317_00_02_SS_Primary_EUF																					
C02.01	SX_IB_20220317_00_11_SS_Primary_ALS	<100	<100	<50	<0.05	<0.05	<0.30	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		<0.05	<0.05	<0.10	<0.03	<0.03	<0.05	<0.05
C02.01	SX_IB_20220317_00_11_SS_Primary_ALS																					
C02.01	SX_IB_20220317_03_58_SS_Primary_EUF	<50	<50	<50	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1			<0.05	<0.05
C02.01	SX_IB_20220317_03_58_SS_Primary_EUF																					
C02.01	SX_IB_20220317_03_58_SS_Primary_EUF																					
C02.01	SX_IB_20220317_04_08_SS_Primary_ALS	<100	<100	<50	<0.05	<0.05	<0.30	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		<0.05	<0.05	<0.10	<0.03	<0.03	<0.05	<0.05
C02.01	SX_IB_20220317_04_08_SS_Primary_ALS																					
C02.01	SX_IB_20220317_07_53_SS_Duplicate_ALS	<100	<100	<50	<0.05	<0.05	<0.30	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		<0.05	<0.05	<0.10	<0.03	<0.03	<0.05	<0.05
C02.01	SX_IB_20220317_07_53_SS_Duplicate_ALS																					
C02.01	SX_IB_20220317_07_53_SS_Primary_ALS	<100	<100	<50	<0.05	<0.05	<0.30	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		<0.05	<0.05	<0.10	<0.03	<0.03	<0.05	<0.05
C02.01	SX_IB_20220317_07_53_SS_Primary_ALS																					
C02.01	SX_IB_20220317_07_54_SS_Triplicate_EUF	<50	<50	<50	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1			<0.05	<0.05
C02.01	SX_IB_20220317_07_54_SS_Triplicate_EUF																					
C02.01	SX_IB_20220317_07_54_SS_Triplicate_EUF																					
C02.01	SX_IB_20220317_08_03_SS_Primary_EUF	<50	<50	<50	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1			<0.05	<0.05
C02.01	SX_IB_20220317_08_03_SS_Primary_EUF																					
C02.01	SX_IB_20220317_08_03_SS_Primary_EUF																					
C02.01	SX_IB_20220327_19_56_SS_Primary_ALS	<100	<100	<50	<0.05	<0.05	<0.30	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		<0.05	<0.05	<0.10	<0.03	<0.03	<0.05	<0.05
C02.01	SX_IB_20220327_19_56_SS_Primary_ALS																					
C02.01	SX_IB_20220327_20_01_SS_Primary_EUF	<50	<50	<50	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1			<0.05	<0.05

		TPH			Organochlorine Pesticides																	
		C15-C28	C29-C36	+C10-C36 (Sum of total)	Aldrin	Dieldrin	Aldrin + Dieldrin	DDD	DDT	4,4-DDE	DDT+DDE+DDD	Endosulfan I	Endosulfan II	Endrin	Endrin ketone	Endrin aldehyde	Endosulfan sulphate	Chlordane	Chlordane (cis)	Chlordane (trans)	Hexachlorobenzene	Heptachlor
		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
C02.01	SX_IB_20220327_20_01_SS_Primary_EUF																					
C02.01	SX_IB_20220327_20_01_SS_Primary_EUF																					
C02.01	SX_IB_20220327_23_57_SS_Primary_ALS	<100	<100	<50	<0.03	<0.03	<0.03	<0.05	<0.05	<0.05	<0.05	<0.03	<0.03	<0.03		<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
C02.01	SX_IB_20220327_23_57_SS_Primary_ALS																					
C02.01	SX_IB_20220328_00_07_SS_Primary_EUF	<50	<50	<50	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1			<0.05	<0.05
C02.01	SX_IB_20220328_00_07_SS_Primary_EUF																					
C02.01	SX_IB_20220328_00_07_SS_Primary_EUF																					
C02.01	SX_IB_20220328_04_00_SS_Primary_EUF	<50	<50	<50	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1			<0.05	<0.05
C02.01	SX_IB_20220328_04_00_SS_Primary_EUF																					
C02.01	SX_IB_20220328_04_00_SS_Primary_EUF																					
C02.01	SX_IB_20220328_04_11_SS_Primary_ALS	<100	<100	<50	<0.03	<0.03	<0.03	<0.05	<0.05	<0.05	<0.05	<0.03	<0.03	<0.03		<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
C02.01	SX_IB_20220328_04_11_SS_Primary_ALS																					
C02.01	SX_IB_20220328_07_41_SS_Primary_ALS	<100	<100	<50	<0.05	<0.05	<0.30	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		<0.05	<0.05	<0.10	<0.03	<0.03	<0.05	<0.05
C02.01	SX_IB_20220328_07_41_SS_Primary_ALS																					
C02.01	SX_IB_20220328_07_45_SS_Duplicate_ALS	<100	<100	<50	<0.05	<0.05	<0.30	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		<0.05	<0.05	<0.10	<0.03	<0.03	<0.05	<0.05
C02.01	SX_IB_20220328_07_45_SS_Duplicate_ALS																					
C02.01	SX_IB_20220328_07_46_SS_Triplicate_EUF	<50	<50	<50	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1			<0.05	<0.05
C02.01	SX_IB_20220328_07_46_SS_Triplicate_EUF																					
C02.01	SX_IB_20220328_07_46_SS_Triplicate_EUF																					
C02.01	SX_IB_20220328_08_06_SS_Primary_EUF	<50	<50	<50	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1			<0.05	<0.05
C02.01	SX_IB_20220328_08_06_SS_Primary_EUF																					
C02.01	SX_IB_20220328_08_06_SS_Primary_EUF																					
C02.01	SX_IB_20220328_11_51_SS_Primary_EUF	<50	<50	<50	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1			<0.05	<0.05
C02.01	SX_IB_20220328_11_51_SS_Primary_EUF																					
C02.01	SX_IB_20220328_11_51_SS_Primary_EUF																					
C02.01	SX_IB_20220328_11_59_SS_Primary_ALS	<100	<100	<50	<0.05	<0.05	<0.30	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		<0.05	<0.05	<0.10	<0.03	<0.03	<0.05	<0.05
C02.01	SX_IB_20220328_11_59_SS_Primary_ALS																					
C02.01	SX_IB_20220328_15_44_SS_Primary_EUF	<50	<50	<50	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1			<0.05	<0.05
C02.01	SX_IB_20220328_11_59_SS_Primary_ALS																					
C02.01	SX_IB_20220328_15_44_SS_Primary_EUF	<50	<50	<50	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1			<0.05	<0.05
C02.01	SX_IB_20220328_15_44_SS_Primary_EUF																					
C02.01	SX_IB_20220328_15_44_SS_Primary_EUF																					
C02.01	SX_IB_20220328_15_47_SS_Duplicate_EUF	<50	<50	<50	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1			<0.05	<0.05
C02.01	SX_IB_20220328_15_47_SS_Duplicate_EUF																					
C02.01	SX_IB_20220328_15_47_SS_Duplicate_EUF																					
C02.01	SX_IB_20220328_15_48_SS_Triplicate_ALS	<100	<100	<50	<0.05	<0.05	<0.30	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		<0.05	<0.05	<0.10	<0.03	<0.03	<0.05	<0.05
C02.01	SX_IB_20220328_15_48_SS_Triplicate_ALS																					
C02.01	SX_IB_20220328_15_50_SS_Primary_ALS	<100	<100	<50	<0.05	<0.05	<0.30	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		<0.05	<0.05	<0.10	<0.03	<0.03	<0.05	<0.05
C02.01	SX_IB_20220328_15_50_SS_Primary_ALS																					

Statistics

Number of Results	**36**	**36**	**36**	**36**	**36**	**36**	**36**	**36**	**36**	**36**	**36**	**36**	**36**	**18**	**36**	**36**	**36**	**18**	**18**	**36**	**36**
Number of Detects	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Minimum Concentration	**<50**	**<50**	**<50**	**<0.03**	**<0.03**	**<0.03**	**<0.05**	**<0.05**	**<0.05**	**<0.05**	**<0.03**	**<0.03**	**<0.03**	**<0.05**	**<0.03**	**<0.03**	**<0.03**	**<0.03**	**<0.03**	**<0.03**	**<0.03**
Minimum Detect	**ND**	**ND**	**58**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**
Maximum Concentration	**<100**	**<100**	**58**	**<0.05**	**<0.05**	**<0.3**	**<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**
Maximum Detect	**ND**	**ND**	**58**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**
Average Concentration *	**38**	**38**	**26**	**0.024**	**0.024**	**0.08**	**0.025**	**0.025**	**0.025**	**0.025**	**0.024**	**0.024**	**0.024**	**0.025**	**0.024**	**0.024**	**0.048**	**0.015**	**0.015**	**0.024**	**0.024**
Median Concentration *	**37.5**	**37.5**	**25**	**0.025**	**0.025**	**0.025**	**0.025**	**0.025**	**0.025**	**0.025**	**0.025**	**0.025**	**0.025**	**0.025**	**0.025**	**0.025**	**0.05**	**0.015**	**0.015**	**0.025**	**0.025**
Standard Deviation *	**13**	**13**	**5.5**	**0.0023**	**0.0023**	**0.064**	**0**	**0**	**0**	**0**	**0.0023**	**0.0023**	**0.0023**	**0**	**0.0023**	**0.0023**	**0.0081**	**0**	**0**	**0.0023**	**0.0023**
95% UCL (Student's-t) *	**41.07**	**41.07**	**27.47**	**0.0251**	**0.0251**	**0.0979**	**0.025**	**0.025**	**0.025**	**0.025**	**0.0251**	**0.0251**	**0.0251**	**0.025**	**0.0251**	**0.0251**	**0.0503**	**0.015**	**0.015**	**0.0251**	**0.0251**
% of Detects	**0**	**0**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
% of Non-Detects	**100**	**100**	**97**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**

* A Non Detect Multiplier of 0.5 has been applied.

Environmental Standards

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

	Heptachlor epoxide	a-BHC	b-BHC	d-BHC	g-BHC (Lindane)	Methoxychlor	Toxaphene	Organochlorine pesticides EPAVic	Other organochlorine pesticides EPAVic	2-Chlorophenol	2,4-Dichlorophenol	2,4,5-Trichlorophenol	2,4,6-Trichlorophenol	2,6-Dichlorophenol	4-chloro-3-methylphenol	Pentachlorophenol	2,3,4,5 & 2,3,4,6-Tetrachlorophenol	4,6-Dinitro-2-methylphenol	Tetrachlorophenols	2,3,5,6-Tetrachlorophenol	Cresol 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
EQL	0.03	0.03	0.03	0.03	0.03	0.03	0.5	0.03	0.03	0.03	0.03	0.05	0.05	0.03	0.03	0.2	0.05	5	10	0.03	0.5
EPA PFAS Classification - Tunnel Zone - 2019/404 (SO 9038429) Threshold																					
EPA PFAS Classification - Tunnel Zone - 2019/405 (SO 9038560) Threshold																					
EPA PFAS Classification - Tunnel Zone - 2019/406 (SO 9038561) Threshold																					
EPA PFAS Classification - Tunnel Zone - No option for disposal threshold																					
EPA Victoria IWRG621 Category B Leached Upper Limits																					
EPA Victoria IWRG621 Category B Upper Limits									50												
EPA Victoria IWRG621 Category C Leached Upper Limits																					
EPA Victoria IWRG621 Category C Upper Limts									10												
EPA Victoria IWRG621 Fill Upper Limits								1													
Location Code	**Field ID**																				
C02.01	SX_IB_20220316_08_17_SS_Primary_ALS	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		<0.10	<0.03	<0.50	<0.50	<1.00	<1.00	<0.50	<1.00	<1.0	<0.05	<5		<0.03	
C02.01	SX_IB_20220316_08_17_SS_Primary_ALS																					
C02.01	SX_IB_20220316_08_20_SS_Duplicate_ALS	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		<0.10	<0.03	<0.50	<0.50	<1.00	<1.00	<0.50	<1.00	<1.0	<0.05	<5		<0.03	
C02.01	SX_IB_20220316_08_20_SS_Duplicate_ALS																					
C02.01	SX_IB_20220316_08_22_SS_Triplicate_EUF	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.5	<0.1	<0.1	<0.5	<0.5	<1	<1	<0.5	<1	<1		<5	<10		<0.5
C02.01	SX_IB_20220316_08_22_SS_Triplicate_EUF																					
C02.01	SX_IB_20220316_08_22_SS_Triplicate_EUF																					
C02.01	SX_IB_20220316_08_36_SS_Primary_EUF	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.5	<0.1	<0.1	<0.5	<0.5	<1	<1	<0.5	<1	<1		<5	<10		<0.5
C02.01	SX_IB_20220316_08_36_SS_Primary_EUF																					
C02.01	SX_IB_20220316_08_36_SS_Primary_EUF																					
C02.01	SX_IB_20220316_12_12_SS_Primary_EUF	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.5	<0.1	<0.1	<0.5	<0.5	<1	<1	<0.5	<1	<1		<5	<10		<0.5
C02.01	SX_IB_20220316_12_12_SS_Primary_EUF																					
C02.01	SX_IB_20220316_12_12_SS_Primary_EUF																					
C02.01	SX_IB_20220316_12_25_SS_Primary_ALS	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		<0.10	<0.03	<0.50	<0.50	<1.00	<1.00	<0.50	<1.00	<1.0	<0.05	<5		<0.03	
C02.01	SX_IB_20220316_12_25_SS_Primary_ALS																					
C02.01	SX_IB_20220316_16_12_SS_Primary_EUF	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.5	<0.1	<0.1	<0.5	<0.5	<1	<1	<0.5	<1	<1		<5	<10		<0.5
C02.01	SX_IB_20220316_12_25_SS_Primary_ALS																					
C02.01	SX_IB_20220316_16_12_SS_Primary_EUF	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.5	<0.1	<0.1	<0.5	<0.5	<1	<1	<0.5	<1	<1		<5	<10		<0.5
C02.01	SX_IB_20220316_16_12_SS_Primary_EUF																					
C02.01	SX_IB_20220316_16_12_SS_Primary_EUF																					
C02.01	SX_IB_20220316_16_15_SS_Duplicate_EUF	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.5	<0.1	<0.1	<0.5	<0.5	<1	<1	<0.5	<1	<1		<5	<10		<0.5
C02.01	SX_IB_20220316_16_15_SS_Duplicate_EUF																					
C02.01	SX_IB_20220316_16_15_SS_Duplicate_EUF																					
C02.01	SX_IB_20220316_16_16_SS_Triplicate_ALS	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		<0.10	<0.03	<0.50	<0.50	<1.00	<1.00	<0.50	<1.00	<1.0	<0.05	<5		<0.03	
C02.01	SX_IB_20220316_16_16_SS_Triplicate_ALS																					
C02.01	SX_IB_20220316_16_22_SS_Primary_ALS	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		<0.10	<0.03	<0.50	<0.50	<1.00	<1.00	<0.50	<1.00	<1.0	<0.05	<5		<0.03	
C02.01	SX_IB_20220316_16_22_SS_Primary_ALS																					
C02.01	SX_IB_20220316_19_52_SS_Primary_ALS	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		<0.10	<0.03	<0.50	<0.50	<1.00	<1.00	<0.50	<1.00	<1.0	<0.05	<5		<0.03	
C02.01	SX_IB_20220316_19_52_SS_Primary_ALS																					
C02.01	SX_IB_20220316_19_56_SS_Primary_EUF	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.5	<0.1	<0.1	<0.5	<0.5	<1	<1	<0.5	<1	<1		<5	<10		<0.5
C02.01	SX_IB_20220316_19_56_SS_Primary_EUF																					
C02.01	SX_IB_20220316_19_56_SS_Primary_EUF																					
C02.01	SX_IB_20220317_00_02_SS_Primary_EUF	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.5	<0.1	<0.1	<0.5	<0.5	<1	<1	<0.5	<1	<1		<5	<10		<0.5
C02.01	SX_IB_20220317_00_02_SS_Primary_EUF																					
C02.01	SX_IB_20220317_00_02_SS_Primary_EUF																					
C02.01	SX_IB_20220317_00_11_SS_Primary_ALS	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		<0.10	<0.03	<0.50	<0.50	<1.00	<1.00	<0.50	<1.00	<1.0	<0.05	<5		<0.03	
C02.01	SX_IB_20220317_00_11_SS_Primary_ALS																					
C02.01	SX_IB_20220317_03_58_SS_Primary_EUF	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.5	<0.1	<0.1	<0.5	<0.5	<1	<1	<0.5	<1	<1		<5	<10		<0.5
C02.01	SX_IB_20220317_03_58_SS_Primary_EUF																					
C02.01	SX_IB_20220317_03_58_SS_Primary_EUF																					
C02.01	SX_IB_20220317_04_08_SS_Primary_ALS	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		<0.10	<0.03	<0.50	<0.50	<1.00	<1.00	<0.50	<1.00	<1.0	<0.05	<5		<0.03	
C02.01	SX_IB_20220317_04_08_SS_Primary_ALS																					
C02.01	SX_IB_20220317_07_53_SS_Duplicate_ALS	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		<0.10	<0.03	<0.50	<0.50	<1.00	<1.00	<0.50	<1.00	<1.0	<0.05	<5		<0.03	
C02.01	SX_IB_20220317_07_53_SS_Duplicate_ALS																					
C02.01	SX_IB_20220317_07_53_SS_Primary_ALS	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		<0.10	<0.03	<0.50	<0.50	<1.00	<1.00	<0.50	<1.00	<1.0	<0.05	<5		<0.03	
C02.01	SX_IB_20220317_07_53_SS_Primary_ALS																					
C02.01	SX_IB_20220317_07_54_SS_Triplicate_EUF	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.5	<0.1	<0.1	<0.5	<0.5	<1	<1	<0.5	<1	<1		<5	<10		<0.5
C02.01	SX_IB_20220317_07_54_SS_Triplicate_EUF																					
C02.01	SX_IB_20220317_07_54_SS_Triplicate_EUF																					
C02.01	SX_IB_20220317_08_03_SS_Primary_EUF	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.5	<0.1	<0.1	<0.5	<0.5	<1	<1	<0.5	<1	<1		<5	<10		<0.5
C02.01	SX_IB_20220317_08_03_SS_Primary_EUF																					
C02.01	SX_IB_20220317_08_03_SS_Primary_EUF																					
C02.01	SX_IB_20220327_19_56_SS_Primary_ALS	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		<0.10	<0.03	<0.50	<0.50	<1.00	<1.00	<0.50	<1.00	<1.0	<0.05	<5		<0.03	
C02.01	SX_IB_20220327_19_56_SS_Primary_ALS																					
C02.01	SX_IB_20220327_20_01_SS_Primary_EUF	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.5	<0.1	<0.1	<0.5	<0.5	<1	<1	<0.5	<1	<1		<5	<10		<0.5

		Heptachlor epoxide	a-BHC	b-BHC	d-BHC	g-BHC (Lindane)	Methoxychlor	Toxaphene	Organochlorine pesticides EPAVic	Other organochlorine pesticides EPAVic	2-Chlorophenol	2,4-Dichlorophenol	2,4,5-Trichlorophenol	2,4,6-Trichlorophenol	2,6-Dichlorophenol	4-chloro-3-methylphenol	Pentachlorophenol	2,3,4,5 & 2,3,4,6-Tetrachlorophenol	4,6-Dinitro-2-methylphenol	Tetrachlorophenols	2,3,5,6-Tetrachlorophenol	Cresol 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
C02.01	SX_IB_20220327_20_01_SS_Primary_EUF																					
C02.01	SX_IB_20220327_20_01_SS_Primary_EUF																					
C02.01	SX_IB_20220327_23_57_SS_Primary_ALS	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03		<0.03	<0.03	<0.03	<0.03	<0.05	<0.05	<0.03	<0.03	<0.2	<0.05	<5		<0.03	
C02.01	SX_IB_20220327_23_57_SS_Primary_ALS																					
C02.01	SX_IB_20220328_00_07_SS_Primary_EUF	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.5	<0.1	<0.1	<0.5	<0.5	<1	<1	<0.5	<1	<1		<5	<10		<0.5
C02.01	SX_IB_20220328_00_07_SS_Primary_EUF																					
C02.01	SX_IB_20220328_00_07_SS_Primary_EUF																					
C02.01	SX_IB_20220328_04_00_SS_Primary_EUF	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.5	<0.1	<0.1	<0.5	<0.5	<1	<1	<0.5	<1	<1		<5	<10		<0.5
C02.01	SX_IB_20220328_04_00_SS_Primary_EUF																					
C02.01	SX_IB_20220328_04_00_SS_Primary_EUF																					
C02.01	SX_IB_20220328_04_11_SS_Primary_ALS	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03		<0.03	<0.03	<0.03	<0.03	<0.05	<0.05	<0.03	<0.03	<0.2	<0.05	<5		<0.03	
C02.01	SX_IB_20220328_04_11_SS_Primary_ALS																					
C02.01	SX_IB_20220328_07_41_SS_Primary_ALS	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		<0.10	<0.03	<0.50	<0.50	<1.00	<1.00	<0.50	<1.00	<1.0	<0.05	<5		<0.03	
C02.01	SX_IB_20220328_07_41_SS_Primary_ALS																					
C02.01	SX_IB_20220328_07_45_SS_Duplicate_ALS	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		<0.10	<0.03	<0.50	<0.50	<1.00	<1.00	<0.50	<1.00	<1.0	<0.05	<5		<0.03	
C02.01	SX_IB_20220328_07_45_SS_Duplicate_ALS																					
C02.01	SX_IB_20220328_07_46_SS_Triplicate_EUF	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.5	<0.1	<0.1	<0.5	<0.5	<1	<1	<0.5	<1	<1		<5	<10		<0.5
C02.01	SX_IB_20220328_07_46_SS_Triplicate_EUF																					
C02.01	SX_IB_20220328_07_46_SS_Triplicate_EUF																					
C02.01	SX_IB_20220328_08_06_SS_Primary_EUF	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.5	<0.1	<0.1	<0.5	<0.5	<1	<1	<0.5	<1	<1		<5	<10		<0.5
C02.01	SX_IB_20220328_08_06_SS_Primary_EUF																					
C02.01	SX_IB_20220328_08_06_SS_Primary_EUF																					
C02.01	SX_IB_20220328_11_51_SS_Primary_EUF	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.5	<0.1	<0.1	<0.5	<0.5	<1	<1	<0.5	<1	<1		<5	<10		<0.5
C02.01	SX_IB_20220328_11_51_SS_Primary_EUF																					
C02.01	SX_IB_20220328_11_51_SS_Primary_EUF																					
C02.01	SX_IB_20220328_11_59_SS_Primary_ALS	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		<0.10	<0.03	<0.50	<0.50	<1.00	<1.00	<0.50	<1.00	<1.0	<0.05	<5		<0.03	
C02.01	SX_IB_20220328_11_59_SS_Primary_ALS																					
C02.01	SX_IB_20220328_15_44_SS_Primary_EUF	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.5	<0.1	<0.1	<0.5	<0.5	<1	<1	<0.5	<1	<1		<5	<10		<0.5
C02.01	SX_IB_20220328_11_59_SS_Primary_ALS																					
C02.01	SX_IB_20220328_15_44_SS_Primary_EUF	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.5	<0.1	<0.1	<0.5	<0.5	<1	<1	<0.5	<1	<1		<5	<10		<0.5
C02.01	SX_IB_20220328_15_44_SS_Primary_EUF																					
C02.01	SX_IB_20220328_15_44_SS_Primary_EUF																					
C02.01	SX_IB_20220328_15_47_SS_Duplicate_EUF	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.5	<0.1	<0.1	<0.5	<0.5	<1	<1	<0.5	<1	<1		<5	<10		<0.5
C02.01	SX_IB_20220328_15_47_SS_Duplicate_EUF																					
C02.01	SX_IB_20220328_15_47_SS_Duplicate_EUF																					
C02.01	SX_IB_20220328_15_48_SS_Triplicate_ALS	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		<0.10	<0.03	<0.50	<0.50	<1.00	<1.00	<0.50	<1.00	<1.0	<0.05	<5		<0.03	
C02.01	SX_IB_20220328_15_48_SS_Triplicate_ALS																					
C02.01	SX_IB_20220328_15_50_SS_Primary_ALS	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		<0.10	<0.03	<0.50	<0.50	<1.00	<1.00	<0.50	<1.00	<1.0	<0.05	<5		<0.03	
C02.01	SX_IB_20220328_15_50_SS_Primary_ALS																					

Statistics

Number of Results	36	36	36	36	36	36	18	36	36	36	36	36	36	36	36	36	18	36	18	18	18
Number of Detects	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Minimum Concentration	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.5	<0.03	<0.03	<0.03	<0.03	<0.05	<0.05	<0.03	<0.03	<0.2	<0.05	<5	<10	<0.03	<0.5
Minimum Detect	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Maximum Concentration	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.5	<0.1	<0.1	<0.5	<0.5	<1	<1	<0.5	<1	<1	<0.05	<5	<10	<0.03	<0.5
Maximum Detect	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Average Concentration *	0.024	0.024	0.024	0.024	0.024	0.024	0.25	0.048	0.032	0.24	0.24	0.47	0.47	0.24	0.47	0.48	0.025	2.5	5	0.015	0.25
Median Concentration *	0.025	0.025	0.025	0.025	0.025	0.025	0.25	0.05	0.0325	0.25	0.25	0.5	0.5	0.25	0.5	0.5	0.025	2.5	5	0.015	0.25
Standard Deviation *	0.0023	0.0023	0.0023	0.0023	0.0023	0.0023	0	0.0081	0.018	0.055	0.055	0.11	0.11	0.055	0.11	0.093	0	0	0	0	0
95% UCL (Student's-t) *	0.0251	0.0251	0.0251	0.0251	0.0251	0.0251	0.25	0.0503	0.0375	0.252	0.252	0.505	0.505	0.252	0.505	0.504	0.025	2.5	5	0.015	0.25
% of Detects	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% of Non-Detects	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100

* A Non Detect Multiplier of 0.5 has been applied.

Environmental Standards

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

		Phenols																			
		4,6-Dinitro-o-cyclohexyl phenol	Phenols (halogenated) EPAVic	Phenols (non-halogenated) EPAVic	2,4-Dimethylphenol	2-Methylphenol	2-Nitrophenol	2,4-Dinitrophenol	3&4-Methylphenol (m&p-cresol)	4-Nitrophenol	Dinoseb	Phenol	Phenols (Total Halogenated)	Phenols (Total Non Halogenated)	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)	
		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg
EQL		5	0.03	1	0.5	0.2	1	5	0.4	5	5	0.5	1	20	0.00001	0.0005	0.00001	0.0005	0.00005	0.0005	0.00001	0.0005
EPA PFAS Classification - Tunnel Zone - 2019/404 (SO 9038429) Threshold																						
EPA PFAS Classification - Tunnel Zone - 2019/405 (SO 9038560) Threshold																						
EPA PFAS Classification - Tunnel Zone - 2019/406 (SO 9038561) Threshold																						
EPA PFAS Classification - Tunnel Zone - No option for disposal threshold																						
EPA Victoria IWRG621 Category B Leached Upper Limits																						
EPA Victoria IWRG621 Category B Upper Limits			320	2,200																		
EPA Victoria IWRG621 Category C Leached Upper Limits																						
EPA Victoria IWRG621 Category C Upper Limts			10	560																		
EPA Victoria IWRG621 Fill Upper Limits			1	60																		
Location Code	**Field ID**																					
C02.01	SX_IB_20220316_08_17_SS_Primary_ALS	<20	<1.00	<20	<1	<1	<1	<5	<1	<5	<20	<1			<0.00005	<0.0050	<0.00005	<0.0050	<0.00005	<0.0100	<0.00005	<0.0050
C02.01	SX_IB_20220316_08_17_SS_Primary_ALS														<0.00005		<0.00005		<0.00005		<0.00005	
C02.01	SX_IB_20220316_08_20_SS_Duplicate_ALS	<20	<1.00	<20	<1	<1	<1	<5	<1	<5	<20	<1			<0.00005	<0.0050	<0.00005	<0.0050	<0.00005	<0.0100	<0.00005	<0.0050
C02.01	SX_IB_20220316_08_20_SS_Duplicate_ALS														<0.00005		<0.00005		<0.00005		<0.00005	
C02.01	SX_IB_20220316_08_22_SS_Triplicate_EUF	<20			<0.5	<0.2	<1	<5	<0.4	<5	<20	<0.5	<1	<20		<0.005		<0.005		<0.01		<0.005
C02.01	SX_IB_20220316_08_22_SS_Triplicate_EUF														<0.00001		<0.00001		<0.00005		<0.00001	
C02.01	SX_IB_20220316_08_22_SS_Triplicate_EUF														<0.00001		<0.00001		<0.00005		<0.00001	
C02.01	SX_IB_20220316_08_36_SS_Primary_EUF	<20			<0.5	<0.2	<1	<5	<0.4	<5	<20	<0.5	<1	<20		<0.005		<0.005		<0.01		<0.005
C02.01	SX_IB_20220316_08_36_SS_Primary_EUF														<0.00001		<0.00001		<0.00005		<0.00001	
C02.01	SX_IB_20220316_08_36_SS_Primary_EUF														<0.00001		<0.00001		<0.00005		<0.00001	
C02.01	SX_IB_20220316_12_12_SS_Primary_EUF	<20			<0.5	<0.2	<1	<5	<0.4	<5	<20	<0.5	<1	<20		<0.005		<0.005		<0.01		<0.005
C02.01	SX_IB_20220316_12_12_SS_Primary_EUF														<0.00001		<0.00001		<0.00005		<0.00001	
C02.01	SX_IB_20220316_12_12_SS_Primary_EUF														<0.00001		<0.00001		<0.00005		<0.00001	
C02.01	SX_IB_20220316_12_25_SS_Primary_ALS	<20	<1.00	<20	<1	<1	<1	<5	<1	<5	<20	<1			<0.00005	<0.0050	<0.00005	<0.0050	<0.00005	<0.0100	<0.00005	<0.0050
C02.01	SX_IB_20220316_12_25_SS_Primary_ALS														<0.00005		<0.00005		<0.00005		<0.00005	
C02.01	SX_IB_20220316_16_12_SS_Primary_EUF	<20			<0.5	<0.2	<1	<5	<0.4	<5	<20	<0.5	<1	<20		<0.005		<0.005		<0.01		<0.005
C02.01	SX_IB_20220316_16_12_SS_Primary_EUF														<0.00001		<0.00001		<0.00005		<0.00001	
C02.01	SX_IB_20220316_16_12_SS_Primary_EUF														<0.00001		<0.00001		<0.00005		<0.00001	
C02.01	SX_IB_20220316_16_15_SS_Duplicate_EUF	<20			<0.5	<0.2	<1	<5	<0.4	<5	<20	<0.5	<1	<20		<0.005		<0.005		<0.01		<0.005
C02.01	SX_IB_20220316_16_15_SS_Duplicate_EUF														<0.00001		<0.00001		<0.00005		<0.00001	
C02.01	SX_IB_20220316_16_15_SS_Duplicate_EUF														<0.00001		<0.00001		<0.00005		<0.00001	
C02.01	SX_IB_20220316_16_16_SS_Triplicate_ALS	<20	<1.00	<20	<1	<1	<1	<5	<1	<5	<20	<1			<0.00005	<0.0050	<0.00005	<0.0050	<0.00005	<0.0100	<0.00005	<0.0050
C02.01	SX_IB_20220316_16_16_SS_Triplicate_ALS														<0.00005		<0.00005		<0.00005		<0.00005	
C02.01	SX_IB_20220316_16_22_SS_Primary_ALS	<20	<1.00	<20	<1	<1	<1	<5	<1	<5	<20	<1			<0.00005	<0.0050	<0.00005	<0.0050	<0.00005	<0.0100	<0.00005	<0.0050
C02.01	SX_IB_20220316_16_22_SS_Primary_ALS														<0.00005		<0.00005		<0.00005		<0.00005	
C02.01	SX_IB_20220316_19_52_SS_Primary_ALS	<20	<1.00	<20	<1	<1	<1	<5	<1	<5	<20	<1			<0.00005	<0.0050	<0.00005	<0.0050	<0.00005	<0.0100	<0.00005	<0.0050
C02.01	SX_IB_20220316_19_52_SS_Primary_ALS														<0.00005		<0.00005		<0.00005		<0.00005	
C02.01	SX_IB_20220316_19_56_SS_Primary_EUF	<20			<0.5	<0.2	<1	<5	<0.4	<5	<20	<0.5	<1	<20		<0.005		<0.005		<0.01		<0.005
C02.01	SX_IB_20220316_19_56_SS_Primary_EUF														<0.00001		<0.00001		<0.00005		<0.00001	
C02.01	SX_IB_20220316_19_56_SS_Primary_EUF														<0.00001		<0.00001		<0.00005		<0.00001	
C02.01	SX_IB_20220317_00_02_SS_Primary_EUF	<20			<0.5	<0.2	<1	<5	<0.4	<5	<20	<0.5	<1	<20		<0.005		<0.005		<0.01		<0.005
C02.01	SX_IB_20220317_00_02_SS_Primary_EUF														<0.00001		<0.00001		<0.00005		<0.00001	
C02.01	SX_IB_20220317_00_02_SS_Primary_EUF														<0.00001		<0.00001		<0.00005		<0.00001	
C02.01	SX_IB_20220317_00_11_SS_Primary_ALS	<20	<1.00	<20	<1	<1	<1	<5	<1	<5	<20	<1			<0.00005	<0.0050	<0.00005	<0.0050	<0.00005	<0.0100	<0.00005	<0.0050
C02.01	SX_IB_20220317_00_11_SS_Primary_ALS														<0.00005		<0.00005		<0.00005		<0.00005	
C02.01	SX_IB_20220317_03_58_SS_Primary_EUF	<20			<0.5	<0.2	<1	<5	<0.4	<5	<20	<0.5	<1	<20		<0.005		<0.005		<0.01		<0.005
C02.01	SX_IB_20220317_03_58_SS_Primary_EUF														<0.00001		<0.00001		<0.00005		<0.00001	
C02.01	SX_IB_20220317_03_58_SS_Primary_EUF														<0.00001		<0.00001		<0.00005		<0.00001	
C02.01	SX_IB_20220317_04_08_SS_Primary_ALS	<20	<1.00	<20	<1	<1	<1	<5	<1	<5	<20	<1			<0.00005	<0.0050	<0.00005	<0.0050	<0.00005	<0.0100	<0.00005	<0.0050
C02.01	SX_IB_20220317_04_08_SS_Primary_ALS														<0.00005		<0.00005		<0.00005		<0.00005	
C02.01	SX_IB_20220317_07_53_SS_Duplicate_ALS	<20	<1.00	<20	<1	<1	<1	<5	<1	<5	<20	<1			<0.00005	<0.0050	<0.00005	<0.0050	<0.00005	<0.0100	<0.00005	<0.0050
C02.01	SX_IB_20220317_07_53_SS_Duplicate_ALS														<0.00005		<0.00005		<0.00005		<0.00005	
C02.01	SX_IB_20220317_07_53_SS_Primary_ALS	<20	<1.00	<20	<1	<1	<1	<5	<1	<5	<20	<1			<0.00005	<0.0050	<0.00005	<0.0050	<0.00005	<0.0100	<0.00005	<0.0050
C02.01	SX_IB_20220317_07_53_SS_Primary_ALS														<0.00005		<0.00005		<0.00005		<0.00005	
C02.01	SX_IB_20220317_07_54_SS_Triplicate_EUF	<20			<0.5	<0.2	<1	<5	<0.4	<5	<20	<0.5	<1	<20		<0.005		<0.005		<0.01		<0.005
C02.01	SX_IB_20220317_07_54_SS_Triplicate_EUF														<0.00001		<0.00001		<0.00005		<0.00001	
C02.01	SX_IB_20220317_07_54_SS_Triplicate_EUF														<0.00001		<0.00001		<0.00005		<0.00001	
C02.01	SX_IB_20220317_08_03_SS_Primary_EUF	<20			<0.5	<0.2	<1	<5	<0.4	<5	<20	<0.5	<1	<20		<0.005		<0.005		<0.01		<0.005
C02.01	SX_IB_20220317_08_03_SS_Primary_EUF														<0.00001		<0.00001		<0.00005		<0.00001	
C02.01	SX_IB_20220317_08_03_SS_Primary_EUF														<0.00001		<0.00001		<0.00005		<0.00001	
C02.01	SX_IB_20220327_19_56_SS_Primary_ALS	<20	<1.00	<20	<1	<1	<1	<5	<1	<5	<20	<1			<0.00005	<0.0050	<0.00005	<0.0050	<0.00005	<0.0100	<0.00005	<0.0050
C02.01	SX_IB_20220327_19_56_SS_Primary_ALS														<0.00005		<0.00005		<0.00005		<0.00005	
C02.01	SX_IB_20220327_20_01_SS_Primary_EUF	<20			<0.5	<0.2	<1	<5	<0.4	<5	<20	<0.5	<1	<20		<0.005		<0.005		<0.01		<0.005

		Phenols																			
		4,6-Dinitro-o-cyclohexyl phenol	Phenols (halogenated) EPAVic	Phenols (non-halogenated) EPAVic	2,4-Dimethylphenol	2-Methylphenol	2-Nitrophenol	2,4-Dinitrophenol	3&4-Methylphenol (m&p-cresol)	4-Nitrophenol	Dinoseb	Phenol	Phenols (Total Halogenated)	Phenols (Total Non Halogenated)	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)	
		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg
C02.01	SX_IB_20220327_20_01_SS_Primary_EUF														<0.00001		<0.00001		<0.00005		<0.00001	
C02.01	SX_IB_20220327_20_01_SS_Primary_EUF														<0.00001		<0.00001		<0.00005		<0.00001	
C02.01	SX_IB_20220327_23_57_SS_Primary_ALS	<5	<0.03	<1	<1	<1	<1	<5	<1	<5	<5	<1			<0.00005	<0.0005	<0.00005	<0.0005	<0.00005	<0.0005	<0.00005	<0.0005
C02.01	SX_IB_20220327_23_57_SS_Primary_ALS														<0.00005		<0.00005		<0.00005		<0.00005	
C02.01	SX_IB_20220328_00_07_SS_Primary_EUF	<20			<0.5	<0.2	<1	<5	<0.4	<5	<20	<0.5	<1	<20		<0.005		<0.005		<0.01		<0.005
C02.01	SX_IB_20220328_00_07_SS_Primary_EUF														<0.00001		<0.00001		<0.00005		<0.00001	
C02.01	SX_IB_20220328_00_07_SS_Primary_EUF														<0.00001		<0.00001		<0.00005		<0.00001	
C02.01	SX_IB_20220328_04_00_SS_Primary_EUF	<20			<0.5	<0.2	<1	<5	<0.4	<5	<20	<0.5	<1	<20		<0.005		<0.005		<0.01		<0.005
C02.01	SX_IB_20220328_04_00_SS_Primary_EUF														<0.00001		<0.00001		<0.00005		<0.00001	
C02.01	SX_IB_20220328_04_00_SS_Primary_EUF														<0.00001		<0.00001		<0.00005		<0.00001	
C02.01	SX_IB_20220328_04_11_SS_Primary_ALS	<5	<0.03	<1	<1	<1	<1	<5	<1	<5	<5	<1			<0.00005	<0.0005	<0.00005	<0.0005	<0.00005	<0.0005	<0.00005	<0.0005
C02.01	SX_IB_20220328_04_11_SS_Primary_ALS														<0.00005		<0.00005		<0.00005		<0.00005	
C02.01	SX_IB_20220328_07_41_SS_Primary_ALS	<20	<1.00	<20	<1	<1	<1	<5	<1	<5	<20	<1			<0.00005	<0.0050	<0.00005	<0.0050	<0.00005	<0.0100	<0.00005	<0.0050
C02.01	SX_IB_20220328_07_41_SS_Primary_ALS														<0.00005		<0.00005		<0.00005		<0.00005	
C02.01	SX_IB_20220328_07_45_SS_Duplicate_ALS	<20	<1.00	<20	<1	<1	<1	<5	<1	<5	<20	<1			<0.00005	<0.0050	<0.00005	<0.0050	<0.00005	<0.0100	<0.00005	<0.0050
C02.01	SX_IB_20220328_07_45_SS_Duplicate_ALS														<0.00005		<0.00005		<0.00005		<0.00005	
C02.01	SX_IB_20220328_07_46_SS_Triplicate_EUF	<20			<0.5	<0.2	<1	<5	<0.4	<5	<20	<0.5	<1	<20		<0.005		<0.005		<0.01		<0.005
C02.01	SX_IB_20220328_07_46_SS_Triplicate_EUF														<0.00001		<0.00001		<0.00005		<0.00001	
C02.01	SX_IB_20220328_07_46_SS_Triplicate_EUF														<0.00001		<0.00001		<0.00005		<0.00001	
C02.01	SX_IB_20220328_08_06_SS_Primary_EUF	<20			<0.5	<0.2	<1	<5	<0.4	<5	<20	<0.5	<1	<20		<0.005		<0.005		<0.01		<0.005
C02.01	SX_IB_20220328_08_06_SS_Primary_EUF														<0.00001		<0.00001		<0.00005		<0.00001	
C02.01	SX_IB_20220328_08_06_SS_Primary_EUF														<0.00001		<0.00001		<0.00005		<0.00001	
C02.01	SX_IB_20220328_11_51_SS_Primary_EUF	<20			<0.5	<0.2	<1	<5	<0.4	<5	<20	<0.5	<1	<20		<0.005		<0.005		<0.01		<0.005
C02.01	SX_IB_20220328_11_51_SS_Primary_EUF														<0.00001		<0.00001		<0.00005		<0.00001	
C02.01	SX_IB_20220328_11_51_SS_Primary_EUF														<0.00001		<0.00001		<0.00005		<0.00001	
C02.01	SX_IB_20220328_11_59_SS_Primary_ALS	<20	<1.00	<20	<1	<1	<1	<5	<1	<5	<20	<1			<0.00005	<0.0050	<0.00005	<0.0050	<0.00005	<0.0100	<0.00005	<0.0050
C02.01	SX_IB_20220328_11_59_SS_Primary_ALS														<0.00005		<0.00005		<0.00005		<0.00005	
C02.01	SX_IB_20220328_15_44_SS_Primary_EUF	<20			<0.5	<0.2	<1	<5	<0.4	<5	<20	<0.5	<1	<20		<0.005		<0.005		<0.01		<0.005
C02.01	SX_IB_20220328_11_59_SS_Primary_ALS														<0.00005		<0.00005		<0.00005		<0.00005	
C02.01	SX_IB_20220328_15_44_SS_Primary_EUF	<20			<0.5	<0.2	<1	<5	<0.4	<5	<20	<0.5	<1	<20		<0.005		<0.005		<0.01		<0.005
C02.01	SX_IB_20220328_15_44_SS_Primary_EUF														<0.00001		<0.00001		<0.00005		<0.00001	
C02.01	SX_IB_20220328_15_44_SS_Primary_EUF														<0.00001		<0.00001		<0.00005		<0.00001	
C02.01	SX_IB_20220328_15_47_SS_Duplicate_EUF	<20			<0.5	<0.2	<1	<5	<0.4	<5	<20	<0.5	<1	<20		<0.005		<0.005		<0.01		<0.005
C02.01	SX_IB_20220328_15_47_SS_Duplicate_EUF														<0.00001		<0.00001		<0.00005		<0.00001	
C02.01	SX_IB_20220328_15_47_SS_Duplicate_EUF														<0.00001		<0.00001		<0.00005		<0.00001	
C02.01	SX_IB_20220328_15_48_SS_Triplicate_ALS	<20	<1.00	<20	<1	<1	<1	<5	<1	<5	<20	<1			<0.00005	<0.0050	<0.00005	<0.0050	<0.00005	<0.0100	<0.00005	<0.0050
C02.01	SX_IB_20220328_15_48_SS_Triplicate_ALS														<0.00005		<0.00005		<0.00005		<0.00005	
C02.01	SX_IB_20220328_15_50_SS_Primary_ALS	<20	<1.00	<20	<1	<1	<1	<5	<1	<5	<20	<1			<0.00005	<0.0050	<0.00005	<0.0050	<0.00005	<0.0100	<0.00005	<0.0050
C02.01	SX_IB_20220328_15_50_SS_Primary_ALS														<0.00005		<0.00005		<0.00005		<0.00005	
Statistics																						
Number of Results		36	18	18	36	36	36	36	36	36	36	36	18	18	72	36	72	36	72	36	72	36
Number of Detects		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Minimum Concentration		<5	<0.03	<1	<0.5	<0.2	<1	<5	<0.4	<5	<5	<0.5	<1	<20	<0.00001	<0.0005	<0.00001	<0.0005	<0.00005	<0.0005	<0.00001	<0.0005
Minimum Detect		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Maximum Concentration		<20	<1	<20	<1	<1	<1	<5	<1	<5	<20	<1	<1	<20	<0.00005	<0.005	<0.00005	<0.005	<0.00005	<0.01	<0.00005	<0.005
Maximum Detect		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Average Concentration *		9.6	0.45	8.9	0.38	0.3	0.5	2.5	0.35	2.5	9.6	0.38	0.5	10	0.000015	0.0024	0.000015	0.0024	0.000025	0.0047	0.000015	0.0024
Median Concentration *		10	0.5	10	0.375	0.3	0.5	2.5	0.35	2.5	10	0.375	0.5	10	0.000015	0.0025	0.000015	0.0025	0.000025	0.005	0.000015	0.0025
Standard Deviation *		1.7	0.16	3.1	0.13	0.2	0	0	0.15	0	1.7	0.13	0	0	0.00001	0.00052	0.00001	0.00052	0	0.0011	0.00001	0.00052
95% UCL (Student's-t) *		10.07	0.51	10.2	0.411	0.357	0.5	2.5	0.393	2.5	10.07	0.411	0.5	10	0.000016978	0.00252	0.000016978	0.00252	0.000025	0.00505	0.000016978	0.00252
% of Detects		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% of Non-Detects		100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100

* A Non Detect Multiplier of 0.5 has been applied.

Environmental Standards

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

	N-Ethyl perfluorooctane sulfonamide (NEtFOSA)		N-ethyl-perfluorooctanesulfonamidoacetic acid (NEtFOSAA)		N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)		N-Methyl perfluorooctane sulfonamide (NMeFOSA)		N-methylperfluorooctane sulfonamidoacetic acid (NMeFOSAA)		N-Methylperfluorooctanesulfonamidoethanol (N-MeFOSE)		Perfluorobutanoic acid (PFBA)		Perfluorobutane sulfonic acid (PFBS)		Perfluorodecanoic acid (PFDA)		Perfluorododecanoic acid (PFDoDA)		Perfluorodecanesulfonic
	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L
EQL	0.00005	0.0005	0.00002	0.0002	0.00005	0.0005	0.00005	0.0005	0.00002	0.0002	0.00005	0.0005	0.00005	0.001	0.00001	0.0002	0.00001	0.0002	0.00001	0.0002	0.00001
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																					
EPA Victoria IWRG621 Category C Leached Upper Limits																					
EPA Victoria IWRG621 Category C Upper Limts																					
EPA Victoria IWRG621 Fill Upper Limits																					
Location Code	**Field ID**																				
C02.01	SX_IB_20220316_08_17_SS_Primary_ALS	<0.00005	<0.0050	<0.00005	<0.0100	<0.00005	<0.0050	<0.00005	<0.0050	<0.00005	<0.0100	<0.00005	<0.0050	<0.0001	<0.005	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.00002
C02.01	SX_IB_20220316_08_17_SS_Primary_ALS	<0.00005		<0.00002		<0.00005		<0.00005		<0.00002		<0.00005		<0.0001		<0.00002		<0.00002		<0.00002	<0.00002
C02.01	SX_IB_20220316_08_20_SS_Duplicate_ALS	<0.00005	<0.0050	<0.00005	<0.0100	<0.00005	<0.0050	<0.00005	<0.0050	<0.00005	<0.0100	<0.00005	<0.0050	<0.0001	<0.005	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.00002
C02.01	SX_IB_20220316_08_20_SS_Duplicate_ALS	<0.00005		<0.00002		<0.00005		<0.00005		<0.00002		<0.00005		<0.0001		<0.00002		<0.00002		<0.00002	<0.00002
C02.01	SX_IB_20220316_08_22_SS_Triplicate_EUF		<0.005		<0.01		<0.005		<0.005		<0.01		<0.005		<0.005		<0.005		<0.005		<0.005	
C02.01	SX_IB_20220316_08_22_SS_Triplicate_EUF	<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00001		<0.00001		<0.00001	<0.00001
C02.01	SX_IB_20220316_08_22_SS_Triplicate_EUF	<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00001		<0.00001		<0.00001	<0.00001
C02.01	SX_IB_20220316_08_36_SS_Primary_EUF		<0.005		<0.01		<0.005		<0.005		<0.01		<0.005		<0.005		<0.005		<0.005		<0.005	
C02.01	SX_IB_20220316_08_36_SS_Primary_EUF	<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00001		<0.00001		<0.00001	<0.00001
C02.01	SX_IB_20220316_08_36_SS_Primary_EUF	<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00001		<0.00001		<0.00001	<0.00001
C02.01	SX_IB_20220316_12_12_SS_Primary_EUF		<0.005		<0.01		<0.005		<0.005		<0.01		<0.005		<0.005		<0.005		<0.005		<0.005	
C02.01	SX_IB_20220316_12_12_SS_Primary_EUF	<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00001		<0.00001		<0.00001	<0.00001
C02.01	SX_IB_20220316_12_12_SS_Primary_EUF	<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00001		<0.00001		<0.00001	<0.00001
C02.01	SX_IB_20220316_12_25_SS_Primary_ALS	<0.00005	<0.0050	<0.00005	<0.0100	<0.00005	<0.0050	<0.00005	<0.0050	<0.00005	<0.0100	<0.00005	<0.0050	<0.0001	<0.005	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.00002
C02.01	SX_IB_20220316_12_25_SS_Primary_ALS	<0.00005		<0.00002		<0.00005		<0.00005		<0.00002		<0.00005		<0.0001		<0.00002		<0.00002		<0.00002	<0.00002
C02.01	SX_IB_20220316_16_12_SS_Primary_EUF		<0.005		<0.01		<0.005		<0.005		<0.01		<0.005		<0.005		<0.005		<0.005		<0.005	
C02.01	SX_IB_20220316_16_12_SS_Primary_EUF	<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00001		<0.00001		<0.00001	<0.00001
C02.01	SX_IB_20220316_16_12_SS_Primary_EUF	<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00001		<0.00001		<0.00001	<0.00001
C02.01	SX_IB_20220316_16_15_SS_Duplicate_EUF		<0.005		<0.01		<0.005		<0.005		<0.01		<0.005		<0.005		<0.005		<0.005		<0.005	
C02.01	SX_IB_20220316_16_15_SS_Duplicate_EUF	<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00001		<0.00001		<0.00001	<0.00001
C02.01	SX_IB_20220316_16_15_SS_Duplicate_EUF	<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00001		<0.00001		<0.00001	<0.00001
C02.01	SX_IB_20220316_16_16_SS_Triplicate_ALS	<0.00005	<0.0050	<0.00005	<0.0100	<0.00005	<0.0050	<0.00005	<0.0050	<0.00005	<0.0100	<0.00005	<0.0050	<0.0001	<0.005	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.00002
C02.01	SX_IB_20220316_16_16_SS_Triplicate_ALS	<0.00005		<0.00002		<0.00005		<0.00005		<0.00002		<0.00005		<0.0001		<0.00002		<0.00002		<0.00002	<0.00002
C02.01	SX_IB_20220316_16_22_SS_Primary_ALS	<0.00005	<0.0050	<0.00005	<0.0100	<0.00005	<0.0050	<0.00005	<0.0050	<0.00005	<0.0100	<0.00005	<0.0050	<0.0001	<0.005	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.00002
C02.01	SX_IB_20220316_16_22_SS_Primary_ALS	<0.00005		<0.00002		<0.00005		<0.00005		<0.00002		<0.00005		<0.0001		<0.00002		<0.00002		<0.00002	<0.00002
C02.01	SX_IB_20220316_19_52_SS_Primary_ALS	<0.00005	<0.0050	<0.00005	<0.0100	<0.00005	<0.0050	<0.00005	<0.0050	<0.00005	<0.0100	<0.00005	<0.0050	<0.0001	<0.005	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.00002
C02.01	SX_IB_20220316_19_52_SS_Primary_ALS	<0.00005		<0.00002		<0.00005		<0.00005		<0.00002		<0.00005		<0.0001		<0.00002		<0.00002		<0.00002	<0.00002
C02.01	SX_IB_20220316_19_56_SS_Primary_EUF		<0.005		<0.01		<0.005		<0.005		<0.01		<0.005		<0.005		<0.005		<0.005		<0.005	
C02.01	SX_IB_20220316_19_56_SS_Primary_EUF	<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00001		<0.00001		<0.00001	<0.00001
C02.01	SX_IB_20220316_19_56_SS_Primary_EUF	<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00001		<0.00001		<0.00001	<0.00001
C02.01	SX_IB_20220317_00_02_SS_Primary_EUF		<0.005		<0.01		<0.005		<0.005		<0.01		<0.005		<0.005		<0.005		<0.005		<0.005	
C02.01	SX_IB_20220317_00_02_SS_Primary_EUF	<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00001		<0.00001		<0.00001	<0.00001
C02.01	SX_IB_20220317_00_02_SS_Primary_EUF	<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00001		<0.00001		<0.00001	<0.00001
C02.01	SX_IB_20220317_00_11_SS_Primary_ALS	<0.00005	<0.0050	<0.00005	<0.0100	<0.00005	<0.0050	<0.00005	<0.0050	<0.00005	<0.0100	<0.00005	<0.0050	<0.0001	<0.005	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.00002
C02.01	SX_IB_20220317_00_11_SS_Primary_ALS	<0.00005		<0.00002		<0.00005		<0.00005		<0.00002		<0.00005		<0.0001		<0.00002		<0.00002		<0.00002	<0.00002
C02.01	SX_IB_20220317_03_58_SS_Primary_EUF		<0.005		<0.01		<0.005		<0.005		<0.01		<0.005		<0.005		<0.005		<0.005		<0.005	
C02.01	SX_IB_20220317_03_58_SS_Primary_EUF	<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00001		<0.00001		<0.00001	<0.00001
C02.01	SX_IB_20220317_03_58_SS_Primary_EUF	<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00001		<0.00001		<0.00001	<0.00001
C02.01	SX_IB_20220317_04_08_SS_Primary_ALS	<0.00005	<0.0050	<0.00005	<0.0100	<0.00005	<0.0050	<0.00005	<0.0050	<0.00005	<0.0100	<0.00005	<0.0050	<0.0001	<0.005	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.00002
C02.01	SX_IB_20220317_04_08_SS_Primary_ALS	<0.00005		<0.00002		<0.00005		<0.00005		<0.00002		<0.00005		<0.0001		<0.00002		<0.00002		<0.00002	<0.00002
C02.01	SX_IB_20220317_07_53_SS_Duplicate_ALS	<0.00005	<0.0050	<0.00005	<0.0100	<0.00005	<0.0050	<0.00005	<0.0050	<0.00005	<0.0100	<0.00005	<0.0050	<0.0001	<0.005	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.00002
C02.01	SX_IB_20220317_07_53_SS_Duplicate_ALS	<0.00005		<0.00002		<0.00005		<0.00005		<0.00002		<0.00005		<0.0001		<0.00002		<0.00002		<0.00002	<0.00002
C02.01	SX_IB_20220317_07_53_SS_Primary_ALS	<0.00005	<0.0050	<0.00005	<0.0100	<0.00005	<0.0050	<0.00005	<0.0050	<0.00005	<0.0100	<0.00005	<0.0050	<0.0001	<0.005	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.00002
C02.01	SX_IB_20220317_07_53_SS_Primary_ALS	<0.00005		<0.00002		<0.00005		<0.00005		<0.00002		<0.00005		<0.0001		<0.00002		<0.00002		<0.00002	<0.00002
C02.01	SX_IB_20220317_07_54_SS_Triplicate_EUF		<0.005		<0.01		<0.005		<0.005		<0.01		<0.005		<0.005		<0.005		<0.005		<0.005	
C02.01	SX_IB_20220317_07_54_SS_Triplicate_EUF	<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00001		<0.00001		<0.00001	<0.00001
C02.01	SX_IB_20220317_07_54_SS_Triplicate_EUF	<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00001		<0.00001		<0.00001	<0.00001
C02.01	SX_IB_20220317_08_03_SS_Primary_EUF		<0.005		<0.01		<0.005		<0.005		<0.01		<0.005		<0.005		<0.005		<0.005		<0.005	
C02.01	SX_IB_20220317_08_03_SS_Primary_EUF	<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00001		<0.00001		<0.00001	<0.00001
C02.01	SX_IB_20220317_08_03_SS_Primary_EUF	<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00001		<0.00001		<0.00001	<0.00001
C02.01	SX_IB_20220327_19_56_SS_Primary_ALS	<0.00005	<0.0050	<0.00002	<0.0100	<0.00005	<0.0050	<0.00005	<0.0050	<0.00002	<0.0100	<0.00005	<0.0050	<0.0001	<0.005	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.00002
C02.01	SX_IB_20220327_19_56_SS_Primary_ALS	<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.0001		<0.00002		<0.00002		<0.00002	<0.00002
C02.01	SX_IB_20220327_20_01_SS_Primary_EUF		<0.005		<0.01		<0.005		<0.005		<0.01		<0.005		<0.005		<0.005		<0.005		<0.005	

		N-Ethyl perfluorooctane sulfonamide (NEtFOSA)		N-ethyl-perfluorooctanesulfonamidoacetic acid (NEtFOSAA)		N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)		N-Methyl perfluorooctane sulfonamide (NMeFOSA)		N-methylperfluorooctane sulfonamidoacetic acid (NMeFOSAA)		N-Methylperfluorooctanesulfonamidoethanol (N-MeFOSE)		Perfluorobutanoic acid (PFBA)		Perfluorobutane sulfonic acid (PFBS)		Perfluorodecanoic acid (PFDA)		Perfluorododecanoic acid (PFDoDA)		Perfluorodecanesulfonic
		mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L
C02.01	SX_IB_20220327_20_01_SS_Primary_EUF	<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00001		<0.00001		<0.00001		<0.00001
C02.01	SX_IB_20220327_20_01_SS_Primary_EUF	<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00001		<0.00001		<0.00001		<0.00001
C02.01	SX_IB_20220327_23_57_SS_Primary_ALS	<0.00005	<0.0005	<0.00002	<0.0002	<0.00005	<0.0005	<0.00005	<0.0005	<0.00002	<0.0002	<0.00005	<0.0005	<0.0001	<0.001	<0.00002	<0.0002	<0.00002	<0.0002	<0.00002	<0.0002	<0.00002
C02.01	SX_IB_20220327_23_57_SS_Primary_ALS	<0.00005		<0.00002		<0.00005		<0.00005		<0.00002		<0.00005		<0.0001		<0.00002		<0.00002		<0.00002		<0.00002
C02.01	SX_IB_20220328_00_07_SS_Primary_EUF		<0.005		<0.01		<0.005		<0.005		<0.01		<0.005		<0.005		<0.005		<0.005		<0.005	
C02.01	SX_IB_20220328_00_07_SS_Primary_EUF	<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00001		<0.00001		<0.00001		<0.00001
C02.01	SX_IB_20220328_00_07_SS_Primary_EUF	<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00001		<0.00001		<0.00001		<0.00001
C02.01	SX_IB_20220328_04_00_SS_Primary_EUF		<0.005		<0.01		<0.005		<0.005		<0.01		<0.005		<0.005		<0.005		<0.005		<0.005	
C02.01	SX_IB_20220328_04_00_SS_Primary_EUF	<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00001		<0.00001		<0.00001		<0.00001
C02.01	SX_IB_20220328_04_00_SS_Primary_EUF	<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00001		<0.00001		<0.00001		<0.00001
C02.01	SX_IB_20220328_04_11_SS_Primary_ALS	<0.00005	<0.0005	<0.00002	<0.0002	<0.00005	<0.0005	<0.00005	<0.0005	<0.00002	<0.0002	<0.00005	<0.0005	<0.0001	<0.001	<0.00002	<0.0002	<0.00002	<0.0002	<0.00002	<0.0002	<0.00002
C02.01	SX_IB_20220328_04_11_SS_Primary_ALS	<0.00005		<0.00002		<0.00005		<0.00005		<0.00002		<0.00005		<0.0001		<0.00002		<0.00002		<0.00002		<0.00002
C02.01	SX_IB_20220328_07_41_SS_Primary_ALS	<0.00005	<0.0050	<0.00005	<0.0100	<0.00005	<0.0050	<0.00005	<0.0050	<0.00005	<0.0100	<0.00005	<0.0050	<0.0001	<0.005	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002
C02.01	SX_IB_20220328_07_41_SS_Primary_ALS	<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.0001		<0.00002		<0.00002		<0.00002		<0.00002
C02.01	SX_IB_20220328_07_45_SS_Duplicate_ALS	<0.00005	<0.0050	<0.00005	<0.0100	<0.00005	<0.0050	<0.00005	<0.0050	<0.00005	<0.0100	<0.00005	<0.0050	<0.0001	<0.005	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002
C02.01	SX_IB_20220328_07_45_SS_Duplicate_ALS	<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.0001		<0.00002		<0.00002		<0.00002		<0.00002
C02.01	SX_IB_20220328_07_46_SS_Triplicate_EUF		<0.005		<0.01		<0.005		<0.005		<0.01		<0.005		<0.005		<0.005		<0.005		<0.005	
C02.01	SX_IB_20220328_07_46_SS_Triplicate_EUF	<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00001		<0.00001		<0.00001		<0.00001
C02.01	SX_IB_20220328_07_46_SS_Triplicate_EUF	<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00001		<0.00001		<0.00001		<0.00001
C02.01	SX_IB_20220328_08_06_SS_Primary_EUF		<0.005		<0.01		<0.005		<0.005		<0.01		<0.005		<0.005		<0.005		<0.005		<0.005	
C02.01	SX_IB_20220328_08_06_SS_Primary_EUF	<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00001		<0.00001		<0.00001		<0.00001
C02.01	SX_IB_20220328_08_06_SS_Primary_EUF	<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00001		<0.00001		<0.00001		<0.00001
C02.01	SX_IB_20220328_11_51_SS_Primary_EUF		<0.005		<0.01		<0.005		<0.005		<0.01		<0.005		<0.005		<0.005		<0.005		<0.005	
C02.01	SX_IB_20220328_11_51_SS_Primary_EUF	<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00001		<0.00001		<0.00001		<0.00001
C02.01	SX_IB_20220328_11_51_SS_Primary_EUF	<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00001		<0.00001		<0.00001		<0.00001
C02.01	SX_IB_20220328_11_59_SS_Primary_ALS	<0.00005	<0.0050	<0.00005	<0.0100	<0.00005	<0.0050	<0.00005	<0.0050	<0.00005	<0.0100	<0.00005	<0.0050	<0.0001	<0.005	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002
C02.01	SX_IB_20220328_11_59_SS_Primary_ALS	<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.0001		<0.00002		<0.00002		<0.00002		<0.00002
C02.01	SX_IB_20220328_15_44_SS_Primary_EUF		<0.005		<0.01		<0.005		<0.005		<0.01		<0.005		<0.005		<0.005		<0.005		<0.005	
C02.01	SX_IB_20220328_11_59_SS_Primary_ALS	<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00002		<0.00002		<0.00002		<0.00002
C02.01	SX_IB_20220328_15_44_SS_Primary_EUF		<0.005		<0.01		<0.005		<0.005		<0.01		<0.005		<0.005		<0.005		<0.005		<0.005	
C02.01	SX_IB_20220328_15_44_SS_Primary_EUF	<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00001		<0.00001		<0.00001		<0.00001
C02.01	SX_IB_20220328_15_44_SS_Primary_EUF	<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00001		<0.00001		<0.00001		<0.00001
C02.01	SX_IB_20220328_15_47_SS_Duplicate_EUF		<0.005		<0.01		<0.005		<0.005		<0.01		<0.005		<0.005		<0.005		<0.005		<0.005	
C02.01	SX_IB_20220328_15_47_SS_Duplicate_EUF	<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00001		<0.00001		<0.00001		<0.00001
C02.01	SX_IB_20220328_15_47_SS_Duplicate_EUF	<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00001		<0.00001		<0.00001		<0.00001
C02.01	SX_IB_20220328_15_48_SS_Triplicate_ALS	<0.00005	<0.0050	<0.00005	<0.0100	<0.00005	<0.0050	<0.00005	<0.0050	<0.00005	<0.0100	<0.00005	<0.0050	<0.0001	<0.005	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002
C02.01	SX_IB_20220328_15_48_SS_Triplicate_ALS	<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.0001		<0.00002		<0.00002		<0.00002		<0.00002
C02.01	SX_IB_20220328_15_50_SS_Primary_ALS	<0.00005	<0.0050	<0.00005	<0.0100	<0.00005	<0.0050	<0.00005	<0.0050	<0.00005	<0.0100	<0.00005	<0.0050	<0.0001	<0.005	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002
C02.01	SX_IB_20220328_15_50_SS_Primary_ALS	<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005		<0.0001		<0.00002		<0.00002		<0.00002		<0.00002
Statistics																						
Number of Results		**72**	**36**	**72**	**36**	**72**	**36**	**72**	**36**	**72**	**36**	**72**	**36**	**72**	**36**	**72**	**36**	**72**	**36**	**72**	**36**	**72**
Number of Detects		**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Minimum Concentration		**<0.00005**	**<0.0005**	**<0.00002**	**<0.0002**	**<0.00005**	**<0.0005**	**<0.00005**	**<0.0005**	**<0.00002**	**<0.0002**	**<0.00005**	**<0.0005**	**<0.00005**	**<0.001**	**<0.00001**	**<0.0002**	**<0.00001**	**<0.0002**	**<0.00001**	**<0.0002**	**<0.00001**
Minimum Detect		**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**
Maximum Concentration		**<0.00005**	**<0.005**	**<0.00005**	**<0.01**	**<0.00005**	**<0.005**	**<0.00005**	**<0.005**	**<0.00005**	**<0.01**	**<0.00005**	**<0.005**	**<0.0001**	**<0.005**	**<0.00002**	**<0.005**	**<0.00002**	**<0.005**	**<0.00002**	**<0.005**	**<0.00002**
Maximum Detect		**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**
Average Concentration *		**0.000025**	**0.0024**	**0.000022**	**0.0047**	**0.000025**	**0.0024**	**0.000025**	**0.0024**	**0.000022**	**0.0047**	**0.000025**	**0.0024**	**0.000038**	**0.0024**	**0.0000075**	**0.0024**	**0.0000075**	**0.0024**	**0.0000075**	**0.0024**	**0.0000075**
Median Concentration *		**0.000025**	**0.0025**	**0.000025**	**0.005**	**0.000025**	**0.0025**	**0.000025**	**0.0025**	**0.000025**	**0.005**	**0.000025**	**0.0025**	**0.0000375**	**0.0025**	**0.0000075**	**0.0025**	**0.0000075**	**0.0025**	**0.0000075**	**0.0025**	**0.0000075**
Standard Deviation *		**0**	**0.00052**	**0.0000061**	**0.0011**	**0**	**0.00052**	**0**	**0.00052**	**0.0000061**	**0.0011**	**0**	**0.00052**	**0.000013**	**0.00046**	**0.0000025**	**0.00056**	**0.0000025**	**0.00056**	**0.0000025**	**0.00056**	**0.0000025**
95% UCL (Student's-t) *		**0.000025**	**0.00252**	**0.00002308**	**0.00505**	**0.000025**	**0.00252**	**0.000025**	**0.00252**	**0.00002308**	**0.00505**	**0.000025**	**0.00252**	**0.000039972**	**0.00252**	**0.0000079945**	**0.00252**	**0.0000079945**	**0.00252**	**0.0000079945**	**0.00252**	**0.0000079945**
% of Detects		**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
% of Non-Detects		**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**

* A Non Detect Multiplier of 0.5 has been applied.

Environmental Standards

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

		PFOS/PFOA																					
		acid (PFDS)	Perfluoroheptanoic acid (PFHpA)		Perfluoroheptane sulfonic acid (PFHpS)		Perfluorohexanoic acid (PFHxA)		Perfluorononanoic acid (PFNA)		Perfluorononanesulfonic acid (PFNS)(trace)		Perfluorooctanoic acid (PFOA)		Perfluorooctane sulfonamide (PFOSA)		Perfluoropentanoic acid (PFPeA)		Perfluoropentane sulfonic acid (PFPeS)		Perfluoropropanesulfonic acid (PFPrS)	
		mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg
EQL		0.0002	0.00001	0.0002	0.00001	0.0002	0.00001	0.0002	0.00001	0.0002	0.00001	0.005	0.00001	0.0002	0.00002	0.0002	0.00001	0.0002	0.00001	0.0002	0.00001	0.005
EPA PFAS Classification - Tunnel Zone - 2019/404 (SO 9038429) Threshold													0									
EPA PFAS Classification - Tunnel Zone - 2019/405 (SO 9038560) Threshold													0.00056									
EPA PFAS Classification - Tunnel Zone - 2019/406 (SO 9038561) Threshold													0.0056									
EPA PFAS Classification - Tunnel Zone - No option for disposal threshold													0.056									
EPA Victoria IWRG621 Category B Leached Upper Limits																						
EPA Victoria IWRG621 Category B Upper Limits																						
EPA Victoria IWRG621 Category C Leached Upper Limits																						
EPA Victoria IWRG621 Category C Upper Limts																						
EPA Victoria IWRG621 Fill Upper Limits																						
Location Code	**Field ID**																					
C02.01	SX_IB_20220316_08_17_SS_Primary_ALS	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050			<0.00001	<0.0050	<0.00005	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050		
C02.01	SX_IB_20220316_08_17_SS_Primary_ALS		<0.00002		<0.00002		<0.00002		<0.00002				<0.00001		<0.00002		<0.00002		<0.00002			
C02.01	SX_IB_20220316_08_20_SS_Duplicate_ALS	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050			<0.00001	<0.0050	<0.00005	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050		
C02.01	SX_IB_20220316_08_20_SS_Duplicate_ALS		<0.00002		<0.00002		<0.00002		<0.00002				<0.00001		<0.00002		<0.00002		<0.00002			
C02.01	SX_IB_20220316_08_22_SS_Triplicate_EUF	<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005
C02.01	SX_IB_20220316_08_22_SS_Triplicate_EUF		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00005		<0.00001		<0.00001		<0.00001	
C02.01	SX_IB_20220316_08_22_SS_Triplicate_EUF		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00005		<0.00001		<0.00001		<0.00001	
C02.01	SX_IB_20220316_08_36_SS_Primary_EUF	<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005
C02.01	SX_IB_20220316_08_36_SS_Primary_EUF		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00005		<0.00001		<0.00001		<0.00001	
C02.01	SX_IB_20220316_08_36_SS_Primary_EUF		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00005		<0.00001		<0.00001		<0.00001	
C02.01	SX_IB_20220316_12_12_SS_Primary_EUF	<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005
C02.01	SX_IB_20220316_12_12_SS_Primary_EUF		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00005		<0.00001		<0.00001		<0.00001	
C02.01	SX_IB_20220316_12_12_SS_Primary_EUF		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00005		<0.00001		<0.00001		<0.00001	
C02.01	SX_IB_20220316_12_25_SS_Primary_ALS	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050			<0.00001	<0.0050	<0.00005	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050		
C02.01	SX_IB_20220316_12_25_SS_Primary_ALS		<0.00002		<0.00002		<0.00002		<0.00002				<0.00001		<0.00002		<0.00002		<0.00002			
C02.01	SX_IB_20220316_16_12_SS_Primary_EUF	<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005
C02.01	SX_IB_20220316_12_25_SS_Primary_ALS		<0.00002		<0.00002		<0.00002		<0.00002				<0.00001		<0.00002		<0.00002		<0.00002			
C02.01	SX_IB_20220316_16_12_SS_Primary_EUF	<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005
C02.01	SX_IB_20220316_16_12_SS_Primary_EUF		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00005		<0.00001		<0.00001		<0.00001	
C02.01	SX_IB_20220316_16_12_SS_Primary_EUF		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00005		<0.00001		<0.00001		<0.00001	
C02.01	SX_IB_20220316_16_15_SS_Duplicate_EUF	<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005
C02.01	SX_IB_20220316_16_15_SS_Duplicate_EUF		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00005		<0.00001		<0.00001		<0.00001	
C02.01	SX_IB_20220316_16_15_SS_Duplicate_EUF		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00005		<0.00001		<0.00001		<0.00001	
C02.01	SX_IB_20220316_16_16_SS_Triplicate_ALS	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050			<0.00001	<0.0050	<0.00005	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050		
C02.01	SX_IB_20220316_16_16_SS_Triplicate_ALS		<0.00002		<0.00002		<0.00002		<0.00002				<0.00001		<0.00002		<0.00002		<0.00002			
C02.01	SX_IB_20220316_16_22_SS_Primary_ALS	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050			<0.00001	<0.0050	<0.00005	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050		
C02.01	SX_IB_20220316_16_22_SS_Primary_ALS		<0.00002		<0.00002		<0.00002		<0.00002				<0.00001		<0.00002		<0.00002		<0.00002			
C02.01	SX_IB_20220316_19_52_SS_Primary_ALS	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050			<0.00001	<0.0050	<0.00005	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050		
C02.01	SX_IB_20220316_19_52_SS_Primary_ALS		<0.00002		<0.00002		<0.00002		<0.00002				<0.00001		<0.00002		<0.00002		<0.00002			
C02.01	SX_IB_20220316_19_56_SS_Primary_EUF	<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005
C02.01	SX_IB_20220316_19_56_SS_Primary_EUF		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00005		<0.00001		<0.00001		<0.00001	
C02.01	SX_IB_20220316_19_56_SS_Primary_EUF		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00005		<0.00001		<0.00001		<0.00001	
C02.01	SX_IB_20220317_00_02_SS_Primary_EUF	<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005
C02.01	SX_IB_20220317_00_02_SS_Primary_EUF		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00005		<0.00001		<0.00001		<0.00001	
C02.01	SX_IB_20220317_00_02_SS_Primary_EUF		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00005		<0.00001		<0.00001		<0.00001	
C02.01	SX_IB_20220317_00_11_SS_Primary_ALS	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050			<0.00001	<0.0050	<0.00005	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050		
C02.01	SX_IB_20220317_00_11_SS_Primary_ALS		<0.00002		<0.00002		<0.00002		<0.00002				<0.00001		<0.00002		<0.00002		<0.00002			
C02.01	SX_IB_20220317_03_58_SS_Primary_EUF	<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005
C02.01	SX_IB_20220317_03_58_SS_Primary_EUF		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00005		<0.00001		<0.00001		<0.00001	
C02.01	SX_IB_20220317_03_58_SS_Primary_EUF		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00005		<0.00001		<0.00001		<0.00001	
C02.01	SX_IB_20220317_04_08_SS_Primary_ALS	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050			<0.00001	<0.0050	<0.00005	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050		
C02.01	SX_IB_20220317_04_08_SS_Primary_ALS		<0.00002		<0.00002		<0.00002		<0.00002				<0.00001		<0.00002		<0.00002		<0.00002			
C02.01	SX_IB_20220317_07_53_SS_Duplicate_ALS	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050			<0.00001	<0.0050	<0.00005	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050		
C02.01	SX_IB_20220317_07_53_SS_Duplicate_ALS		<0.00002		<0.00002		<0.00002		<0.00002				<0.00001		<0.00002		<0.00002		<0.00002			
C02.01	SX_IB_20220317_07_53_SS_Primary_ALS	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050			<0.00001	<0.0050	<0.00005	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050		
C02.01	SX_IB_20220317_07_53_SS_Primary_ALS		<0.00002		<0.00002		<0.00002		<0.00002				<0.00001		<0.00002		<0.00002		<0.00002			
C02.01	SX_IB_20220317_07_54_SS_Triplicate_EUF	<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005
C02.01	SX_IB_20220317_07_54_SS_Triplicate_EUF		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00005		<0.00001		<0.00001		<0.00001	
C02.01	SX_IB_20220317_07_54_SS_Triplicate_EUF		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00005		<0.00001		<0.00001		<0.00001	
C02.01	SX_IB_20220317_08_03_SS_Primary_EUF	<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005
C02.01	SX_IB_20220317_08_03_SS_Primary_EUF		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00005		<0.00001		<0.00001		<0.00001	
C02.01	SX_IB_20220317_08_03_SS_Primary_EUF		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00005		<0.00001		<0.00001		<0.00001	
C02.01	SX_IB_20220327_19_56_SS_Primary_ALS	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050			<0.00001	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050		
C02.01	SX_IB_20220327_19_56_SS_Primary_ALS		<0.00002		<0.00002		<0.00002		<0.00002				<0.00001		<0.00005		<0.00002		<0.00002			
C02.01	SX_IB_20220327_20_01_SS_Primary_EUF	<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005

		PFOS/PFOA																					
		acid (PFDS)	Perfluoroheptanoic acid (PFHpA)		Perfluoroheptane sulfonic acid (PFHpS)		Perfluorohexanoic acid (PFHxA)		Perfluorononanoic acid (PFNA)		Perfluorononanesulfonic acid (PFNS)(trace)		Perfluorooctanoic acid (PFOA)		Perfluorooctane sulfonamide (PFOSA)		Perfluoropentanoic acid (PFPeA)		Perfluoropentane sulfonic acid (PFPeS)		Perfluoropropanesulfonic acid (PFPrS)	
		mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg
C02.01	SX_IB_20220327_20_01_SS_Primary_EUF		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00005		<0.00001		<0.00001		<0.00001	
C02.01	SX_IB_20220327_20_01_SS_Primary_EUF		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00005		<0.00001		<0.00001		<0.00001	
C02.01	SX_IB_20220327_23_57_SS_Primary_ALS	<0.0002	<0.00002	<0.0002	<0.00002	<0.0002	<0.00002	<0.0002	<0.00002	<0.0002			<0.00001	<0.0002	<0.00002	<0.0002	<0.00002	<0.0002	<0.00002	<0.0002		
C02.01	SX_IB_20220327_23_57_SS_Primary_ALS		<0.00002		<0.00002		<0.00002		<0.00002				<0.00001		<0.00002		<0.00002		<0.00002			
C02.01	SX_IB_20220328_00_07_SS_Primary_EUF	<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005
C02.01	SX_IB_20220328_00_07_SS_Primary_EUF		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00005		<0.00001		<0.00001		<0.00001	
C02.01	SX_IB_20220328_00_07_SS_Primary_EUF		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00005		<0.00001		<0.00001		<0.00001	
C02.01	SX_IB_20220328_04_00_SS_Primary_EUF	<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005
C02.01	SX_IB_20220328_04_00_SS_Primary_EUF		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00005		<0.00001		<0.00001		<0.00001	
C02.01	SX_IB_20220328_04_00_SS_Primary_EUF		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00005		<0.00001		<0.00001		<0.00001	
C02.01	SX_IB_20220328_04_11_SS_Primary_ALS	<0.0002	<0.00002	<0.0002	<0.00002	<0.0002	<0.00002	<0.0002	<0.00002	<0.0002			<0.00001	<0.0002	<0.00002	<0.0002	<0.00002	<0.0002	<0.00002	<0.0002		
C02.01	SX_IB_20220328_04_11_SS_Primary_ALS		<0.00002		<0.00002		<0.00002		<0.00002				<0.00001		<0.00002		<0.00002		<0.00002			
C02.01	SX_IB_20220328_07_41_SS_Primary_ALS	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050			<0.00001	<0.0050	<0.00005	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050		
C02.01	SX_IB_20220328_07_41_SS_Primary_ALS		<0.00002		<0.00002		<0.00002		<0.00002				<0.00001		<0.00005		<0.00002		<0.00002			
C02.01	SX_IB_20220328_07_45_SS_Duplicate_ALS	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050			<0.00001	<0.0050	<0.00005	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050		
C02.01	SX_IB_20220328_07_45_SS_Duplicate_ALS		<0.00002		<0.00002		<0.00002		<0.00002				<0.00001		<0.00005		<0.00002		<0.00002			
C02.01	SX_IB_20220328_07_46_SS_Triplicate_EUF	<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005
C02.01	SX_IB_20220328_07_46_SS_Triplicate_EUF		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00005		<0.00001		<0.00001		<0.00001	
C02.01	SX_IB_20220328_07_46_SS_Triplicate_EUF		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00005		<0.00001		<0.00001		<0.00001	
C02.01	SX_IB_20220328_08_06_SS_Primary_EUF	<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005
C02.01	SX_IB_20220328_08_06_SS_Primary_EUF		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00005		<0.00001		<0.00001		<0.00001	
C02.01	SX_IB_20220328_08_06_SS_Primary_EUF		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00005		<0.00001		<0.00001		<0.00001	
C02.01	SX_IB_20220328_11_51_SS_Primary_EUF	<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005
C02.01	SX_IB_20220328_11_51_SS_Primary_EUF		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00005		<0.00001		<0.00001		<0.00001	
C02.01	SX_IB_20220328_11_51_SS_Primary_EUF		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00005		<0.00001		<0.00001		<0.00001	
C02.01	SX_IB_20220328_11_59_SS_Primary_ALS	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050			<0.00001	<0.0050	<0.00005	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050		
C02.01	SX_IB_20220328_11_59_SS_Primary_ALS		<0.00002		<0.00002		<0.00002		<0.00002				<0.00001		<0.00005		<0.00002		<0.00002			
C02.01	SX_IB_20220328_15_44_SS_Primary_EUF	<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005
C02.01	SX_IB_20220328_15_44_SS_Primary_EUF		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00005		<0.00001		<0.00001		<0.00001	
C02.01	SX_IB_20220328_15_44_SS_Primary_EUF		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00005		<0.00001		<0.00001		<0.00001	
C02.01	SX_IB_20220328_15_47_SS_Duplicate_EUF	<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005
C02.01	SX_IB_20220328_15_47_SS_Duplicate_EUF		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00005		<0.00001		<0.00001		<0.00001	
C02.01	SX_IB_20220328_15_47_SS_Duplicate_EUF		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00005		<0.00001		<0.00001		<0.00001	
C02.01	SX_IB_20220328_15_48_SS_Triplicate_ALS	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050			<0.00001	<0.0050	<0.00005	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050		
C02.01	SX_IB_20220328_15_48_SS_Triplicate_ALS		<0.00002		<0.00002		<0.00002		<0.00002				<0.00001		<0.00005		<0.00002		<0.00002			
C02.01	SX_IB_20220328_15_50_SS_Primary_ALS	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050			<0.00001	<0.0050	<0.00005	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050		
C02.01	SX_IB_20220328_15_50_SS_Primary_ALS		<0.00002		<0.00002		<0.00002		<0.00002				<0.00001		<0.00005		<0.00002		<0.00002			
Statistics																							
Number of Results		**36**	**72**	**36**	**72**	**36**	**72**	**36**	**72**	**36**	**36**	**18**	**72**	**36**	**72**	**36**	**72**	**36**	**72**	**36**	**36**	**18**	
Number of Detects		**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	
Minimum Concentration		**<0.0002**	**<0.00001**	**<0.0002**	**<0.00001**	**<0.0002**	**<0.00001**	**<0.0002**	**<0.00001**	**<0.0002**	**<0.00001**	**<0.005**	**<0.00001**	**<0.0002**	**<0.00002**	**<0.0002**	**<0.00001**	**<0.0002**	**<0.00001**	**<0.0002**	**<0.00001**	**<0.005**	
Minimum Detect		**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	
Maximum Concentration		**<0.005**	**<0.00002**	**<0.005**	**<0.00002**	**<0.005**	**<0.00002**	**<0.005**	**<0.00002**	**<0.005**	**<0.00001**	**<0.005**	**<0.00001**	**<0.005**	**<0.00005**	**<0.005**	**<0.00002**	**<0.005**	**<0.00002**	**<0.005**	**<0.00001**	**<0.005**	
Maximum Detect		**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	
Average Concentration *		**0.0024**	**0.0000075**	**0.0024**	**0.0000075**	**0.0024**	**0.0000075**	**0.0024**	**0.0000075**	**0.0024**	**0.000005**	**0.0025**	**0.000005**	**0.0024**	**0.000022**	**0.0024**	**0.0000075**	**0.0024**	**0.0000075**	**0.0024**	**0.000005**	**0.0025**	
Median Concentration *		**0.0025**	**0.0000075**	**0.0025**	**0.0000075**	**0.0025**	**0.0000075**	**0.0025**	**0.0000075**	**0.0025**	**0.000005**	**0.0025**	**0.000005**	**0.0025**	**0.000025**	**0.0025**	**0.0000075**	**0.0025**	**0.0000075**	**0.0025**	**0.000005**	**0.0025**	
Standard Deviation *		**0.00056**	**0.0000025**	**0.00056**	**0.0000025**	**0.00056**	**0.0000025**	**0.00056**	**0.0000025**	**0.00056**	**0**	**0**	**0**	**0.00056**	**0.0000061**	**0.00056**	**0.0000025**	**0.00056**	**0.0000025**	**0.00056**	**0**	**0**	
95% UCL (Student's-t) *		**0.00252**	**0.0000079945**	**0.00252**	**0.0000079945**	**0.00252**	**0.0000079945**	**0.00252**	**0.0000079945**	**0.00252**	**0.000005**	**0.0025**	**0.000005**	**0.00252**	**0.00002308**	**0.00252**	**0.0000079945**	**0.00252**	**0.0000079945**	**0.00252**	**0.000005**	**0.0025**	
% of Detects		**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	
% of Non-Detects		**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	

* A Non Detect Multiplier of 0.5 has been applied.

Environmental Standards

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

		Perfluorotetradecanoic acid (PFTeDA)		Perfluorotridecanoic acid (PFTrDA)		Perfluoroundecanoic acid (PFUnDA)		Perfluorooctanesulfonic acid (PFOS)		Perfluorohexane sulfonic acid (PFHxS)		Sum of PFHxS and PFOS		Sum of US EPA PFAS (PFOS + PFOA)*		Sum of enHealth PFAS (PFHxS + PFOS + PFOA)*		Sum of PFAS				
		mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/kg	mg/kg	mg/kg
EQL		0.00001	0.0005	0.00001	0.0002	0.00001	0.0002	0.00001	0.0002	0.00001	0.0002	0.00001	0.0002	0.00001	0.005	0.00001	0.005	0.00001	0.0002	0.5	0.01	0.5
EPA PFAS Classification - Tunnel Zone - 2019/404 (SO 9038429) Threshold												0										
EPA PFAS Classification - Tunnel Zone - 2019/405 (SO 9038560) Threshold												0.00007										
EPA PFAS Classification - Tunnel Zone - 2019/406 (SO 9038561) Threshold												0.0007										
EPA PFAS Classification - Tunnel Zone - No option for disposal threshold												0.007										
EPA Victoria IWRG621 Category B Leached Upper Limits																						
EPA Victoria IWRG621 Category B Upper Limits																						
EPA Victoria IWRG621 Category C Leached Upper Limits																						
EPA Victoria IWRG621 Category C Upper Limts																						
EPA Victoria IWRG621 Fill Upper Limits																						
Location Code	**Field ID**																					
C02.01	SX_IB_20220316_08_17_SS_Primary_ALS	<0.00005	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00001	<0.0050	<0.00001	<0.0050	<0.00001	<0.0050					<0.00010	<0.0500		<0.50	
C02.01	SX_IB_20220316_08_17_SS_Primary_ALS	<0.00005		<0.00002		<0.00002		<0.00001		<0.00001		<0.00001						<0.00001				
C02.01	SX_IB_20220316_08_20_SS_Duplicate_ALS	<0.00005	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00001	<0.0050	<0.00001	<0.0050	<0.00001	<0.0050					<0.00010	<0.0500		<0.50	
C02.01	SX_IB_20220316_08_20_SS_Duplicate_ALS	<0.00005		<0.00002		<0.00002		<0.00001		<0.00001		<0.00001						<0.00001				
C02.01	SX_IB_20220316_08_22_SS_Triplicate_EUF		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.05	<0.5	<0.5	<0.5
C02.01	SX_IB_20220316_08_22_SS_Triplicate_EUF	<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.0001				
C02.01	SX_IB_20220316_08_22_SS_Triplicate_EUF	<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.0001				
C02.01	SX_IB_20220316_08_36_SS_Primary_EUF		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.05	<0.5	<0.5	<0.5
C02.01	SX_IB_20220316_08_36_SS_Primary_EUF	<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.0001				
C02.01	SX_IB_20220316_08_36_SS_Primary_EUF	<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.0001				
C02.01	SX_IB_20220316_12_12_SS_Primary_EUF		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.05	<0.5	<0.5	<0.5
C02.01	SX_IB_20220316_12_12_SS_Primary_EUF	<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.0001				
C02.01	SX_IB_20220316_12_12_SS_Primary_EUF	<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.0001				
C02.01	SX_IB_20220316_12_25_SS_Primary_ALS	<0.00005	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00001	<0.0050	<0.00001	<0.0050	<0.00001	<0.0050					<0.00010	<0.0500		<0.50	
C02.01	SX_IB_20220316_12_25_SS_Primary_ALS	<0.00005		<0.00002		<0.00002		<0.00001		<0.00001		<0.00001						<0.00001				
C02.01	SX_IB_20220316_16_12_SS_Primary_EUF		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.05	<0.5	<0.5	<0.5
C02.01	SX_IB_20220316_12_25_SS_Primary_ALS	<0.00005		<0.00002		<0.00002		<0.00001		<0.00001		<0.00001						<0.00001				
C02.01	SX_IB_20220316_16_12_SS_Primary_EUF		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.05	<0.5	<0.5	<0.5
C02.01	SX_IB_20220316_16_12_SS_Primary_EUF	<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.0001				
C02.01	SX_IB_20220316_16_12_SS_Primary_EUF	<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.0001				
C02.01	SX_IB_20220316_16_15_SS_Duplicate_EUF		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.05	<0.5	<0.5	<0.5
C02.01	SX_IB_20220316_16_15_SS_Duplicate_EUF	<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.0001				
C02.01	SX_IB_20220316_16_15_SS_Duplicate_EUF	<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.0001				
C02.01	SX_IB_20220316_16_16_SS_Triplicate_ALS	<0.00005	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00001	<0.0050	<0.00001	<0.0050	<0.00001	<0.0050					<0.00010	<0.0500		<0.50	
C02.01	SX_IB_20220316_16_16_SS_Triplicate_ALS	<0.00005		<0.00002		<0.00002		<0.00001		<0.00001		<0.00001						<0.00001				
C02.01	SX_IB_20220316_16_22_SS_Primary_ALS	<0.00005	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00001	<0.0050	<0.00001	<0.0050	<0.00001	<0.0050					<0.00010	<0.0500		<0.50	
C02.01	SX_IB_20220316_16_22_SS_Primary_ALS	<0.00005		<0.00002		<0.00002		<0.00001		<0.00001		<0.00001						<0.00001				
C02.01	SX_IB_20220316_19_52_SS_Primary_ALS	<0.00005	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00001	<0.0050	<0.00001	<0.0050	<0.00001	<0.0050					<0.00010	<0.0500		<0.50	
C02.01	SX_IB_20220316_19_52_SS_Primary_ALS	<0.00005		<0.00002		<0.00002		<0.00001		<0.00001		<0.00001						<0.00001				
C02.01	SX_IB_20220316_19_56_SS_Primary_EUF		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.05	<0.5	<0.5	<0.5
C02.01	SX_IB_20220316_19_56_SS_Primary_EUF	<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.0001				
C02.01	SX_IB_20220316_19_56_SS_Primary_EUF	<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.0001				
C02.01	SX_IB_20220317_00_02_SS_Primary_EUF		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.05	<0.5	<0.5	<0.5
C02.01	SX_IB_20220317_00_02_SS_Primary_EUF	<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.0001				
C02.01	SX_IB_20220317_00_02_SS_Primary_EUF	<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.0001				
C02.01	SX_IB_20220317_00_11_SS_Primary_ALS	<0.00005	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00001	<0.0050	<0.00001	<0.0050	<0.00001	<0.0050					<0.00010	<0.0500		<0.50	
C02.01	SX_IB_20220317_00_11_SS_Primary_ALS	<0.00005		<0.00002		<0.00002		<0.00001		<0.00001		<0.00001						<0.00001				
C02.01	SX_IB_20220317_03_58_SS_Primary_EUF		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.05	<0.5	<0.5	<0.5
C02.01	SX_IB_20220317_03_58_SS_Primary_EUF	<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.0001				
C02.01	SX_IB_20220317_03_58_SS_Primary_EUF	<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.0001				
C02.01	SX_IB_20220317_04_08_SS_Primary_ALS	<0.00005	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00001	<0.0050	<0.00001	<0.0050	<0.00001	<0.0050					<0.00010	<0.0500		<0.50	
C02.01	SX_IB_20220317_04_08_SS_Primary_ALS	<0.00005		<0.00002		<0.00002		<0.00001		<0.00001		<0.00001						<0.00001				
C02.01	SX_IB_20220317_07_53_SS_Duplicate_ALS	<0.00005	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00001	<0.0050	<0.00001	<0.0050	<0.00001	<0.0050					<0.00010	<0.0500		<0.50	
C02.01	SX_IB_20220317_07_53_SS_Duplicate_ALS	<0.00005		<0.00002		<0.00002		<0.00001		<0.00001		<0.00001						<0.00001				
C02.01	SX_IB_20220317_07_53_SS_Primary_ALS	<0.00005	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00001	<0.0050	<0.00001	<0.0050	<0.00001	<0.0050					<0.00010	<0.0500		<0.50	
C02.01	SX_IB_20220317_07_53_SS_Primary_ALS	<0.00005		<0.00002		<0.00002		<0.00001		<0.00001		<0.00001						<0.00001				
C02.01	SX_IB_20220317_07_54_SS_Triplicate_EUF		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.05	<0.5	<0.5	<0.5
C02.01	SX_IB_20220317_07_54_SS_Triplicate_EUF	<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.0001				
C02.01	SX_IB_20220317_07_54_SS_Triplicate_EUF	<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.0001				
C02.01	SX_IB_20220317_08_03_SS_Primary_EUF		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.05	<0.5	<0.5	<0.5
C02.01	SX_IB_20220317_08_03_SS_Primary_EUF	<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.0001				
C02.01	SX_IB_20220317_08_03_SS_Primary_EUF	<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.0001				
C02.01	SX_IB_20220327_19_56_SS_Primary_ALS	<0.00005	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00001	<0.0050	<0.00001	<0.0050	<0.00001	<0.0050					<0.00001	<0.0500		<0.50	
C02.01	SX_IB_20220327_19_56_SS_Primary_ALS	<0.00005		<0.00002		<0.00002		<0.00001		<0.00001		<0.00001						<0.00010				
C02.01	SX_IB_20220327_20_01_SS_Primary_EUF		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.05	<0.5	<0.5	<0.5

		Perfluorotetradecanoic acid (PFTeDA)		Perfluorotridecanoic acid (PFTrDA)		Perfluoroundecanoic acid (PFUnDA)		Perfluorooctanesulfonic acid (PFOS)		Perfluorohexane sulfonic acid (PFHxS)		Sum of PFHxS and PFOS		Sum of US EPA PFAS (PFOS + PFOA)*		Sum of enHealth PFAS (PFHxS + PFOS + PFOA)*		Sum of PFAS		1,1-dichloroethane	1,1-dichloroethene	1,2,3-trichloropropane
		mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/kg	mg/kg	mg/kg
C02.01	SX_IB_20220327_20_01_SS_Primary_EUF	<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.0001				
C02.01	SX_IB_20220327_20_01_SS_Primary_EUF	<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.0001				
C02.01	SX_IB_20220327_23_57_SS_Primary_ALS	<0.00005	<0.0005	<0.00002	<0.0002	<0.00002	<0.0002	<0.00001	<0.0002	<0.00001	<0.0002	<0.00001	<0.0002					<0.00001	<0.0002		<0.01	
C02.01	SX_IB_20220327_23_57_SS_Primary_ALS	<0.00005		<0.00002		<0.00002		<0.00001		<0.00001		<0.00001						<0.00001				
C02.01	SX_IB_20220328_00_07_SS_Primary_EUF		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.05	<0.5	<0.5	<0.5
C02.01	SX_IB_20220328_00_07_SS_Primary_EUF	<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.0001				
C02.01	SX_IB_20220328_00_07_SS_Primary_EUF	<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.0001				
C02.01	SX_IB_20220328_04_00_SS_Primary_EUF		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.05	<0.5	<0.5	<0.5
C02.01	SX_IB_20220328_04_00_SS_Primary_EUF	<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.0001				
C02.01	SX_IB_20220328_04_00_SS_Primary_EUF	<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.0001				
C02.01	SX_IB_20220328_04_11_SS_Primary_ALS	<0.00005	<0.0005	<0.00002	<0.0002	<0.00002	<0.0002	<0.00001	<0.0002	<0.00001	<0.0002	<0.00001	<0.0002					<0.00001	<0.0002		<0.01	
C02.01	SX_IB_20220328_04_11_SS_Primary_ALS	<0.00005		<0.00002		<0.00002		<0.00001		<0.00001		<0.00001						<0.00001				
C02.01	SX_IB_20220328_07_41_SS_Primary_ALS	<0.00005	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00001	<0.0050	<0.00001	<0.0050	<0.00001	<0.0050					<0.00010	<0.0500		<0.50	
C02.01	SX_IB_20220328_07_41_SS_Primary_ALS	<0.00005		<0.00002		<0.00002		<0.00001		<0.00001		<0.00001						<0.00010				
C02.01	SX_IB_20220328_07_45_SS_Duplicate_ALS	<0.00005	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00001	<0.0050	<0.00001	<0.0050	<0.00001	<0.0050					<0.00010	<0.0500		<0.50	
C02.01	SX_IB_20220328_07_45_SS_Duplicate_ALS	<0.00005		<0.00002		<0.00002		<0.00001		<0.00001		<0.00001						<0.00010				
C02.01	SX_IB_20220328_07_46_SS_Triplicate_EUF		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.05	<0.5	<0.5	<0.5
C02.01	SX_IB_20220328_07_46_SS_Triplicate_EUF	<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.0001				
C02.01	SX_IB_20220328_07_46_SS_Triplicate_EUF	<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.0001				
C02.01	SX_IB_20220328_08_06_SS_Primary_EUF		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.05	<0.5	<0.5	<0.5
C02.01	SX_IB_20220328_08_06_SS_Primary_EUF	<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.0001				
C02.01	SX_IB_20220328_08_06_SS_Primary_EUF	<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.0001				
C02.01	SX_IB_20220328_11_51_SS_Primary_EUF		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.05	<0.5	<0.5	<0.5
C02.01	SX_IB_20220328_11_51_SS_Primary_EUF	<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.0001				
C02.01	SX_IB_20220328_11_51_SS_Primary_EUF	<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.0001				
C02.01	SX_IB_20220328_11_59_SS_Primary_ALS	<0.00005	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00001	<0.0050	<0.00001	<0.0050	<0.00001	<0.0050					<0.00010	<0.0500		<0.50	
C02.01	SX_IB_20220328_11_59_SS_Primary_ALS	<0.00005		<0.00002		<0.00002		<0.00001		<0.00001		<0.00001						<0.00010				
C02.01	SX_IB_20220328_15_44_SS_Primary_EUF		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.05	<0.5	<0.5	<0.5
C02.01	SX_IB_20220328_15_44_SS_Primary_EUF	<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.0001				
C02.01	SX_IB_20220328_15_44_SS_Primary_EUF	<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.0001				
C02.01	SX_IB_20220328_15_47_SS_Duplicate_EUF		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.05	<0.5	<0.5	<0.5
C02.01	SX_IB_20220328_15_47_SS_Duplicate_EUF	<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.0001				
C02.01	SX_IB_20220328_15_47_SS_Duplicate_EUF	<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.0001				
C02.01	SX_IB_20220328_15_48_SS_Triplicate_ALS	<0.00005	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00001	<0.0050	<0.00001	<0.0050	<0.00001	<0.0050					<0.00010	<0.0500		<0.50	
C02.01	SX_IB_20220328_15_48_SS_Triplicate_ALS	<0.00005		<0.00002		<0.00002		<0.00001		<0.00001		<0.00001						<0.00010				
C02.01	SX_IB_20220328_15_50_SS_Primary_ALS	<0.00005	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00001	<0.0050	<0.00001	<0.0050	<0.00001	<0.0050					<0.00010	<0.0500		<0.50	
C02.01	SX_IB_20220328_15_50_SS_Primary_ALS	<0.00005		<0.00002		<0.00002		<0.00001		<0.00001		<0.00001						<0.00010				

Statistics

Number of Results	72	36	72	36	72	36	72	36	72	36	72	36	36	18	36	18	72	36	18	36	18
Number of Detects	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Minimum Concentration	<0.00001	<0.0005	<0.00001	<0.0002	<0.00001	<0.0002	<0.00001	<0.0002	<0.00001	<0.0002	<0.00001	<0.0002	<0.00001	<0.005	<0.00001	<0.005	<0.00001	<0.0002	<0.5	<0.01	<0.5
Minimum Detect	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Maximum Concentration	<0.00005	<0.005	<0.00002	<0.005	<0.00002	<0.005	<0.00001	<0.005	<0.00001	<0.005	<0.00001	<0.005	<0.00001	<0.005	<0.00001	<0.005	<0.0001	<0.05	<0.5	<0.5	<0.5
Maximum Detect	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Average Concentration *	0.000015	0.0024	0.0000075	0.0024	0.0000075	0.0024	0.000005	0.0024	0.000005	0.0024	0.000005	0.0024	0.000005	0.0025	0.000005	0.0025	0.000041	0.024	0.25	0.24	0.25
Median Concentration *	0.000015	0.0025	0.0000075	0.0025	0.0000075	0.0025	0.000005	0.0025	0.000005	0.0025	0.000005	0.0025	0.000005	0.0025	0.000005	0.0025	0.00005	0.025	0.25	0.25	0.25
Standard Deviation *	0.00001	0.00052	0.0000025	0.00056	0.0000025	0.00056	0	0.00056	0	0.00056	0	0.00056	0	0	0	0	0.000018	0.0058	0	0.057	0
95% UCL (Student's-t) *	0.000016978	0.00252	0.0000079945	0.00252	0.0000079945	0.00252	0.000005	0.00252	0.000005	0.00252	0.000005	0.00252	0.000005	0.0025	0.000005	0.0025	0.00004424	0.0252	0.25	0.252	0.25
% of Detects	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% of Non-Detects	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100

* A Non Detect Multiplier of 0.5 has been applied.

Environmental Standards

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

		Chlorinated Hydrocarbons																				
		1,2-dichloroethane	1,2-dichloropropane	1,3-dichloropropane	Bromochloromethane	1,1,1,2-tetrachloroethane	Bromodichloromethane	1,1,1-trichloroethane	Chloroform	1,1,2,2-tetrachloroethane	Chloromethane	cis-1,3-dichloropropene	Dibromomethane	Dichloromethane	Hexachlorobutadiene	Other chlorinated hydrocarbons EPAVic	Trichloroethene	Chlorinated hydrocarbons EPAVic	cis-1,2-dichloroethene	1,1,2-trichloroethane	trans-1,3-dichloropropene	Vinyl chloride
		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	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		0.02	0.5	0.5	0.5	0.01	0.5	0.01	0.02	0.02	0.5	0.5	0.5	0.4	0.02	0.01	0.02	0.01	0.01	0.04	0.5	0.02
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															11	50						4.8
EPA Victoria IWRG621 Category C Leached Upper Limits																						
EPA Victoria IWRG621 Category C Upper Limts															2.8	10						1.2
EPA Victoria IWRG621 Fill Upper Limits																		1				
Location Code	**Field ID**																					
C02.01	SX_IB_20220316_08_17_SS_Primary_ALS	<0.50				<0.50		<0.50	<0.50	<0.50				<0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		<0.50
C02.01	SX_IB_20220316_08_17_SS_Primary_ALS																					
C02.01	SX_IB_20220316_08_20_SS_Duplicate_ALS	<0.50				<0.50		<0.50	<0.50	<0.50				<0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		<0.50
C02.01	SX_IB_20220316_08_20_SS_Duplicate_ALS																					
C02.01	SX_IB_20220316_08_22_SS_Triplicate_EUF	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
C02.01	SX_IB_20220316_08_22_SS_Triplicate_EUF																					
C02.01	SX_IB_20220316_08_22_SS_Triplicate_EUF																					
C02.01	SX_IB_20220316_08_36_SS_Primary_EUF	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
C02.01	SX_IB_20220316_08_36_SS_Primary_EUF																					
C02.01	SX_IB_20220316_08_36_SS_Primary_EUF																					
C02.01	SX_IB_20220316_12_12_SS_Primary_EUF	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
C02.01	SX_IB_20220316_12_12_SS_Primary_EUF																					
C02.01	SX_IB_20220316_12_12_SS_Primary_EUF																					
C02.01	SX_IB_20220316_12_25_SS_Primary_ALS	<0.50				<0.50		<0.50	<0.50	<0.50				<0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		<0.50
C02.01	SX_IB_20220316_12_25_SS_Primary_ALS																					
C02.01	SX_IB_20220316_16_12_SS_Primary_EUF	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
C02.01	SX_IB_20220316_12_25_SS_Primary_ALS																					
C02.01	SX_IB_20220316_16_12_SS_Primary_EUF	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
C02.01	SX_IB_20220316_16_12_SS_Primary_EUF																					
C02.01	SX_IB_20220316_16_12_SS_Primary_EUF																					
C02.01	SX_IB_20220316_16_15_SS_Duplicate_EUF	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
C02.01	SX_IB_20220316_16_15_SS_Duplicate_EUF																					
C02.01	SX_IB_20220316_16_15_SS_Duplicate_EUF																					
C02.01	SX_IB_20220316_16_16_SS_Triplicate_ALS	<0.50				<0.50		<0.50	<0.50	<0.50				<0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		<0.50
C02.01	SX_IB_20220316_16_16_SS_Triplicate_ALS																					
C02.01	SX_IB_20220316_16_22_SS_Primary_ALS	<0.50				<0.50		<0.50	<0.50	<0.50				<0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		<0.50
C02.01	SX_IB_20220316_16_22_SS_Primary_ALS																					
C02.01	SX_IB_20220316_19_52_SS_Primary_ALS	<0.50				<0.50		<0.50	<0.50	<0.50				<0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		<0.50
C02.01	SX_IB_20220316_19_52_SS_Primary_ALS																					
C02.01	SX_IB_20220316_19_56_SS_Primary_EUF	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
C02.01	SX_IB_20220316_19_56_SS_Primary_EUF																					
C02.01	SX_IB_20220316_19_56_SS_Primary_EUF																					
C02.01	SX_IB_20220317_00_02_SS_Primary_EUF	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
C02.01	SX_IB_20220317_00_02_SS_Primary_EUF																					
C02.01	SX_IB_20220317_00_02_SS_Primary_EUF																					
C02.01	SX_IB_20220317_00_11_SS_Primary_ALS	<0.50				<0.50		<0.50	<0.50	<0.50				<0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		<0.50
C02.01	SX_IB_20220317_00_11_SS_Primary_ALS																					
C02.01	SX_IB_20220317_03_58_SS_Primary_EUF	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
C02.01	SX_IB_20220317_03_58_SS_Primary_EUF																					
C02.01	SX_IB_20220317_03_58_SS_Primary_EUF																					
C02.01	SX_IB_20220317_04_08_SS_Primary_ALS	<0.50				<0.50		<0.50	<0.50	<0.50				<0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		<0.50
C02.01	SX_IB_20220317_04_08_SS_Primary_ALS																					
C02.01	SX_IB_20220317_07_53_SS_Duplicate_ALS	<0.50				<0.50		<0.50	<0.50	<0.50				<0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		<0.50
C02.01	SX_IB_20220317_07_53_SS_Duplicate_ALS																					
C02.01	SX_IB_20220317_07_53_SS_Primary_ALS	<0.50				<0.50		<0.50	<0.50	<0.50				<0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		<0.50
C02.01	SX_IB_20220317_07_53_SS_Primary_ALS																					
C02.01	SX_IB_20220317_07_54_SS_Triplicate_EUF	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
C02.01	SX_IB_20220317_07_54_SS_Triplicate_EUF																					
C02.01	SX_IB_20220317_07_54_SS_Triplicate_EUF																					
C02.01	SX_IB_20220317_08_03_SS_Primary_EUF	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
C02.01	SX_IB_20220317_08_03_SS_Primary_EUF																					
C02.01	SX_IB_20220317_08_03_SS_Primary_EUF																					
C02.01	SX_IB_20220327_19_56_SS_Primary_ALS	<0.50				<0.50		<0.50	<0.50	<0.50				<0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		<0.50
C02.01	SX_IB_20220327_19_56_SS_Primary_ALS																					
C02.01	SX_IB_20220327_20_01_SS_Primary_EUF	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

		Chlorinated Hydrocarbons																				
		1,2-dichloroethane	1,2-dichloropropane	1,3-dichloropropane	Bromochloromethane	1,1,1,2-tetrachloroethane	Bromodichloromethane	1,1,1-trichloroethane	Chloroform	1,1,2,2-tetrachloroethane	Chloromethane	cis-1,3-dichloropropene	Dibromomethane	Dichloromethane	Hexachlorobutadiene	Other chlorinated hydrocarbons EPAVic	Trichloroethene	Chlorinated hydrocarbons EPAVic	cis-1,2-dichloroethene	1,1,2-trichloroethane	trans-1,3-dichloropropene	Vinyl chloride
		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
C02.01	SX_IB_20220327_20_01_SS_Primary_EUF																					
C02.01	SX_IB_20220327_20_01_SS_Primary_EUF																					
C02.01	SX_IB_20220327_23_57_SS_Primary_ALS	<0.02				<0.01		<0.01	<0.02	<0.02				<0.4	<0.02	<0.01	<0.02	<0.01	<0.01	<0.04		<0.02
C02.01	SX_IB_20220327_23_57_SS_Primary_ALS																					
C02.01	SX_IB_20220328_00_07_SS_Primary_EUF	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
C02.01	SX_IB_20220328_00_07_SS_Primary_EUF																					
C02.01	SX_IB_20220328_00_07_SS_Primary_EUF																					
C02.01	SX_IB_20220328_04_00_SS_Primary_EUF	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
C02.01	SX_IB_20220328_04_00_SS_Primary_EUF																					
C02.01	SX_IB_20220328_04_00_SS_Primary_EUF																					
C02.01	SX_IB_20220328_04_11_SS_Primary_ALS	<0.02				<0.01		<0.01	<0.02	<0.02				<0.4	<0.02	<0.01	<0.02	<0.01	<0.01	<0.04		<0.02
C02.01	SX_IB_20220328_04_11_SS_Primary_ALS																					
C02.01	SX_IB_20220328_07_41_SS_Primary_ALS	<0.50				<0.50		<0.50	<0.50	<0.50				<0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		<0.50
C02.01	SX_IB_20220328_07_41_SS_Primary_ALS																					
C02.01	SX_IB_20220328_07_45_SS_Duplicate_ALS	<0.50				<0.50		<0.50	<0.50	<0.50				<0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		<0.50
C02.01	SX_IB_20220328_07_45_SS_Duplicate_ALS																					
C02.01	SX_IB_20220328_07_46_SS_Triplicate_EUF	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
C02.01	SX_IB_20220328_07_46_SS_Triplicate_EUF																					
C02.01	SX_IB_20220328_07_46_SS_Triplicate_EUF																					
C02.01	SX_IB_20220328_08_06_SS_Primary_EUF	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
C02.01	SX_IB_20220328_08_06_SS_Primary_EUF																					
C02.01	SX_IB_20220328_08_06_SS_Primary_EUF																					
C02.01	SX_IB_20220328_11_51_SS_Primary_EUF	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
C02.01	SX_IB_20220328_11_51_SS_Primary_EUF																					
C02.01	SX_IB_20220328_11_51_SS_Primary_EUF																					
C02.01	SX_IB_20220328_11_59_SS_Primary_ALS	<0.50				<0.50		<0.50	<0.50	<0.50				<0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		<0.50
C02.01	SX_IB_20220328_11_59_SS_Primary_ALS																					
C02.01	SX_IB_20220328_15_44_SS_Primary_EUF	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
C02.01	SX_IB_20220328_15_44_SS_Primary_EUF																					
C02.01	SX_IB_20220328_15_44_SS_Primary_EUF																					
C02.01	SX_IB_20220328_15_47_SS_Duplicate_EUF	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
C02.01	SX_IB_20220328_15_47_SS_Duplicate_EUF																					
C02.01	SX_IB_20220328_15_47_SS_Duplicate_EUF																					
C02.01	SX_IB_20220328_15_48_SS_Triplicate_ALS	<0.50				<0.50		<0.50	<0.50	<0.50				<0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		<0.50
C02.01	SX_IB_20220328_15_48_SS_Triplicate_ALS																					
C02.01	SX_IB_20220328_15_50_SS_Primary_ALS	<0.50				<0.50		<0.50	<0.50	<0.50				<0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		<0.50
C02.01	SX_IB_20220328_15_50_SS_Primary_ALS																					
Statistics																						
Number of Results		**36**	**18**	**18**	**18**	**36**	**18**	**36**	**36**	**36**	**18**	**18**	**18**	**36**	**36**	**36**	**36**	**36**	**36**	**36**	**18**	**36**
Number of Detects		**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Minimum Concentration		**<0.02**	**<0.5**	**<0.5**	**<0.5**	**<0.01**	**<0.5**	**<0.01**	**<0.02**	**<0.02**	**<0.5**	**<0.5**	**<0.5**	**<0.4**	**<0.02**	**<0.01**	**<0.02**	**<0.01**	**<0.01**	**<0.04**	**<0.5**	**<0.02**
Minimum Detect		**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**
Maximum Concentration		**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**
Maximum Detect		**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**
Average Concentration *		**0.24**	**0.25**	**0.25**	**0.25**	**0.24**	**0.25**	**0.24**	**0.24**	**0.24**	**0.25**	**0.25**	**0.25**	**0.25**	**0.24**	**0.24**	**0.24**	**0.24**	**0.24**	**0.24**	**0.25**	**0.24**
Median Concentration *		**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**
Standard Deviation *		**0.056**	**0**	**0**	**0**	**0.057**	**0**	**0.057**	**0.056**	**0.056**	**0**	**0**	**0**	**0.012**	**0.056**	**0.057**	**0.056**	**0.057**	**0.057**	**0.053**	**0**	**0.056**
95% UCL (Student's-t) *		**0.252**	**0.25**	**0.25**	**0.25**	**0.252**	**0.25**	**0.252**	**0.252**	**0.252**	**0.25**	**0.25**	**0.25**	**0.25**	**0.252**	**0.252**	**0.252**	**0.252**	**0.252**	**0.252**	**0.25**	**0.252**
% of Detects		**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
% of Non-Detects		**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**

* A Non Detect Multiplier of 0.5 has been applied.

Environmental Standards

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

								NA			PCBs								Inorg			
		Bromoform	Carbon tetrachloride	Chlorodibromomethane	Chloroethane	trans-1,2-dichloroethene	Tetrachloroethene	Sum of WA DWER PFAS (n=10)*		Moisture Content	Arochlor 1232	Arochlor 1242	Arochlor 1248	Arochlor 1254	Arochlor 1221	Arochlor 1260	Arochlor 1016	PCBs (Sum of total)	pH (after HCL)	pH (Final)	pH (Initial)	pH of Leaching Fluid
		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	UG/KG	µg/L	%	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	-	-	-	-
EQL		0.5	0.01	0.5	0.5	0.02	0.02	0.05		1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
EPA PFAS Classification - Tunnel Zone - 2019/404 (SO 9038429) Threshold																						
EPA PFAS Classification - Tunnel Zone - 2019/405 (SO 9038560) Threshold																						
EPA PFAS Classification - Tunnel Zone - 2019/406 (SO 9038561) Threshold																						
EPA PFAS Classification - Tunnel Zone - No option for disposal threshold																						
EPA Victoria IWRG621 Category B Leached Upper Limits																						
EPA Victoria IWRG621 Category B Upper Limits																						
EPA Victoria IWRG621 Category C Leached Upper Limits																						
EPA Victoria IWRG621 Category C Upper Limts																						
EPA Victoria IWRG621 Fill Upper Limits																		2				
Location Code	**Field ID**																					
C02.01	SX_IB_20220316_08_17_SS_Primary_ALS		<0.50			<0.50	<0.50	<10.0	<0.05	30.7								<0.1	1.6	5.1	8.9	5.0
C02.01	SX_IB_20220316_08_17_SS_Primary_ALS								<0.01											9.3		
C02.01	SX_IB_20220316_08_20_SS_Duplicate_ALS		<0.50			<0.50	<0.50	<10.0	<0.05	34.4								<0.1	1.5	5.0	8.7	5.0
C02.01	SX_IB_20220316_08_20_SS_Duplicate_ALS								<0.01											9.2		
C02.01	SX_IB_20220316_08_22_SS_Triplicate_EUF	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<10			<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1				
C02.01	SX_IB_20220316_08_22_SS_Triplicate_EUF							<0.05												5.3		5.1
C02.01	SX_IB_20220316_08_22_SS_Triplicate_EUF							<0.05												9.3		6.5
C02.01	SX_IB_20220316_08_36_SS_Primary_EUF	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<10			<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1				
C02.01	SX_IB_20220316_08_36_SS_Primary_EUF							<0.05												5.2		5.1
C02.01	SX_IB_20220316_08_36_SS_Primary_EUF							<0.05												9.3		6.5
C02.01	SX_IB_20220316_12_12_SS_Primary_EUF	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<10			<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1				
C02.01	SX_IB_20220316_12_12_SS_Primary_EUF							<0.05												5.2		5.1
C02.01	SX_IB_20220316_12_12_SS_Primary_EUF							<0.05												9.4		6.5
C02.01	SX_IB_20220316_12_25_SS_Primary_ALS		<0.50			<0.50	<0.50	<10.0	<0.05	34.5								<0.1	1.6	5.0	8.9	5.0
C02.01	SX_IB_20220316_12_25_SS_Primary_ALS								<0.01											9.4		
C02.01	SX_IB_20220316_16_12_SS_Primary_EUF	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<10			<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1				
C02.01	SX_IB_20220316_16_12_SS_Primary_EUF							<0.05												5.2		5.1
C02.01	SX_IB_20220316_16_12_SS_Primary_EUF							<0.05												9.4		6.5
C02.01	SX_IB_20220316_16_15_SS_Duplicate_EUF	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<10			<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1				
C02.01	SX_IB_20220316_16_15_SS_Duplicate_EUF							<0.05												5.2		5.1
C02.01	SX_IB_20220316_16_15_SS_Duplicate_EUF							<0.05												9.3		6.5
C02.01	SX_IB_20220316_16_16_SS_Triplicate_ALS		<0.50			<0.50	<0.50	<10.0	<0.05	33.1								<0.1	1.5	5.1	8.8	5.0
C02.01	SX_IB_20220316_16_16_SS_Triplicate_ALS								<0.01											9.4		
C02.01	SX_IB_20220316_16_22_SS_Primary_ALS		<0.50			<0.50	<0.50	<10.0	<0.05	34.3								<0.1	1.6	5.1	8.8	5.0
C02.01	SX_IB_20220316_16_22_SS_Primary_ALS								<0.01											9.4		
C02.01	SX_IB_20220316_19_52_SS_Primary_ALS		<0.50			<0.50	<0.50	<10.0	<0.05	32.0								<0.1	1.4	5.0	8.9	5.0
C02.01	SX_IB_20220316_19_52_SS_Primary_ALS								<0.01											9.4		
C02.01	SX_IB_20220316_19_56_SS_Primary_EUF	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<10			<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1				
C02.01	SX_IB_20220316_19_56_SS_Primary_EUF							<0.05												5.2		5.1
C02.01	SX_IB_20220316_19_56_SS_Primary_EUF							<0.05												9.4		6.5
C02.01	SX_IB_20220317_00_02_SS_Primary_EUF	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<10			<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1				
C02.01	SX_IB_20220317_00_02_SS_Primary_EUF							<0.05												5.2		5.1
C02.01	SX_IB_20220317_00_02_SS_Primary_EUF							<0.05												9.3		6.5
C02.01	SX_IB_20220317_00_11_SS_Primary_ALS		<0.50			<0.50	<0.50	<10.0	<0.05	33.1								<0.1	1.5	5.0	8.9	5.0
C02.01	SX_IB_20220317_00_11_SS_Primary_ALS								<0.01											9.7		
C02.01	SX_IB_20220317_03_58_SS_Primary_EUF	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<10			<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1				
C02.01	SX_IB_20220317_03_58_SS_Primary_EUF							<0.05												5.2		5.1
C02.01	SX_IB_20220317_03_58_SS_Primary_EUF							<0.05												9.3		6.5
C02.01	SX_IB_20220317_04_08_SS_Primary_ALS		<0.50			<0.50	<0.50	<10.0	<0.05	31.5								<0.1	1.5	5.1	9.1	5.0
C02.01	SX_IB_20220317_04_08_SS_Primary_ALS								<0.01											9.6		
C02.01	SX_IB_20220317_07_53_SS_Duplicate_ALS		<0.50			<0.50	<0.50	<10.0	<0.05	31.7								<0.1	1.6	5.1	9.3	5.0
C02.01	SX_IB_20220317_07_53_SS_Duplicate_ALS								<0.01											9.4		
C02.01	SX_IB_20220317_07_53_SS_Primary_ALS		<0.50			<0.50	<0.50	<10.0	<0.05	32.3								<0.1	1.6	5.1	9.4	5.0
C02.01	SX_IB_20220317_07_53_SS_Primary_ALS								<0.01											9.4		
C02.01	SX_IB_20220317_07_54_SS_Triplicate_EUF	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<10			<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1				
C02.01	SX_IB_20220317_07_54_SS_Triplicate_EUF							<0.05												5.2		5.1
C02.01	SX_IB_20220317_07_54_SS_Triplicate_EUF							<0.05												9.2		6.5
C02.01	SX_IB_20220317_08_03_SS_Primary_EUF	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<10			<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1				
C02.01	SX_IB_20220317_08_03_SS_Primary_EUF							<0.05												5.2		5.1
C02.01	SX_IB_20220317_08_03_SS_Primary_EUF							<0.05												9.3		6.5
C02.01	SX_IB_20220327_19_56_SS_Primary_ALS		<0.50			<0.50	<0.50	<10.0	<0.01	32.8								<0.1	1.3	4.9	9.6	5.0
C02.01	SX_IB_20220327_19_56_SS_Primary_ALS								<0.05											10.0		
C02.01	SX_IB_20220327_20_01_SS_Primary_EUF	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<10			<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1				

								NA			PCBs								Inorg			
		Bromoform	Carbon tetrachloride	Chlorodibromomethane	Chloroethane	trans-1,2-dichloroethene	Tetrachloroethene	Sum of WA DWER PFAS (n=10)*		Moisture Content	Arochlor 1232	Arochlor 1242	Arochlor 1248	Arochlor 1254	Arochlor 1221	Arochlor 1260	Arochlor 1016	PCBs (Sum of total)	pH (after HCL)	pH (Final)	pH (Initial)	pH of Leaching Fluid
		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	UG/KG	µg/L	%	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	-	-	-	-
C02.01	SX_IB_20220327_20_01_SS_Primary_EUF							<0.05												5.1		5.0
C02.01	SX_IB_20220327_20_01_SS_Primary_EUF							<0.05												9.3		6.4
C02.01	SX_IB_20220327_23_57_SS_Primary_ALS		<0.01			<0.02	<0.02	<0.2	<0.01	31.5								<0.1	1.3	5.0	9.2	5.0
C02.01	SX_IB_20220327_23_57_SS_Primary_ALS								<0.01											9.6		
C02.01	SX_IB_20220328_00_07_SS_Primary_EUF	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<10			<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1				
C02.01	SX_IB_20220328_00_07_SS_Primary_EUF							<0.05												5.4		5.0
C02.01	SX_IB_20220328_00_07_SS_Primary_EUF							<0.05												10		6.4
C02.01	SX_IB_20220328_04_00_SS_Primary_EUF	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<10			<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1				
C02.01	SX_IB_20220328_04_00_SS_Primary_EUF							<0.05												5.1		5.0
C02.01	SX_IB_20220328_04_00_SS_Primary_EUF							<0.05												9.3		6.4
C02.01	SX_IB_20220328_04_11_SS_Primary_ALS		<0.01			<0.02	<0.02	<0.2	<0.01	32.6								<0.1	1.3	5.0	9.6	5.0
C02.01	SX_IB_20220328_04_11_SS_Primary_ALS								<0.01											9.6		
C02.01	SX_IB_20220328_07_41_SS_Primary_ALS		<0.50			<0.50	<0.50	<10.0	<0.05	31.4								<0.1	1.6	5.0	7.7	5.0
C02.01	SX_IB_20220328_07_41_SS_Primary_ALS								<0.05											9.4		
C02.01	SX_IB_20220328_07_45_SS_Duplicate_ALS		<0.50			<0.50	<0.50	<10.0	<0.05	32.0								<0.1	1.6	5.2	9.3	5.0
C02.01	SX_IB_20220328_07_45_SS_Duplicate_ALS								<0.05											9.7		
C02.01	SX_IB_20220328_07_46_SS_Triplicate_EUF	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<10			<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1				
C02.01	SX_IB_20220328_07_46_SS_Triplicate_EUF							<0.05												5.1		5.0
C02.01	SX_IB_20220328_07_46_SS_Triplicate_EUF							<0.05												9.2		6.7
C02.01	SX_IB_20220328_08_06_SS_Primary_EUF	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<10			<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1				
C02.01	SX_IB_20220328_08_06_SS_Primary_EUF							<0.05												5.2		5.0
C02.01	SX_IB_20220328_08_06_SS_Primary_EUF							<0.05												9.2		6.7
C02.01	SX_IB_20220328_11_51_SS_Primary_EUF	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<10			<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1				
C02.01	SX_IB_20220328_11_51_SS_Primary_EUF							<0.05												5.1		5.0
C02.01	SX_IB_20220328_11_51_SS_Primary_EUF							<0.05												9.1		6.7
C02.01	SX_IB_20220328_11_59_SS_Primary_ALS		<0.50			<0.50	<0.50	<10.0	<0.05	29.9								<0.1	1.6	5.0	8.9	5.0
C02.01	SX_IB_20220328_11_59_SS_Primary_ALS								<0.05											9.4		
C02.01	SX_IB_20220328_15_44_SS_Primary_EUF	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<10			<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1				
C02.01	SX_IB_20220328_15_44_SS_Primary_EUF							<0.05												5.2		5.0
C02.01	SX_IB_20220328_15_44_SS_Primary_EUF							<0.05												9.2		6.7
C02.01	SX_IB_20220328_15_47_SS_Duplicate_EUF	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<10			<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1				
C02.01	SX_IB_20220328_15_47_SS_Duplicate_EUF							<0.05												5.2		5.0
C02.01	SX_IB_20220328_15_47_SS_Duplicate_EUF							<0.05												9.2		6.7
C02.01	SX_IB_20220328_15_48_SS_Triplicate_ALS		<0.50			<0.50	<0.50	<10.0	<0.05	31.3								<0.1	1.5	5.1	9.2	5.0
C02.01	SX_IB_20220328_15_48_SS_Triplicate_ALS								<0.05											9.5		
C02.01	SX_IB_20220328_15_50_SS_Primary_ALS		<0.50			<0.50	<0.50	<10.0	<0.05	28.9								<0.1	1.4	5.1	9.2	5.0
C02.01	SX_IB_20220328_15_50_SS_Primary_ALS								<0.05											9.3		
Statistics																						
Number of Results		**18**	**36**	**18**	**18**	**36**	**36**	**72**	**36**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**36**	**18**	**72**	**18**	**54**
Number of Detects		**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**18**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**18**	**72**	**18**	**54**
Minimum Concentration		**<0.5**	**<0.01**	**<0.5**	**<0.5**	**<0.02**	**<0.02**	**<0.05**	**<0.01**	**28.9**	**<0.1**	**<0.1**	**<0.1**	**<0.1**	**<0.1**	**<0.1**	**<0.1**	**<0.1**	**1.3**	**4.9**	**7.7**	**5**
Minimum Detect		**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**28.9**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**1.3**	**4.9**	**7.7**	**5**
Maximum Concentration		**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<10**	**<0.05**	**34.5**	**<0.1**	**<0.1**	**<0.1**	**<0.1**	**<0.1**	**<0.1**	**<0.1**	**<0.1**	**1.6**	**10**	**9.6**	**6.7**
Maximum Detect		**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**34.5**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**1.6**	**10**	**9.6**	**6.7**
Average Concentration *		**0.25**	**0.24**	**0.25**	**0.25**	**0.24**	**0.24**	**2.4**	**0.017**	**32**	**0.05**	**0.05**	**0.05**	**0.05**	**0.05**	**0.05**	**0.05**	**0.05**	**1.5**	**7.3**	**9**	**5.5**
Median Concentration *		**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.0625**	**0.025**	**32**	**0.05**	**0.05**	**0.05**	**0.05**	**0.05**	**0.05**	**0.05**	**0.05**	**1.5**	**7.25**	**9**	**5.1**
Standard Deviation *		**0**	**0.057**	**0**	**0**	**0.056**	**0.056**	**2.5**	**0.01**	**1.5**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.11**	**2.2**	**0.43**	**0.72**
95% UCL (Student's-t) *		**0.25**	**0.252**	**0.25**	**0.25**	**0.252**	**0.252**	**2.867**	**0.0195**	**32.72**	**0.05**	**0.05**	**0.05**	**0.05**	**0.05**	**0.05**	**0.05**	**0.05**	**1.547**	**7.685**	**9.197**	**5.696**
% of Detects		**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**100**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**100**	**100**	**100**	**100**
% of Non-Detects		**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**0**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**0**	**0**	**0**	**0**

* A Non Detect Multiplier of 0.5 has been applied.

Environmental Standards

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

		anics				Halogenated Benzenes							Halogenated Hydrocarbons						MAH				
		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	1,2-dibromoethane	Dichlorodifluoromethane	Trichlorofluoromethane	Total MAH	Monocylic aromatic hydrocarbons EPAVic	1,3,5-trimethylbenzene	Styrene	Isopropylbenzene
		-	mg/kg	%	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	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	40	1	1	0.01	0.02	0.5	0.02	0.5	0.5	0.02	0.5	0.5	0.5	0.5	0.5	0.5	0.2	0.5	0.5	0.5
EPA PFAS Classification - Tunnel Zone - 2019/404 (SO 9038429) Threshold																						
EPA PFAS Classification - Tunnel Zone - 2019/405 (SO 9038560) Threshold																						
EPA PFAS Classification - Tunnel Zone - 2019/406 (SO 9038561) Threshold																						
EPA PFAS Classification - Tunnel Zone - No option for disposal threshold																						
EPA Victoria IWRG621 Category B Leached Upper Limits																						
EPA Victoria IWRG621 Category B Upper Limits			40,000		10,000														240			
EPA Victoria IWRG621 Category C Leached Upper Limits																						
EPA Victoria IWRG621 Category C Upper Limts			10,000		2,500														70			
EPA Victoria IWRG621 Fill Upper Limits			450		50														7			
Location Code	**Field ID**																					
C02.01	SX_IB_20220316_08_17_SS_Primary_ALS		250		<5	<0.50	<0.50		<0.50			<0.50							<0.5		<0.5	
C02.01	SX_IB_20220316_08_17_SS_Primary_ALS																					
C02.01	SX_IB_20220316_08_20_SS_Duplicate_ALS		250		<5	<0.50	<0.50		<0.50			<0.50							<0.5		<0.5	
C02.01	SX_IB_20220316_08_20_SS_Duplicate_ALS																					
C02.01	SX_IB_20220316_08_22_SS_Triplicate_EUF	9.0	<100	28	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5	<0.5	<0.5
C02.01	SX_IB_20220316_08_22_SS_Triplicate_EUF																					
C02.01	SX_IB_20220316_08_22_SS_Triplicate_EUF																					
C02.01	SX_IB_20220316_08_36_SS_Primary_EUF	8.9	<100	30	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5	<0.5	<0.5
C02.01	SX_IB_20220316_08_36_SS_Primary_EUF																					
C02.01	SX_IB_20220316_08_36_SS_Primary_EUF																					
C02.01	SX_IB_20220316_12_12_SS_Primary_EUF	9.1	<100	30	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5	<0.5	<0.5
C02.01	SX_IB_20220316_12_12_SS_Primary_EUF																					
C02.01	SX_IB_20220316_12_12_SS_Primary_EUF																					
C02.01	SX_IB_20220316_12_25_SS_Primary_ALS		180		<5	<0.50	<0.50		<0.50			<0.50							<0.5		<0.5	
C02.01	SX_IB_20220316_12_25_SS_Primary_ALS																					
C02.01	SX_IB_20220316_16_12_SS_Primary_EUF	8.8	<100	31	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5	<0.5	<0.5
C02.01	SX_IB_20220316_16_12_SS_Primary_EUF																					
C02.01	SX_IB_20220316_16_12_SS_Primary_EUF																					
C02.01	SX_IB_20220316_16_15_SS_Duplicate_EUF	8.7	<100	29	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5	<0.5	<0.5
C02.01	SX_IB_20220316_16_15_SS_Duplicate_EUF																					
C02.01	SX_IB_20220316_16_15_SS_Duplicate_EUF																					
C02.01	SX_IB_20220316_16_16_SS_Triplicate_ALS		210		<5	<0.50	<0.50		<0.50			<0.50							<0.5		<0.5	
C02.01	SX_IB_20220316_16_16_SS_Triplicate_ALS																					
C02.01	SX_IB_20220316_16_22_SS_Primary_ALS		230		<5	<0.50	<0.50		<0.50			<0.50							<0.5		<0.5	
C02.01	SX_IB_20220316_16_22_SS_Primary_ALS																					
C02.01	SX_IB_20220316_19_52_SS_Primary_ALS		210		<5	<0.50	<0.50		<0.50			<0.50							<0.5		<0.5	
C02.01	SX_IB_20220316_19_52_SS_Primary_ALS																					
C02.01	SX_IB_20220316_19_56_SS_Primary_EUF	8.9	<100	30	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5	<0.5	<0.5
C02.01	SX_IB_20220316_19_56_SS_Primary_EUF																					
C02.01	SX_IB_20220316_19_56_SS_Primary_EUF																					
C02.01	SX_IB_20220317_00_02_SS_Primary_EUF	8.9	<100	31	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5	<0.5	<0.5
C02.01	SX_IB_20220317_00_02_SS_Primary_EUF																					
C02.01	SX_IB_20220317_00_02_SS_Primary_EUF																					
C02.01	SX_IB_20220317_00_11_SS_Primary_ALS		240		<5	<0.50	<0.50		<0.50			<0.50							<0.5		<0.5	
C02.01	SX_IB_20220317_00_11_SS_Primary_ALS																					
C02.01	SX_IB_20220317_03_58_SS_Primary_EUF	7.0	<100	30	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5	<0.5	<0.5
C02.01	SX_IB_20220317_03_58_SS_Primary_EUF																					
C02.01	SX_IB_20220317_03_58_SS_Primary_EUF																					
C02.01	SX_IB_20220317_04_08_SS_Primary_ALS		200		<5	<0.50	<0.50		<0.50			<0.50							<0.5		<0.5	
C02.01	SX_IB_20220317_04_08_SS_Primary_ALS																					
C02.01	SX_IB_20220317_07_53_SS_Duplicate_ALS		190		<5	<0.50	<0.50		<0.50			<0.50							<0.5		<0.5	
C02.01	SX_IB_20220317_07_53_SS_Duplicate_ALS																					
C02.01	SX_IB_20220317_07_53_SS_Primary_ALS		310		<5	<0.50	<0.50		<0.50			<0.50							<0.5		<0.5	
C02.01	SX_IB_20220317_07_53_SS_Primary_ALS																					
C02.01	SX_IB_20220317_07_54_SS_Triplicate_EUF	9.0	<100	30	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5	<0.5	<0.5
C02.01	SX_IB_20220317_07_54_SS_Triplicate_EUF																					
C02.01	SX_IB_20220317_07_54_SS_Triplicate_EUF																					
C02.01	SX_IB_20220317_08_03_SS_Primary_EUF	8.9	<100	28	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5	<0.5	<0.5
C02.01	SX_IB_20220317_08_03_SS_Primary_EUF																					
C02.01	SX_IB_20220317_08_03_SS_Primary_EUF																					
C02.01	SX_IB_20220327_19_56_SS_Primary_ALS		200		<5	<0.50	<0.50		<0.50			<0.50							<0.5		<0.5	
C02.01	SX_IB_20220327_19_56_SS_Primary_ALS																					
C02.01	SX_IB_20220327_20_01_SS_Primary_EUF	9.1	<100	31	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5	<0.5	<0.5

		anics				Halogenated Benzenes							Halogenated Hydrocarbons					MAH				
		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	1,2-dibromoethane	Dichlorodifluoromethane	Trichlorofluoromethane	Total MAH	Monocylic aromatic hydrocarbons EPAVic	1,3,5-trimethylbenzene	Styrene	Isopropylbenzene
		-	mg/kg	%	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
C02.01	SX_IB_20220327_20_01_SS_Primary_EUF																					
C02.01	SX_IB_20220327_20_01_SS_Primary_EUF																					
C02.01	SX_IB_20220327_23_57_SS_Primary_ALS		170		<1	<0.01	<0.02		<0.02			<0.02							<0.2		<0.5	
C02.01	SX_IB_20220327_23_57_SS_Primary_ALS																					
C02.01	SX_IB_20220328_00_07_SS_Primary_EUF	10	<100	35	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5	<0.5	<0.5
C02.01	SX_IB_20220328_00_07_SS_Primary_EUF																					
C02.01	SX_IB_20220328_00_07_SS_Primary_EUF																					
C02.01	SX_IB_20220328_04_00_SS_Primary_EUF	8.5	<100	31	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5	<0.5	<0.5
C02.01	SX_IB_20220328_04_00_SS_Primary_EUF																					
C02.01	SX_IB_20220328_04_00_SS_Primary_EUF																					
C02.01	SX_IB_20220328_04_11_SS_Primary_ALS		160		<1	<0.01	<0.02		<0.02			<0.02							<0.2		<0.5	
C02.01	SX_IB_20220328_04_11_SS_Primary_ALS																					
C02.01	SX_IB_20220328_07_41_SS_Primary_ALS		230		<5	<0.50	<0.50		<0.50			<0.50							<0.5		<0.5	
C02.01	SX_IB_20220328_07_41_SS_Primary_ALS																					
C02.01	SX_IB_20220328_07_45_SS_Duplicate_ALS		210		<5	<0.50	<0.50		<0.50			<0.50							<0.5		<0.5	
C02.01	SX_IB_20220328_07_45_SS_Duplicate_ALS																					
C02.01	SX_IB_20220328_07_46_SS_Triplicate_EUF	9.0	<100	30	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5	<0.5	<0.5
C02.01	SX_IB_20220328_07_46_SS_Triplicate_EUF																					
C02.01	SX_IB_20220328_07_46_SS_Triplicate_EUF																					
C02.01	SX_IB_20220328_08_06_SS_Primary_EUF	8.9	200	30	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5	<0.5	<0.5
C02.01	SX_IB_20220328_08_06_SS_Primary_EUF																					
C02.01	SX_IB_20220328_08_06_SS_Primary_EUF																					
C02.01	SX_IB_20220328_11_51_SS_Primary_EUF	8.7	<100	31	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5	<0.5	<0.5
C02.01	SX_IB_20220328_11_51_SS_Primary_EUF																					
C02.01	SX_IB_20220328_11_51_SS_Primary_EUF																					
C02.01	SX_IB_20220328_11_59_SS_Primary_ALS		240		<5	<0.50	<0.50		<0.50			<0.50							<0.5		<0.5	
C02.01	SX_IB_20220328_11_59_SS_Primary_ALS																					
C02.01	SX_IB_20220328_15_44_SS_Primary_EUF	9.3	<100	30	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5	<0.5	<0.5
C02.01	SX_IB_20220328_15_44_SS_Primary_EUF																					
C02.01	SX_IB_20220328_15_44_SS_Primary_EUF																					
C02.01	SX_IB_20220328_15_47_SS_Duplicate_EUF	8.6	<100	29	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5	<0.5	<0.5
C02.01	SX_IB_20220328_15_47_SS_Duplicate_EUF																					
C02.01	SX_IB_20220328_15_47_SS_Duplicate_EUF																					
C02.01	SX_IB_20220328_15_48_SS_Triplicate_ALS		360		<5	<0.50	<0.50		<0.50			<0.50							<0.5		<0.5	
C02.01	SX_IB_20220328_15_48_SS_Triplicate_ALS																					
C02.01	SX_IB_20220328_15_50_SS_Primary_ALS		240		<5	<0.50	<0.50		<0.50			<0.50							<0.5		<0.5	
C02.01	SX_IB_20220328_15_50_SS_Primary_ALS																					
Statistics																						
Number of Results		**18**	**36**	**18**	**36**	**36**	**36**	**18**	**36**	**18**	**18**	**36**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**18**	**36**	**18**
Number of Detects		**18**	**19**	**18**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Minimum Concentration		**7**	**<100**	**28**	**<1**	**<0.01**	**<0.02**	**<0.5**	**<0.02**	**<0.5**	**<0.5**	**<0.02**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.2**	**<0.5**	**<0.5**	**<0.5**
Minimum Detect		**7**	**160**	**28**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**
Maximum Concentration		**10**	**360**	**35**	**<5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**
Maximum Detect		**10**	**360**	**35**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**
Average Concentration *		**8.8**	**142**	**30**	**2.4**	**0.24**	**0.24**	**0.25**	**0.24**	**0.25**	**0.25**	**0.24**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.23**	**0.25**	**0.25**	**0.25**
Median Concentration *		**8.9**	**165**	**30**	**2.5**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**
Standard Deviation *		**0.56**	**95**	**1.5**	**0.46**	**0.057**	**0.056**	**0**	**0.056**	**0**	**0**	**0.056**	**0**	**0**	**0**	**0**	**0**	**0**	**0.049**	**0**	**0**	**0**
95% UCL (Student's-t) *		**9.081**	**169.3**	**30.84**	**2.52**	**0.252**	**0.252**	**0.25**	**0.252**	**0.25**	**0.25**	**0.252**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.253**	**0.25**	**0.25**	**0.25**
% of Detects		**100**	**53**	**100**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
% of Non-Detects		**0**	**47**	**0**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**

* A Non Detect Multiplier of 0.5 has been applied.

Environmental Standards

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

		Solvents						SPOCAS
		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	-
EQL		0.5	0.5	0.5	0.5	0.5	0.5	0.1
EPA PFAS Classification - Tunnel Zone - 2019/404 (SO 9038429) Threshold								
EPA PFAS Classification - Tunnel Zone - 2019/405 (SO 9038560) Threshold								
EPA PFAS Classification - Tunnel Zone - 2019/406 (SO 9038561) Threshold								
EPA PFAS Classification - Tunnel Zone - No option for disposal threshold								
EPA Victoria IWRG621 Category B Leached Upper Limits								
EPA Victoria IWRG621 Category B Upper Limits								
EPA Victoria IWRG621 Category C Leached Upper Limits								
EPA Victoria IWRG621 Category C Upper Limts								
EPA Victoria IWRG621 Fill Upper Limits								
Location Code	**Field ID**							
C02.01	SX_IB_20220316_08_17_SS_Primary_ALS							7.8
C02.01	SX_IB_20220316_08_17_SS_Primary_ALS							
C02.01	SX_IB_20220316_08_20_SS_Duplicate_ALS							7.8
C02.01	SX_IB_20220316_08_20_SS_Duplicate_ALS							
C02.01	SX_IB_20220316_08_22_SS_Triplicate_EUF	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
C02.01	SX_IB_20220316_08_22_SS_Triplicate_EUF							
C02.01	SX_IB_20220316_08_22_SS_Triplicate_EUF							
C02.01	SX_IB_20220316_08_36_SS_Primary_EUF	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
C02.01	SX_IB_20220316_08_36_SS_Primary_EUF							
C02.01	SX_IB_20220316_08_36_SS_Primary_EUF							
C02.01	SX_IB_20220316_12_12_SS_Primary_EUF	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
C02.01	SX_IB_20220316_12_12_SS_Primary_EUF							
C02.01	SX_IB_20220316_12_12_SS_Primary_EUF							
C02.01	SX_IB_20220316_12_25_SS_Primary_ALS							7.8
C02.01	SX_IB_20220316_12_25_SS_Primary_ALS							
C02.01	SX_IB_20220316_16_12_SS_Primary_EUF	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
C02.01	SX_IB_20220316_12_25_SS_Primary_ALS							
C02.01	SX_IB_20220316_16_12_SS_Primary_EUF	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
C02.01	SX_IB_20220316_16_12_SS_Primary_EUF							
C02.01	SX_IB_20220316_16_12_SS_Primary_EUF							
C02.01	SX_IB_20220316_16_15_SS_Duplicate_EUF	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
C02.01	SX_IB_20220316_16_15_SS_Duplicate_EUF							
C02.01	SX_IB_20220316_16_15_SS_Duplicate_EUF							
C02.01	SX_IB_20220316_16_16_SS_Triplicate_ALS							7.8
C02.01	SX_IB_20220316_16_16_SS_Triplicate_ALS							
C02.01	SX_IB_20220316_16_22_SS_Primary_ALS							7.8
C02.01	SX_IB_20220316_16_22_SS_Primary_ALS							
C02.01	SX_IB_20220316_19_52_SS_Primary_ALS							7.7
C02.01	SX_IB_20220316_19_52_SS_Primary_ALS							
C02.01	SX_IB_20220316_19_56_SS_Primary_EUF	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
C02.01	SX_IB_20220316_19_56_SS_Primary_EUF							
C02.01	SX_IB_20220316_19_56_SS_Primary_EUF							
C02.01	SX_IB_20220317_00_02_SS_Primary_EUF	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
C02.01	SX_IB_20220317_00_02_SS_Primary_EUF							
C02.01	SX_IB_20220317_00_02_SS_Primary_EUF							
C02.01	SX_IB_20220317_00_11_SS_Primary_ALS							7.8
C02.01	SX_IB_20220317_00_11_SS_Primary_ALS							
C02.01	SX_IB_20220317_03_58_SS_Primary_EUF	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
C02.01	SX_IB_20220317_03_58_SS_Primary_EUF							
C02.01	SX_IB_20220317_03_58_SS_Primary_EUF							
C02.01	SX_IB_20220317_04_08_SS_Primary_ALS							7.8
C02.01	SX_IB_20220317_04_08_SS_Primary_ALS							
C02.01	SX_IB_20220317_07_53_SS_Duplicate_ALS							7.8
C02.01	SX_IB_20220317_07_53_SS_Duplicate_ALS							
C02.01	SX_IB_20220317_07_53_SS_Primary_ALS							7.8
C02.01	SX_IB_20220317_07_53_SS_Primary_ALS							
C02.01	SX_IB_20220317_07_54_SS_Triplicate_EUF	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
C02.01	SX_IB_20220317_07_54_SS_Triplicate_EUF							
C02.01	SX_IB_20220317_07_54_SS_Triplicate_EUF							
C02.01	SX_IB_20220317_08_03_SS_Primary_EUF	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
C02.01	SX_IB_20220317_08_03_SS_Primary_EUF							
C02.01	SX_IB_20220317_08_03_SS_Primary_EUF							
C02.01	SX_IB_20220327_19_56_SS_Primary_ALS							8.3
C02.01	SX_IB_20220327_19_56_SS_Primary_ALS							
C02.01	SX_IB_20220327_20_01_SS_Primary_EUF	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	

			Solvents					SPOCAS
		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	-
C02.01	SX_IB_20220327_20_01_SS_Primary_EUF							
C02.01	SX_IB_20220327_20_01_SS_Primary_EUF							
C02.01	SX_IB_20220327_23_57_SS_Primary_ALS							7.7
C02.01	SX_IB_20220327_23_57_SS_Primary_ALS							
C02.01	SX_IB_20220328_00_07_SS_Primary_EUF	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
C02.01	SX_IB_20220328_00_07_SS_Primary_EUF							
C02.01	SX_IB_20220328_00_07_SS_Primary_EUF							
C02.01	SX_IB_20220328_04_00_SS_Primary_EUF	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
C02.01	SX_IB_20220328_04_00_SS_Primary_EUF							
C02.01	SX_IB_20220328_04_00_SS_Primary_EUF							
C02.01	SX_IB_20220328_04_11_SS_Primary_ALS							7.9
C02.01	SX_IB_20220328_04_11_SS_Primary_ALS							
C02.01	SX_IB_20220328_07_41_SS_Primary_ALS							8.0
C02.01	SX_IB_20220328_07_41_SS_Primary_ALS							
C02.01	SX_IB_20220328_07_45_SS_Duplicate_ALS							8.1
C02.01	SX_IB_20220328_07_45_SS_Duplicate_ALS							
C02.01	SX_IB_20220328_07_46_SS_Triplicate_EUF	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
C02.01	SX_IB_20220328_07_46_SS_Triplicate_EUF							
C02.01	SX_IB_20220328_07_46_SS_Triplicate_EUF							
C02.01	SX_IB_20220328_08_06_SS_Primary_EUF	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
C02.01	SX_IB_20220328_08_06_SS_Primary_EUF							
C02.01	SX_IB_20220328_08_06_SS_Primary_EUF							
C02.01	SX_IB_20220328_11_51_SS_Primary_EUF	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
C02.01	SX_IB_20220328_11_51_SS_Primary_EUF							
C02.01	SX_IB_20220328_11_51_SS_Primary_EUF							
C02.01	SX_IB_20220328_11_59_SS_Primary_ALS							7.8
C02.01	SX_IB_20220328_11_59_SS_Primary_ALS							
C02.01	SX_IB_20220328_15_44_SS_Primary_EUF	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
C02.01	SX_IB_20220328_15_44_SS_Primary_EUF							
C02.01	SX_IB_20220328_15_44_SS_Primary_EUF							
C02.01	SX_IB_20220328_15_47_SS_Duplicate_EUF	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
C02.01	SX_IB_20220328_15_47_SS_Duplicate_EUF							
C02.01	SX_IB_20220328_15_47_SS_Duplicate_EUF							
C02.01	SX_IB_20220328_15_48_SS_Triplicate_ALS							8.0
C02.01	SX_IB_20220328_15_48_SS_Triplicate_ALS							
C02.01	SX_IB_20220328_15_50_SS_Primary_ALS							7.8
C02.01	SX_IB_20220328_15_50_SS_Primary_ALS							

Statistics

Number of Results	**18**	**18**	**18**	**18**	**18**	**18**	**18**
Number of Detects	**0**	**0**	**0**	**0**	**0**	**0**	**18**
Minimum Concentration	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**7.7**
Minimum Detect	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**7.7**
Maximum Concentration	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**8.3**
Maximum Detect	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**8.3**
Average Concentration *	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**7.9**
Median Concentration *	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**7.8**
Standard Deviation *	**0**	**0**	**0**	**0**	**0**	**0**	**0.15**
95% UCL (Student's-t) *	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**7.923**
% of Detects	**0**	**0**	**0**	**0**	**0**	**0**	**100**
% of Non-Detects	**100**	**100**	**100**	**100**	**100**	**100**	**0**

* A Non Detect Multiplier of 0.5 has been applied.

Environmental Standards

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

								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	Depth	Lab Report Number	Lab Name	Sample Type	Parent Sample											
C02.01	SX_IB_20220316_16_12_SS_Pri	16/03/2022		872036	MGT	Normal		21	<0.4	60	120	<1	<5	<0.1	<5	170	<2	<2
C02.01	SX_IB_20220316_16_15_SS_Du	16/03/2022		872036	MGT	Field_D	M22-Ma34703	38	<0.4	110	130	<1	<5	<0.1	<5	230	<2	<2
RPD								58	0	59	8	0	0	0	0	30	0	0
C02.01	SX_IB_20220316_16_12_SS_Pri	16/03/2022		872036	MGT	Normal		21	<0.4	60	120	<1	<5	<0.1	<5	170	<2	<2
C02.01	SX_IB_20220316_16_16_SS_Tri	16/03/2022		EM2204736	ALSE-Melbourne	Interlab_D	M22-Ma34703	18	<1	55	88	<1.0	<5	<0.1	<5	143	<5	<2
RPD								15	0	9	31	0	0	0	0	17	0	0
C02.01	SX_IB_20220316_16_12_SS_Pri	16/03/2022		872036	MGT	Normal												
C02.01	SX_IB_20220316_16_15_SS_Du	16/03/2022		872036	MGT	Field_D	M22-Ma34711											
RPD																		
C02.01	SX_IB_20220316_16_12_SS_Pri	16/03/2022		872036	MGT	Normal												
C02.01	SX_IB_20220316_16_15_SS_Du	16/03/2022		872036	MGT	Field_D	M22-Ma34719											
RPD																		
C02.01	SX_IB_20220316_16_12_SS_Pri	16/03/2022		872036	MGT	Normal												
C02.01	SX_IB_20220316_16_16_SS_Tri	16/03/2022		EM2204736	ALSE-Melbourne	Interlab_D	M22-Ma34719											
RPD																		
C02.01	SX_IB_20220316_08_17_SS_Pri	16/03/2022		EM2204736	ALSE-Melbourne	Normal		18	<1	47	82	<1.0	<5	<0.1	<5	117	<5	<2
C02.01	SX_IB_20220316_08_20_SS_Du	16/03/2022		EM2204736	ALSE-Melbourne	Field_D	EM2204736001	17	<1	63	89	<1.0	<5	<0.1	<5	129	<5	<2
RPD								6	0	29	8	0	0	0	0	10	0	0
C02.01	SX_IB_20220316_08_17_SS_Pri	16/03/2022		EM2204736	ALSE-Melbourne	Normal		18	<1	47	82	<1.0	<5	<0.1	<5	117	<5	<2
C02.01	SX_IB_20220316_08_22_SS_Tri	16/03/2022		872036	MGT	Interlab_D	EM2204736001	22	<0.4	72	120	<1	<5	<0.1	<5	180	<2	<2
RPD								20	0	42	38	0	0	0	0	42	0	0
C02.01	SX_IB_20220316_08_17_SS_Pri	16/03/2022		EM2204736	ALSE-Melbourne	Normal		18	<1	47	82	<1.0	<5	<0.1	<5	117	<5	<2
C02.01	SX_IB_20220316_08_22_SS_Tri	16/03/2022		872036	MGT	Interlab_D	EM2204736001											
RPD																		
C02.01	SX_IB_20220316_08_17_SS_Pri	16/03/2022		EM2204736	ALSE-Melbourne	Normal												
C02.01	SX_IB_20220316_08_20_SS_Du	16/03/2022		EM2204736	ALSE-Melbourne	Field_D	EM2204736009											
RPD																		
C02.01	SX_IB_20220316_08_17_SS_Pri	16/03/2022		EM2204736	ALSE-Melbourne	Normal												
C02.01	SX_IB_20220316_08_22_SS_Tri	16/03/2022		872036	MGT	Interlab_D	EM2204736009											
RPD																		
A04.01	SX_OB_20220317_16_02_SS_Pr	17/03/2022		872310	MGT	Normal		37	<0.4	61	120	<1	<5	<0.1	<5	200	<2	<2
A04.01	SX_OB_20220317_16_02_SS_Du	17/03/2022		872310	MGT	Field_D	M22-Ma36471	42	<0.4	68	120	<1	<5	<0.1	<5	230	<2	<2
RPD								13	0	11	0	0	0	0	0	14	0	0
A04.01	SX_OB_20220317_16_02_SS_Pr	17/03/2022		872310	MGT	Normal		37	<0.4	61	120	<1	<5	<0.1	<5	200	<2	<2
A04.01	SX_OB_20220317_16_03_SS_Tr	17/03/2022		EM2204843	ALSE-Melbourne	Interlab_D	M22-Ma36471	28	<1	38	66	<1.0	<5	<0.1	<5	119	<5	<2
RPD								28	0	46	58	0	0	0	0	51	0	0
A04.01	SX_OB_20220317_16_02_SS_Pr	17/03/2022		872310	MGT	Normal												
A04.01	SX_OB_20220317_16_02_SS_Du	17/03/2022		872310	MGT	Field_D	M22-Ma36481											
RPD																		
A04.01	SX_OB_20220317_16_02_SS_Pr	17/03/2022		872310	MGT	Normal												
A04.01	SX_OB_20220317_16_02_SS_Du	17/03/2022		872310	MGT	Field_D	M22-Ma36489											
RPD																		
A04.01	SX_OB_20220317_16_02_SS_Pr	17/03/2022		872310	MGT	Normal												
A04.01	SX_OB_20220317_16_03_SS_Tr	17/03/2022		EM2204843	ALSE-Melbourne	Interlab_D	M22-Ma36489											
RPD																		
C02.01	SX_IB_20220317_07_53_SS_Pri	17/03/2022		EM2204843	ALSE-Melbourne	Normal		18	<1	48	83	<1.0	<5	<0.1	<5	132	<5	<2
C02.01	SX_IB_20220317_07_53_SS_Du	17/03/2022		EM2204843	ALSE-Melbourne	Field_D	EM2204843001	17	<1	43	81	<1.0	<5	<0.1	<5	118	<5	<2
RPD								6	0	11	2	0	0	0	0	11	0	0
C02.01	SX_IB_20220317_07_53_SS_Pri	17/03/2022		EM2204843	ALSE-Melbourne	Normal		18	<1	48	83	<1.0	<5	<0.1	<5	132	<5	<2
C02.01	SX_IB_20220317_07_54_SS_Tri	17/03/2022		872310	MGT	Interlab_D	EM2204843001	28	<0.4	73	110	<1	5.0	<0.1	<5	180	<2	<2
RPD								43	0	41	28	0	0	0	0	31	0	0
C02.01	SX_IB_20220317_07_53_SS_Pri	17/03/2022		EM2204843	ALSE-Melbourne	Normal		18	<1	48	83	<1.0	<5	<0.1	<5	132	<5	<2
C02.01	SX_IB_20220317_07_54_SS_Tri	17/03/2022		872310	MGT	Interlab_D	EM2204843001											
RPD																		
C02.01	SX_IB_20220317_07_53_SS_Pri	17/03/2022		EM2204843	ALSE-Melbourne	Normal												
C02.01	SX_IB_20220317_07_53_SS_Du	17/03/2022		EM2204843	ALSE-Melbourne	Field_D	EM2204843011											
RPD																		
C02.01	SX_IB_20220317_07_53_SS_Pri	17/03/2022		EM2204843	ALSE-Melbourne	Normal												
C02.01	SX_IB_20220317_07_54_SS_Tri	17/03/2022		872310	MGT	Interlab_D	EM2204843011											
RPD																		
C05.01	SX_OB_20220327_15_52_SS_Pr	27/03/2022		874920	MGT	Normal		21	<0.4	54	85	1.2	<5	<0.1	<5	150	<2	<2
C05.01	SX_OB_20220327_15_59_SS_Du	27/03/2022		874920	MGT	Field_D	M22-Ma57512	27	<0.4	74	140	1.2	6.1	<0.1	<5	190	2.7	<2
RPD								25	0	31	49	0	20	0	0	24	30	0
C05.01	SX_OB_20220327_15_52_SS_Pr	27/03/2022		874920	MGT	Normal		21	<0.4	54	85	1.2	<5	<0.1	<5	150	<2	<2

								Metals										
								Arsenic	Cadmium	Copper	Chromium (III+VI)	Chromium (hexavalent)	Lead	Mercury	Molybdenum	Nickel	Selenium	Silver
								mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
C05.01	SX_OB_20220327_16_00_SS_Tr	27/03/2022		EM2205473	ALSE-Melbourne	Interlab_D	M22-Ma57512	22	<1	56	98	<1.0	<5	<0.1	<5	132	<5	<2
RPD								5	0	4	14	18	0	0	0	13	0	0
C05.01	SX_OB_20220327_15_52_SS_Pr	27/03/2022		874920	MGT	Normal												
C05.01	SX_OB_20220327_15_59_SS_Du	27/03/2022		874920	MGT	Field_D	M22-Ma57521											
RPD																		
C05.01	SX_OB_20220327_15_52_SS_Pr	27/03/2022		874920	MGT	Normal												
C05.01	SX_OB_20220327_15_59_SS_Du	27/03/2022		874920	MGT	Field_D	M22-Ma57530											
RPD																		
C05.01	SX_OB_20220327_15_52_SS_Pr	27/03/2022		874920	MGT	Normal												
C05.01	SX_OB_20220327_16_00_SS_Tr	27/03/2022		EM2205473	ALSE-Melbourne	Interlab_D	M22-Ma57530											
RPD																		
C05.01	SX_OB_20220327_07_55_SS_Pr	27/03/2022		EM2205473	ALSE-Melbourne	Normal		32	<1	58	103	<1.0	<5	<0.1	<5	183	<5	<2
C05.01	SX_OB_20220327_07_58_SS_Du	27/03/2022		EM2205473	ALSE-Melbourne	Field_D	EM2205473004	43	<1	62	111	<1.0	<5	<0.1	<5	186	<5	<2
RPD								29	0	7	7	0	0	0	0	2	0	0
C05.01	SX_OB_20220327_07_55_SS_Pr	27/03/2022		EM2205473	ALSE-Melbourne	Normal		32	<1	58	103	<1.0	<5	<0.1	<5	183	<5	<2
C05.01	SX_OB_20220327_07_58_SS_Tr	27/03/2022		874920	MGT	Interlab_D	EM2205473004	32	<0.4	58	110	1.2	<5	<0.1	<5	190	<2	<2
RPD								0	0	0	7	18	0	0	0	4	0	0
C05.01	SX_OB_20220327_07_55_SS_Pr	27/03/2022		EM2205473	ALSE-Melbourne	Normal		32	<1	58	103	<1.0	<5	<0.1	<5	183	<5	<2
C05.01	SX_OB_20220327_07_58_SS_Tr	27/03/2022		874920	MGT	Interlab_D	EM2205473004											
RPD																		
C05.01	SX_OB_20220327_07_55_SS_Pr	27/03/2022		EM2205473	ALSE-Melbourne	Normal												
C05.01	SX_OB_20220327_07_58_SS_Du	27/03/2022		EM2205473	ALSE-Melbourne	Field_D	EM2205473013											
RPD																		
C05.01	SX_OB_20220327_07_55_SS_Pr	27/03/2022		EM2205473	ALSE-Melbourne	Normal												
C05.01	SX_OB_20220327_07_58_SS_Tr	27/03/2022		874920	MGT	Interlab_D	EM2205473013											
RPD																		
C02.01	SX_IB_20220328_15_44_SS_Pri	28/03/2022		875283	MGT	Normal		33	<0.4	73	130	<1	<5	<0.1	<5	190	<2	<2
C02.01	SX_IB_20220328_15_47_SS_Du	28/03/2022		875283	MGT	Field_D	M22-Ma60487	20	<0.4	62	120	<1	<5	<0.1	<5	160	<2	<2
RPD								49	0	16	8	0	0	0	0	17	0	0
C02.01	SX_IB_20220328_15_44_SS_Pri	28/03/2022		875283	MGT	Normal		33	<0.4	73	130	<1	<5	<0.1	<5	190	<2	<2
C02.01	SX_IB_20220328_15_48_SS_Tri	28/03/2022		EM2205583	ALSE-Melbourne	Interlab_D	M22-Ma60487	23	<1	57	102	<1.0	<5	<0.1	<5	151	<5	<2
RPD								36	0	25	24	0	0	0	0	23	0	0
C02.01	SX_IB_20220328_15_44_SS_Pri	28/03/2022		875283	MGT	Normal												
C02.01	SX_IB_20220328_15_47_SS_Du	28/03/2022		875283	MGT	Field_D	M22-Ma60495											
RPD																		
C02.01	SX_IB_20220328_15_44_SS_Pri	28/03/2022		875283	MGT	Normal												
C02.01	SX_IB_20220328_15_47_SS_Du	28/03/2022		875283	MGT	Field_D	M22-Ma60503											
RPD																		
C02.01	SX_IB_20220328_15_44_SS_Pri	28/03/2022		875283	MGT	Normal												
C02.01	SX_IB_20220328_15_48_SS_Tri	28/03/2022		EM2205583	ALSE-Melbourne	Interlab_D	M22-Ma60503											
RPD																		
C02.01	SX_IB_20220328_07_41_SS_Pri	28/03/2022		EM2205583	ALSE-Melbourne	Normal		17	1	63	96	<1.0	<5	<0.1	<5	174	<5	<2
C02.01	SX_IB_20220328_07_45_SS_Du	28/03/2022		EM2205583	ALSE-Melbourne	Field_D	EM2205583001	18	1	64	106	<1.0	<5	<0.1	<5	169	<5	<2
RPD								6	0	2	10	0	0	0	0	3	0	0
C02.01	SX_IB_20220328_07_41_SS_Pri	28/03/2022		EM2205583	ALSE-Melbourne	Normal		17	1	63	96	<1.0	<5	<0.1	<5	174	<5	<2
C02.01	SX_IB_20220328_07_46_SS_Tri	28/03/2022		875283	MGT	Interlab_D	EM2205583001	22	<0.4	61	120	<1	<5	<0.1	<5	170	<2	<2
RPD								26	86	3	22	0	0	0	0	2	0	0
C02.01	SX_IB_20220328_07_41_SS_Pri	28/03/2022		EM2205583	ALSE-Melbourne	Normal		17	1	63	96	<1.0	<5	<0.1	<5	174	<5	<2
C02.01	SX_IB_20220328_07_46_SS_Tri	28/03/2022		875283	MGT	Interlab_D	EM2205583001											
RPD																		
C02.01	SX_IB_20220328_07_41_SS_Pri	28/03/2022		EM2205583	ALSE-Melbourne	Normal												
C02.01	SX_IB_20220328_07_45_SS_Du	28/03/2022		EM2205583	ALSE-Melbourne	Field_D	EM2205583009											
RPD																		
C02.01	SX_IB_20220328_07_41_SS_Pri	28/03/2022		EM2205583	ALSE-Melbourne	Normal												
C02.01	SX_IB_20220328_07_46_SS_Tri	28/03/2022		875283	MGT	Interlab_D	EM2205583009											
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

								Tin	Zinc	PAHs (Vic EPA List)	Benzo(b+j+k)fluoranthene	Acenaphthene	Acenaphthylene	Anthracene	Benz(a)anthracene	Benzo(a)pyrene TEQ calc (Zero)	Benzo(a)pyrene TEQ (LOR)	Benzo(a)pyrene TEQ calc (Half)
								mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL								10	5	0.5	1	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Location Code	**Field ID**	**Date**	**Depth**	**Lab Report Number**	**Lab Name**	**Sample Type**	**Parent Sample**											
C02.01	SX_IB_20220316_16_12_SS_Pri	16/03/2022		872036	MGT	Normal		<10	110			<0.5	<0.5	<0.5	<0.5	<0.5	1.2	0.6
C02.01	SX_IB_20220316_16_15_SS_Du	16/03/2022		872036	MGT	Field_D	M22-Ma34703	<10	150			<0.5	<0.5	<0.5	<0.5	<0.5	1.2	0.6
RPD								0	31			0	0	0	0	0	0	0
C02.01	SX_IB_20220316_16_12_SS_Pri	16/03/2022		872036	MGT	Normal		<10	110			<0.5	<0.5	<0.5	<0.5	<0.5	1.2	0.6
C02.01	SX_IB_20220316_16_16_SS_Tri	16/03/2022		EM2204736	ALSE-Melbourne	Interlab_D	M22-Ma34703	<10	90	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	1.2	0.6
RPD								0	20			0	0	0	0	0	0	0
C02.01	SX_IB_20220316_16_12_SS_Pri	16/03/2022		872036	MGT	Normal												
C02.01	SX_IB_20220316_16_15_SS_Du	16/03/2022		872036	MGT	Field_D	M22-Ma34711											
RPD																		
C02.01	SX_IB_20220316_16_12_SS_Pri	16/03/2022		872036	MGT	Normal												
C02.01	SX_IB_20220316_16_15_SS_Du	16/03/2022		872036	MGT	Field_D	M22-Ma34719											
RPD																		
C02.01	SX_IB_20220316_16_12_SS_Pri	16/03/2022		872036	MGT	Normal												
C02.01	SX_IB_20220316_16_16_SS_Tri	16/03/2022		EM2204736	ALSE-Melbourne	Interlab_D	M22-Ma34719											
RPD																		
C02.01	SX_IB_20220316_08_17_SS_Pri	16/03/2022		EM2204736	ALSE-Melbourne	Normal		<10	75	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	1.2	0.6
C02.01	SX_IB_20220316_08_20_SS_Du	16/03/2022		EM2204736	ALSE-Melbourne	Field_D	EM2204736001	<10	88	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	1.2	0.6
RPD								0	16	0	0	0	0	0	0	0	0	0
C02.01	SX_IB_20220316_08_17_SS_Pri	16/03/2022		EM2204736	ALSE-Melbourne	Normal		<10	75	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	1.2	0.6
C02.01	SX_IB_20220316_08_22_SS_Tri	16/03/2022		872036	MGT	Interlab_D	EM2204736001	<10	120			<0.5	<0.5	<0.5	<0.5	<0.5	1.2	0.6
RPD								0	46			0	0	0	0	0	0	0
C02.01	SX_IB_20220316_08_17_SS_Pri	16/03/2022		EM2204736	ALSE-Melbourne	Normal		<10	75	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	1.2	0.6
C02.01	SX_IB_20220316_08_22_SS_Tri	16/03/2022		872036	MGT	Interlab_D	EM2204736001											
RPD																		
C02.01	SX_IB_20220316_08_17_SS_Pri	16/03/2022		EM2204736	ALSE-Melbourne	Normal												
C02.01	SX_IB_20220316_08_20_SS_Du	16/03/2022		EM2204736	ALSE-Melbourne	Field_D	EM2204736009											
RPD																		
C02.01	SX_IB_20220316_08_17_SS_Pri	16/03/2022		EM2204736	ALSE-Melbourne	Normal												
C02.01	SX_IB_20220316_08_22_SS_Tri	16/03/2022		872036	MGT	Interlab_D	EM2204736009											
RPD																		
A04.01	SX_OB_20220317_16_02_SS_Pr	17/03/2022		872310	MGT	Normal		<10	130			<0.5	<0.5	<0.5	<0.5	<0.5	1.2	0.6
A04.01	SX_OB_20220317_16_02_SS_Du	17/03/2022		872310	MGT	Field_D	M22-Ma36471	<10	140			<0.5	<0.5	<0.5	<0.5	<0.5	1.2	0.6
RPD								0	7			0	0	0	0	0	0	0
A04.01	SX_OB_20220317_16_02_SS_Pr	17/03/2022		872310	MGT	Normal		<10	130			<0.5	<0.5	<0.5	<0.5	<0.5	1.2	0.6
A04.01	SX_OB_20220317_16_03_SS_Tr	17/03/2022		EM2204843	ALSE-Melbourne	Interlab_D	M22-Ma36471	<10	74	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	1.2	0.6
RPD								0	**55**			0	0	0	0	0	0	0
A04.01	SX_OB_20220317_16_02_SS_Pr	17/03/2022		872310	MGT	Normal												
A04.01	SX_OB_20220317_16_02_SS_Du	17/03/2022		872310	MGT	Field_D	M22-Ma36481											
RPD																		
A04.01	SX_OB_20220317_16_02_SS_Pr	17/03/2022		872310	MGT	Normal												
A04.01	SX_OB_20220317_16_02_SS_Du	17/03/2022		872310	MGT	Field_D	M22-Ma36489											
RPD																		
A04.01	SX_OB_20220317_16_02_SS_Pr	17/03/2022		872310	MGT	Normal												
A04.01	SX_OB_20220317_16_03_SS_Tr	17/03/2022		EM2204843	ALSE-Melbourne	Interlab_D	M22-Ma36489											
RPD																		
C02.01	SX_IB_20220317_07_53_SS_Pri	17/03/2022		EM2204843	ALSE-Melbourne	Normal		<10	82	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	1.2	0.6
C02.01	SX_IB_20220317_07_53_SS_Du	17/03/2022		EM2204843	ALSE-Melbourne	Field_D	EM2204843001	<10	72	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	1.2	0.6
RPD								0	13	0	0	0	0	0	0	0	0	0
C02.01	SX_IB_20220317_07_53_SS_Pri	17/03/2022		EM2204843	ALSE-Melbourne	Normal		<10	82	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	1.2	0.6
C02.01	SX_IB_20220317_07_54_SS_Tri	17/03/2022		872310	MGT	Interlab_D	EM2204843001	<10	140			<0.5	<0.5	<0.5	<0.5	<0.5	1.2	0.6
RPD								0	**52**			0	0	0	0	0	0	0
C02.01	SX_IB_20220317_07_53_SS_Pri	17/03/2022		EM2204843	ALSE-Melbourne	Normal		<10	82	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	1.2	0.6
C02.01	SX_IB_20220317_07_54_SS_Tri	17/03/2022		872310	MGT	Interlab_D	EM2204843001											
RPD																		
C02.01	SX_IB_20220317_07_53_SS_Pri	17/03/2022		EM2204843	ALSE-Melbourne	Normal												
C02.01	SX_IB_20220317_07_53_SS_Du	17/03/2022		EM2204843	ALSE-Melbourne	Field_D	EM2204843011											
RPD																		
C02.01	SX_IB_20220317_07_53_SS_Pri	17/03/2022		EM2204843	ALSE-Melbourne	Normal												
C02.01	SX_IB_20220317_07_54_SS_Tri	17/03/2022		872310	MGT	Interlab_D	EM2204843011											
RPD																		
C05.01	SX_OB_20220327_15_52_SS_Pr	27/03/2022		874920	MGT	Normal		<10	110			<0.5	<0.5	<0.5	<0.5	<0.5	1.2	0.6
C05.01	SX_OB_20220327_15_59_SS_Du	27/03/2022		874920	MGT	Field_D	M22-Ma57512	<10	150			<0.5	<0.5	<0.5	<0.5	<0.5	1.2	0.6
RPD								0	31			0	0	0	0	0	0	0
C05.01	SX_OB_20220327_15_52_SS_Pr	27/03/2022		874920	MGT	Normal		<10	110			<0.5	<0.5	<0.5	<0.5	<0.5	1.2	0.6

								Tin	Zinc	PAHs (Vic EPA List)	Benzo(b+j+k)fluoranthene	Acenaphthene	Acenaphthylene	Anthracene	Benz(a)anthracene	Benzo(a)pyrene TEQ calc (Zero)	Benzo(a)pyrene TEQ (LOR)	Benzo(a)pyrene TEQ calc (Half)
								mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
C05.01	SX_OB_20220327_16_00_SS_Tr	27/03/2022		EM2205473	ALSE-Melbourne	Interlab_D	M22-Ma57512	<10	103	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	1.2	0.6
RPD								0	7			0	0	0	0	0	0	0
C05.01	SX_OB_20220327_15_52_SS_Pr	27/03/2022		874920	MGT	Normal												
C05.01	SX_OB_20220327_15_59_SS_Du	27/03/2022		874920	MGT	Field_D	M22-Ma57521											
RPD																		
C05.01	SX_OB_20220327_15_52_SS_Pr	27/03/2022		874920	MGT	Normal												
C05.01	SX_OB_20220327_15_59_SS_Du	27/03/2022		874920	MGT	Field_D	M22-Ma57530											
RPD																		
C05.01	SX_OB_20220327_15_52_SS_Pr	27/03/2022		874920	MGT	Normal												
C05.01	SX_OB_20220327_16_00_SS_Tr	27/03/2022		EM2205473	ALSE-Melbourne	Interlab_D	M22-Ma57530											
RPD																		
C05.01	SX_OB_20220327_07_55_SS_Pr	27/03/2022		EM2205473	ALSE-Melbourne	Normal		<10	99	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	1.2	0.6
C05.01	SX_OB_20220327_07_58_SS_Du	27/03/2022		EM2205473	ALSE-Melbourne	Field_D	EM2205473004	<10	102	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	1.2	0.6
RPD								0	3	0	0	0	0	0	0	0	0	0
C05.01	SX_OB_20220327_07_55_SS_Pr	27/03/2022		EM2205473	ALSE-Melbourne	Normal		<10	99	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	1.2	0.6
C05.01	SX_OB_20220327_07_58_SS_Tr	27/03/2022		874920	MGT	Interlab_D	EM2205473004	<10	120			<0.5	<0.5	<0.5	<0.5	<0.5	1.2	0.6
RPD								0	19			0	0	0	0	0	0	0
C05.01	SX_OB_20220327_07_55_SS_Pr	27/03/2022		EM2205473	ALSE-Melbourne	Normal		<10	99	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	1.2	0.6
C05.01	SX_OB_20220327_07_58_SS_Tr	27/03/2022		874920	MGT	Interlab_D	EM2205473004											
RPD																		
C05.01	SX_OB_20220327_07_55_SS_Pr	27/03/2022		EM2205473	ALSE-Melbourne	Normal												
C05.01	SX_OB_20220327_07_58_SS_Du	27/03/2022		EM2205473	ALSE-Melbourne	Field_D	EM2205473013											
RPD																		
C05.01	SX_OB_20220327_07_55_SS_Pr	27/03/2022		EM2205473	ALSE-Melbourne	Normal												
C05.01	SX_OB_20220327_07_58_SS_Tr	27/03/2022		874920	MGT	Interlab_D	EM2205473013											
RPD																		
C02.01	SX_IB_20220328_15_44_SS_Pri	28/03/2022		875283	MGT	Normal		<10	130			<0.5	<0.5	<0.5	<0.5	<0.5	1.2	0.6
C02.01	SX_IB_20220328_15_47_SS_Du	28/03/2022		875283	MGT	Field_D	M22-Ma60487	<10	120			<0.5	<0.5	<0.5	<0.5	<0.5	1.2	0.6
RPD								0	8			0	0	0	0	0	0	0
C02.01	SX_IB_20220328_15_44_SS_Pri	28/03/2022		875283	MGT	Normal		<10	130			<0.5	<0.5	<0.5	<0.5	<0.5	1.2	0.6
C02.01	SX_IB_20220328_15_48_SS_Tri	28/03/2022		EM2205583	ALSE-Melbourne	Interlab_D	M22-Ma60487	<10	93	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	1.2	0.6
RPD								0	33			0	0	0	0	0	0	0
C02.01	SX_IB_20220328_15_44_SS_Pri	28/03/2022		875283	MGT	Normal												
C02.01	SX_IB_20220328_15_47_SS_Du	28/03/2022		875283	MGT	Field_D	M22-Ma60495											
RPD																		
C02.01	SX_IB_20220328_15_44_SS_Pri	28/03/2022		875283	MGT	Normal												
C02.01	SX_IB_20220328_15_47_SS_Du	28/03/2022		875283	MGT	Field_D	M22-Ma60503											
RPD																		
C02.01	SX_IB_20220328_15_44_SS_Pri	28/03/2022		875283	MGT	Normal												
C02.01	SX_IB_20220328_15_48_SS_Tri	28/03/2022		EM2205583	ALSE-Melbourne	Interlab_D	M22-Ma60503											
RPD																		
C02.01	SX_IB_20220328_07_41_SS_Pri	28/03/2022		EM2205583	ALSE-Melbourne	Normal		<10	102	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	1.2	0.6
C02.01	SX_IB_20220328_07_45_SS_Du	28/03/2022		EM2205583	ALSE-Melbourne	Field_D	EM2205583001	<10	100	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	1.2	0.6
RPD								0	2	0	0	0	0	0	0	0	0	0
C02.01	SX_IB_20220328_07_41_SS_Pri	28/03/2022		EM2205583	ALSE-Melbourne	Normal		<10	102	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	1.2	0.6
C02.01	SX_IB_20220328_07_46_SS_Tri	28/03/2022		875283	MGT	Interlab_D	EM2205583001	<10	110			<0.5	<0.5	<0.5	<0.5	<0.5	1.2	0.6
RPD								0	8			0	0	0	0	0	0	0
C02.01	SX_IB_20220328_07_41_SS_Pri	28/03/2022		EM2205583	ALSE-Melbourne	Normal		<10	102	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	1.2	0.6
C02.01	SX_IB_20220328_07_46_SS_Tri	28/03/2022		875283	MGT	Interlab_D	EM2205583001											
RPD																		
C02.01	SX_IB_20220328_07_41_SS_Pri	28/03/2022		EM2205583	ALSE-Melbourne	Normal												
C02.01	SX_IB_20220328_07_45_SS_Du	28/03/2022		EM2205583	ALSE-Melbourne	Field_D	EM2205583009											
RPD																		
C02.01	SX_IB_20220328_07_41_SS_Pri	28/03/2022		EM2205583	ALSE-Melbourne	Normal												
C02.01	SX_IB_20220328_07_46_SS_Tri	28/03/2022		875283	MGT	Interlab_D	EM2205583009											
RPD																		

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

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

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

								PAH										
								Benzo(a) pyrene	Benzo(b+j)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Chrysene	Dibenz(a,h)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-c,d)pyrene	Naphthalene	Phenanthrene
								mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL								0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Location Code	Field ID	Date	Depth	Lab Report Number	Lab Name	Sample Type	Parent Sample											
C02.01	SX_IB_20220316_16_12_SS_Pri	16/03/2022		872036	MGT	Normal		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
C02.01	SX_IB_20220316_16_15_SS_Du	16/03/2022		872036	MGT	Field_D	M22-Ma34703	<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
C02.01	SX_IB_20220316_16_12_SS_Pri	16/03/2022		872036	MGT	Normal		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
C02.01	SX_IB_20220316_16_16_SS_Tri	16/03/2022		EM2204736	ALSE-Melbourne	Interlab_D	M22-Ma34703	<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
C02.01	SX_IB_20220316_16_12_SS_Pri	16/03/2022		872036	MGT	Normal												
C02.01	SX_IB_20220316_16_15_SS_Du	16/03/2022		872036	MGT	Field_D	M22-Ma34711											
RPD																		
C02.01	SX_IB_20220316_16_12_SS_Pri	16/03/2022		872036	MGT	Normal												
C02.01	SX_IB_20220316_16_15_SS_Du	16/03/2022		872036	MGT	Field_D	M22-Ma34719											
RPD																		
C02.01	SX_IB_20220316_16_12_SS_Pri	16/03/2022		872036	MGT	Normal												
C02.01	SX_IB_20220316_16_16_SS_Tri	16/03/2022		EM2204736	ALSE-Melbourne	Interlab_D	M22-Ma34719											
RPD																		
C02.01	SX_IB_20220316_08_17_SS_Pri	16/03/2022		EM2204736	ALSE-Melbourne	Normal		<0.5		<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
C02.01	SX_IB_20220316_08_20_SS_Du	16/03/2022		EM2204736	ALSE-Melbourne	Field_D	EM2204736001	<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
C02.01	SX_IB_20220316_08_17_SS_Pri	16/03/2022		EM2204736	ALSE-Melbourne	Normal		<0.5		<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
C02.01	SX_IB_20220316_08_22_SS_Tri	16/03/2022		872036	MGT	Interlab_D	EM2204736001	<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
C02.01	SX_IB_20220316_08_17_SS_Pri	16/03/2022		EM2204736	ALSE-Melbourne	Normal		<0.5		<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
C02.01	SX_IB_20220316_08_22_SS_Tri	16/03/2022		872036	MGT	Interlab_D	EM2204736001											
RPD																		
C02.01	SX_IB_20220316_08_17_SS_Pri	16/03/2022		EM2204736	ALSE-Melbourne	Normal												
C02.01	SX_IB_20220316_08_20_SS_Du	16/03/2022		EM2204736	ALSE-Melbourne	Field_D	EM2204736009											
RPD																		
C02.01	SX_IB_20220316_08_17_SS_Pri	16/03/2022		EM2204736	ALSE-Melbourne	Normal												
C02.01	SX_IB_20220316_08_22_SS_Tri	16/03/2022		872036	MGT	Interlab_D	EM2204736009											
RPD																		
A04.01	SX_OB_20220317_16_02_SS_Pr	17/03/2022		872310	MGT	Normal		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
A04.01	SX_OB_20220317_16_02_SS_Du	17/03/2022		872310	MGT	Field_D	M22-Ma36471	<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
A04.01	SX_OB_20220317_16_02_SS_Pr	17/03/2022		872310	MGT	Normal		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
A04.01	SX_OB_20220317_16_03_SS_Tr	17/03/2022		EM2204843	ALSE-Melbourne	Interlab_D	M22-Ma36471	<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
A04.01	SX_OB_20220317_16_02_SS_Pr	17/03/2022		872310	MGT	Normal												
A04.01	SX_OB_20220317_16_02_SS_Du	17/03/2022		872310	MGT	Field_D	M22-Ma36481											
RPD																		
A04.01	SX_OB_20220317_16_02_SS_Pr	17/03/2022		872310	MGT	Normal												
A04.01	SX_OB_20220317_16_02_SS_Du	17/03/2022		872310	MGT	Field_D	M22-Ma36489											
RPD																		
A04.01	SX_OB_20220317_16_02_SS_Pr	17/03/2022		872310	MGT	Normal												
A04.01	SX_OB_20220317_16_03_SS_Tr	17/03/2022		EM2204843	ALSE-Melbourne	Interlab_D	M22-Ma36489											
RPD																		
C02.01	SX_IB_20220317_07_53_SS_Pri	17/03/2022		EM2204843	ALSE-Melbourne	Normal		<0.5		<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
C02.01	SX_IB_20220317_07_53_SS_Du	17/03/2022		EM2204843	ALSE-Melbourne	Field_D	EM2204843001	<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
C02.01	SX_IB_20220317_07_53_SS_Pri	17/03/2022		EM2204843	ALSE-Melbourne	Normal		<0.5		<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
C02.01	SX_IB_20220317_07_54_SS_Tri	17/03/2022		872310	MGT	Interlab_D	EM2204843001	<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
C02.01	SX_IB_20220317_07_53_SS_Pri	17/03/2022		EM2204843	ALSE-Melbourne	Normal		<0.5		<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
C02.01	SX_IB_20220317_07_54_SS_Tri	17/03/2022		872310	MGT	Interlab_D	EM2204843001											
RPD																		
C02.01	SX_IB_20220317_07_53_SS_Pri	17/03/2022		EM2204843	ALSE-Melbourne	Normal												
C02.01	SX_IB_20220317_07_53_SS_Du	17/03/2022		EM2204843	ALSE-Melbourne	Field_D	EM2204843011											
RPD																		
C02.01	SX_IB_20220317_07_53_SS_Pri	17/03/2022		EM2204843	ALSE-Melbourne	Normal												
C02.01	SX_IB_20220317_07_54_SS_Tri	17/03/2022		872310	MGT	Interlab_D	EM2204843011											
RPD																		
C05.01	SX_OB_20220327_15_52_SS_Pr	27/03/2022		874920	MGT	Normal		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
C05.01	SX_OB_20220327_15_59_SS_Du	27/03/2022		874920	MGT	Field_D	M22-Ma57512	<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
C05.01	SX_OB_20220327_15_52_SS_Pr	27/03/2022		874920	MGT	Normal		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

								PAH										
								Benzo(a) pyrene	Benzo(b+j)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Chrysene	Dibenz(a,h)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-c,d)pyrene	Naphthalene	Phenanthrene
								mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
C05.01	SX_OB_20220327_16_00_SS_Tr	27/03/2022		EM2205473	ALSE-Melbourne	Interlab_D	M22-Ma57512	<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
C05.01	SX_OB_20220327_15_52_SS_Pr	27/03/2022		874920	MGT	Normal												
C05.01	SX_OB_20220327_15_59_SS_Du	27/03/2022		874920	MGT	Field_D	M22-Ma57521											
RPD																		
C05.01	SX_OB_20220327_15_52_SS_Pr	27/03/2022		874920	MGT	Normal												
C05.01	SX_OB_20220327_15_59_SS_Du	27/03/2022		874920	MGT	Field_D	M22-Ma57530											
RPD																		
C05.01	SX_OB_20220327_15_52_SS_Pr	27/03/2022		874920	MGT	Normal												
C05.01	SX_OB_20220327_16_00_SS_Tr	27/03/2022		EM2205473	ALSE-Melbourne	Interlab_D	M22-Ma57530											
RPD																		
C05.01	SX_OB_20220327_07_55_SS_Pr	27/03/2022		EM2205473	ALSE-Melbourne	Normal		<0.5		<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
C05.01	SX_OB_20220327_07_58_SS_Du	27/03/2022		EM2205473	ALSE-Melbourne	Field_D	EM2205473004	<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
C05.01	SX_OB_20220327_07_55_SS_Pr	27/03/2022		EM2205473	ALSE-Melbourne	Normal		<0.5		<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
C05.01	SX_OB_20220327_07_58_SS_Tr	27/03/2022		874920	MGT	Interlab_D	EM2205473004	<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
C05.01	SX_OB_20220327_07_55_SS_Pr	27/03/2022		EM2205473	ALSE-Melbourne	Normal		<0.5		<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
C05.01	SX_OB_20220327_07_58_SS_Tr	27/03/2022		874920	MGT	Interlab_D	EM2205473004											
RPD																		
C05.01	SX_OB_20220327_07_55_SS_Pr	27/03/2022		EM2205473	ALSE-Melbourne	Normal												
C05.01	SX_OB_20220327_07_58_SS_Du	27/03/2022		EM2205473	ALSE-Melbourne	Field_D	EM2205473013											
RPD																		
C05.01	SX_OB_20220327_07_55_SS_Pr	27/03/2022		EM2205473	ALSE-Melbourne	Normal												
C05.01	SX_OB_20220327_07_58_SS_Tr	27/03/2022		874920	MGT	Interlab_D	EM2205473013											
RPD																		
C02.01	SX_IB_20220328_15_44_SS_Pri	28/03/2022		875283	MGT	Normal		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
C02.01	SX_IB_20220328_15_47_SS_Du	28/03/2022		875283	MGT	Field_D	M22-Ma60487	<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
C02.01	SX_IB_20220328_15_44_SS_Pri	28/03/2022		875283	MGT	Normal		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
C02.01	SX_IB_20220328_15_48_SS_Tri	28/03/2022		EM2205583	ALSE-Melbourne	Interlab_D	M22-Ma60487	<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
C02.01	SX_IB_20220328_15_44_SS_Pri	28/03/2022		875283	MGT	Normal												
C02.01	SX_IB_20220328_15_47_SS_Du	28/03/2022		875283	MGT	Field_D	M22-Ma60495											
RPD																		
C02.01	SX_IB_20220328_15_44_SS_Pri	28/03/2022		875283	MGT	Normal												
C02.01	SX_IB_20220328_15_47_SS_Du	28/03/2022		875283	MGT	Field_D	M22-Ma60503											
RPD																		
C02.01	SX_IB_20220328_15_44_SS_Pri	28/03/2022		875283	MGT	Normal												
C02.01	SX_IB_20220328_15_48_SS_Tri	28/03/2022		EM2205583	ALSE-Melbourne	Interlab_D	M22-Ma60503											
RPD																		
C02.01	SX_IB_20220328_07_41_SS_Pri	28/03/2022		EM2205583	ALSE-Melbourne	Normal		<0.5		<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
C02.01	SX_IB_20220328_07_45_SS_Du	28/03/2022		EM2205583	ALSE-Melbourne	Field_D	EM2205583001	<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
C02.01	SX_IB_20220328_07_41_SS_Pri	28/03/2022		EM2205583	ALSE-Melbourne	Normal		<0.5		<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
C02.01	SX_IB_20220328_07_46_SS_Tri	28/03/2022		875283	MGT	Interlab_D	EM2205583001	<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
C02.01	SX_IB_20220328_07_41_SS_Pri	28/03/2022		EM2205583	ALSE-Melbourne	Normal		<0.5		<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
C02.01	SX_IB_20220328_07_46_SS_Tri	28/03/2022		875283	MGT	Interlab_D	EM2205583001											
RPD																		
C02.01	SX_IB_20220328_07_41_SS_Pri	28/03/2022		EM2205583	ALSE-Melbourne	Normal												
C02.01	SX_IB_20220328_07_45_SS_Du	28/03/2022		EM2205583	ALSE-Melbourne	Field_D	EM2205583009											
RPD																		
C02.01	SX_IB_20220328_07_41_SS_Pri	28/03/2022		EM2205583	ALSE-Melbourne	Normal												
C02.01	SX_IB_20220328_07_46_SS_Tri	28/03/2022		875283	MGT	Interlab_D	EM2205583009											
RPD																		

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

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

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

											BTEX											
								Pyrene	PAHs (Sum of total)	Benzene	Ethylbenzene	Toluene	Xylene (o)	Xylene (m & p)	Xylene Total	C6-C10	C6-C10 (F1 minus BTEX)	C10-C16
								mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL								0.5	0.5	0.1	0.1	0.1	0.1	0.2	0.3	20	20	50
Location Code	Field ID	Date	Depth	Lab Report Number	Lab Name	Sample Type	Parent Sample											
C02.01	SX_IB_20220316_16_12_SS_Pri	16/03/2022		872036	MGT	Normal		<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.2	<0.3	<20	<20	<50
C02.01	SX_IB_20220316_16_15_SS_Du	16/03/2022		872036	MGT	Field_D	M22-Ma34703	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.2	<0.3	<20	<20	53
RPD								0	0	0	0	0	0	0	0	0	0	6
C02.01	SX_IB_20220316_16_12_SS_Pri	16/03/2022		872036	MGT	Normal		<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.2	<0.3	<20	<20	<50
C02.01	SX_IB_20220316_16_16_SS_Tri	16/03/2022		EM2204736	ALSE-Melbourne	Interlab_D	M22-Ma34703	<0.5		<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<20	<20	<50
RPD								0		0	0	0	0	0	0	0	0	0
C02.01	SX_IB_20220316_16_12_SS_Pri	16/03/2022		872036	MGT	Normal												
C02.01	SX_IB_20220316_16_15_SS_Du	16/03/2022		872036	MGT	Field_D	M22-Ma34711											
RPD																		
C02.01	SX_IB_20220316_16_12_SS_Pri	16/03/2022		872036	MGT	Normal												
C02.01	SX_IB_20220316_16_15_SS_Du	16/03/2022		872036	MGT	Field_D	M22-Ma34719											
RPD																		
C02.01	SX_IB_20220316_16_12_SS_Pri	16/03/2022		872036	MGT	Normal												
C02.01	SX_IB_20220316_16_16_SS_Tri	16/03/2022		EM2204736	ALSE-Melbourne	Interlab_D	M22-Ma34719											
RPD																		
C02.01	SX_IB_20220316_08_17_SS_Pri	16/03/2022		EM2204736	ALSE-Melbourne	Normal		<0.5		<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<20	<20	<50
C02.01	SX_IB_20220316_08_20_SS_Du	16/03/2022		EM2204736	ALSE-Melbourne	Field_D	EM2204736001	<0.5		<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<20	<20	<50
RPD								0		0	0	0	0	0	0	0	0	0
C02.01	SX_IB_20220316_08_17_SS_Pri	16/03/2022		EM2204736	ALSE-Melbourne	Normal		<0.5		<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<20	<20	<50
C02.01	SX_IB_20220316_08_22_SS_Tri	16/03/2022		872036	MGT	Interlab_D	EM2204736001	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.2	<0.3	<20	<20	<50
RPD								0		0	0	0	0	0	0	0	0	0
C02.01	SX_IB_20220316_08_17_SS_Pri	16/03/2022		EM2204736	ALSE-Melbourne	Normal		<0.5		<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<20	<20	<50
C02.01	SX_IB_20220316_08_22_SS_Tri	16/03/2022		872036	MGT	Interlab_D	EM2204736001											
RPD																		
C02.01	SX_IB_20220316_08_17_SS_Pri	16/03/2022		EM2204736	ALSE-Melbourne	Normal												
C02.01	SX_IB_20220316_08_20_SS_Du	16/03/2022		EM2204736	ALSE-Melbourne	Field_D	EM2204736009											
RPD																		
C02.01	SX_IB_20220316_08_17_SS_Pri	16/03/2022		EM2204736	ALSE-Melbourne	Normal												
C02.01	SX_IB_20220316_08_22_SS_Tri	16/03/2022		872036	MGT	Interlab_D	EM2204736009											
RPD																		
A04.01	SX_OB_20220317_16_02_SS_Pr	17/03/2022		872310	MGT	Normal		<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.2	<0.3	<20	<20	<50
A04.01	SX_OB_20220317_16_02_SS_Du	17/03/2022		872310	MGT	Field_D	M22-Ma36471	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.2	<0.3	<20	<20	<50
RPD								0	0	0	0	0	0	0	0	0	0	0
A04.01	SX_OB_20220317_16_02_SS_Pr	17/03/2022		872310	MGT	Normal		<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.2	<0.3	<20	<20	<50
A04.01	SX_OB_20220317_16_03_SS_Tr	17/03/2022		EM2204843	ALSE-Melbourne	Interlab_D	M22-Ma36471	<0.5		<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<20	<20	<50
RPD								0		0	0	0	0	0	0	0	0	0
A04.01	SX_OB_20220317_16_02_SS_Pr	17/03/2022		872310	MGT	Normal												
A04.01	SX_OB_20220317_16_02_SS_Du	17/03/2022		872310	MGT	Field_D	M22-Ma36481											
RPD																		
A04.01	SX_OB_20220317_16_02_SS_Pr	17/03/2022		872310	MGT	Normal												
A04.01	SX_OB_20220317_16_02_SS_Du	17/03/2022		872310	MGT	Field_D	M22-Ma36489											
RPD																		
A04.01	SX_OB_20220317_16_02_SS_Pr	17/03/2022		872310	MGT	Normal												
A04.01	SX_OB_20220317_16_03_SS_Tr	17/03/2022		EM2204843	ALSE-Melbourne	Interlab_D	M22-Ma36489											
RPD																		
C02.01	SX_IB_20220317_07_53_SS_Pri	17/03/2022		EM2204843	ALSE-Melbourne	Normal		<0.5		<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<20	<20	<50
C02.01	SX_IB_20220317_07_53_SS_Du	17/03/2022		EM2204843	ALSE-Melbourne	Field_D	EM2204843001	<0.5		<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<20	<20	<50
RPD								0		0	0	0	0	0	0	0	0	0
C02.01	SX_IB_20220317_07_53_SS_Pri	17/03/2022		EM2204843	ALSE-Melbourne	Normal		<0.5		<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<20	<20	<50
C02.01	SX_IB_20220317_07_54_SS_Tri	17/03/2022		872310	MGT	Interlab_D	EM2204843001	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.2	<0.3	<20	<20	<50
RPD								0		0	0	0	0	0	0	0	0	0
C02.01	SX_IB_20220317_07_53_SS_Pri	17/03/2022		EM2204843	ALSE-Melbourne	Normal		<0.5		<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<20	<20	<50
C02.01	SX_IB_20220317_07_54_SS_Tri	17/03/2022		872310	MGT	Interlab_D	EM2204843001											
RPD																		
C02.01	SX_IB_20220317_07_53_SS_Pri	17/03/2022		EM2204843	ALSE-Melbourne	Normal												
C02.01	SX_IB_20220317_07_53_SS_Du	17/03/2022		EM2204843	ALSE-Melbourne	Field_D	EM2204843011											
RPD																		
C02.01	SX_IB_20220317_07_53_SS_Pri	17/03/2022		EM2204843	ALSE-Melbourne	Normal												
C02.01	SX_IB_20220317_07_54_SS_Tri	17/03/2022		872310	MGT	Interlab_D	EM2204843011											
RPD																		
C05.01	SX_OB_20220327_15_52_SS_Pr	27/03/2022		874920	MGT	Normal		<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.2	<0.3	<20	<20	85
C05.01	SX_OB_20220327_15_59_SS_Du	27/03/2022		874920	MGT	Field_D	M22-Ma57512	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.2	<0.3	<20	<20	<50
RPD								0	0	0	0	0	0	0	0	0	0	52
C05.01	SX_OB_20220327_15_52_SS_Pr	27/03/2022		874920	MGT	Normal		<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.2	<0.3	<20	<20	85

										BTEX											
								Pyrene	PAHs (Sum of total)	Benzene	Ethylbenzene	Toluene	Xylene (o)	Xylene (m & p)	Xylene Total	C6-C10	C6-C10 (F1 minus BTEX)	C10-C16
								mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
C05.01	SX_OB_20220327_16_00_SS_Tr	27/03/2022		EM2205473	ALSE-Melbourne	Interlab_D	M22-Ma57512	<0.5		<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<20	<20	80
RPD								0		0	0	0	0	0	0	0	0	6
C05.01	SX_OB_20220327_15_52_SS_Pr	27/03/2022		874920	MGT	Normal												
C05.01	SX_OB_20220327_15_59_SS_Du	27/03/2022		874920	MGT	Field_D	M22-Ma57521											
RPD																		
C05.01	SX_OB_20220327_15_52_SS_Pr	27/03/2022		874920	MGT	Normal												
C05.01	SX_OB_20220327_15_59_SS_Du	27/03/2022		874920	MGT	Field_D	M22-Ma57530											
RPD																		
C05.01	SX_OB_20220327_15_52_SS_Pr	27/03/2022		874920	MGT	Normal												
C05.01	SX_OB_20220327_16_00_SS_Tr	27/03/2022		EM2205473	ALSE-Melbourne	Interlab_D	M22-Ma57530											
RPD																		
C05.01	SX_OB_20220327_07_55_SS_Pr	27/03/2022		EM2205473	ALSE-Melbourne	Normal		<0.5		<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<20	<20	<50
C05.01	SX_OB_20220327_07_58_SS_Du	27/03/2022		EM2205473	ALSE-Melbourne	Field_D	EM2205473004	<0.5		<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<20	<20	<50
RPD								0		0	0	0	0	0	0	0	0	0
C05.01	SX_OB_20220327_07_55_SS_Pr	27/03/2022		EM2205473	ALSE-Melbourne	Normal		<0.5		<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<20	<20	<50
C05.01	SX_OB_20220327_07_58_SS_Tr	27/03/2022		874920	MGT	Interlab_D	EM2205473004	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.2	<0.3	<20	<20	<50
RPD								0		0	0	0	0	0	0	0	0	0
C05.01	SX_OB_20220327_07_55_SS_Pr	27/03/2022		EM2205473	ALSE-Melbourne	Normal		<0.5		<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<20	<20	<50
C05.01	SX_OB_20220327_07_58_SS_Tr	27/03/2022		874920	MGT	Interlab_D	EM2205473004											
RPD																		
C05.01	SX_OB_20220327_07_55_SS_Pr	27/03/2022		EM2205473	ALSE-Melbourne	Normal												
C05.01	SX_OB_20220327_07_58_SS_Du	27/03/2022		EM2205473	ALSE-Melbourne	Field_D	EM2205473013											
RPD																		
C05.01	SX_OB_20220327_07_55_SS_Pr	27/03/2022		EM2205473	ALSE-Melbourne	Normal												
C05.01	SX_OB_20220327_07_58_SS_Tr	27/03/2022		874920	MGT	Interlab_D	EM2205473013											
RPD																		
C02.01	SX_IB_20220328_15_44_SS_Pri	28/03/2022		875283	MGT	Normal		<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.2	<0.3	<20	<20	<50
C02.01	SX_IB_20220328_15_47_SS_Du	28/03/2022		875283	MGT	Field_D	M22-Ma60487	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.2	<0.3	<20	<20	<50
RPD								0	0	0	0	0	0	0	0	0	0	0
C02.01	SX_IB_20220328_15_44_SS_Pri	28/03/2022		875283	MGT	Normal		<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.2	<0.3	<20	<20	<50
C02.01	SX_IB_20220328_15_48_SS_Tri	28/03/2022		EM2205583	ALSE-Melbourne	Interlab_D	M22-Ma60487	<0.5		<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<20	<20	<50
RPD								0		0	0	0	0	0	0	0	0	0
C02.01	SX_IB_20220328_15_44_SS_Pri	28/03/2022		875283	MGT	Normal												
C02.01	SX_IB_20220328_15_47_SS_Du	28/03/2022		875283	MGT	Field_D	M22-Ma60495											
RPD																		
C02.01	SX_IB_20220328_15_44_SS_Pri	28/03/2022		875283	MGT	Normal												
C02.01	SX_IB_20220328_15_47_SS_Du	28/03/2022		875283	MGT	Field_D	M22-Ma60503											
RPD																		
C02.01	SX_IB_20220328_15_44_SS_Pri	28/03/2022		875283	MGT	Normal												
C02.01	SX_IB_20220328_15_48_SS_Tri	28/03/2022		EM2205583	ALSE-Melbourne	Interlab_D	M22-Ma60503											
RPD																		
C02.01	SX_IB_20220328_07_41_SS_Pri	28/03/2022		EM2205583	ALSE-Melbourne	Normal		<0.5		<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<20	<20	<50
C02.01	SX_IB_20220328_07_45_SS_Du	28/03/2022		EM2205583	ALSE-Melbourne	Field_D	EM2205583001	<0.5		<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<20	<20	<50
RPD								0		0	0	0	0	0	0	0	0	0
C02.01	SX_IB_20220328_07_41_SS_Pri	28/03/2022		EM2205583	ALSE-Melbourne	Normal		<0.5		<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<20	<20	<50
C02.01	SX_IB_20220328_07_46_SS_Tri	28/03/2022		875283	MGT	Interlab_D	EM2205583001	<0.5	<0.5	<0.1	<0.1	<0.1	<0.1	<0.2	<0.3	<20	<20	<50
RPD								0		0	0	0	0	0	0	0	0	0
C02.01	SX_IB_20220328_07_41_SS_Pri	28/03/2022		EM2205583	ALSE-Melbourne	Normal		<0.5		<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<20	<20	<50
C02.01	SX_IB_20220328_07_46_SS_Tri	28/03/2022		875283	MGT	Interlab_D	EM2205583001											
RPD																		
C02.01	SX_IB_20220328_07_41_SS_Pri	28/03/2022		EM2205583	ALSE-Melbourne	Normal												
C02.01	SX_IB_20220328_07_45_SS_Du	28/03/2022		EM2205583	ALSE-Melbourne	Field_D	EM2205583009											
RPD																		
C02.01	SX_IB_20220328_07_41_SS_Pri	28/03/2022		EM2205583	ALSE-Melbourne	Normal												
C02.01	SX_IB_20220328_07_46_SS_Tri	28/03/2022		875283	MGT	Interlab_D	EM2205583009											
RPD																		

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

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

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

								TRH				TPH						
								C10-C16 (F2 minus Naphthalene)	C16-C34	C34-C40	C10-C40 (Sum of total)	C6-C9	C10-C14	C15-C28	C29-C36	+C10-C36 (Sum of total)	Aldrin	Dieldrin
								mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL								50	100	100	50	20	20	50	50	50	0.05	0.05
Location Code	Field ID	Date	Depth	Lab Report Number	Lab Name	Sample Type	Parent Sample											
C02.01	SX_IB_20220316_16_12_SS_Pri	16/03/2022		872036	MGT	Normal		<50	<100	<100	<100	<20	<20	<50	<50	<50	<0.05	<0.05
C02.01	SX_IB_20220316_16_15_SS_Du	16/03/2022		872036	MGT	Field_D	M22-Ma34703	53	<100	<100	<100	<20	58	<50	<50	58	<0.05	<0.05
RPD								6	0	0	0	0	97	0	0	15	0	0
C02.01	SX_IB_20220316_16_12_SS_Pri	16/03/2022		872036	MGT	Normal		<50	<100	<100	<100	<20	<20	<50	<50	<50	<0.05	<0.05
C02.01	SX_IB_20220316_16_16_SS_Tri	16/03/2022		EM2204736	ALSE-Melbourne	Interlab_D	M22-Ma34703	<50	<100	<100	<50	<20	<50	<100	<100	<50	<0.05	<0.05
RPD								0	0	0	0	0	0	0	0	0	0	0
C02.01	SX_IB_20220316_16_12_SS_Pri	16/03/2022		872036	MGT	Normal												
C02.01	SX_IB_20220316_16_15_SS_Du	16/03/2022		872036	MGT	Field_D	M22-Ma34711											
RPD																		
C02.01	SX_IB_20220316_16_12_SS_Pri	16/03/2022		872036	MGT	Normal												
C02.01	SX_IB_20220316_16_15_SS_Du	16/03/2022		872036	MGT	Field_D	M22-Ma34719											
RPD																		
C02.01	SX_IB_20220316_16_12_SS_Pri	16/03/2022		872036	MGT	Normal												
C02.01	SX_IB_20220316_16_16_SS_Tri	16/03/2022		EM2204736	ALSE-Melbourne	Interlab_D	M22-Ma34719											
RPD																		
C02.01	SX_IB_20220316_08_17_SS_Pri	16/03/2022		EM2204736	ALSE-Melbourne	Normal		<50	<100	<100	<50	<20	<50	<100	<100	<50	<0.05	<0.05
C02.01	SX_IB_20220316_08_20_SS_Du	16/03/2022		EM2204736	ALSE-Melbourne	Field_D	EM2204736001	<50	<100	<100	<50	<20	<50	<100	<100	<50	<0.05	<0.05
RPD								0	0	0	0	0	0	0	0	0	0	0
C02.01	SX_IB_20220316_08_17_SS_Pri	16/03/2022		EM2204736	ALSE-Melbourne	Normal		<50	<100	<100	<50	<20	<50	<100	<100	<50	<0.05	<0.05
C02.01	SX_IB_20220316_08_22_SS_Tri	16/03/2022		872036	MGT	Interlab_D	EM2204736001	<50	<100	<100	<100	<20	<20	<50	<50	<50	<0.05	<0.05
RPD								0	0	0	0	0	0	0	0	0	0	0
C02.01	SX_IB_20220316_08_17_SS_Pri	16/03/2022		EM2204736	ALSE-Melbourne	Normal		<50	<100	<100	<50	<20	<50	<100	<100	<50	<0.05	<0.05
C02.01	SX_IB_20220316_08_22_SS_Tri	16/03/2022		872036	MGT	Interlab_D	EM2204736001											
RPD																		
C02.01	SX_IB_20220316_08_17_SS_Pri	16/03/2022		EM2204736	ALSE-Melbourne	Normal												
C02.01	SX_IB_20220316_08_20_SS_Du	16/03/2022		EM2204736	ALSE-Melbourne	Field_D	EM2204736009											
RPD																		
C02.01	SX_IB_20220316_08_17_SS_Pri	16/03/2022		EM2204736	ALSE-Melbourne	Normal												
C02.01	SX_IB_20220316_08_22_SS_Tri	16/03/2022		872036	MGT	Interlab_D	EM2204736009											
RPD																		
A04.01	SX_OB_20220317_16_02_SS_Pr	17/03/2022		872310	MGT	Normal		<50	<100	<100	<100	<20	<20	<50	<50	<50	<0.05	<0.05
A04.01	SX_OB_20220317_16_02_SS_Du	17/03/2022		872310	MGT	Field_D	M22-Ma36471	<50	<100	<100	<100	<20	<20	<50	<50	<50	<0.05	<0.05
RPD								0	0	0	0	0	0	0	0	0	0	0
A04.01	SX_OB_20220317_16_02_SS_Pr	17/03/2022		872310	MGT	Normal		<50	<100	<100	<100	<20	<20	<50	<50	<50	<0.05	<0.05
A04.01	SX_OB_20220317_16_03_SS_Tr	17/03/2022		EM2204843	ALSE-Melbourne	Interlab_D	M22-Ma36471	<50	<100	<100	<50	<20	<50	<100	<100	<50	<0.05	<0.05
RPD								0	0	0	0	0	0	0	0	0	0	0
A04.01	SX_OB_20220317_16_02_SS_Pr	17/03/2022		872310	MGT	Normal												
A04.01	SX_OB_20220317_16_02_SS_Du	17/03/2022		872310	MGT	Field_D	M22-Ma36481											
RPD																		
A04.01	SX_OB_20220317_16_02_SS_Pr	17/03/2022		872310	MGT	Normal												
A04.01	SX_OB_20220317_16_02_SS_Du	17/03/2022		872310	MGT	Field_D	M22-Ma36489											
RPD																		
A04.01	SX_OB_20220317_16_02_SS_Pr	17/03/2022		872310	MGT	Normal												
A04.01	SX_OB_20220317_16_03_SS_Tr	17/03/2022		EM2204843	ALSE-Melbourne	Interlab_D	M22-Ma36489											
RPD																		
C02.01	SX_IB_20220317_07_53_SS_Pri	17/03/2022		EM2204843	ALSE-Melbourne	Normal		<50	<100	<100	<50	<20	<50	<100	<100	<50	<0.05	<0.05
C02.01	SX_IB_20220317_07_53_SS_Du	17/03/2022		EM2204843	ALSE-Melbourne	Field_D	EM2204843001	<50	<100	<100	<50	<20	<50	<100	<100	<50	<0.05	<0.05
RPD								0	0	0	0	0	0	0	0	0	0	0
C02.01	SX_IB_20220317_07_53_SS_Pri	17/03/2022		EM2204843	ALSE-Melbourne	Normal		<50	<100	<100	<50	<20	<50	<100	<100	<50	<0.05	<0.05
C02.01	SX_IB_20220317_07_54_SS_Tri	17/03/2022		872310	MGT	Interlab_D	EM2204843001	<50	<100	<100	<100	<20	<20	<50	<50	<50	<0.05	<0.05
RPD								0	0	0	0	0	0	0	0	0	0	0
C02.01	SX_IB_20220317_07_53_SS_Pri	17/03/2022		EM2204843	ALSE-Melbourne	Normal		<50	<100	<100	<50	<20	<50	<100	<100	<50	<0.05	<0.05
C02.01	SX_IB_20220317_07_54_SS_Tri	17/03/2022		872310	MGT	Interlab_D	EM2204843001											
RPD																		
C02.01	SX_IB_20220317_07_53_SS_Pri	17/03/2022		EM2204843	ALSE-Melbourne	Normal												
C02.01	SX_IB_20220317_07_53_SS_Du	17/03/2022		EM2204843	ALSE-Melbourne	Field_D	EM2204843011											
RPD																		
C02.01	SX_IB_20220317_07_53_SS_Pri	17/03/2022		EM2204843	ALSE-Melbourne	Normal												
C02.01	SX_IB_20220317_07_54_SS_Tri	17/03/2022		872310	MGT	Interlab_D	EM2204843011											
RPD																		
C05.01	SX_OB_20220327_15_52_SS_Pr	27/03/2022		874920	MGT	Normal		85	<100	<100	<100	<20	62	<50	<50	62	<0.05	<0.05
C05.01	SX_OB_20220327_15_59_SS_Du	27/03/2022		874920	MGT	Field_D	M22-Ma57512	<50	<100	<100	<100	<20	<20	<50	<50	<50	<0.05	<0.05
RPD								52	0	0	0	0	102	0	0	21	0	0
C05.01	SX_OB_20220327_15_52_SS_Pr	27/03/2022		874920	MGT	Normal		85	<100	<100	<100	<20	62	<50	<50	62	<0.05	<0.05

								TRH				TPH						
								C10-C16 (F2 minus Naphthalene)	C16-C34	C34-C40	C10-C40 (Sum of total)	C6-C9	C10-C14	C15-C28	C29-C36	+C10-C36 (Sum of total)	Aldrin	Dieldrin
								mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
C05.01	SX_OB_20220327_16_00_SS_Tr	27/03/2022		EM2205473	ALSE-Melbourne	Interlab_D	M22-Ma57512	80	<100	<100	80	<20	70	<100	<100	70	<0.05	<0.05
RPD								6	0	0	0	0	12	0	0	12	0	0
C05.01	SX_OB_20220327_15_52_SS_Pr	27/03/2022		874920	MGT	Normal												
C05.01	SX_OB_20220327_15_59_SS_Du	27/03/2022		874920	MGT	Field_D	M22-Ma57521											
RPD																		
C05.01	SX_OB_20220327_15_52_SS_Pr	27/03/2022		874920	MGT	Normal												
C05.01	SX_OB_20220327_15_59_SS_Du	27/03/2022		874920	MGT	Field_D	M22-Ma57530											
RPD																		
C05.01	SX_OB_20220327_15_52_SS_Pr	27/03/2022		874920	MGT	Normal												
C05.01	SX_OB_20220327_16_00_SS_Tr	27/03/2022		EM2205473	ALSE-Melbourne	Interlab_D	M22-Ma57530											
RPD																		
C05.01	SX_OB_20220327_07_55_SS_Pr	27/03/2022		EM2205473	ALSE-Melbourne	Normal		<50	<100	<100	<50	<20	<50	<100	<100	<50	<0.05	<0.05
C05.01	SX_OB_20220327_07_58_SS_Du	27/03/2022		EM2205473	ALSE-Melbourne	Field_D	EM2205473004	<50	<100	<100	<50	<20	<50	<100	<100	<50	<0.05	<0.05
RPD								0	0	0	0	0	0	0	0	0	0	0
C05.01	SX_OB_20220327_07_55_SS_Pr	27/03/2022		EM2205473	ALSE-Melbourne	Normal		<50	<100	<100	<50	<20	<50	<100	<100	<50	<0.05	<0.05
C05.01	SX_OB_20220327_07_58_SS_Tr	27/03/2022		874920	MGT	Interlab_D	EM2205473004	<50	<100	<100	<100	<20	<20	<50	<50	<50	<0.05	<0.05
RPD								0	0	0	0	0	0	0	0	0	0	0
C05.01	SX_OB_20220327_07_55_SS_Pr	27/03/2022		EM2205473	ALSE-Melbourne	Normal		<50	<100	<100	<50	<20	<50	<100	<100	<50	<0.05	<0.05
C05.01	SX_OB_20220327_07_58_SS_Tr	27/03/2022		874920	MGT	Interlab_D	EM2205473004											
RPD																		
C05.01	SX_OB_20220327_07_55_SS_Pr	27/03/2022		EM2205473	ALSE-Melbourne	Normal												
C05.01	SX_OB_20220327_07_58_SS_Du	27/03/2022		EM2205473	ALSE-Melbourne	Field_D	EM2205473013											
RPD																		
C05.01	SX_OB_20220327_07_55_SS_Pr	27/03/2022		EM2205473	ALSE-Melbourne	Normal												
C05.01	SX_OB_20220327_07_58_SS_Tr	27/03/2022		874920	MGT	Interlab_D	EM2205473013											
RPD																		
C02.01	SX_IB_20220328_15_44_SS_Pri	28/03/2022		875283	MGT	Normal		<50	<100	<100	<100	<20	<20	<50	<50	<50	<0.05	<0.05
C02.01	SX_IB_20220328_15_47_SS_Du	28/03/2022		875283	MGT	Field_D	M22-Ma60487	<50	<100	<100	<100	<20	<20	<50	<50	<50	<0.05	<0.05
RPD								0	0	0	0	0	0	0	0	0	0	0
C02.01	SX_IB_20220328_15_44_SS_Pri	28/03/2022		875283	MGT	Normal		<50	<100	<100	<100	<20	<20	<50	<50	<50	<0.05	<0.05
C02.01	SX_IB_20220328_15_48_SS_Tri	28/03/2022		EM2205583	ALSE-Melbourne	Interlab_D	M22-Ma60487	<50	<100	<100	<50	<20	<50	<100	<100	<50	<0.05	<0.05
RPD								0	0	0	0	0	0	0	0	0	0	0
C02.01	SX_IB_20220328_15_44_SS_Pri	28/03/2022		875283	MGT	Normal												
C02.01	SX_IB_20220328_15_47_SS_Du	28/03/2022		875283	MGT	Field_D	M22-Ma60495											
RPD																		
C02.01	SX_IB_20220328_15_44_SS_Pri	28/03/2022		875283	MGT	Normal												
C02.01	SX_IB_20220328_15_47_SS_Du	28/03/2022		875283	MGT	Field_D	M22-Ma60503											
RPD																		
C02.01	SX_IB_20220328_15_44_SS_Pri	28/03/2022		875283	MGT	Normal												
C02.01	SX_IB_20220328_15_48_SS_Tri	28/03/2022		EM2205583	ALSE-Melbourne	Interlab_D	M22-Ma60503											
RPD																		
C02.01	SX_IB_20220328_07_41_SS_Pri	28/03/2022		EM2205583	ALSE-Melbourne	Normal		<50	<100	<100	<50	<20	<50	<100	<100	<50	<0.05	<0.05
C02.01	SX_IB_20220328_07_45_SS_Du	28/03/2022		EM2205583	ALSE-Melbourne	Field_D	EM2205583001	<50	<100	<100	<50	<20	<50	<100	<100	<50	<0.05	<0.05
RPD								0	0	0	0	0	0	0	0	0	0	0
C02.01	SX_IB_20220328_07_41_SS_Pri	28/03/2022		EM2205583	ALSE-Melbourne	Normal		<50	<100	<100	<50	<20	<50	<100	<100	<50	<0.05	<0.05
C02.01	SX_IB_20220328_07_46_SS_Tri	28/03/2022		875283	MGT	Interlab_D	EM2205583001	<50	<100	<100	<100	<20	<20	<50	<50	<50	<0.05	<0.05
RPD								0	0	0	0	0	0	0	0	0	0	0
C02.01	SX_IB_20220328_07_41_SS_Pri	28/03/2022		EM2205583	ALSE-Melbourne	Normal		<50	<100	<100	<50	<20	<50	<100	<100	<50	<0.05	<0.05
C02.01	SX_IB_20220328_07_46_SS_Tri	28/03/2022		875283	MGT	Interlab_D	EM2205583001											
RPD																		
C02.01	SX_IB_20220328_07_41_SS_Pri	28/03/2022		EM2205583	ALSE-Melbourne	Normal												
C02.01	SX_IB_20220328_07_45_SS_Du	28/03/2022		EM2205583	ALSE-Melbourne	Field_D	EM2205583009											
RPD																		
C02.01	SX_IB_20220328_07_41_SS_Pri	28/03/2022		EM2205583	ALSE-Melbourne	Normal												
C02.01	SX_IB_20220328_07_46_SS_Tri	28/03/2022		875283	MGT	Interlab_D	EM2205583009											
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

									Organ											
									Aldrin + Dieldrin	DDD	DDT	4,4-DDE	DDT+DDE+DDD	Endosulfan I	Endosulfan II	Endrin	Endrin ketone	Endrin aldehyde	Endosulfan sulphate
									mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL									0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
Location Code	Field ID	Date	Depth	Lab Report Number	Lab Name	Sample Type	Parent Sample												
C02.01	SX_IB_20220316_16_12_SS_Pri	16/03/2022		872036	MGT	Normal			<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
C02.01	SX_IB_20220316_16_15_SS_Du	16/03/2022		872036	MGT	Field_D	M22-Ma34703		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
RPD									0	0	0	0	0	0	0	0	0	0	0
C02.01	SX_IB_20220316_16_12_SS_Pri	16/03/2022		872036	MGT	Normal			<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
C02.01	SX_IB_20220316_16_16_SS_Tri	16/03/2022		EM2204736	ALSE-Melbourne	Interlab_D	M22-Ma34703		<0.30	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		<0.05	<0.05
RPD									0	0	0	0	0	0	0	0		0	0
C02.01	SX_IB_20220316_16_12_SS_Pri	16/03/2022		872036	MGT	Normal													
C02.01	SX_IB_20220316_16_15_SS_Du	16/03/2022		872036	MGT	Field_D	M22-Ma34711												
RPD																			
C02.01	SX_IB_20220316_16_12_SS_Pri	16/03/2022		872036	MGT	Normal													
C02.01	SX_IB_20220316_16_15_SS_Du	16/03/2022		872036	MGT	Field_D	M22-Ma34719												
RPD																			
C02.01	SX_IB_20220316_16_12_SS_Pri	16/03/2022		872036	MGT	Normal													
C02.01	SX_IB_20220316_16_16_SS_Tri	16/03/2022		EM2204736	ALSE-Melbourne	Interlab_D	M22-Ma34719												
RPD																			
C02.01	SX_IB_20220316_08_17_SS_Pri	16/03/2022		EM2204736	ALSE-Melbourne	Normal			<0.30	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		<0.05	<0.05
C02.01	SX_IB_20220316_08_20_SS_Du	16/03/2022		EM2204736	ALSE-Melbourne	Field_D	EM2204736001		<0.30	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		<0.05	<0.05
RPD									0	0	0	0	0	0	0	0		0	0
C02.01	SX_IB_20220316_08_17_SS_Pri	16/03/2022		EM2204736	ALSE-Melbourne	Normal			<0.30	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		<0.05	<0.05
C02.01	SX_IB_20220316_08_22_SS_Tri	16/03/2022		872036	MGT	Interlab_D	EM2204736001		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
RPD									0	0	0	0	0	0	0	0		0	0
C02.01	SX_IB_20220316_08_17_SS_Pri	16/03/2022		EM2204736	ALSE-Melbourne	Normal			<0.30	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		<0.05	<0.05
C02.01	SX_IB_20220316_08_22_SS_Tri	16/03/2022		872036	MGT	Interlab_D	EM2204736001												
RPD																			
C02.01	SX_IB_20220316_08_17_SS_Pri	16/03/2022		EM2204736	ALSE-Melbourne	Normal													
C02.01	SX_IB_20220316_08_20_SS_Du	16/03/2022		EM2204736	ALSE-Melbourne	Field_D	EM2204736009												
RPD																			
C02.01	SX_IB_20220316_08_17_SS_Pri	16/03/2022		EM2204736	ALSE-Melbourne	Normal													
C02.01	SX_IB_20220316_08_22_SS_Tri	16/03/2022		872036	MGT	Interlab_D	EM2204736009												
RPD																			
A04.01	SX_OB_20220317_16_02_SS_Pr	17/03/2022		872310	MGT	Normal			<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
A04.01	SX_OB_20220317_16_02_SS_Du	17/03/2022		872310	MGT	Field_D	M22-Ma36471		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
RPD									0	0	0	0	0	0	0	0	0	0	0
A04.01	SX_OB_20220317_16_02_SS_Pr	17/03/2022		872310	MGT	Normal			<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
A04.01	SX_OB_20220317_16_03_SS_Tr	17/03/2022		EM2204843	ALSE-Melbourne	Interlab_D	M22-Ma36471		<0.30	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		<0.05	<0.05
RPD									0	0	0	0	0	0	0	0		0	0
A04.01	SX_OB_20220317_16_02_SS_Pr	17/03/2022		872310	MGT	Normal													
A04.01	SX_OB_20220317_16_02_SS_Du	17/03/2022		872310	MGT	Field_D	M22-Ma36481												
RPD																			
A04.01	SX_OB_20220317_16_02_SS_Pr	17/03/2022		872310	MGT	Normal													
A04.01	SX_OB_20220317_16_02_SS_Du	17/03/2022		872310	MGT	Field_D	M22-Ma36489												
RPD																			
A04.01	SX_OB_20220317_16_02_SS_Pr	17/03/2022		872310	MGT	Normal													
A04.01	SX_OB_20220317_16_03_SS_Tr	17/03/2022		EM2204843	ALSE-Melbourne	Interlab_D	M22-Ma36489												
RPD																			
C02.01	SX_IB_20220317_07_53_SS_Pri	17/03/2022		EM2204843	ALSE-Melbourne	Normal			<0.30	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		<0.05	<0.05
C02.01	SX_IB_20220317_07_53_SS_Du	17/03/2022		EM2204843	ALSE-Melbourne	Field_D	EM2204843001		<0.30	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		<0.05	<0.05
RPD									0	0	0	0	0	0	0	0		0	0
C02.01	SX_IB_20220317_07_53_SS_Pri	17/03/2022		EM2204843	ALSE-Melbourne	Normal			<0.30	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		<0.05	<0.05
C02.01	SX_IB_20220317_07_54_SS_Tri	17/03/2022		872310	MGT	Interlab_D	EM2204843001		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
RPD									0	0	0	0	0	0	0	0		0	0
C02.01	SX_IB_20220317_07_53_SS_Pri	17/03/2022		EM2204843	ALSE-Melbourne	Normal			<0.30	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		<0.05	<0.05
C02.01	SX_IB_20220317_07_54_SS_Tri	17/03/2022		872310	MGT	Interlab_D	EM2204843001												
RPD																			
C02.01	SX_IB_20220317_07_53_SS_Pri	17/03/2022		EM2204843	ALSE-Melbourne	Normal													
C02.01	SX_IB_20220317_07_53_SS_Du	17/03/2022		EM2204843	ALSE-Melbourne	Field_D	EM2204843011												
RPD																			
C02.01	SX_IB_20220317_07_53_SS_Pri	17/03/2022		EM2204843	ALSE-Melbourne	Normal													
C02.01	SX_IB_20220317_07_54_SS_Tri	17/03/2022		872310	MGT	Interlab_D	EM2204843011												
RPD																			
C05.01	SX_OB_20220327_15_52_SS_Pr	27/03/2022		874920	MGT	Normal			<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
C05.01	SX_OB_20220327_15_59_SS_Du	27/03/2022		874920	MGT	Field_D	M22-Ma57512		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
RPD									0	0	0	0	0	0	0	0	0	0	0
C05.01	SX_OB_20220327_15_52_SS_Pr	27/03/2022		874920	MGT	Normal			<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05

								Organ										
								Aldrin + Dieldrin	DDD	DDT	4,4-DDE	DDT+DDE+DDD	Endosulfan I	Endosulfan II	Endrin	Endrin ketone	Endrin aldehyde	Endosulfan sulphate
								mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
C05.01	SX_OB_20220327_16_00_SS_Tr	27/03/2022		EM2205473	ALSE-Melbourne	Interlab_D	M22-Ma57512	<0.30	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		<0.05	<0.05
RPD								0	0	0	0	0	0	0	0		0	0
C05.01	SX_OB_20220327_15_52_SS_Pr	27/03/2022		874920	MGT	Normal												
C05.01	SX_OB_20220327_15_59_SS_Du	27/03/2022		874920	MGT	Field_D	M22-Ma57521											
RPD																		
C05.01	SX_OB_20220327_15_52_SS_Pr	27/03/2022		874920	MGT	Normal												
C05.01	SX_OB_20220327_15_59_SS_Du	27/03/2022		874920	MGT	Field_D	M22-Ma57530											
RPD																		
C05.01	SX_OB_20220327_15_52_SS_Pr	27/03/2022		874920	MGT	Normal												
C05.01	SX_OB_20220327_16_00_SS_Tr	27/03/2022		EM2205473	ALSE-Melbourne	Interlab_D	M22-Ma57530											
RPD																		
C05.01	SX_OB_20220327_07_55_SS_Pr	27/03/2022		EM2205473	ALSE-Melbourne	Normal		<0.30	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		<0.05	<0.05
C05.01	SX_OB_20220327_07_58_SS_Du	27/03/2022		EM2205473	ALSE-Melbourne	Field_D	EM2205473004	<0.30	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		<0.05	<0.05
RPD								0	0	0	0	0	0	0	0		0	0
C05.01	SX_OB_20220327_07_55_SS_Pr	27/03/2022		EM2205473	ALSE-Melbourne	Normal		<0.30	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		<0.05	<0.05
C05.01	SX_OB_20220327_07_58_SS_Tr	27/03/2022		874920	MGT	Interlab_D	EM2205473004	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
RPD								0	0	0	0	0	0	0	0		0	0
C05.01	SX_OB_20220327_07_55_SS_Pr	27/03/2022		EM2205473	ALSE-Melbourne	Normal		<0.30	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		<0.05	<0.05
C05.01	SX_OB_20220327_07_58_SS_Tr	27/03/2022		874920	MGT	Interlab_D	EM2205473004											
RPD																		
C05.01	SX_OB_20220327_07_55_SS_Pr	27/03/2022		EM2205473	ALSE-Melbourne	Normal												
C05.01	SX_OB_20220327_07_58_SS_Du	27/03/2022		EM2205473	ALSE-Melbourne	Field_D	EM2205473013											
RPD																		
C05.01	SX_OB_20220327_07_55_SS_Pr	27/03/2022		EM2205473	ALSE-Melbourne	Normal												
C05.01	SX_OB_20220327_07_58_SS_Tr	27/03/2022		874920	MGT	Interlab_D	EM2205473013											
RPD																		
C02.01	SX_IB_20220328_15_44_SS_Pri	28/03/2022		875283	MGT	Normal		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
C02.01	SX_IB_20220328_15_47_SS_Du	28/03/2022		875283	MGT	Field_D	M22-Ma60487	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
RPD								0	0	0	0	0	0	0	0	0	0	0
C02.01	SX_IB_20220328_15_44_SS_Pri	28/03/2022		875283	MGT	Normal		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
C02.01	SX_IB_20220328_15_48_SS_Tri	28/03/2022		EM2205583	ALSE-Melbourne	Interlab_D	M22-Ma60487	<0.30	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		<0.05	<0.05
RPD								0	0	0	0	0	0	0	0		0	0
C02.01	SX_IB_20220328_15_44_SS_Pri	28/03/2022		875283	MGT	Normal												
C02.01	SX_IB_20220328_15_47_SS_Du	28/03/2022		875283	MGT	Field_D	M22-Ma60495											
RPD																		
C02.01	SX_IB_20220328_15_44_SS_Pri	28/03/2022		875283	MGT	Normal												
C02.01	SX_IB_20220328_15_47_SS_Du	28/03/2022		875283	MGT	Field_D	M22-Ma60503											
RPD																		
C02.01	SX_IB_20220328_15_44_SS_Pri	28/03/2022		875283	MGT	Normal												
C02.01	SX_IB_20220328_15_48_SS_Tri	28/03/2022		EM2205583	ALSE-Melbourne	Interlab_D	M22-Ma60503											
RPD																		
C02.01	SX_IB_20220328_07_41_SS_Pri	28/03/2022		EM2205583	ALSE-Melbourne	Normal		<0.30	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		<0.05	<0.05
C02.01	SX_IB_20220328_07_45_SS_Du	28/03/2022		EM2205583	ALSE-Melbourne	Field_D	EM2205583001	<0.30	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		<0.05	<0.05
RPD								0	0	0	0	0	0	0	0		0	0
C02.01	SX_IB_20220328_07_41_SS_Pri	28/03/2022		EM2205583	ALSE-Melbourne	Normal		<0.30	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		<0.05	<0.05
C02.01	SX_IB_20220328_07_46_SS_Tri	28/03/2022		875283	MGT	Interlab_D	EM2205583001	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
RPD								0	0	0	0	0	0	0	0		0	0
C02.01	SX_IB_20220328_07_41_SS_Pri	28/03/2022		EM2205583	ALSE-Melbourne	Normal		<0.30	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		<0.05	<0.05
C02.01	SX_IB_20220328_07_46_SS_Tri	28/03/2022		875283	MGT	Interlab_D	EM2205583001											
RPD																		
C02.01	SX_IB_20220328_07_41_SS_Pri	28/03/2022		EM2205583	ALSE-Melbourne	Normal												
C02.01	SX_IB_20220328_07_45_SS_Du	28/03/2022		EM2205583	ALSE-Melbourne	Field_D	EM2205583009											
RPD																		
C02.01	SX_IB_20220328_07_41_SS_Pri	28/03/2022		EM2205583	ALSE-Melbourne	Normal												
C02.01	SX_IB_20220328_07_46_SS_Tri	28/03/2022		875283	MGT	Interlab_D	EM2205583009											
RPD																		

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

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

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

								nochlorine Pesticides															
								chlordane	Chlordane (cis)	Chlordane (trans)	Hexachlorobenzene	Heptachlor	Heptachlor epoxide	a-BHC	b-BHC	d-BHC	g-BHC (Lindane)	Methoxychlor				
								mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg				
EQL								0.1	0.03	0.03	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05				
Location Code	Field ID	Date	Depth	Lab Report Number	Lab Name	Sample Type	Parent Sample																
C02.01	SX_IB_20220316_16_12_SS_Pri	16/03/2022		872036	MGT	Normal		<0.1			<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05				
C02.01	SX_IB_20220316_16_15_SS_Du	16/03/2022		872036	MGT	Field_D	M22-Ma34703	<0.1			<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05				
RPD								0			0	0	0	0	0	0	0	0				
C02.01	SX_IB_20220316_16_12_SS_Pri	16/03/2022		872036	MGT	Normal		<0.1			<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05				
C02.01	SX_IB_20220316_16_16_SS_Tri	16/03/2022		EM2204736	ALSE-Melbourne	Interlab_D	M22-Ma34703	<0.10	<0.03	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05				
RPD								0			0	0	0	0	0	0	0	0				
C02.01	SX_IB_20220316_16_12_SS_Pri	16/03/2022		872036	MGT	Normal																
C02.01	SX_IB_20220316_16_15_SS_Du	16/03/2022		872036	MGT	Field_D	M22-Ma34711															
RPD																						
C02.01	SX_IB_20220316_16_12_SS_Pri	16/03/2022		872036	MGT	Normal																
C02.01	SX_IB_20220316_16_15_SS_Du	16/03/2022		872036	MGT	Field_D	M22-Ma34719															
RPD																						
C02.01	SX_IB_20220316_16_12_SS_Pri	16/03/2022		872036	MGT	Normal																
C02.01	SX_IB_20220316_16_16_SS_Tri	16/03/2022		EM2204736	ALSE-Melbourne	Interlab_D	M22-Ma34719															
RPD																						
C02.01	SX_IB_20220316_08_17_SS_Pri	16/03/2022		EM2204736	ALSE-Melbourne	Normal		<0.10	<0.03	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05				
C02.01	SX_IB_20220316_08_20_SS_Du	16/03/2022		EM2204736	ALSE-Melbourne	Field_D	EM2204736001	<0.10	<0.03	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05				
RPD								0	0	0	0	0	0	0	0	0	0	0				
C02.01	SX_IB_20220316_08_17_SS_Pri	16/03/2022		EM2204736	ALSE-Melbourne	Normal		<0.10	<0.03	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05				
C02.01	SX_IB_20220316_08_22_SS_Tri	16/03/2022		872036	MGT	Interlab_D	EM2204736001	<0.1			<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05				
RPD								0			0	0	0	0	0	0	0	0				
C02.01	SX_IB_20220316_08_17_SS_Pri	16/03/2022		EM2204736	ALSE-Melbourne	Normal		<0.10	<0.03	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05				
C02.01	SX_IB_20220316_08_22_SS_Tri	16/03/2022		872036	MGT	Interlab_D	EM2204736001															
RPD																						
C02.01	SX_IB_20220316_08_17_SS_Pri	16/03/2022		EM2204736	ALSE-Melbourne	Normal																
C02.01	SX_IB_20220316_08_20_SS_Du	16/03/2022		EM2204736	ALSE-Melbourne	Field_D	EM2204736009															
RPD																						
C02.01	SX_IB_20220316_08_17_SS_Pri	16/03/2022		EM2204736	ALSE-Melbourne	Normal																
C02.01	SX_IB_20220316_08_22_SS_Tri	16/03/2022		872036	MGT	Interlab_D	EM2204736009															
RPD																						
A04.01	SX_OB_20220317_16_02_SS_Pr	17/03/2022		872310	MGT	Normal		<0.1			<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05				
A04.01	SX_OB_20220317_16_02_SS_Du	17/03/2022		872310	MGT	Field_D	M22-Ma36471	<0.1			<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05				
RPD								0			0	0	0	0	0	0	0	0				
A04.01	SX_OB_20220317_16_02_SS_Pr	17/03/2022		872310	MGT	Normal		<0.1			<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05				
A04.01	SX_OB_20220317_16_03_SS_Tr	17/03/2022		EM2204843	ALSE-Melbourne	Interlab_D	M22-Ma36471	<0.10	<0.03	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05				
RPD								0			0	0	0	0	0	0	0	0				
A04.01	SX_OB_20220317_16_02_SS_Pr	17/03/2022		872310	MGT	Normal																
A04.01	SX_OB_20220317_16_02_SS_Du	17/03/2022		872310	MGT	Field_D	M22-Ma36481															
RPD																						
A04.01	SX_OB_20220317_16_02_SS_Pr	17/03/2022		872310	MGT	Normal																
A04.01	SX_OB_20220317_16_02_SS_Du	17/03/2022		872310	MGT	Field_D	M22-Ma36489															
RPD																						
A04.01	SX_OB_20220317_16_02_SS_Pr	17/03/2022		872310	MGT	Normal																
A04.01	SX_OB_20220317_16_03_SS_Tr	17/03/2022		EM2204843	ALSE-Melbourne	Interlab_D	M22-Ma36489															
RPD																						
C02.01	SX_IB_20220317_07_53_SS_Pri	17/03/2022		EM2204843	ALSE-Melbourne	Normal		<0.10	<0.03	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05				
C02.01	SX_IB_20220317_07_53_SS_Du	17/03/2022		EM2204843	ALSE-Melbourne	Field_D	EM2204843001	<0.10	<0.03	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05				
RPD								0	0	0	0	0	0	0	0	0	0	0				
C02.01	SX_IB_20220317_07_53_SS_Pri	17/03/2022		EM2204843	ALSE-Melbourne	Normal		<0.10	<0.03	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05				
C02.01	SX_IB_20220317_07_54_SS_Tri	17/03/2022		872310	MGT	Interlab_D	EM2204843001	<0.1			<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05				
RPD								0			0	0	0	0	0	0	0	0				
C02.01	SX_IB_20220317_07_53_SS_Pri	17/03/2022		EM2204843	ALSE-Melbourne	Normal		<0.10	<0.03	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05				
C02.01	SX_IB_20220317_07_54_SS_Tri	17/03/2022		872310	MGT	Interlab_D	EM2204843001															
RPD																						
C02.01	SX_IB_20220317_07_53_SS_Pri	17/03/2022		EM2204843	ALSE-Melbourne	Normal																
C02.01	SX_IB_20220317_07_53_SS_Du	17/03/2022		EM2204843	ALSE-Melbourne	Field_D	EM2204843011															
RPD																						
C02.01	SX_IB_20220317_07_53_SS_Pri	17/03/2022		EM2204843	ALSE-Melbourne	Normal																
C02.01	SX_IB_20220317_07_54_SS_Tri	17/03/2022		872310	MGT	Interlab_D	EM2204843011															
RPD																						
C05.01	SX_OB_20220327_15_52_SS_Pr	27/03/2022		874920	MGT	Normal		<0.1			<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05				
C05.01	SX_OB_20220327_15_59_SS_Du	27/03/2022		874920	MGT	Field_D	M22-Ma57512	<0.1			<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05				
RPD								0			0	0	0	0	0	0	0	0				
C05.01	SX_OB_20220327_15_52_SS_Pr	27/03/2022		874920	MGT	Normal		<0.1			<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05				

							nochlorine Pesticides										
							chlordane	Chlordane (cis)	Chlordane (trans)	Hexachlorobenzene	Heptachlor	Heptachlor epoxide	a-BHC	b-BHC	d-BHC	g-BHC (Lindane)	Methoxychlor
							mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
C05.01	SX_OB_20220327_16_00_SS_Tr	27/03/2022		EM2205473	ALSE-Melbourne	Interlab_D	M22-Ma57512	<0.10	<0.03	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
RPD								0			0	0	0	0	0	0	0	0
C05.01	SX_OB_20220327_15_52_SS_Pr	27/03/2022		874920	MGT	Normal												
C05.01	SX_OB_20220327_15_59_SS_Du	27/03/2022		874920	MGT	Field_D	M22-Ma57521											
RPD																		
C05.01	SX_OB_20220327_15_52_SS_Pr	27/03/2022		874920	MGT	Normal												
C05.01	SX_OB_20220327_15_59_SS_Du	27/03/2022		874920	MGT	Field_D	M22-Ma57530											
RPD																		
C05.01	SX_OB_20220327_15_52_SS_Pr	27/03/2022		874920	MGT	Normal												
C05.01	SX_OB_20220327_16_00_SS_Tr	27/03/2022		EM2205473	ALSE-Melbourne	Interlab_D	M22-Ma57530											
RPD																		
C05.01	SX_OB_20220327_07_55_SS_Pr	27/03/2022		EM2205473	ALSE-Melbourne	Normal		<0.10	<0.03	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
C05.01	SX_OB_20220327_07_58_SS_Du	27/03/2022		EM2205473	ALSE-Melbourne	Field_D	EM2205473004	<0.10	<0.03	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
RPD								0	0	0	0	0	0	0	0	0	0	0
C05.01	SX_OB_20220327_07_55_SS_Pr	27/03/2022		EM2205473	ALSE-Melbourne	Normal		<0.10	<0.03	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
C05.01	SX_OB_20220327_07_58_SS_Tr	27/03/2022		874920	MGT	Interlab_D	EM2205473004	<0.1			<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
RPD								0			0	0	0	0	0	0	0	0
C05.01	SX_OB_20220327_07_55_SS_Pr	27/03/2022		EM2205473	ALSE-Melbourne	Normal		<0.10	<0.03	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
C05.01	SX_OB_20220327_07_58_SS_Tr	27/03/2022		874920	MGT	Interlab_D	EM2205473004											
RPD																		
C05.01	SX_OB_20220327_07_55_SS_Pr	27/03/2022		EM2205473	ALSE-Melbourne	Normal												
C05.01	SX_OB_20220327_07_58_SS_Du	27/03/2022		EM2205473	ALSE-Melbourne	Field_D	EM2205473013											
RPD																		
C05.01	SX_OB_20220327_07_55_SS_Pr	27/03/2022		EM2205473	ALSE-Melbourne	Normal												
C05.01	SX_OB_20220327_07_58_SS_Tr	27/03/2022		874920	MGT	Interlab_D	EM2205473013											
RPD																		
C02.01	SX_IB_20220328_15_44_SS_Pri	28/03/2022		875283	MGT	Normal		<0.1			<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
C02.01	SX_IB_20220328_15_47_SS_Du	28/03/2022		875283	MGT	Field_D	M22-Ma60487	<0.1			<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
RPD								0			0	0	0	0	0	0	0	0
C02.01	SX_IB_20220328_15_44_SS_Pri	28/03/2022		875283	MGT	Normal		<0.1			<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
C02.01	SX_IB_20220328_15_48_SS_Tri	28/03/2022		EM2205583	ALSE-Melbourne	Interlab_D	M22-Ma60487	<0.10	<0.03	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
RPD								0			0	0	0	0	0	0	0	0
C02.01	SX_IB_20220328_15_44_SS_Pri	28/03/2022		875283	MGT	Normal												
C02.01	SX_IB_20220328_15_47_SS_Du	28/03/2022		875283	MGT	Field_D	M22-Ma60495											
RPD																		
C02.01	SX_IB_20220328_15_44_SS_Pri	28/03/2022		875283	MGT	Normal												
C02.01	SX_IB_20220328_15_47_SS_Du	28/03/2022		875283	MGT	Field_D	M22-Ma60503											
RPD																		
C02.01	SX_IB_20220328_15_44_SS_Pri	28/03/2022		875283	MGT	Normal												
C02.01	SX_IB_20220328_15_48_SS_Tri	28/03/2022		EM2205583	ALSE-Melbourne	Interlab_D	M22-Ma60503											
RPD																		
C02.01	SX_IB_20220328_07_41_SS_Pri	28/03/2022		EM2205583	ALSE-Melbourne	Normal		<0.10	<0.03	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
C02.01	SX_IB_20220328_07_45_SS_Du	28/03/2022		EM2205583	ALSE-Melbourne	Field_D	EM2205583001	<0.10	<0.03	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
RPD								0	0	0	0	0	0	0	0	0	0	0
C02.01	SX_IB_20220328_07_41_SS_Pri	28/03/2022		EM2205583	ALSE-Melbourne	Normal		<0.10	<0.03	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
C02.01	SX_IB_20220328_07_46_SS_Tri	28/03/2022		875283	MGT	Interlab_D	EM2205583001	<0.1			<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
RPD								0			0	0	0	0	0	0	0	0
C02.01	SX_IB_20220328_07_41_SS_Pri	28/03/2022		EM2205583	ALSE-Melbourne	Normal		<0.10	<0.03	<0.03	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
C02.01	SX_IB_20220328_07_46_SS_Tri	28/03/2022		875283	MGT	Interlab_D	EM2205583001											
RPD																		
C02.01	SX_IB_20220328_07_41_SS_Pri	28/03/2022		EM2205583	ALSE-Melbourne	Normal												
C02.01	SX_IB_20220328_07_45_SS_Du	28/03/2022		EM2205583	ALSE-Melbourne	Field_D	EM2205583009											
RPD																		
C02.01	SX_IB_20220328_07_41_SS_Pri	28/03/2022		EM2205583	ALSE-Melbourne	Normal												
C02.01	SX_IB_20220328_07_46_SS_Tri	28/03/2022		875283	MGT	Interlab_D	EM2205583009											
RPD																		

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

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

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

								Toxaphene	Organochlorine pesticides EPAVic	Other organochlorine pesticides EPAVic	2-Chlorophenol	2,4-Dichlorophenol	2,4,5-Trichlorophenol	2,4,6-Trichlorophenol	2,6-Dichlorophenol	4-chloro-3-methylphenol	Pentachlorophenol	2,3,4,5 & 2,3,4,6-Tetrachlorophenol
								mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL								0.5	0.1	0.03	0.5	0.5	1	1	0.5	1	1	0.05
Location Code	Field ID	Date	Depth	Lab Report Number	Lab Name	Sample Type	Parent Sample											
C02.01	SX_IB_20220316_16_12_SS_Pri	16/03/2022		872036	MGT	Normal		<0.5	<0.1	<0.1	<0.5	<0.5	<1	<1	<0.5	<1	<1	
C02.01	SX_IB_20220316_16_15_SS_Du	16/03/2022		872036	MGT	Field_D	M22-Ma34703	<0.5	<0.1	<0.1	<0.5	<0.5	<1	<1	<0.5	<1	<1	
RPD								0	0	0	0	0	0	0	0	0	0	
C02.01	SX_IB_20220316_16_12_SS_Pri	16/03/2022		872036	MGT	Normal		<0.5	<0.1	<0.1	<0.5	<0.5	<1	<1	<0.5	<1	<1	
C02.01	SX_IB_20220316_16_16_SS_Tri	16/03/2022		EM2204736	ALSE-Melbourne	Interlab_D	M22-Ma34703		<0.10	<0.03	<0.50	<0.50	<1.00	<1.00	<0.50	<1.00	<1.0	<0.05
RPD									0	0	0	0	0	0	0	0	0	
C02.01	SX_IB_20220316_16_12_SS_Pri	16/03/2022		872036	MGT	Normal												
C02.01	SX_IB_20220316_16_15_SS_Du	16/03/2022		872036	MGT	Field_D	M22-Ma34711											
RPD																		
C02.01	SX_IB_20220316_16_12_SS_Pri	16/03/2022		872036	MGT	Normal												
C02.01	SX_IB_20220316_16_15_SS_Du	16/03/2022		872036	MGT	Field_D	M22-Ma34719											
RPD																		
C02.01	SX_IB_20220316_16_12_SS_Pri	16/03/2022		872036	MGT	Normal												
C02.01	SX_IB_20220316_16_16_SS_Tri	16/03/2022		EM2204736	ALSE-Melbourne	Interlab_D	M22-Ma34719											
RPD																		
C02.01	SX_IB_20220316_08_17_SS_Pri	16/03/2022		EM2204736	ALSE-Melbourne	Normal			<0.10	<0.03	<0.50	<0.50	<1.00	<1.00	<0.50	<1.00	<1.0	<0.05
C02.01	SX_IB_20220316_08_20_SS_Du	16/03/2022		EM2204736	ALSE-Melbourne	Field_D	EM2204736001		<0.10	<0.03	<0.50	<0.50	<1.00	<1.00	<0.50	<1.00	<1.0	<0.05
RPD									0	0	0	0	0	0	0	0	0	0
C02.01	SX_IB_20220316_08_17_SS_Pri	16/03/2022		EM2204736	ALSE-Melbourne	Normal			<0.10	<0.03	<0.50	<0.50	<1.00	<1.00	<0.50	<1.00	<1.0	<0.05
C02.01	SX_IB_20220316_08_22_SS_Tri	16/03/2022		872036	MGT	Interlab_D	EM2204736001	<0.5	<0.1	<0.1	<0.5	<0.5	<1	<1	<0.5	<1	<1	
RPD									0	0	0	0	0	0	0	0	0	
C02.01	SX_IB_20220316_08_17_SS_Pri	16/03/2022		EM2204736	ALSE-Melbourne	Normal			<0.10	<0.03	<0.50	<0.50	<1.00	<1.00	<0.50	<1.00	<1.0	<0.05
C02.01	SX_IB_20220316_08_22_SS_Tri	16/03/2022		872036	MGT	Interlab_D	EM2204736001											
RPD																		
C02.01	SX_IB_20220316_08_17_SS_Pri	16/03/2022		EM2204736	ALSE-Melbourne	Normal												
C02.01	SX_IB_20220316_08_20_SS_Du	16/03/2022		EM2204736	ALSE-Melbourne	Field_D	EM2204736009											
RPD																		
C02.01	SX_IB_20220316_08_17_SS_Pri	16/03/2022		EM2204736	ALSE-Melbourne	Normal												
C02.01	SX_IB_20220316_08_22_SS_Tri	16/03/2022		872036	MGT	Interlab_D	EM2204736009											
RPD																		
A04.01	SX_OB_20220317_16_02_SS_Pr	17/03/2022		872310	MGT	Normal		<0.5	<0.1	<0.1	<0.5	<0.5	<1	<1	<0.5	<1	<1	
A04.01	SX_OB_20220317_16_02_SS_Du	17/03/2022		872310	MGT	Field_D	M22-Ma36471	<0.5	<0.1	<0.1	<0.5	<0.5	<1	<1	<0.5	<1	<1	
RPD								0	0	0	0	0	0	0	0	0	0	
A04.01	SX_OB_20220317_16_02_SS_Pr	17/03/2022		872310	MGT	Normal		<0.5	<0.1	<0.1	<0.5	<0.5	<1	<1	<0.5	<1	<1	
A04.01	SX_OB_20220317_16_03_SS_Tr	17/03/2022		EM2204843	ALSE-Melbourne	Interlab_D	M22-Ma36471		<0.10	<0.03	<0.50	<0.50	<1.00	<1.00	<0.50	<1.00	<1.0	<0.05
RPD									0	0	0	0	0	0	0	0	0	
A04.01	SX_OB_20220317_16_02_SS_Pr	17/03/2022		872310	MGT	Normal												
A04.01	SX_OB_20220317_16_02_SS_Du	17/03/2022		872310	MGT	Field_D	M22-Ma36481											
RPD																		
A04.01	SX_OB_20220317_16_02_SS_Pr	17/03/2022		872310	MGT	Normal												
A04.01	SX_OB_20220317_16_02_SS_Du	17/03/2022		872310	MGT	Field_D	M22-Ma36489											
RPD																		
A04.01	SX_OB_20220317_16_02_SS_Pr	17/03/2022		872310	MGT	Normal												
A04.01	SX_OB_20220317_16_03_SS_Tr	17/03/2022		EM2204843	ALSE-Melbourne	Interlab_D	M22-Ma36489											
RPD																		
C02.01	SX_IB_20220317_07_53_SS_Pri	17/03/2022		EM2204843	ALSE-Melbourne	Normal			<0.10	<0.03	<0.50	<0.50	<1.00	<1.00	<0.50	<1.00	<1.0	<0.05
C02.01	SX_IB_20220317_07_53_SS_Du	17/03/2022		EM2204843	ALSE-Melbourne	Field_D	EM2204843001		<0.10	<0.03	<0.50	<0.50	<1.00	<1.00	<0.50	<1.00	<1.0	<0.05
RPD									0	0	0	0	0	0	0	0	0	0
C02.01	SX_IB_20220317_07_53_SS_Pri	17/03/2022		EM2204843	ALSE-Melbourne	Normal			<0.10	<0.03	<0.50	<0.50	<1.00	<1.00	<0.50	<1.00	<1.0	<0.05
C02.01	SX_IB_20220317_07_54_SS_Tri	17/03/2022		872310	MGT	Interlab_D	EM2204843001	<0.5	<0.1	<0.1	<0.5	<0.5	<1	<1	<0.5	<1	<1	
RPD									0	0	0	0	0	0	0	0	0	
C02.01	SX_IB_20220317_07_53_SS_Pri	17/03/2022		EM2204843	ALSE-Melbourne	Normal			<0.10	<0.03	<0.50	<0.50	<1.00	<1.00	<0.50	<1.00	<1.0	<0.05
C02.01	SX_IB_20220317_07_54_SS_Tri	17/03/2022		872310	MGT	Interlab_D	EM2204843001											
RPD																		
C02.01	SX_IB_20220317_07_53_SS_Pri	17/03/2022		EM2204843	ALSE-Melbourne	Normal												
C02.01	SX_IB_20220317_07_53_SS_Du	17/03/2022		EM2204843	ALSE-Melbourne	Field_D	EM2204843011											
RPD																		
C02.01	SX_IB_20220317_07_53_SS_Pri	17/03/2022		EM2204843	ALSE-Melbourne	Normal												
C02.01	SX_IB_20220317_07_54_SS_Tri	17/03/2022		872310	MGT	Interlab_D	EM2204843011											
RPD																		
C05.01	SX_OB_20220327_15_52_SS_Pr	27/03/2022		874920	MGT	Normal		<0.5	<0.1	<0.1	<0.5	<0.5	<1	<1	<0.5	<1	<1	
C05.01	SX_OB_20220327_15_59_SS_Du	27/03/2022		874920	MGT	Field_D	M22-Ma57512	<0.5	<0.1	<0.1	<0.5	<0.5	<1	<1	<0.5	<1	<1	
RPD								0	0	0	0	0	0	0	0	0	0	
C05.01	SX_OB_20220327_15_52_SS_Pr	27/03/2022		874920	MGT	Normal		<0.5	<0.1	<0.1	<0.5	<0.5	<1	<1	<0.5	<1	<1	

										Toxaphene	Organochlorine pesticides EPAVic	Other organochlorine pesticides EPAVic	2-Chlorophenol	2,4-Dichlorophenol	2,4,5-Trichlorophenol	2,4,6-Trichlorophenol	2,6-Dichlorophenol	4-chloro-3-methylphenol	Pentachlorophenol	2,3,4,5 & 2,3,4,6-Tetrachlorophenol
										mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
C05.01	SX_OB_20220327_16_00_SS_Tr	27/03/2022		EM2205473	ALSE-Melbourne	Interlab_D	M22-Ma57512				<0.10	<0.03	<0.50	<0.50	<1.00	<1.00	<0.50	<1.00	<1.0	<0.05
RPD											0	0	0	0	0	0	0	0	0	
C05.01	SX_OB_20220327_15_52_SS_Pr	27/03/2022		874920	MGT	Normal														
C05.01	SX_OB_20220327_15_59_SS_Du	27/03/2022		874920	MGT	Field_D	M22-Ma57521													
RPD																				
C05.01	SX_OB_20220327_15_52_SS_Pr	27/03/2022		874920	MGT	Normal														
C05.01	SX_OB_20220327_15_59_SS_Du	27/03/2022		874920	MGT	Field_D	M22-Ma57530													
RPD																				
C05.01	SX_OB_20220327_15_52_SS_Pr	27/03/2022		874920	MGT	Normal														
C05.01	SX_OB_20220327_16_00_SS_Tr	27/03/2022		EM2205473	ALSE-Melbourne	Interlab_D	M22-Ma57530													
RPD																				
C05.01	SX_OB_20220327_07_55_SS_Pr	27/03/2022		EM2205473	ALSE-Melbourne	Normal					<0.10	<0.03	<0.50	<0.50	<1.00	<1.00	<0.50	<1.00	<1.0	<0.05
C05.01	SX_OB_20220327_07_58_SS_Du	27/03/2022		EM2205473	ALSE-Melbourne	Field_D	EM2205473004				<0.10	<0.03	<0.50	<0.50	<1.00	<1.00	<0.50	<1.00	<1.0	<0.05
RPD											0	0	0	0	0	0	0	0	0	0
C05.01	SX_OB_20220327_07_55_SS_Pr	27/03/2022		EM2205473	ALSE-Melbourne	Normal					<0.10	<0.03	<0.50	<0.50	<1.00	<1.00	<0.50	<1.00	<1.0	<0.05
C05.01	SX_OB_20220327_07_58_SS_Tr	27/03/2022		874920	MGT	Interlab_D	EM2205473004	<0.5			<0.1	<0.1	<0.5	<0.5	<1	<1	<0.5	<1	<1	
RPD											0	0	0	0	0	0	0	0	0	
C05.01	SX_OB_20220327_07_55_SS_Pr	27/03/2022		EM2205473	ALSE-Melbourne	Normal					<0.10	<0.03	<0.50	<0.50	<1.00	<1.00	<0.50	<1.00	<1.0	<0.05
C05.01	SX_OB_20220327_07_58_SS_Tr	27/03/2022		874920	MGT	Interlab_D	EM2205473004													
RPD																				
C05.01	SX_OB_20220327_07_55_SS_Pr	27/03/2022		EM2205473	ALSE-Melbourne	Normal														
C05.01	SX_OB_20220327_07_58_SS_Du	27/03/2022		EM2205473	ALSE-Melbourne	Field_D	EM2205473013													
RPD																				
C05.01	SX_OB_20220327_07_55_SS_Pr	27/03/2022		EM2205473	ALSE-Melbourne	Normal														
C05.01	SX_OB_20220327_07_58_SS_Tr	27/03/2022		874920	MGT	Interlab_D	EM2205473013													
RPD																				
C02.01	SX_IB_20220328_15_44_SS_Pri	28/03/2022		875283	MGT	Normal		<0.5			<0.1	<0.1	<0.5	<0.5	<1	<1	<0.5	<1	<1	
C02.01	SX_IB_20220328_15_47_SS_Du	28/03/2022		875283	MGT	Field_D	M22-Ma60487	<0.5			<0.1	<0.1	<0.5	<0.5	<1	<1	<0.5	<1	<1	
RPD								0			0	0	0	0	0	0	0	0	0	
C02.01	SX_IB_20220328_15_44_SS_Pri	28/03/2022		875283	MGT	Normal		<0.5			<0.1	<0.1	<0.5	<0.5	<1	<1	<0.5	<1	<1	
C02.01	SX_IB_20220328_15_48_SS_Tri	28/03/2022		EM2205583	ALSE-Melbourne	Interlab_D	M22-Ma60487				<0.10	<0.03	<0.50	<0.50	<1.00	<1.00	<0.50	<1.00	<1.0	<0.05
RPD											0	0	0	0	0	0	0	0	0	
C02.01	SX_IB_20220328_15_44_SS_Pri	28/03/2022		875283	MGT	Normal														
C02.01	SX_IB_20220328_15_47_SS_Du	28/03/2022		875283	MGT	Field_D	M22-Ma60495													
RPD																				
C02.01	SX_IB_20220328_15_44_SS_Pri	28/03/2022		875283	MGT	Normal														
C02.01	SX_IB_20220328_15_47_SS_Du	28/03/2022		875283	MGT	Field_D	M22-Ma60503													
RPD																				
C02.01	SX_IB_20220328_15_44_SS_Pri	28/03/2022		875283	MGT	Normal														
C02.01	SX_IB_20220328_15_48_SS_Tri	28/03/2022		EM2205583	ALSE-Melbourne	Interlab_D	M22-Ma60503													
RPD																				
C02.01	SX_IB_20220328_07_41_SS_Pri	28/03/2022		EM2205583	ALSE-Melbourne	Normal					<0.10	<0.03	<0.50	<0.50	<1.00	<1.00	<0.50	<1.00	<1.0	<0.05
C02.01	SX_IB_20220328_07_45_SS_Du	28/03/2022		EM2205583	ALSE-Melbourne	Field_D	EM2205583001				<0.10	<0.03	<0.50	<0.50	<1.00	<1.00	<0.50	<1.00	<1.0	<0.05
RPD											0	0	0	0	0	0	0	0	0	0
C02.01	SX_IB_20220328_07_41_SS_Pri	28/03/2022		EM2205583	ALSE-Melbourne	Normal					<0.10	<0.03	<0.50	<0.50	<1.00	<1.00	<0.50	<1.00	<1.0	<0.05
C02.01	SX_IB_20220328_07_46_SS_Tri	28/03/2022		875283	MGT	Interlab_D	EM2205583001	<0.5			<0.1	<0.1	<0.5	<0.5	<1	<1	<0.5	<1	<1	
RPD											0	0	0	0	0	0	0	0	0	
C02.01	SX_IB_20220328_07_41_SS_Pri	28/03/2022		EM2205583	ALSE-Melbourne	Normal					<0.10	<0.03	<0.50	<0.50	<1.00	<1.00	<0.50	<1.00	<1.0	<0.05
C02.01	SX_IB_20220328_07_46_SS_Tri	28/03/2022		875283	MGT	Interlab_D	EM2205583001													
RPD																				
C02.01	SX_IB_20220328_07_41_SS_Pri	28/03/2022		EM2205583	ALSE-Melbourne	Normal														
C02.01	SX_IB_20220328_07_45_SS_Du	28/03/2022		EM2205583	ALSE-Melbourne	Field_D	EM2205583009													
RPD																				
C02.01	SX_IB_20220328_07_41_SS_Pri	28/03/2022		EM2205583	ALSE-Melbourne	Normal														
C02.01	SX_IB_20220328_07_46_SS_Tri	28/03/2022		875283	MGT	Interlab_D	EM2205583009													
RPD																				

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

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

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

								Phenols										
								4,6-Dinitro-2-methylphenol	Tetrachlorophenols	2,3,5,6-Tetrachlorophenol	Cresol Total	4,6-Dinitro-o-cyclohexyl phenol	Phenols (halogenated) EPAVic	Phenols (non-halogenated) EPAVic	2,4-Dimethylphenol	2-Methylphenol	2-Nitrophenol	2,4-Dinitrophenol
								mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL								5	10	0.03	0.5	20	1	20	0.5	0.2	1	5
Location Code	Field ID	Date	Depth	Lab Report Number	Lab Name	Sample Type	Parent Sample											
C02.01	SX_IB_20220316_16_12_SS_Pri	16/03/2022		872036	MGT	Normal		<5	<10		<0.5	<20			<0.5	<0.2	<1	<5
C02.01	SX_IB_20220316_16_15_SS_Du	16/03/2022		872036	MGT	Field_D	M22-Ma34703	<5	<10		<0.5	<20			<0.5	<0.2	<1	<5
RPD								0	0		0	0			0	0	0	0
C02.01	SX_IB_20220316_16_12_SS_Pri	16/03/2022		872036	MGT	Normal		<5	<10		<0.5	<20			<0.5	<0.2	<1	<5
C02.01	SX_IB_20220316_16_16_SS_Tri	16/03/2022		EM2204736	ALSE-Melbourne	Interlab_D	M22-Ma34703	<5		<0.03		<20	<1.00	<20	<1	<1	<1	<5
RPD								0				0			0	0	0	0
C02.01	SX_IB_20220316_16_12_SS_Pri	16/03/2022		872036	MGT	Normal												
C02.01	SX_IB_20220316_16_15_SS_Du	16/03/2022		872036	MGT	Field_D	M22-Ma34711											
RPD																		
C02.01	SX_IB_20220316_16_12_SS_Pri	16/03/2022		872036	MGT	Normal												
C02.01	SX_IB_20220316_16_15_SS_Du	16/03/2022		872036	MGT	Field_D	M22-Ma34719											
RPD																		
C02.01	SX_IB_20220316_16_12_SS_Pri	16/03/2022		872036	MGT	Normal												
C02.01	SX_IB_20220316_16_16_SS_Tri	16/03/2022		EM2204736	ALSE-Melbourne	Interlab_D	M22-Ma34719											
RPD																		
C02.01	SX_IB_20220316_08_17_SS_Pri	16/03/2022		EM2204736	ALSE-Melbourne	Normal		<5		<0.03		<20	<1.00	<20	<1	<1	<1	<5
C02.01	SX_IB_20220316_08_20_SS_Du	16/03/2022		EM2204736	ALSE-Melbourne	Field_D	EM2204736001	<5		<0.03		<20	<1.00	<20	<1	<1	<1	<5
RPD								0		0		0	0	0	0	0	0	0
C02.01	SX_IB_20220316_08_17_SS_Pri	16/03/2022		EM2204736	ALSE-Melbourne	Normal		<5		<0.03		<20	<1.00	<20	<1	<1	<1	<5
C02.01	SX_IB_20220316_08_22_SS_Tri	16/03/2022		872036	MGT	Interlab_D	EM2204736001	<5	<10		<0.5	<20			<0.5	<0.2	<1	<5
RPD								0				0			0	0	0	0
C02.01	SX_IB_20220316_08_17_SS_Pri	16/03/2022		EM2204736	ALSE-Melbourne	Normal		<5		<0.03		<20	<1.00	<20	<1	<1	<1	<5
C02.01	SX_IB_20220316_08_22_SS_Tri	16/03/2022		872036	MGT	Interlab_D	EM2204736001											
RPD																		
C02.01	SX_IB_20220316_08_17_SS_Pri	16/03/2022		EM2204736	ALSE-Melbourne	Normal												
C02.01	SX_IB_20220316_08_20_SS_Du	16/03/2022		EM2204736	ALSE-Melbourne	Field_D	EM2204736009											
RPD																		
C02.01	SX_IB_20220316_08_17_SS_Pri	16/03/2022		EM2204736	ALSE-Melbourne	Normal												
C02.01	SX_IB_20220316_08_22_SS_Tri	16/03/2022		872036	MGT	Interlab_D	EM2204736009											
RPD																		
A04.01	SX_OB_20220317_16_02_SS_Pr	17/03/2022		872310	MGT	Normal		<5	<10		<0.5	<20			<0.5	<0.2	<1	<5
A04.01	SX_OB_20220317_16_02_SS_Du	17/03/2022		872310	MGT	Field_D	M22-Ma36471	<5	<10		<0.5	<20			<0.5	<0.2	<1	<5
RPD								0	0		0	0			0	0	0	0
A04.01	SX_OB_20220317_16_02_SS_Pr	17/03/2022		872310	MGT	Normal		<5	<10		<0.5	<20			<0.5	<0.2	<1	<5
A04.01	SX_OB_20220317_16_03_SS_Tr	17/03/2022		EM2204843	ALSE-Melbourne	Interlab_D	M22-Ma36471	<5		<0.03		<20	<1.00	<20	<1	<1	<1	<5
RPD								0				0			0	0	0	0
A04.01	SX_OB_20220317_16_02_SS_Pr	17/03/2022		872310	MGT	Normal												
A04.01	SX_OB_20220317_16_02_SS_Du	17/03/2022		872310	MGT	Field_D	M22-Ma36481											
RPD																		
A04.01	SX_OB_20220317_16_02_SS_Pr	17/03/2022		872310	MGT	Normal												
A04.01	SX_OB_20220317_16_02_SS_Du	17/03/2022		872310	MGT	Field_D	M22-Ma36489											
RPD																		
A04.01	SX_OB_20220317_16_02_SS_Pr	17/03/2022		872310	MGT	Normal												
A04.01	SX_OB_20220317_16_03_SS_Tr	17/03/2022		EM2204843	ALSE-Melbourne	Interlab_D	M22-Ma36489											
RPD																		
C02.01	SX_IB_20220317_07_53_SS_Pri	17/03/2022		EM2204843	ALSE-Melbourne	Normal		<5		<0.03		<20	<1.00	<20	<1	<1	<1	<5
C02.01	SX_IB_20220317_07_53_SS_Du	17/03/2022		EM2204843	ALSE-Melbourne	Field_D	EM2204843001	<5		<0.03		<20	<1.00	<20	<1	<1	<1	<5
RPD								0		0		0	0	0	0	0	0	0
C02.01	SX_IB_20220317_07_53_SS_Pri	17/03/2022		EM2204843	ALSE-Melbourne	Normal		<5		<0.03		<20	<1.00	<20	<1	<1	<1	<5
C02.01	SX_IB_20220317_07_54_SS_Tri	17/03/2022		872310	MGT	Interlab_D	EM2204843001	<5	<10		<0.5	<20			<0.5	<0.2	<1	<5
RPD								0				0			0	0	0	0
C02.01	SX_IB_20220317_07_53_SS_Pri	17/03/2022		EM2204843	ALSE-Melbourne	Normal		<5		<0.03		<20	<1.00	<20	<1	<1	<1	<5
C02.01	SX_IB_20220317_07_54_SS_Tri	17/03/2022		872310	MGT	Interlab_D	EM2204843001											
RPD																		
C02.01	SX_IB_20220317_07_53_SS_Pri	17/03/2022		EM2204843	ALSE-Melbourne	Normal												
C02.01	SX_IB_20220317_07_53_SS_Du	17/03/2022		EM2204843	ALSE-Melbourne	Field_D	EM2204843011											
RPD																		
C02.01	SX_IB_20220317_07_53_SS_Pri	17/03/2022		EM2204843	ALSE-Melbourne	Normal												
C02.01	SX_IB_20220317_07_54_SS_Tri	17/03/2022		872310	MGT	Interlab_D	EM2204843011											
RPD																		
C05.01	SX_OB_20220327_15_52_SS_Pr	27/03/2022		874920	MGT	Normal		<5	<10		<0.5	<20			<0.5	<0.2	<1	<5
C05.01	SX_OB_20220327_15_59_SS_Du	27/03/2022		874920	MGT	Field_D	M22-Ma57512	<5	<10		<0.5	<20			<0.5	<0.2	<1	<5
RPD								0	0		0	0			0	0	0	0
C05.01	SX_OB_20220327_15_52_SS_Pr	27/03/2022		874920	MGT	Normal		<5	<10		<0.5	<20			<0.5	<0.2	<1	<5

								Phenols											
								4,6-Dinitro-2-methylphenol	Tetrachlorophenols	2,3,5,6-Tetrachlorophenol	Cresol Total	4,6-Dinitro-o-cyclohexyl phenol	Phenols (halogenated) EPAVic	Phenols (non-halogenated) EPAVic	2,4-Dimethylphenol	2-Methylphenol	2-Nitrophenol	2,4-Dinitrophenol
								mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
C05.01	SX_OB_20220327_16_00_SS_Tr	27/03/2022		EM2205473	ALSE-Melbourne	Interlab_D	M22-Ma57512	<5		<0.03		<20	<1.00	<20	<1	<1	<1	<5
RPD								0				0			0	0	0	0
C05.01	SX_OB_20220327_15_52_SS_Pr	27/03/2022		874920	MGT	Normal												
C05.01	SX_OB_20220327_15_59_SS_Du	27/03/2022		874920	MGT	Field_D	M22-Ma57521											
RPD																		
C05.01	SX_OB_20220327_15_52_SS_Pr	27/03/2022		874920	MGT	Normal												
C05.01	SX_OB_20220327_15_59_SS_Du	27/03/2022		874920	MGT	Field_D	M22-Ma57530											
RPD																		
C05.01	SX_OB_20220327_15_52_SS_Pr	27/03/2022		874920	MGT	Normal												
C05.01	SX_OB_20220327_16_00_SS_Tr	27/03/2022		EM2205473	ALSE-Melbourne	Interlab_D	M22-Ma57530											
RPD																		
C05.01	SX_OB_20220327_07_55_SS_Pr	27/03/2022		EM2205473	ALSE-Melbourne	Normal		<5		<0.03		<20	<1.00	<20	<1	<1	<1	<5
C05.01	SX_OB_20220327_07_58_SS_Du	27/03/2022		EM2205473	ALSE-Melbourne	Field_D	EM2205473004	<5		<0.03		<20	<1.00	<20	<1	<1	<1	<5
RPD								0		0		0	0	0	0	0	0	0
C05.01	SX_OB_20220327_07_55_SS_Pr	27/03/2022		EM2205473	ALSE-Melbourne	Normal		<5		<0.03		<20	<1.00	<20	<1	<1	<1	<5
C05.01	SX_OB_20220327_07_58_SS_Tr	27/03/2022		874920	MGT	Interlab_D	EM2205473004	<5	<10		<0.5	<20			<0.5	<0.2	<1	<5
RPD								0				0			0	0	0	0
C05.01	SX_OB_20220327_07_55_SS_Pr	27/03/2022		EM2205473	ALSE-Melbourne	Normal		<5		<0.03		<20	<1.00	<20	<1	<1	<1	<5
C05.01	SX_OB_20220327_07_58_SS_Tr	27/03/2022		874920	MGT	Interlab_D	EM2205473004											
RPD																		
C05.01	SX_OB_20220327_07_55_SS_Pr	27/03/2022		EM2205473	ALSE-Melbourne	Normal												
C05.01	SX_OB_20220327_07_58_SS_Du	27/03/2022		EM2205473	ALSE-Melbourne	Field_D	EM2205473013											
RPD																		
C05.01	SX_OB_20220327_07_55_SS_Pr	27/03/2022		EM2205473	ALSE-Melbourne	Normal												
C05.01	SX_OB_20220327_07_58_SS_Tr	27/03/2022		874920	MGT	Interlab_D	EM2205473013											
RPD																		
C02.01	SX_IB_20220328_15_44_SS_Pri	28/03/2022		875283	MGT	Normal		<5	<10		<0.5	<20			<0.5	<0.2	<1	<5
C02.01	SX_IB_20220328_15_47_SS_Du	28/03/2022		875283	MGT	Field_D	M22-Ma60487	<5	<10		<0.5	<20			<0.5	<0.2	<1	<5
RPD								0	0		0	0			0	0	0	0
C02.01	SX_IB_20220328_15_44_SS_Pri	28/03/2022		875283	MGT	Normal		<5	<10		<0.5	<20			<0.5	<0.2	<1	<5
C02.01	SX_IB_20220328_15_48_SS_Tri	28/03/2022		EM2205583	ALSE-Melbourne	Interlab_D	M22-Ma60487	<5		<0.03		<20	<1.00	<20	<1	<1	<1	<5
RPD								0				0			0	0	0	0
C02.01	SX_IB_20220328_15_44_SS_Pri	28/03/2022		875283	MGT	Normal												
C02.01	SX_IB_20220328_15_47_SS_Du	28/03/2022		875283	MGT	Field_D	M22-Ma60495											
RPD																		
C02.01	SX_IB_20220328_15_44_SS_Pri	28/03/2022		875283	MGT	Normal												
C02.01	SX_IB_20220328_15_47_SS_Du	28/03/2022		875283	MGT	Field_D	M22-Ma60503											
RPD																		
C02.01	SX_IB_20220328_15_44_SS_Pri	28/03/2022		875283	MGT	Normal												
C02.01	SX_IB_20220328_15_48_SS_Tri	28/03/2022		EM2205583	ALSE-Melbourne	Interlab_D	M22-Ma60503											
RPD																		
C02.01	SX_IB_20220328_07_41_SS_Pri	28/03/2022		EM2205583	ALSE-Melbourne	Normal		<5		<0.03		<20	<1.00	<20	<1	<1	<1	<5
C02.01	SX_IB_20220328_07_45_SS_Du	28/03/2022		EM2205583	ALSE-Melbourne	Field_D	EM2205583001	<5		<0.03		<20	<1.00	<20	<1	<1	<1	<5
RPD								0		0		0	0	0	0	0	0	0
C02.01	SX_IB_20220328_07_41_SS_Pri	28/03/2022		EM2205583	ALSE-Melbourne	Normal		<5		<0.03		<20	<1.00	<20	<1	<1	<1	<5
C02.01	SX_IB_20220328_07_46_SS_Tri	28/03/2022		875283	MGT	Interlab_D	EM2205583001	<5	<10		<0.5	<20			<0.5	<0.2	<1	<5
RPD								0				0			0	0	0	0
C02.01	SX_IB_20220328_07_41_SS_Pri	28/03/2022		EM2205583	ALSE-Melbourne	Normal		<5		<0.03		<20	<1.00	<20	<1	<1	<1	<5
C02.01	SX_IB_20220328_07_46_SS_Tri	28/03/2022		875283	MGT	Interlab_D	EM2205583001											
RPD																		
C02.01	SX_IB_20220328_07_41_SS_Pri	28/03/2022		EM2205583	ALSE-Melbourne	Normal												
C02.01	SX_IB_20220328_07_45_SS_Du	28/03/2022		EM2205583	ALSE-Melbourne	Field_D	EM2205583009											
RPD																		
C02.01	SX_IB_20220328_07_41_SS_Pri	28/03/2022		EM2205583	ALSE-Melbourne	Normal												
C02.01	SX_IB_20220328_07_46_SS_Tri	28/03/2022		875283	MGT	Interlab_D	EM2205583009											
RPD																		

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

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

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

								3&4-Methylphenol (m&p-cresol)	4-Nitrophenol	Dinoseb	Phenol	Phenols (Total Halogenated)	Phenols (Total Non Halogenated)	10:2 Fluorotelomer sulfonic acid (10:2 FTS)		8:2 Fluorotelomer sulfonic acid (8:2 FTS)		6:2 Fluorotelomer sulfonic
								mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L
EQL								0.4	5	20	0.5	1	20	0.00001	0.005	0.00001	0.005	0.00005
Location Code	Field ID	Date	Depth	Lab Report Number	Lab Name	Sample Type	Parent Sample											
C02.01	SX_IB_20220316_16_12_SS_Pri	16/03/2022		872036	MGT	Normal		<0.4	<5	<20	<0.5	<1	<20		<0.005		<0.005	
C02.01	SX_IB_20220316_16_15_SS_Du	16/03/2022		872036	MGT	Field_D	M22-Ma34703	<0.4	<5	<20	<0.5	<1	<20		<0.005		<0.005	
RPD								0	0	0	0	0	0		0		0	
C02.01	SX_IB_20220316_16_12_SS_Pri	16/03/2022		872036	MGT	Normal		<0.4	<5	<20	<0.5	<1	<20		<0.005		<0.005	
C02.01	SX_IB_20220316_16_16_SS_Tri	16/03/2022		EM2204736	ALSE-Melbourne	Interlab_D	M22-Ma34703	<1	<5	<20	<1			<0.00005	<0.0050	<0.00005	<0.0050	<0.00005
RPD								0	0	0	0				0		0	
C02.01	SX_IB_20220316_16_12_SS_Pri	16/03/2022		872036	MGT	Normal								<0.00001		<0.00001		<0.00005
C02.01	SX_IB_20220316_16_15_SS_Du	16/03/2022		872036	MGT	Field_D	M22-Ma34711							<0.00001		<0.00001		<0.00005
RPD														0		0		0
C02.01	SX_IB_20220316_16_12_SS_Pri	16/03/2022		872036	MGT	Normal								<0.00001		<0.00001		<0.00005
C02.01	SX_IB_20220316_16_15_SS_Du	16/03/2022		872036	MGT	Field_D	M22-Ma34719							<0.00001		<0.00001		<0.00005
RPD														0		0		0
C02.01	SX_IB_20220316_16_12_SS_Pri	16/03/2022		872036	MGT	Normal								<0.00001		<0.00001		<0.00005
C02.01	SX_IB_20220316_16_16_SS_Tri	16/03/2022		EM2204736	ALSE-Melbourne	Interlab_D	M22-Ma34719							<0.00005		<0.00005		<0.00005
RPD														0		0		0
C02.01	SX_IB_20220316_08_17_SS_Pri	16/03/2022		EM2204736	ALSE-Melbourne	Normal		<1	<5	<20	<1			<0.00005	<0.0050	<0.00005	<0.0050	<0.00005
C02.01	SX_IB_20220316_08_20_SS_Du	16/03/2022		EM2204736	ALSE-Melbourne	Field_D	EM2204736001	<1	<5	<20	<1			<0.00005	<0.0050	<0.00005	<0.0050	<0.00005
RPD								0	0	0	0			0	0	0	0	0
C02.01	SX_IB_20220316_08_17_SS_Pri	16/03/2022		EM2204736	ALSE-Melbourne	Normal		<1	<5	<20	<1			<0.00005	<0.0050	<0.00005	<0.0050	<0.00005
C02.01	SX_IB_20220316_08_22_SS_Tri	16/03/2022		872036	MGT	Interlab_D	EM2204736001	<0.4	<5	<20	<0.5	<1	<20		<0.005		<0.005	
RPD								0	0	0	0				0		0	
C02.01	SX_IB_20220316_08_17_SS_Pri	16/03/2022		EM2204736	ALSE-Melbourne	Normal		<1	<5	<20	<1			<0.00005	<0.0050	<0.00005	<0.0050	<0.00005
C02.01	SX_IB_20220316_08_22_SS_Tri	16/03/2022		872036	MGT	Interlab_D	EM2204736001							<0.00001		<0.00001		<0.00005
RPD														0		0		0
C02.01	SX_IB_20220316_08_17_SS_Pri	16/03/2022		EM2204736	ALSE-Melbourne	Normal								<0.00005		<0.00005		<0.00005
C02.01	SX_IB_20220316_08_20_SS_Du	16/03/2022		EM2204736	ALSE-Melbourne	Field_D	EM2204736009							<0.00005		<0.00005		<0.00005
RPD														0		0		0
C02.01	SX_IB_20220316_08_17_SS_Pri	16/03/2022		EM2204736	ALSE-Melbourne	Normal								<0.00005		<0.00005		<0.00005
C02.01	SX_IB_20220316_08_22_SS_Tri	16/03/2022		872036	MGT	Interlab_D	EM2204736009							<0.00001		<0.00001		<0.00005
RPD														0		0		0
A04.01	SX_OB_20220317_16_02_SS_Pr	17/03/2022		872310	MGT	Normal		<0.4	<5	<20	<0.5	<1	<20		<0.005		<0.005	
A04.01	SX_OB_20220317_16_02_SS_Du	17/03/2022		872310	MGT	Field_D	M22-Ma36471	<0.4	<5	<20	<0.5	<1	<20		<0.005		<0.005	
RPD								0	0	0	0	0	0		0		0	
A04.01	SX_OB_20220317_16_02_SS_Pr	17/03/2022		872310	MGT	Normal		<0.4	<5	<20	<0.5	<1	<20		<0.005		<0.005	
A04.01	SX_OB_20220317_16_03_SS_Tr	17/03/2022		EM2204843	ALSE-Melbourne	Interlab_D	M22-Ma36471	<1	<5	<20	<1			<0.00005	<0.0050	<0.00005	<0.0050	<0.00005
RPD								0	0	0	0				0		0	
A04.01	SX_OB_20220317_16_02_SS_Pr	17/03/2022		872310	MGT	Normal								<0.00001		<0.00001		<0.00005
A04.01	SX_OB_20220317_16_02_SS_Du	17/03/2022		872310	MGT	Field_D	M22-Ma36481							<0.00001		<0.00001		<0.00005
RPD														0		0		0
A04.01	SX_OB_20220317_16_02_SS_Pr	17/03/2022		872310	MGT	Normal								<0.00001		<0.00001		<0.00005
A04.01	SX_OB_20220317_16_02_SS_Du	17/03/2022		872310	MGT	Field_D	M22-Ma36489							<0.00001		<0.00001		<0.00005
RPD														0		0		0
A04.01	SX_OB_20220317_16_02_SS_Pr	17/03/2022		872310	MGT	Normal								<0.00001		<0.00001		<0.00005
A04.01	SX_OB_20220317_16_03_SS_Tr	17/03/2022		EM2204843	ALSE-Melbourne	Interlab_D	M22-Ma36489							<0.00005		<0.00005		<0.00005
RPD														0		0		0
C02.01	SX_IB_20220317_07_53_SS_Pri	17/03/2022		EM2204843	ALSE-Melbourne	Normal		<1	<5	<20	<1			<0.00005	<0.0050	<0.00005	<0.0050	<0.00005
C02.01	SX_IB_20220317_07_53_SS_Du	17/03/2022		EM2204843	ALSE-Melbourne	Field_D	EM2204843001	<1	<5	<20	<1			<0.00005	<0.0050	<0.00005	<0.0050	<0.00005
RPD								0	0	0	0			0	0	0	0	0
C02.01	SX_IB_20220317_07_53_SS_Pri	17/03/2022		EM2204843	ALSE-Melbourne	Normal		<1	<5	<20	<1			<0.00005	<0.0050	<0.00005	<0.0050	<0.00005
C02.01	SX_IB_20220317_07_54_SS_Tri	17/03/2022		872310	MGT	Interlab_D	EM2204843001	<0.4	<5	<20	<0.5	<1	<20		<0.005		<0.005	
RPD								0	0	0	0				0		0	
C02.01	SX_IB_20220317_07_53_SS_Pri	17/03/2022		EM2204843	ALSE-Melbourne	Normal		<1	<5	<20	<1			<0.00005	<0.0050	<0.00005	<0.0050	<0.00005
C02.01	SX_IB_20220317_07_54_SS_Tri	17/03/2022		872310	MGT	Interlab_D	EM2204843001							<0.00001		<0.00001		<0.00005
RPD														0		0		0
C02.01	SX_IB_20220317_07_53_SS_Pri	17/03/2022		EM2204843	ALSE-Melbourne	Normal								<0.00005		<0.00005		<0.00005
C02.01	SX_IB_20220317_07_53_SS_Du	17/03/2022		EM2204843	ALSE-Melbourne	Field_D	EM2204843011							<0.00005		<0.00005		<0.00005
RPD														0		0		0
C02.01	SX_IB_20220317_07_53_SS_Pri	17/03/2022		EM2204843	ALSE-Melbourne	Normal								<0.00005		<0.00005		<0.00005
C02.01	SX_IB_20220317_07_54_SS_Tri	17/03/2022		872310	MGT	Interlab_D	EM2204843011							<0.00001		<0.00001		<0.00005
RPD														0		0		0
C05.01	SX_OB_20220327_15_52_SS_Pr	27/03/2022		874920	MGT	Normal		<0.4	<5	<20	<0.5	<1	<20		<0.005		<0.005	
C05.01	SX_OB_20220327_15_59_SS_Du	27/03/2022		874920	MGT	Field_D	M22-Ma57512	<0.4	<5	<20	<0.5	<1	<20		<0.005		<0.005	
RPD								0	0	0	0	0	0		0		0	
C05.01	SX_OB_20220327_15_52_SS_Pr	27/03/2022		874920	MGT	Normal		<0.4	<5	<20	<0.5	<1	<20		<0.005		<0.005	

								3&4-Methylphenol (m&p-cresol)	4-Nitrophenol	Dinoseb	Phenol	Phenols (Total Halogenated)	Phenols (Total Non Halogenated)	10:2 Fluorotelomer sulfonic acid (10:2 FTS)		8:2 Fluorotelomer sulfonic acid (8:2 FTS)		6:2 Fluorotelomer sulfonic
								mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L
C05.01	SX_OB_20220327_16_00_SS_Tr	27/03/2022		EM2205473	ALSE-Melbourne	Interlab_D	M22-Ma57512	<1	<5	<20	<1			<0.00005	<0.0050	<0.00005	<0.0050	<0.00005
RPD								0	0	0	0				0		0	
C05.01	SX_OB_20220327_15_52_SS_Pr	27/03/2022		874920	MGT	Normal								<0.00001		<0.00001		<0.00005
C05.01	SX_OB_20220327_15_59_SS_Du	27/03/2022		874920	MGT	Field_D	M22-Ma57521							<0.00001		<0.00001		<0.00005
RPD														0		0		0
C05.01	SX_OB_20220327_15_52_SS_Pr	27/03/2022		874920	MGT	Normal								<0.00001		<0.00001		<0.00005
C05.01	SX_OB_20220327_15_59_SS_Du	27/03/2022		874920	MGT	Field_D	M22-Ma57530							<0.00001		<0.00001		<0.00005
RPD														0		0		0
C05.01	SX_OB_20220327_15_52_SS_Pr	27/03/2022		874920	MGT	Normal								<0.00001		<0.00001		<0.00005
C05.01	SX_OB_20220327_16_00_SS_Tr	27/03/2022		EM2205473	ALSE-Melbourne	Interlab_D	M22-Ma57530							<0.00005		<0.00005		<0.00005
RPD														0		0		0
C05.01	SX_OB_20220327_07_55_SS_Pr	27/03/2022		EM2205473	ALSE-Melbourne	Normal		<1	<5	<20	<1			<0.00005	<0.0050	<0.00005	<0.0050	<0.00005
C05.01	SX_OB_20220327_07_58_SS_Du	27/03/2022		EM2205473	ALSE-Melbourne	Field_D	EM2205473004	<1	<5	<20	<1			<0.00005	<0.0050	<0.00005	<0.0050	<0.00005
RPD								0	0	0	0			0	0	0	0	0
C05.01	SX_OB_20220327_07_55_SS_Pr	27/03/2022		EM2205473	ALSE-Melbourne	Normal		<1	<5	<20	<1			<0.00005	<0.0050	<0.00005	<0.0050	<0.00005
C05.01	SX_OB_20220327_07_58_SS_Tr	27/03/2022		874920	MGT	Interlab_D	EM2205473004	<0.4	<5	<20	<0.5	<1	<20		<0.005		<0.005	
RPD								0	0	0	0				0		0	
C05.01	SX_OB_20220327_07_55_SS_Pr	27/03/2022		EM2205473	ALSE-Melbourne	Normal		<1	<5	<20	<1			<0.00005	<0.0050	<0.00005	<0.0050	<0.00005
C05.01	SX_OB_20220327_07_58_SS_Tr	27/03/2022		874920	MGT	Interlab_D	EM2205473004							<0.00001		<0.00001		<0.00005
RPD														0		0		0
C05.01	SX_OB_20220327_07_55_SS_Pr	27/03/2022		EM2205473	ALSE-Melbourne	Normal								<0.00005		<0.00005		<0.00005
C05.01	SX_OB_20220327_07_58_SS_Du	27/03/2022		EM2205473	ALSE-Melbourne	Field_D	EM2205473013							<0.00005		<0.00005		<0.00005
RPD														0		0		0
C05.01	SX_OB_20220327_07_55_SS_Pr	27/03/2022		EM2205473	ALSE-Melbourne	Normal								<0.00005		<0.00005		<0.00005
C05.01	SX_OB_20220327_07_58_SS_Tr	27/03/2022		874920	MGT	Interlab_D	EM2205473013							<0.00001		<0.00001		<0.00005
RPD														0		0		0
C02.01	SX_IB_20220328_15_44_SS_Pri	28/03/2022		875283	MGT	Normal		<0.4	<5	<20	<0.5	<1	<20		<0.005		<0.005	
C02.01	SX_IB_20220328_15_47_SS_Du	28/03/2022		875283	MGT	Field_D	M22-Ma60487	<0.4	<5	<20	<0.5	<1	<20		<0.005		<0.005	
RPD								0	0	0	0	0	0		0		0	
C02.01	SX_IB_20220328_15_44_SS_Pri	28/03/2022		875283	MGT	Normal		<0.4	<5	<20	<0.5	<1	<20		<0.005		<0.005	
C02.01	SX_IB_20220328_15_48_SS_Tri	28/03/2022		EM2205583	ALSE-Melbourne	Interlab_D	M22-Ma60487	<1	<5	<20	<1			<0.00005	<0.0050	<0.00005	<0.0050	<0.00005
RPD								0	0	0	0				0		0	
C02.01	SX_IB_20220328_15_44_SS_Pri	28/03/2022		875283	MGT	Normal								<0.00001		<0.00001		<0.00005
C02.01	SX_IB_20220328_15_47_SS_Du	28/03/2022		875283	MGT	Field_D	M22-Ma60495							<0.00001		<0.00001		<0.00005
RPD														0		0		0
C02.01	SX_IB_20220328_15_44_SS_Pri	28/03/2022		875283	MGT	Normal								<0.00001		<0.00001		<0.00005
C02.01	SX_IB_20220328_15_47_SS_Du	28/03/2022		875283	MGT	Field_D	M22-Ma60503							<0.00001		<0.00001		<0.00005
RPD														0		0		0
C02.01	SX_IB_20220328_15_44_SS_Pri	28/03/2022		875283	MGT	Normal								<0.00001		<0.00001		<0.00005
C02.01	SX_IB_20220328_15_48_SS_Tri	28/03/2022		EM2205583	ALSE-Melbourne	Interlab_D	M22-Ma60503							<0.00005		<0.00005		<0.00005
RPD														0		0		0
C02.01	SX_IB_20220328_07_41_SS_Pri	28/03/2022		EM2205583	ALSE-Melbourne	Normal		<1	<5	<20	<1			<0.00005	<0.0050	<0.00005	<0.0050	<0.00005
C02.01	SX_IB_20220328_07_45_SS_Du	28/03/2022		EM2205583	ALSE-Melbourne	Field_D	EM2205583001	<1	<5	<20	<1			<0.00005	<0.0050	<0.00005	<0.0050	<0.00005
RPD								0	0	0	0			0	0	0	0	0
C02.01	SX_IB_20220328_07_41_SS_Pri	28/03/2022		EM2205583	ALSE-Melbourne	Normal		<1	<5	<20	<1			<0.00005	<0.0050	<0.00005	<0.0050	<0.00005
C02.01	SX_IB_20220328_07_46_SS_Tri	28/03/2022		875283	MGT	Interlab_D	EM2205583001	<0.4	<5	<20	<0.5	<1	<20		<0.005		<0.005	
RPD								0	0	0	0				0		0	
C02.01	SX_IB_20220328_07_41_SS_Pri	28/03/2022		EM2205583	ALSE-Melbourne	Normal		<1	<5	<20	<1			<0.00005	<0.0050	<0.00005	<0.0050	<0.00005
C02.01	SX_IB_20220328_07_46_SS_Tri	28/03/2022		875283	MGT	Interlab_D	EM2205583001							<0.00001		<0.00001		<0.00005
RPD														0		0		0
C02.01	SX_IB_20220328_07_41_SS_Pri	28/03/2022		EM2205583	ALSE-Melbourne	Normal								<0.00005		<0.00005		<0.00005
C02.01	SX_IB_20220328_07_45_SS_Du	28/03/2022		EM2205583	ALSE-Melbourne	Field_D	EM2205583009							<0.00005		<0.00005		<0.00005
RPD														0		0		0
C02.01	SX_IB_20220328_07_41_SS_Pri	28/03/2022		EM2205583	ALSE-Melbourne	Normal								<0.00005		<0.00005		<0.00005
C02.01	SX_IB_20220328_07_46_SS_Tri	28/03/2022		875283	MGT	Interlab_D	EM2205583009							<0.00001		<0.00001		<0.00005
RPD														0		0		0

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

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

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

								acid (6:2 FTS)		4:2 Fluorotelomer sulfonic acid (4:2 FTS)		N-Ethyl perfluorooctane sulfonamide (NEtFOSA)		N-ethyl-perfluorooctanesulfonamidoacetic acid (NEtFOSAA)		N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)		N-Methyl perfluorooctane sulfonamide (NMeFOSA)	
								mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg
EQL								0.01	0.00001	0.005	0.00005	0.005	0.00002	0.01	0.00005	0.005	0.00005	0.005		
Location Code	Field ID	Date	Depth	Lab Report Number	Lab Name	Sample Type	Parent Sample													
C02.01	SX_IB_20220316_16_12_SS_Pri	16/03/2022		872036	MGT	Normal		<0.01		<0.005		<0.005		<0.01		<0.005		<0.005		
C02.01	SX_IB_20220316_16_15_SS_Du	16/03/2022		872036	MGT	Field_D	M22-Ma34703	<0.01		<0.005		<0.005		<0.01		<0.005		<0.005		
RPD								0		0		0		0		0		0		
C02.01	SX_IB_20220316_16_12_SS_Pri	16/03/2022		872036	MGT	Normal		<0.01		<0.005		<0.005		<0.01		<0.005		<0.005		
C02.01	SX_IB_20220316_16_16_SS_Tri	16/03/2022		EM2204736	ALSE-Melbourne	Interlab_D	M22-Ma34703	<0.0100	<0.00005	<0.0050	<0.00005	<0.0050	<0.00005	<0.0100	<0.00005	<0.0050	<0.00005	<0.0050		
RPD								0		0		0		0		0		0		
C02.01	SX_IB_20220316_16_12_SS_Pri	16/03/2022		872036	MGT	Normal			<0.00001		<0.00005		<0.00005		<0.00005		<0.00005			
C02.01	SX_IB_20220316_16_15_SS_Du	16/03/2022		872036	MGT	Field_D	M22-Ma34711		<0.00001		<0.00005		<0.00005		<0.00005		<0.00005			
RPD									0		0		0		0		0			
C02.01	SX_IB_20220316_16_12_SS_Pri	16/03/2022		872036	MGT	Normal			<0.00001		<0.00005		<0.00005		<0.00005		<0.00005			
C02.01	SX_IB_20220316_16_15_SS_Du	16/03/2022		872036	MGT	Field_D	M22-Ma34719		<0.00001		<0.00005		<0.00005		<0.00005		<0.00005			
RPD									0		0		0		0		0			
C02.01	SX_IB_20220316_16_12_SS_Pri	16/03/2022		872036	MGT	Normal			<0.00001		<0.00005		<0.00005		<0.00005		<0.00005			
C02.01	SX_IB_20220316_16_16_SS_Tri	16/03/2022		EM2204736	ALSE-Melbourne	Interlab_D	M22-Ma34719		<0.00005		<0.00005		<0.00002		<0.00005		<0.00005			
RPD									0		0		0		0		0			
C02.01	SX_IB_20220316_08_17_SS_Pri	16/03/2022		EM2204736	ALSE-Melbourne	Normal		<0.0100	<0.00005	<0.0050	<0.00005	<0.0050	<0.00005	<0.0100	<0.00005	<0.0050	<0.00005	<0.0050		
C02.01	SX_IB_20220316_08_20_SS_Du	16/03/2022		EM2204736	ALSE-Melbourne	Field_D	EM2204736001	<0.0100	<0.00005	<0.0050	<0.00005	<0.0050	<0.00005	<0.0100	<0.00005	<0.0050	<0.00005	<0.0050		
RPD								0	0	0	0	0	0	0	0	0	0	0		
C02.01	SX_IB_20220316_08_17_SS_Pri	16/03/2022		EM2204736	ALSE-Melbourne	Normal		<0.0100	<0.00005	<0.0050	<0.00005	<0.0050	<0.00005	<0.0100	<0.00005	<0.0050	<0.00005	<0.0050		
C02.01	SX_IB_20220316_08_22_SS_Tri	16/03/2022		872036	MGT	Interlab_D	EM2204736001	<0.01		<0.005		<0.005		<0.01		<0.005		<0.005		
RPD								0		0		0		0		0		0		
C02.01	SX_IB_20220316_08_17_SS_Pri	16/03/2022		EM2204736	ALSE-Melbourne	Normal		<0.0100	<0.00005	<0.0050	<0.00005	<0.0050	<0.00005	<0.0100	<0.00005	<0.0050	<0.00005	<0.0050		
C02.01	SX_IB_20220316_08_22_SS_Tri	16/03/2022		872036	MGT	Interlab_D	EM2204736001		<0.00001		<0.00005		<0.00005		<0.00005		<0.00005			
RPD									0		0		0		0		0			
C02.01	SX_IB_20220316_08_17_SS_Pri	16/03/2022		EM2204736	ALSE-Melbourne	Normal			<0.00005		<0.00005		<0.00002		<0.00005		<0.00005			
C02.01	SX_IB_20220316_08_20_SS_Du	16/03/2022		EM2204736	ALSE-Melbourne	Field_D	EM2204736009		<0.00005		<0.00005		<0.00002		<0.00005		<0.00005			
RPD									0		0		0		0		0			
C02.01	SX_IB_20220316_08_17_SS_Pri	16/03/2022		EM2204736	ALSE-Melbourne	Normal			<0.00005		<0.00005		<0.00002		<0.00005		<0.00005			
C02.01	SX_IB_20220316_08_22_SS_Tri	16/03/2022		872036	MGT	Interlab_D	EM2204736009		<0.00001		<0.00005		<0.00005		<0.00005		<0.00005			
RPD									0		0		0		0		0			
A04.01	SX_OB_20220317_16_02_SS_Pr	17/03/2022		872310	MGT	Normal		<0.01		<0.005		<0.005		<0.01		<0.005		<0.005		
A04.01	SX_OB_20220317_16_02_SS_Du	17/03/2022		872310	MGT	Field_D	M22-Ma36471	<0.01		<0.005		<0.005		<0.01		<0.005		<0.005		
RPD								0		0		0		0		0		0		
A04.01	SX_OB_20220317_16_02_SS_Pr	17/03/2022		872310	MGT	Normal		<0.01		<0.005		<0.005		<0.01		<0.005		<0.005		
A04.01	SX_OB_20220317_16_03_SS_Tr	17/03/2022		EM2204843	ALSE-Melbourne	Interlab_D	M22-Ma36471	<0.0100	<0.00005	<0.0050	<0.00005	<0.0050	<0.00005	<0.0100	<0.00005	<0.0050	<0.00005	<0.0050		
RPD								0		0		0		0		0		0		
A04.01	SX_OB_20220317_16_02_SS_Pr	17/03/2022		872310	MGT	Normal			<0.00001		<0.00005		<0.00005		<0.00005		<0.00005			
A04.01	SX_OB_20220317_16_02_SS_Du	17/03/2022		872310	MGT	Field_D	M22-Ma36481		<0.00001		<0.00005		<0.00005		<0.00005		<0.00005			
RPD									0		0		0		0		0			
A04.01	SX_OB_20220317_16_02_SS_Pr	17/03/2022		872310	MGT	Normal			<0.00001		<0.00005		<0.00005		<0.00005		<0.00005			
A04.01	SX_OB_20220317_16_02_SS_Du	17/03/2022		872310	MGT	Field_D	M22-Ma36489		<0.00001		<0.00005		<0.00005		<0.00005		<0.00005			
RPD									0		0		0		0		0			
A04.01	SX_OB_20220317_16_02_SS_Pr	17/03/2022		872310	MGT	Normal			<0.00001		<0.00005		<0.00005		<0.00005		<0.00005			
A04.01	SX_OB_20220317_16_03_SS_Tr	17/03/2022		EM2204843	ALSE-Melbourne	Interlab_D	M22-Ma36489		<0.00005		<0.00005		<0.00002		<0.00005		<0.00005			
RPD									0		0		0		0		0			
C02.01	SX_IB_20220317_07_53_SS_Pri	17/03/2022		EM2204843	ALSE-Melbourne	Normal		<0.0100	<0.00005	<0.0050	<0.00005	<0.0050	<0.00005	<0.0100	<0.00005	<0.0050	<0.00005	<0.0050		
C02.01	SX_IB_20220317_07_53_SS_Du	17/03/2022		EM2204843	ALSE-Melbourne	Field_D	EM2204843001	<0.0100	<0.00005	<0.0050	<0.00005	<0.0050	<0.00005	<0.0100	<0.00005	<0.0050	<0.00005	<0.0050		
RPD								0	0	0	0	0	0	0	0	0	0	0		
C02.01	SX_IB_20220317_07_53_SS_Pri	17/03/2022		EM2204843	ALSE-Melbourne	Normal		<0.0100	<0.00005	<0.0050	<0.00005	<0.0050	<0.00005	<0.0100	<0.00005	<0.0050	<0.00005	<0.0050		
C02.01	SX_IB_20220317_07_54_SS_Tri	17/03/2022		872310	MGT	Interlab_D	EM2204843001	<0.01		<0.005		<0.005		<0.01		<0.005		<0.005		
RPD								0		0		0		0		0		0		
C02.01	SX_IB_20220317_07_53_SS_Pri	17/03/2022		EM2204843	ALSE-Melbourne	Normal		<0.0100	<0.00005	<0.0050	<0.00005	<0.0050	<0.00005	<0.0100	<0.00005	<0.0050	<0.00005	<0.0050		
C02.01	SX_IB_20220317_07_54_SS_Tri	17/03/2022		872310	MGT	Interlab_D	EM2204843001		<0.00001		<0.00005		<0.00005		<0.00005		<0.00005			
RPD									0		0		0		0		0			
C02.01	SX_IB_20220317_07_53_SS_Pri	17/03/2022		EM2204843	ALSE-Melbourne	Normal			<0.00005		<0.00005		<0.00002		<0.00005		<0.00005			
C02.01	SX_IB_20220317_07_53_SS_Du	17/03/2022		EM2204843	ALSE-Melbourne	Field_D	EM2204843011		<0.00005		<0.00005		<0.00002		<0.00005		<0.00005			
RPD									0		0		0		0		0			
C02.01	SX_IB_20220317_07_53_SS_Pri	17/03/2022		EM2204843	ALSE-Melbourne	Normal			<0.00005		<0.00005		<0.00002		<0.00005		<0.00005			
C02.01	SX_IB_20220317_07_54_SS_Tri	17/03/2022		872310	MGT	Interlab_D	EM2204843011		<0.00001		<0.00005		<0.00005		<0.00005		<0.00005			
RPD									0		0		0		0		0			
C05.01	SX_OB_20220327_15_52_SS_Pr	27/03/2022		874920	MGT	Normal		<0.01		<0.005		<0.005		<0.01		<0.005		<0.005		
C05.01	SX_OB_20220327_15_59_SS_Du	27/03/2022		874920	MGT	Field_D	M22-Ma57512	<0.01		<0.005		<0.005		<0.01		<0.005		<0.005		
RPD								0		0		0		0		0		0		
C05.01	SX_OB_20220327_15_52_SS_Pr	27/03/2022		874920	MGT	Normal		<0.01		<0.005		<0.005		<0.01		<0.005		<0.005		

								acid (6:2 FTS)	4:2 Fluorotelomer sulfonic acid (4:2 FTS)		N-Ethyl perfluorooctane sulfonamide (NEtFOSA)		N-ethyl-perfluorooctanesulfonamidoacetic acid (NEtFOSAA)		N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)		N-Methyl perfluorooctane sulfonamide (NMeFOSA)	
								mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg
C05.01	SX_OB_20220327_16_00_SS_Tr	27/03/2022		EM2205473	ALSE-Melbourne	Interlab_D	M22-Ma57512	<0.0100	<0.00005	<0.0050	<0.00005	<0.0050	<0.00002	<0.0100	<0.00005	<0.0050	<0.00005	<0.0050
RPD								0		0		0		0		0		0
C05.01	SX_OB_20220327_15_52_SS_Pr	27/03/2022		874920	MGT	Normal			<0.00001		<0.00005		<0.00005		<0.00005		<0.00005	
C05.01	SX_OB_20220327_15_59_SS_Du	27/03/2022		874920	MGT	Field_D	M22-Ma57521		<0.00001		<0.00005		<0.00005		<0.00005		<0.00005	
RPD									0		0		0		0		0	
C05.01	SX_OB_20220327_15_52_SS_Pr	27/03/2022		874920	MGT	Normal			<0.00001		<0.00005		<0.00005		<0.00005		<0.00005	
C05.01	SX_OB_20220327_15_59_SS_Du	27/03/2022		874920	MGT	Field_D	M22-Ma57530		<0.00001		<0.00005		<0.00005		<0.00005		<0.00005	
RPD									0		0		0		0		0	
C05.01	SX_OB_20220327_15_52_SS_Pr	27/03/2022		874920	MGT	Normal			<0.00001		<0.00005		<0.00005		<0.00005		<0.00005	
C05.01	SX_OB_20220327_16_00_SS_Tr	27/03/2022		EM2205473	ALSE-Melbourne	Interlab_D	M22-Ma57530		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005	
RPD									0		0		0		0		0	
C05.01	SX_OB_20220327_07_55_SS_Pr	27/03/2022		EM2205473	ALSE-Melbourne	Normal		<0.0100	<0.00005	<0.0050	<0.00005	<0.0050	<0.00002	<0.0100	<0.00005	<0.0050	<0.00005	<0.0050
C05.01	SX_OB_20220327_07_58_SS_Du	27/03/2022		EM2205473	ALSE-Melbourne	Field_D	EM2205473004	<0.0100	<0.00005	<0.0050	<0.00005	<0.0050	<0.00002	<0.0100	<0.00005	<0.0050	<0.00005	<0.0050
RPD								0	0	0	0	0	0	0	0	0	0	0
C05.01	SX_OB_20220327_07_55_SS_Pr	27/03/2022		EM2205473	ALSE-Melbourne	Normal		<0.0100	<0.00005	<0.0050	<0.00005	<0.0050	<0.00002	<0.0100	<0.00005	<0.0050	<0.00005	<0.0050
C05.01	SX_OB_20220327_07_58_SS_Tr	27/03/2022		874920	MGT	Interlab_D	EM2205473004	<0.01		<0.005		<0.005		<0.01		<0.005		<0.005
RPD								0		0		0		0		0		0
C05.01	SX_OB_20220327_07_55_SS_Pr	27/03/2022		EM2205473	ALSE-Melbourne	Normal		<0.0100	<0.00005	<0.0050	<0.00005	<0.0050	<0.00002	<0.0100	<0.00005	<0.0050	<0.00005	<0.0050
C05.01	SX_OB_20220327_07_58_SS_Tr	27/03/2022		874920	MGT	Interlab_D	EM2205473004		<0.00001		<0.00005		<0.00005		<0.00005		<0.00005	
RPD									0		0		0		0		0	
C05.01	SX_OB_20220327_07_55_SS_Pr	27/03/2022		EM2205473	ALSE-Melbourne	Normal			<0.00005		<0.00005		<0.00005		<0.00005		<0.00005	
C05.01	SX_OB_20220327_07_58_SS_Du	27/03/2022		EM2205473	ALSE-Melbourne	Field_D	EM2205473013		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005	
RPD									0		0		0		0		0	
C05.01	SX_OB_20220327_07_55_SS_Pr	27/03/2022		EM2205473	ALSE-Melbourne	Normal			<0.00005		<0.00005		<0.00005		<0.00005		<0.00005	
C05.01	SX_OB_20220327_07_58_SS_Tr	27/03/2022		874920	MGT	Interlab_D	EM2205473013		<0.00001		<0.00005		<0.00005		<0.00005		<0.00005	
RPD									0		0		0		0		0	
C02.01	SX_IB_20220328_15_44_SS_Pri	28/03/2022		875283	MGT	Normal		<0.01		<0.005		<0.005		<0.01		<0.005		<0.005
C02.01	SX_IB_20220328_15_47_SS_Du	28/03/2022		875283	MGT	Field_D	M22-Ma60487	<0.01		<0.005		<0.005		<0.01		<0.005		<0.005
RPD								0		0		0		0		0		0
C02.01	SX_IB_20220328_15_44_SS_Pri	28/03/2022		875283	MGT	Normal		<0.01		<0.005		<0.005		<0.01		<0.005		<0.005
C02.01	SX_IB_20220328_15_48_SS_Tri	28/03/2022		EM2205583	ALSE-Melbourne	Interlab_D	M22-Ma60487	<0.0100	<0.00005	<0.0050	<0.00005	<0.0050	<0.00005	<0.0100	<0.00005	<0.0050	<0.00005	<0.0050
RPD								0		0		0		0		0		0
C02.01	SX_IB_20220328_15_44_SS_Pri	28/03/2022		875283	MGT	Normal			<0.00001		<0.00005		<0.00005		<0.00005		<0.00005	
C02.01	SX_IB_20220328_15_47_SS_Du	28/03/2022		875283	MGT	Field_D	M22-Ma60495		<0.00001		<0.00005		<0.00005		<0.00005		<0.00005	
RPD									0		0		0		0		0	
C02.01	SX_IB_20220328_15_44_SS_Pri	28/03/2022		875283	MGT	Normal			<0.00001		<0.00005		<0.00005		<0.00005		<0.00005	
C02.01	SX_IB_20220328_15_47_SS_Du	28/03/2022		875283	MGT	Field_D	M22-Ma60503		<0.00001		<0.00005		<0.00005		<0.00005		<0.00005	
RPD									0		0		0		0		0	
C02.01	SX_IB_20220328_15_44_SS_Pri	28/03/2022		875283	MGT	Normal			<0.00001		<0.00005		<0.00005		<0.00005		<0.00005	
C02.01	SX_IB_20220328_15_48_SS_Tri	28/03/2022		EM2205583	ALSE-Melbourne	Interlab_D	M22-Ma60503		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005	
RPD									0		0		0		0		0	
C02.01	SX_IB_20220328_07_41_SS_Pri	28/03/2022		EM2205583	ALSE-Melbourne	Normal		<0.0100	<0.00005	<0.0050	<0.00005	<0.0050	<0.00005	<0.0100	<0.00005	<0.0050	<0.00005	<0.0050
C02.01	SX_IB_20220328_07_45_SS_Du	28/03/2022		EM2205583	ALSE-Melbourne	Field_D	EM2205583001	<0.0100	<0.00005	<0.0050	<0.00005	<0.0050	<0.00005	<0.0100	<0.00005	<0.0050	<0.00005	<0.0050
RPD								0	0	0	0	0	0	0	0	0	0	0
C02.01	SX_IB_20220328_07_41_SS_Pri	28/03/2022		EM2205583	ALSE-Melbourne	Normal		<0.0100	<0.00005	<0.0050	<0.00005	<0.0050	<0.00005	<0.0100	<0.00005	<0.0050	<0.00005	<0.0050
C02.01	SX_IB_20220328_07_46_SS_Tri	28/03/2022		875283	MGT	Interlab_D	EM2205583001	<0.01		<0.005		<0.005		<0.01		<0.005		<0.005
RPD								0		0		0		0		0		0
C02.01	SX_IB_20220328_07_41_SS_Pri	28/03/2022		EM2205583	ALSE-Melbourne	Normal		<0.0100	<0.00005	<0.0050	<0.00005	<0.0050	<0.00005	<0.0100	<0.00005	<0.0050	<0.00005	<0.0050
C02.01	SX_IB_20220328_07_46_SS_Tri	28/03/2022		875283	MGT	Interlab_D	EM2205583001		<0.00001		<0.00005		<0.00005		<0.00005		<0.00005	
RPD									0		0		0		0		0	
C02.01	SX_IB_20220328_07_41_SS_Pri	28/03/2022		EM2205583	ALSE-Melbourne	Normal			<0.00005		<0.00005		<0.00005		<0.00005		<0.00005	
C02.01	SX_IB_20220328_07_45_SS_Du	28/03/2022		EM2205583	ALSE-Melbourne	Field_D	EM2205583009		<0.00005		<0.00005		<0.00005		<0.00005		<0.00005	
RPD									0		0		0		0		0	
C02.01	SX_IB_20220328_07_41_SS_Pri	28/03/2022		EM2205583	ALSE-Melbourne	Normal			<0.00005		<0.00005		<0.00005		<0.00005		<0.00005	
C02.01	SX_IB_20220328_07_46_SS_Tri	28/03/2022		875283	MGT	Interlab_D	EM2205583009		<0.00001		<0.00005		<0.00005		<0.00005		<0.00005	
RPD									0		0		0		0		0	

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

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

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

								N-methylperfluorooctane sulfonamidoacetic acid (NMeFOSAA)		N-Methylperfluorooctanesulfonamidoethanol (N-MeFOSE)		Perfluorobutanoic acid (PFBA)		Perfluorobutane sulfonic acid (PFBS)		Perfluorodecanoic acid (PFDA)		Perfluorododecanoic acid	
								mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	
EQL								0.00002	0.01	0.00005	0.005	0.00005	0.005	0.00001	0.005	0.00001	0.005	0.00001	
Location Code	**Field ID**	**Date**	**Depth**	**Lab Report Number**	**Lab Name**	**Sample Type**	**Parent Sample**												
C02.01	SX_IB_20220316_16_12_SS_Pri	16/03/2022		872036	MGT	Normal			<0.01		<0.005		<0.005		<0.005		<0.005		
C02.01	SX_IB_20220316_16_15_SS_Du	16/03/2022		872036	MGT	Field_D	M22-Ma34703		<0.01		<0.005		<0.005		<0.005		<0.005		
RPD									0		0		0		0		0		
C02.01	SX_IB_20220316_16_12_SS_Pri	16/03/2022		872036	MGT	Normal			<0.01		<0.005		<0.005		<0.005		<0.005		
C02.01	SX_IB_20220316_16_16_SS_Tri	16/03/2022		EM2204736	ALSE-Melbourne	Interlab_D	M22-Ma34703	<0.00005	<0.0100	<0.00005	<0.0050	<0.0001	<0.005	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	
RPD									0		0		0		0		0		
C02.01	SX_IB_20220316_16_12_SS_Pri	16/03/2022		872036	MGT	Normal		<0.00005		<0.00005		<0.00005		<0.00001		<0.00001		<0.00001	
C02.01	SX_IB_20220316_16_15_SS_Du	16/03/2022		872036	MGT	Field_D	M22-Ma34711	<0.00005		<0.00005		<0.00005		<0.00001		<0.00001		<0.00001	
RPD								0		0		0		0		0		0	
C02.01	SX_IB_20220316_16_12_SS_Pri	16/03/2022		872036	MGT	Normal		<0.00005		<0.00005		<0.00005		<0.00001		<0.00001		<0.00001	
C02.01	SX_IB_20220316_16_15_SS_Du	16/03/2022		872036	MGT	Field_D	M22-Ma34719	<0.00005		<0.00005		<0.00005		<0.00001		<0.00001		<0.00001	
RPD								0		0		0		0		0		0	
C02.01	SX_IB_20220316_16_12_SS_Pri	16/03/2022		872036	MGT	Normal		<0.00005		<0.00005		<0.00005		<0.00001		<0.00001		<0.00001	
C02.01	SX_IB_20220316_16_16_SS_Tri	16/03/2022		EM2204736	ALSE-Melbourne	Interlab_D	M22-Ma34719	<0.00002		<0.00005		<0.0001		<0.00002		<0.00002		<0.00002	
RPD								0		0		0		0		0		0	
C02.01	SX_IB_20220316_08_17_SS_Pri	16/03/2022		EM2204736	ALSE-Melbourne	Normal		<0.00005	<0.0100	<0.00005	<0.0050	<0.0001	<0.005	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	
C02.01	SX_IB_20220316_08_20_SS_Du	16/03/2022		EM2204736	ALSE-Melbourne	Field_D	EM2204736001	<0.00005	<0.0100	<0.00005	<0.0050	<0.0001	<0.005	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	
RPD								0	0	0	0	0	0	0	0	0	0	0	
C02.01	SX_IB_20220316_08_17_SS_Pri	16/03/2022		EM2204736	ALSE-Melbourne	Normal		<0.00005	<0.0100	<0.00005	<0.0050	<0.0001	<0.005	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	
C02.01	SX_IB_20220316_08_22_SS_Tri	16/03/2022		872036	MGT	Interlab_D	EM2204736001		<0.01		<0.005		<0.005		<0.005		<0.005		
RPD									0		0		0		0		0		
C02.01	SX_IB_20220316_08_17_SS_Pri	16/03/2022		EM2204736	ALSE-Melbourne	Normal		<0.00005	<0.0100	<0.00005	<0.0050	<0.0001	<0.005	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	
C02.01	SX_IB_20220316_08_22_SS_Tri	16/03/2022		872036	MGT	Interlab_D	EM2204736001	<0.00005		<0.00005		<0.00005		<0.00001		<0.00001		<0.00001	
RPD								0		0		0		0		0		0	
A04.01	SX_OB_20220317_16_02_SS_Pr	17/03/2022		872310	MGT	Normal			<0.01		<0.005		<0.005		<0.005		<0.005		
A04.01	SX_OB_20220317_16_02_SS_Du	17/03/2022		872310	MGT	Field_D	M22-Ma36471		<0.01		<0.005		<0.005		<0.005		<0.005		
RPD									0		0		0		0		0		
A04.01	SX_OB_20220317_16_02_SS_Pr	17/03/2022		872310	MGT	Normal			<0.01		<0.005		<0.005		<0.005		<0.005		
A04.01	SX_OB_20220317_16_03_SS_Tr	17/03/2022		EM2204843	ALSE-Melbourne	Interlab_D	M22-Ma36471	<0.00005	<0.0100	<0.00005	<0.0050	<0.0001	<0.005	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	
RPD									0		0		0		0		0		
A04.01	SX_OB_20220317_16_02_SS_Pr	17/03/2022		872310	MGT	Normal		<0.00005		<0.00005		<0.00005		<0.00001		<0.00001		<0.00001	
A04.01	SX_OB_20220317_16_02_SS_Du	17/03/2022		872310	MGT	Field_D	M22-Ma36481	<0.00005		<0.00005		<0.00005		<0.00001		<0.00001		<0.00001	
RPD								0		0		0		0		0		0	
A04.01	SX_OB_20220317_16_02_SS_Pr	17/03/2022		872310	MGT	Normal		<0.00005		<0.00005		<0.00005		<0.00001		<0.00001		<0.00001	
A04.01	SX_OB_20220317_16_02_SS_Du	17/03/2022		872310	MGT	Field_D	M22-Ma36489	<0.00005		<0.00005		<0.00005		<0.00001		<0.00001		<0.00001	
RPD								0		0		0		0		0		0	
A04.01	SX_OB_20220317_16_02_SS_Pr	17/03/2022		872310	MGT	Normal		<0.00005		<0.00005		<0.00005		<0.00001		<0.00001		<0.00001	
A04.01	SX_OB_20220317_16_03_SS_Tr	17/03/2022		EM2204843	ALSE-Melbourne	Interlab_D	M22-Ma36489	<0.00002		<0.00005		<0.0001		<0.00002		<0.00002		<0.00002	
RPD								0		0		0		0		0		0	
C02.01	SX_IB_20220317_07_53_SS_Pri	17/03/2022		EM2204843	ALSE-Melbourne	Normal		<0.00005	<0.0100	<0.00005	<0.0050	<0.0001	<0.005	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	
C02.01	SX_IB_20220317_07_53_SS_Du	17/03/2022		EM2204843	ALSE-Melbourne	Field_D	EM2204843001	<0.00005	<0.0100	<0.00005	<0.0050	<0.0001	<0.005	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	
RPD								0	0	0	0	0	0	0	0	0	0	0	
C02.01	SX_IB_20220317_07_53_SS_Pri	17/03/2022		EM2204843	ALSE-Melbourne	Normal		<0.00005	<0.0100	<0.00005	<0.0050	<0.0001	<0.005	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	
C02.01	SX_IB_20220317_07_54_SS_Tri	17/03/2022		872310	MGT	Interlab_D	EM2204843001		<0.01		<0.005		<0.005		<0.005		<0.005		
RPD									0		0		0		0		0		
C02.01	SX_IB_20220317_07_53_SS_Pri	17/03/2022		EM2204843	ALSE-Melbourne	Normal		<0.00005	<0.0100	<0.00005	<0.0050	<0.0001	<0.005	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	
C02.01	SX_IB_20220317_07_54_SS_Tri	17/03/2022		872310	MGT	Interlab_D	EM2204843001	<0.00005		<0.00005		<0.00005		<0.00001		<0.00001		<0.00001	
RPD								0		0		0		0		0		0	
C02.01	SX_IB_20220317_07_53_SS_Pri	17/03/2022		EM2204843	ALSE-Melbourne	Normal		<0.00002		<0.00005		<0.0001		<0.00002		<0.00002		<0.00002	
C02.01	SX_IB_20220317_07_53_SS_Du	17/03/2022		EM2204843	ALSE-Melbourne	Field_D	EM2204843011	<0.00002		<0.00005		<0.0001		<0.00002		<0.00002		<0.00002	
RPD								0		0		0		0		0		0	
C02.01	SX_IB_20220317_07_53_SS_Pri	17/03/2022		EM2204843	ALSE-Melbourne	Normal		<0.00002		<0.00005		<0.0001		<0.00002		<0.00002		<0.00002	
C02.01	SX_IB_20220317_07_54_SS_Tri	17/03/2022		872310	MGT	Interlab_D	EM2204843011	<0.00005		<0.00005		<0.00005		<0.00001		<0.00001		<0.00001	
RPD								0		0		0		0		0		0	
C05.01	SX_OB_20220327_15_52_SS_Pr	27/03/2022		874920	MGT	Normal			<0.01		<0.005		<0.005		<0.005		<0.005		
C05.01	SX_OB_20220327_15_59_SS_Du	27/03/2022		874920	MGT	Field_D	M22-Ma57512		<0.01		<0.005		<0.005		<0.005		<0.005		
RPD									0		0		0		0		0		
C05.01	SX_OB_20220327_15_52_SS_Pr	27/03/2022		874920	MGT	Normal			<0.01		<0.005		<0.005		<0.005		<0.005		

								N-methylperfluorooctane sulfonamidoacetic acid (NMeFOSAA)		N-Methylperfluorooctanesulfonamidoethanol (N-MeFOSE)		Perfluorobutanoic acid (PFBA)		Perfluorobutane sulfonic acid (PFBS)		Perfluorodecanoic acid (PFDA)		Perfluorododecanoic acid
								mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L
C05.01	SX_OB_20220327_16_00_SS_Tr	27/03/2022		EM2205473	ALSE-Melbourne	Interlab_D	M22-Ma57512	<0.00002	<0.0100	<0.00005	<0.0050	<0.0001	<0.005	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002
RPD									0		0		0		0		0	
C05.01	SX_OB_20220327_15_52_SS_Pr	27/03/2022		874920	MGT	Normal		<0.00005		<0.00005		<0.00005		<0.00001		<0.00001		<0.00001
C05.01	SX_OB_20220327_15_59_SS_Du	27/03/2022		874920	MGT	Field_D	M22-Ma57521	<0.00005		<0.00005		<0.00005		<0.00001		<0.00001		<0.00001
RPD								0		0		0		0		0		0
C05.01	SX_OB_20220327_15_52_SS_Pr	27/03/2022		874920	MGT	Normal		<0.00005		<0.00005		<0.00005		<0.00001		<0.00001		<0.00001
C05.01	SX_OB_20220327_15_59_SS_Du	27/03/2022		874920	MGT	Field_D	M22-Ma57530	<0.00005		<0.00005		<0.00005		<0.00001		<0.00001		<0.00001
RPD								0		0		0		0		0		0
C05.01	SX_OB_20220327_15_52_SS_Pr	27/03/2022		874920	MGT	Normal		<0.00005		<0.00005		<0.00005		<0.00001		<0.00001		<0.00001
C05.01	SX_OB_20220327_16_00_SS_Tr	27/03/2022		EM2205473	ALSE-Melbourne	Interlab_D	M22-Ma57530	<0.00005		<0.00005		<0.0001		<0.00002		<0.00002		<0.00002
RPD								0		0		0		0		0		0
C05.01	SX_OB_20220327_07_55_SS_Pr	27/03/2022		EM2205473	ALSE-Melbourne	Normal		<0.00002	<0.0100	<0.00005	<0.0050	<0.0001	<0.005	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002
C05.01	SX_OB_20220327_07_58_SS_Du	27/03/2022		EM2205473	ALSE-Melbourne	Field_D	EM2205473004	<0.00002	<0.0100	<0.00005	<0.0050	<0.0001	<0.005	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002
RPD								0	0	0	0	0	0	0	0	0	0	0
C05.01	SX_OB_20220327_07_55_SS_Pr	27/03/2022		EM2205473	ALSE-Melbourne	Normal		<0.00002	<0.0100	<0.00005	<0.0050	<0.0001	<0.005	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002
C05.01	SX_OB_20220327_07_58_SS_Tr	27/03/2022		874920	MGT	Interlab_D	EM2205473004		<0.01		<0.005		<0.005		<0.005		<0.005	
RPD									0		0		0		0		0	
C05.01	SX_OB_20220327_07_55_SS_Pr	27/03/2022		EM2205473	ALSE-Melbourne	Normal		<0.00002	<0.0100	<0.00005	<0.0050	<0.0001	<0.005	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002
C05.01	SX_OB_20220327_07_58_SS_Tr	27/03/2022		874920	MGT	Interlab_D	EM2205473004	<0.00005		<0.00005		<0.00005		<0.00001		<0.00001		<0.00001
RPD								0		0		0		0		0		0
C05.01	SX_OB_20220327_07_55_SS_Pr	27/03/2022		EM2205473	ALSE-Melbourne	Normal		<0.00005		<0.00005		<0.0001		<0.00002		<0.00002		<0.00002
C05.01	SX_OB_20220327_07_58_SS_Du	27/03/2022		EM2205473	ALSE-Melbourne	Field_D	EM2205473013	<0.00005		<0.00005		<0.0001		<0.00002		<0.00002		<0.00002
RPD								0		0		0		0		0		0
C05.01	SX_OB_20220327_07_55_SS_Pr	27/03/2022		EM2205473	ALSE-Melbourne	Normal		<0.00005		<0.00005		<0.0001		<0.00002		<0.00002		<0.00002
C05.01	SX_OB_20220327_07_58_SS_Tr	27/03/2022		874920	MGT	Interlab_D	EM2205473013	<0.00005		<0.00005		<0.00005		<0.00001		<0.00001		<0.00001
RPD								0		0		0		0		0		0
C02.01	SX_IB_20220328_15_44_SS_Pri	28/03/2022		875283	MGT	Normal			<0.01		<0.005		<0.005		<0.005		<0.005	
C02.01	SX_IB_20220328_15_47_SS_Du	28/03/2022		875283	MGT	Field_D	M22-Ma60487		<0.01		<0.005		<0.005		<0.005		<0.005	
RPD									0		0		0		0		0	
C02.01	SX_IB_20220328_15_44_SS_Pri	28/03/2022		875283	MGT	Normal			<0.01		<0.005		<0.005		<0.005		<0.005	
C02.01	SX_IB_20220328_15_48_SS_Tri	28/03/2022		EM2205583	ALSE-Melbourne	Interlab_D	M22-Ma60487	<0.00005	<0.0100	<0.00005	<0.0050	<0.0001	<0.005	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002
RPD									0		0		0		0		0	
C02.01	SX_IB_20220328_15_44_SS_Pri	28/03/2022		875283	MGT	Normal		<0.00005		<0.00005		<0.00005		<0.00001		<0.00001		<0.00001
C02.01	SX_IB_20220328_15_47_SS_Du	28/03/2022		875283	MGT	Field_D	M22-Ma60495	<0.00005		<0.00005		<0.00005		<0.00001		<0.00001		<0.00001
RPD								0		0		0		0		0		0
C02.01	SX_IB_20220328_15_44_SS_Pri	28/03/2022		875283	MGT	Normal		<0.00005		<0.00005		<0.00005		<0.00001		<0.00001		<0.00001
C02.01	SX_IB_20220328_15_47_SS_Du	28/03/2022		875283	MGT	Field_D	M22-Ma60503	<0.00005		<0.00005		<0.00005		<0.00001		<0.00001		<0.00001
RPD								0		0		0		0		0		0
C02.01	SX_IB_20220328_15_44_SS_Pri	28/03/2022		875283	MGT	Normal		<0.00005		<0.00005		<0.00005		<0.00001		<0.00001		<0.00001
C02.01	SX_IB_20220328_15_48_SS_Tri	28/03/2022		EM2205583	ALSE-Melbourne	Interlab_D	M22-Ma60503	<0.00005		<0.00005		<0.0001		<0.00002		<0.00002		<0.00002
RPD								0		0		0		0		0		0
C02.01	SX_IB_20220328_07_41_SS_Pri	28/03/2022		EM2205583	ALSE-Melbourne	Normal		<0.00005	<0.0100	<0.00005	<0.0050	<0.0001	<0.005	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002
C02.01	SX_IB_20220328_07_45_SS_Du	28/03/2022		EM2205583	ALSE-Melbourne	Field_D	EM2205583001	<0.00005	<0.0100	<0.00005	<0.0050	<0.0001	<0.005	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002
RPD								0	0	0	0	0	0	0	0	0	0	0
C02.01	SX_IB_20220328_07_41_SS_Pri	28/03/2022		EM2205583	ALSE-Melbourne	Normal		<0.00005	<0.0100	<0.00005	<0.0050	<0.0001	<0.005	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002
C02.01	SX_IB_20220328_07_46_SS_Tri	28/03/2022		875283	MGT	Interlab_D	EM2205583001		<0.01		<0.005		<0.005		<0.005		<0.005	
RPD									0		0		0		0		0	
C02.01	SX_IB_20220328_07_41_SS_Pri	28/03/2022		EM2205583	ALSE-Melbourne	Normal		<0.00005	<0.0100	<0.00005	<0.0050	<0.0001	<0.005	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002
C02.01	SX_IB_20220328_07_46_SS_Tri	28/03/2022		875283	MGT	Interlab_D	EM2205583001	<0.00005		<0.00005		<0.00005		<0.00001		<0.00001		<0.00001
RPD								0		0		0		0		0		0
C02.01	SX_IB_20220328_07_41_SS_Pri	28/03/2022		EM2205583	ALSE-Melbourne	Normal		<0.00005		<0.00005		<0.0001		<0.00002		<0.00002		<0.00002
C02.01	SX_IB_20220328_07_45_SS_Du	28/03/2022		EM2205583	ALSE-Melbourne	Field_D	EM2205583009	<0.00005		<0.00005		<0.0001		<0.00002		<0.00002		<0.00002
RPD								0		0		0		0		0		0
C02.01	SX_IB_20220328_07_41_SS_Pri	28/03/2022		EM2205583	ALSE-Melbourne	Normal		<0.00005		<0.00005		<0.0001		<0.00002		<0.00002		<0.00002
C02.01	SX_IB_20220328_07_46_SS_Tri	28/03/2022		875283	MGT	Interlab_D	EM2205583009	<0.00005		<0.00005		<0.00005		<0.00001		<0.00001		<0.00001
RPD								0		0		0		0		0		0

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

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

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

								PFOS/PFOA											
								(PFDoDA)		Perfluorodecanesulfonic acid (PFDS)		Perfluoroheptanoic acid (PFHpA)		Perfluoroheptane sulfonic acid (PFHpS)		Perfluorohexanoic acid (PFHxA)		Perfluorononanoic acid (PFNA)	
								mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg
EQL								0.005	0.00001	0.005	0.00001	0.005	0.00001	0.005	0.00001	0.005	0.00001	0.005
Location Code	**Field ID**	**Date**	**Depth**	**Lab Report Number**	**Lab Name**	**Sample Type**	**Parent Sample**											
C02.01	SX_IB_20220316_16_12_SS_Pri	16/03/2022		872036	MGT	Normal		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005
C02.01	SX_IB_20220316_16_15_SS_Du	16/03/2022		872036	MGT	Field_D	M22-Ma34703	<0.005		<0.005		<0.005		<0.005		<0.005		<0.005
RPD								0		0		0		0		0		0
C02.01	SX_IB_20220316_16_12_SS_Pri	16/03/2022		872036	MGT	Normal		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005
C02.01	SX_IB_20220316_16_16_SS_Tri	16/03/2022		EM2204736	ALSE-Melbourne	Interlab_D	M22-Ma34703	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050
RPD								0		0		0		0		0		0
C02.01	SX_IB_20220316_16_12_SS_Pri	16/03/2022		872036	MGT	Normal			<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	
C02.01	SX_IB_20220316_16_15_SS_Du	16/03/2022		872036	MGT	Field_D	M22-Ma34711		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	
RPD									0		0		0		0		0	
C02.01	SX_IB_20220316_16_12_SS_Pri	16/03/2022		872036	MGT	Normal			<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	
C02.01	SX_IB_20220316_16_15_SS_Du	16/03/2022		872036	MGT	Field_D	M22-Ma34719		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	
RPD									0		0		0		0		0	
C02.01	SX_IB_20220316_16_12_SS_Pri	16/03/2022		872036	MGT	Normal			<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	
C02.01	SX_IB_20220316_16_16_SS_Tri	16/03/2022		EM2204736	ALSE-Melbourne	Interlab_D	M22-Ma34719		<0.00002		<0.00002		<0.00002		<0.00002		<0.00002	
RPD									0		0		0		0		0	
C02.01	SX_IB_20220316_08_17_SS_Pri	16/03/2022		EM2204736	ALSE-Melbourne	Normal		<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050
C02.01	SX_IB_20220316_08_20_SS_Du	16/03/2022		EM2204736	ALSE-Melbourne	Field_D	EM2204736001	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050
RPD								0	0	0	0	0	0	0	0	0	0	0
C02.01	SX_IB_20220316_08_17_SS_Pri	16/03/2022		EM2204736	ALSE-Melbourne	Normal		<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050
C02.01	SX_IB_20220316_08_22_SS_Tri	16/03/2022		872036	MGT	Interlab_D	EM2204736001	<0.005		<0.005		<0.005		<0.005		<0.005		<0.005
RPD								0		0		0		0		0		0
C02.01	SX_IB_20220316_08_17_SS_Pri	16/03/2022		EM2204736	ALSE-Melbourne	Normal		<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050
C02.01	SX_IB_20220316_08_22_SS_Tri	16/03/2022		872036	MGT	Interlab_D	EM2204736001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	
RPD									0		0		0		0		0	
C02.01	SX_IB_20220316_08_17_SS_Pri	16/03/2022		EM2204736	ALSE-Melbourne	Normal			<0.00002		<0.00002		<0.00002		<0.00002		<0.00002	
C02.01	SX_IB_20220316_08_20_SS_Du	16/03/2022		EM2204736	ALSE-Melbourne	Field_D	EM2204736009		<0.00002		<0.00002		<0.00002		<0.00002		<0.00002	
RPD									0		0		0		0		0	
C02.01	SX_IB_20220316_08_17_SS_Pri	16/03/2022		EM2204736	ALSE-Melbourne	Normal			<0.00002		<0.00002		<0.00002		<0.00002		<0.00002	
C02.01	SX_IB_20220316_08_22_SS_Tri	16/03/2022		872036	MGT	Interlab_D	EM2204736009		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	
RPD									0		0		0		0		0	
A04.01	SX_OB_20220317_16_02_SS_Pr	17/03/2022		872310	MGT	Normal		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005
A04.01	SX_OB_20220317_16_02_SS_Du	17/03/2022		872310	MGT	Field_D	M22-Ma36471	<0.005		<0.005		<0.005		<0.005		<0.005		<0.005
RPD								0		0		0		0		0		0
A04.01	SX_OB_20220317_16_02_SS_Pr	17/03/2022		872310	MGT	Normal		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005
A04.01	SX_OB_20220317_16_03_SS_Tr	17/03/2022		EM2204843	ALSE-Melbourne	Interlab_D	M22-Ma36471	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050
RPD								0		0		0		0		0		0
A04.01	SX_OB_20220317_16_02_SS_Pr	17/03/2022		872310	MGT	Normal			<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	
A04.01	SX_OB_20220317_16_02_SS_Du	17/03/2022		872310	MGT	Field_D	M22-Ma36481		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	
RPD									0		0		0		0		0	
A04.01	SX_OB_20220317_16_02_SS_Pr	17/03/2022		872310	MGT	Normal			<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	
A04.01	SX_OB_20220317_16_02_SS_Du	17/03/2022		872310	MGT	Field_D	M22-Ma36489		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	
RPD									0		0		0		0		0	
A04.01	SX_OB_20220317_16_02_SS_Pr	17/03/2022		872310	MGT	Normal			<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	
A04.01	SX_OB_20220317_16_03_SS_Tr	17/03/2022		EM2204843	ALSE-Melbourne	Interlab_D	M22-Ma36489		<0.00002		<0.00002		<0.00002		<0.00002		<0.00002	
RPD									0		0		0		0		0	
C02.01	SX_IB_20220317_07_53_SS_Pri	17/03/2022		EM2204843	ALSE-Melbourne	Normal		<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050
C02.01	SX_IB_20220317_07_53_SS_Du	17/03/2022		EM2204843	ALSE-Melbourne	Field_D	EM2204843001	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050
RPD								0	0	0	0	0	0	0	0	0	0	0
C02.01	SX_IB_20220317_07_53_SS_Pri	17/03/2022		EM2204843	ALSE-Melbourne	Normal		<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050
C02.01	SX_IB_20220317_07_54_SS_Tri	17/03/2022		872310	MGT	Interlab_D	EM2204843001	<0.005		<0.005		<0.005		<0.005		<0.005		<0.005
RPD								0		0		0		0		0		0
C02.01	SX_IB_20220317_07_53_SS_Pri	17/03/2022		EM2204843	ALSE-Melbourne	Normal		<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050
C02.01	SX_IB_20220317_07_54_SS_Tri	17/03/2022		872310	MGT	Interlab_D	EM2204843001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	
RPD									0		0		0		0		0	
C02.01	SX_IB_20220317_07_53_SS_Pri	17/03/2022		EM2204843	ALSE-Melbourne	Normal			<0.00002		<0.00002		<0.00002		<0.00002		<0.00002	
C02.01	SX_IB_20220317_07_53_SS_Du	17/03/2022		EM2204843	ALSE-Melbourne	Field_D	EM2204843011		<0.00002		<0.00002		<0.00002		<0.00002		<0.00002	
RPD									0		0		0		0		0	
C02.01	SX_IB_20220317_07_53_SS_Pri	17/03/2022		EM2204843	ALSE-Melbourne	Normal			<0.00002		<0.00002		<0.00002		<0.00002		<0.00002	
C02.01	SX_IB_20220317_07_54_SS_Tri	17/03/2022		872310	MGT	Interlab_D	EM2204843011		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	
RPD									0		0		0		0		0	
C05.01	SX_OB_20220327_15_52_SS_Pr	27/03/2022		874920	MGT	Normal		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005
C05.01	SX_OB_20220327_15_59_SS_Du	27/03/2022		874920	MGT	Field_D	M22-Ma57512	<0.005		<0.005		<0.005		<0.005		<0.005		<0.005
RPD								0		0		0		0		0		0
C05.01	SX_OB_20220327_15_52_SS_Pr	27/03/2022		874920	MGT	Normal		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005

								PFOS/PFOA											
								(PFDoDA)		Perfluorodecanesulfonic acid (PFDS)		Perfluoroheptanoic acid (PFHpA)		Perfluoroheptane sulfonic acid (PFHpS)		Perfluorohexanoic acid (PFHxA)		Perfluorononanoic acid (PFNA)	
								mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg
C05.01	SX_OB_20220327_16_00_SS_Tr	27/03/2022		EM2205473	ALSE-Melbourne	Interlab_D	M22-Ma57512	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050
RPD								0		0		0		0		0		0
C05.01	SX_OB_20220327_15_52_SS_Pr	27/03/2022		874920	MGT	Normal			<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	
C05.01	SX_OB_20220327_15_59_SS_Du	27/03/2022		874920	MGT	Field_D	M22-Ma57521		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	
RPD									0		0		0		0		0	
C05.01	SX_OB_20220327_15_52_SS_Pr	27/03/2022		874920	MGT	Normal			<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	
C05.01	SX_OB_20220327_15_59_SS_Du	27/03/2022		874920	MGT	Field_D	M22-Ma57530		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	
RPD									0		0		0		0		0	
C05.01	SX_OB_20220327_15_52_SS_Pr	27/03/2022		874920	MGT	Normal			<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	
C05.01	SX_OB_20220327_16_00_SS_Tr	27/03/2022		EM2205473	ALSE-Melbourne	Interlab_D	M22-Ma57530		<0.00002		<0.00002		<0.00002		<0.00002		<0.00002	
RPD									0		0		0		0		0	
C05.01	SX_OB_20220327_07_55_SS_Pr	27/03/2022		EM2205473	ALSE-Melbourne	Normal		<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050
C05.01	SX_OB_20220327_07_58_SS_Du	27/03/2022		EM2205473	ALSE-Melbourne	Field_D	EM2205473004	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050
RPD								0	0	0	0	0	0	0	0	0	0	0
C05.01	SX_OB_20220327_07_55_SS_Pr	27/03/2022		EM2205473	ALSE-Melbourne	Normal		<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050
C05.01	SX_OB_20220327_07_58_SS_Tr	27/03/2022		874920	MGT	Interlab_D	EM2205473004	<0.005		<0.005		<0.005		<0.005		<0.005		<0.005
RPD								0		0		0		0		0		0
C05.01	SX_OB_20220327_07_55_SS_Pr	27/03/2022		EM2205473	ALSE-Melbourne	Normal		<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050
C05.01	SX_OB_20220327_07_58_SS_Tr	27/03/2022		874920	MGT	Interlab_D	EM2205473004		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	
RPD									0		0		0		0		0	
C05.01	SX_OB_20220327_07_55_SS_Pr	27/03/2022		EM2205473	ALSE-Melbourne	Normal			<0.00002		<0.00002		<0.00002		<0.00002		<0.00002	
C05.01	SX_OB_20220327_07_58_SS_Du	27/03/2022		EM2205473	ALSE-Melbourne	Field_D	EM2205473013		<0.00002		<0.00002		<0.00002		<0.00002		<0.00002	
RPD									0		0		0		0		0	
C05.01	SX_OB_20220327_07_55_SS_Pr	27/03/2022		EM2205473	ALSE-Melbourne	Normal			<0.00002		<0.00002		<0.00002		<0.00002		<0.00002	
C05.01	SX_OB_20220327_07_58_SS_Tr	27/03/2022		874920	MGT	Interlab_D	EM2205473013		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	
RPD									0		0		0		0		0	
C02.01	SX_IB_20220328_15_44_SS_Pri	28/03/2022		875283	MGT	Normal		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005
C02.01	SX_IB_20220328_15_47_SS_Du	28/03/2022		875283	MGT	Field_D	M22-Ma60487	<0.005		<0.005		<0.005		<0.005		<0.005		<0.005
RPD								0		0		0		0		0		0
C02.01	SX_IB_20220328_15_44_SS_Pri	28/03/2022		875283	MGT	Normal		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005
C02.01	SX_IB_20220328_15_48_SS_Tri	28/03/2022		EM2205583	ALSE-Melbourne	Interlab_D	M22-Ma60487	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050
RPD								0		0		0		0		0		0
C02.01	SX_IB_20220328_15_44_SS_Pri	28/03/2022		875283	MGT	Normal			<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	
C02.01	SX_IB_20220328_15_47_SS_Du	28/03/2022		875283	MGT	Field_D	M22-Ma60495		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	
RPD									0		0		0		0		0	
C02.01	SX_IB_20220328_15_44_SS_Pri	28/03/2022		875283	MGT	Normal			<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	
C02.01	SX_IB_20220328_15_47_SS_Du	28/03/2022		875283	MGT	Field_D	M22-Ma60503		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	
RPD									0		0		0		0		0	
C02.01	SX_IB_20220328_15_44_SS_Pri	28/03/2022		875283	MGT	Normal			<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	
C02.01	SX_IB_20220328_15_48_SS_Tri	28/03/2022		EM2205583	ALSE-Melbourne	Interlab_D	M22-Ma60503		<0.00002		<0.00002		<0.00002		<0.00002		<0.00002	
RPD									0		0		0		0		0	
C02.01	SX_IB_20220328_07_41_SS_Pri	28/03/2022		EM2205583	ALSE-Melbourne	Normal		<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050
C02.01	SX_IB_20220328_07_45_SS_Du	28/03/2022		EM2205583	ALSE-Melbourne	Field_D	EM2205583001	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050
RPD								0	0	0	0	0	0	0	0	0	0	0
C02.01	SX_IB_20220328_07_41_SS_Pri	28/03/2022		EM2205583	ALSE-Melbourne	Normal		<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050
C02.01	SX_IB_20220328_07_46_SS_Tri	28/03/2022		875283	MGT	Interlab_D	EM2205583001	<0.005		<0.005		<0.005		<0.005		<0.005		<0.005
RPD								0		0		0		0		0		0
C02.01	SX_IB_20220328_07_41_SS_Pri	28/03/2022		EM2205583	ALSE-Melbourne	Normal		<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050
C02.01	SX_IB_20220328_07_46_SS_Tri	28/03/2022		875283	MGT	Interlab_D	EM2205583001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	
RPD									0		0		0		0		0	
C02.01	SX_IB_20220328_07_41_SS_Pri	28/03/2022		EM2205583	ALSE-Melbourne	Normal			<0.00002		<0.00002		<0.00002		<0.00002		<0.00002	
C02.01	SX_IB_20220328_07_45_SS_Du	28/03/2022		EM2205583	ALSE-Melbourne	Field_D	EM2205583009		<0.00002		<0.00002		<0.00002		<0.00002		<0.00002	
RPD									0		0		0		0		0	
C02.01	SX_IB_20220328_07_41_SS_Pri	28/03/2022		EM2205583	ALSE-Melbourne	Normal			<0.00002		<0.00002		<0.00002		<0.00002		<0.00002	
C02.01	SX_IB_20220328_07_46_SS_Tri	28/03/2022		875283	MGT	Interlab_D	EM2205583009		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	
RPD									0		0		0		0		0	

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

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

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

								Perfluorononanesulfonic acid (PFNS)(trace)		Perfluorooctanoic acid (PFOA)		Perfluorooctane sulfonamide (PFOSA)		Perfluoropentanoic acid (PFPeA)		Perfluoropentane sulfonic acid (PFPeS)		Perfluoropropanesulfonic
								mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L
EQL								0.00001	0.005	0.00001	0.005	0.00002	0.005	0.00001	0.005	0.00001	0.005	0.00001
Location Code	**Field ID**	**Date**	**Depth**	**Lab Report Number**	**Lab Name**	**Sample Type**	**Parent Sample**											
C02.01	SX_IB_20220316_16_12_SS_Pri	16/03/2022		872036	MGT	Normal			<0.005		<0.005		<0.005		<0.005		<0.005	
C02.01	SX_IB_20220316_16_15_SS_Du	16/03/2022		872036	MGT	Field_D	M22-Ma34703		<0.005		<0.005		<0.005		<0.005		<0.005	
RPD									0		0		0		0		0	
C02.01	SX_IB_20220316_16_12_SS_Pri	16/03/2022		872036	MGT	Normal			<0.005		<0.005		<0.005		<0.005		<0.005	
C02.01	SX_IB_20220316_16_16_SS_Tri	16/03/2022		EM2204736	ALSE-Melbourne	Interlab_D	M22-Ma34703			<0.00001	<0.0050	<0.00005	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	
RPD											0		0		0		0	
C02.01	SX_IB_20220316_16_12_SS_Pri	16/03/2022		872036	MGT	Normal		<0.00001		<0.00001		<0.00005		<0.00001		<0.00001		<0.00001
C02.01	SX_IB_20220316_16_15_SS_Du	16/03/2022		872036	MGT	Field_D	M22-Ma34711	<0.00001		<0.00001		<0.00005		<0.00001		<0.00001		<0.00001
RPD								0		0		0		0		0		0
C02.01	SX_IB_20220316_16_12_SS_Pri	16/03/2022		872036	MGT	Normal		<0.00001		<0.00001		<0.00005		<0.00001		<0.00001		<0.00001
C02.01	SX_IB_20220316_16_15_SS_Du	16/03/2022		872036	MGT	Field_D	M22-Ma34719	<0.00001		<0.00001		<0.00005		<0.00001		<0.00001		<0.00001
RPD								0		0		0		0		0		0
C02.01	SX_IB_20220316_16_12_SS_Pri	16/03/2022		872036	MGT	Normal		<0.00001		<0.00001		<0.00005		<0.00001		<0.00001		<0.00001
C02.01	SX_IB_20220316_16_16_SS_Tri	16/03/2022		EM2204736	ALSE-Melbourne	Interlab_D	M22-Ma34719			<0.00001		<0.00002		<0.00002		<0.00002		
RPD										0		0		0		0		
C02.01	SX_IB_20220316_08_17_SS_Pri	16/03/2022		EM2204736	ALSE-Melbourne	Normal				<0.00001	<0.0050	<0.00005	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	
C02.01	SX_IB_20220316_08_20_SS_Du	16/03/2022		EM2204736	ALSE-Melbourne	Field_D	EM2204736001			<0.00001	<0.0050	<0.00005	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	
RPD										0	0	0	0	0	0	0	0	
C02.01	SX_IB_20220316_08_17_SS_Pri	16/03/2022		EM2204736	ALSE-Melbourne	Normal				<0.00001	<0.0050	<0.00005	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	
C02.01	SX_IB_20220316_08_22_SS_Tri	16/03/2022		872036	MGT	Interlab_D	EM2204736001		<0.005		<0.005		<0.005		<0.005		<0.005	
RPD											0		0		0		0	
C02.01	SX_IB_20220316_08_17_SS_Pri	16/03/2022		EM2204736	ALSE-Melbourne	Normal				<0.00001	<0.0050	<0.00005	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	
C02.01	SX_IB_20220316_08_22_SS_Tri	16/03/2022		872036	MGT	Interlab_D	EM2204736001	<0.00001		<0.00001		<0.00005		<0.00001		<0.00001		<0.00001
RPD										0		0		0		0		
C02.01	SX_IB_20220316_08_17_SS_Pri	16/03/2022		EM2204736	ALSE-Melbourne	Normal				<0.00001		<0.00002		<0.00002		<0.00002		
C02.01	SX_IB_20220316_08_20_SS_Du	16/03/2022		EM2204736	ALSE-Melbourne	Field_D	EM2204736009			<0.00001		<0.00002		<0.00002		<0.00002		
RPD										0		0		0		0		
C02.01	SX_IB_20220316_08_17_SS_Pri	16/03/2022		EM2204736	ALSE-Melbourne	Normal				<0.00001		<0.00002		<0.00002		<0.00002		
C02.01	SX_IB_20220316_08_22_SS_Tri	16/03/2022		872036	MGT	Interlab_D	EM2204736009	<0.00001		<0.00001		<0.00005		<0.00001		<0.00001		<0.00001
RPD										0		0		0		0		
A04.01	SX_OB_20220317_16_02_SS_Pr	17/03/2022		872310	MGT	Normal			<0.005		<0.005		<0.005		<0.005		<0.005	
A04.01	SX_OB_20220317_16_02_SS_Du	17/03/2022		872310	MGT	Field_D	M22-Ma36471		<0.005		<0.005		<0.005		<0.005		<0.005	
RPD									0		0		0		0		0	
A04.01	SX_OB_20220317_16_02_SS_Pr	17/03/2022		872310	MGT	Normal			<0.005		<0.005		<0.005		<0.005		<0.005	
A04.01	SX_OB_20220317_16_03_SS_Tr	17/03/2022		EM2204843	ALSE-Melbourne	Interlab_D	M22-Ma36471			<0.00001	<0.0050	<0.00005	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	
RPD											0		0		0		0	
A04.01	SX_OB_20220317_16_02_SS_Pr	17/03/2022		872310	MGT	Normal		<0.00001		<0.00001		<0.00005		<0.00001		<0.00001		<0.00001
A04.01	SX_OB_20220317_16_02_SS_Du	17/03/2022		872310	MGT	Field_D	M22-Ma36481	<0.00001		<0.00001		<0.00005		<0.00001		<0.00001		<0.00001
RPD								0		0		0		0		0		0
A04.01	SX_OB_20220317_16_02_SS_Pr	17/03/2022		872310	MGT	Normal		<0.00001		<0.00001		<0.00005		<0.00001		<0.00001		<0.00001
A04.01	SX_OB_20220317_16_02_SS_Du	17/03/2022		872310	MGT	Field_D	M22-Ma36489	<0.00001		<0.00001		<0.00005		<0.00001		<0.00001		<0.00001
RPD								0		0		0		0		0		0
A04.01	SX_OB_20220317_16_02_SS_Pr	17/03/2022		872310	MGT	Normal		<0.00001		<0.00001		<0.00005		<0.00001		<0.00001		<0.00001
A04.01	SX_OB_20220317_16_03_SS_Tr	17/03/2022		EM2204843	ALSE-Melbourne	Interlab_D	M22-Ma36489			<0.00001		<0.00002		<0.00002		<0.00002		
RPD										0		0		0		0		
C02.01	SX_IB_20220317_07_53_SS_Pri	17/03/2022		EM2204843	ALSE-Melbourne	Normal				<0.00001	<0.0050	<0.00005	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	
C02.01	SX_IB_20220317_07_53_SS_Du	17/03/2022		EM2204843	ALSE-Melbourne	Field_D	EM2204843001			<0.00001	<0.0050	<0.00005	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	
RPD										0	0	0	0	0	0	0	0	
C02.01	SX_IB_20220317_07_53_SS_Pri	17/03/2022		EM2204843	ALSE-Melbourne	Normal				<0.00001	<0.0050	<0.00005	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	
C02.01	SX_IB_20220317_07_54_SS_Tri	17/03/2022		872310	MGT	Interlab_D	EM2204843001		<0.005		<0.005		<0.005		<0.005		<0.005	
RPD											0		0		0		0	
C02.01	SX_IB_20220317_07_53_SS_Pri	17/03/2022		EM2204843	ALSE-Melbourne	Normal				<0.00001	<0.0050	<0.00005	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	
C02.01	SX_IB_20220317_07_54_SS_Tri	17/03/2022		872310	MGT	Interlab_D	EM2204843001	<0.00001		<0.00001		<0.00005		<0.00001		<0.00001		<0.00001
RPD										0		0		0		0		
C02.01	SX_IB_20220317_07_53_SS_Pri	17/03/2022		EM2204843	ALSE-Melbourne	Normal				<0.00001		<0.00002		<0.00002		<0.00002		
C02.01	SX_IB_20220317_07_53_SS_Du	17/03/2022		EM2204843	ALSE-Melbourne	Field_D	EM2204843011			<0.00001		<0.00002		<0.00002		<0.00002		
RPD										0		0		0		0		
C02.01	SX_IB_20220317_07_53_SS_Pri	17/03/2022		EM2204843	ALSE-Melbourne	Normal				<0.00001		<0.00002		<0.00002		<0.00002		
C02.01	SX_IB_20220317_07_54_SS_Tri	17/03/2022		872310	MGT	Interlab_D	EM2204843011	<0.00001		<0.00001		<0.00005		<0.00001		<0.00001		<0.00001
RPD										0		0		0		0		
C05.01	SX_OB_20220327_15_52_SS_Pr	27/03/2022		874920	MGT	Normal			<0.005		<0.005		<0.005		<0.005		<0.005	
C05.01	SX_OB_20220327_15_59_SS_Du	27/03/2022		874920	MGT	Field_D	M22-Ma57512		<0.005		<0.005		<0.005		<0.005		<0.005	
RPD									0		0		0		0		0	
C05.01	SX_OB_20220327_15_52_SS_Pr	27/03/2022		874920	MGT	Normal			<0.005		<0.005		<0.005		<0.005		<0.005	

								Perfluorononanesulfonic acid (PFNS)(trace)		Perfluorooctanoic acid (PFOA)		Perfluorooctane sulfonamide (PFOSA)		Perfluoropentanoic acid (PFPeA)		Perfluoropentane sulfonic acid (PFPeS)		Perfluoropropanesulfonic
								mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L
C05.01	SX_OB_20220327_16_00_SS_Tr	27/03/2022		EM2205473	ALSE-Melbourne	Interlab_D	M22-Ma57512			<0.00001	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	
RPD											0		0		0		0	
C05.01	SX_OB_20220327_15_52_SS_Pr	27/03/2022		874920	MGT	Normal		<0.00001		<0.00001		<0.00005		<0.00001		<0.00001		<0.00001
C05.01	SX_OB_20220327_15_59_SS_Du	27/03/2022		874920	MGT	Field_D	M22-Ma57521	<0.00001		<0.00001		<0.00005		<0.00001		<0.00001		<0.00001
RPD								0		0		0		0		0		0
C05.01	SX_OB_20220327_15_52_SS_Pr	27/03/2022		874920	MGT	Normal		<0.00001		<0.00001		<0.00005		<0.00001		<0.00001		<0.00001
C05.01	SX_OB_20220327_15_59_SS_Du	27/03/2022		874920	MGT	Field_D	M22-Ma57530	<0.00001		<0.00001		<0.00005		<0.00001		<0.00001		<0.00001
RPD								0		0		0		0		0		0
C05.01	SX_OB_20220327_15_52_SS_Pr	27/03/2022		874920	MGT	Normal		<0.00001		<0.00001		<0.00005		<0.00001		<0.00001		<0.00001
C05.01	SX_OB_20220327_16_00_SS_Tr	27/03/2022		EM2205473	ALSE-Melbourne	Interlab_D	M22-Ma57530			<0.00001		<0.00005		<0.00002		<0.00002		
RPD										0		0		0		0		
C05.01	SX_OB_20220327_07_55_SS_Pr	27/03/2022		EM2205473	ALSE-Melbourne	Normal				<0.00001	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	
C05.01	SX_OB_20220327_07_58_SS_Du	27/03/2022		EM2205473	ALSE-Melbourne	Field_D	EM2205473004			<0.00001	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	
RPD										0	0	0	0	0	0	0	0	
C05.01	SX_OB_20220327_07_55_SS_Pr	27/03/2022		EM2205473	ALSE-Melbourne	Normal				<0.00001	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	
C05.01	SX_OB_20220327_07_58_SS_Tr	27/03/2022		874920	MGT	Interlab_D	EM2205473004		<0.005		<0.005		<0.005		<0.005		<0.005	
RPD											0		0		0		0	
C05.01	SX_OB_20220327_07_55_SS_Pr	27/03/2022		EM2205473	ALSE-Melbourne	Normal				<0.00001	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	
C05.01	SX_OB_20220327_07_58_SS_Tr	27/03/2022		874920	MGT	Interlab_D	EM2205473004	<0.00001		<0.00001		<0.00005		<0.00001		<0.00001		<0.00001
RPD										0		0		0		0		
C05.01	SX_OB_20220327_07_55_SS_Pr	27/03/2022		EM2205473	ALSE-Melbourne	Normal				<0.00001		<0.00005		<0.00002		<0.00002		
C05.01	SX_OB_20220327_07_58_SS_Du	27/03/2022		EM2205473	ALSE-Melbourne	Field_D	EM2205473013			<0.00001		<0.00005		<0.00002		<0.00002		
RPD										0		0		0		0		
C05.01	SX_OB_20220327_07_55_SS_Pr	27/03/2022		EM2205473	ALSE-Melbourne	Normal				<0.00001		<0.00005		<0.00002		<0.00002		
C05.01	SX_OB_20220327_07_58_SS_Tr	27/03/2022		874920	MGT	Interlab_D	EM2205473013	<0.00001		<0.00001		<0.00005		<0.00001		<0.00001		<0.00001
RPD										0		0		0		0		
C02.01	SX_IB_20220328_15_44_SS_Pri	28/03/2022		875283	MGT	Normal			<0.005		<0.005		<0.005		<0.005		<0.005	
C02.01	SX_IB_20220328_15_47_SS_Du	28/03/2022		875283	MGT	Field_D	M22-Ma60487		<0.005		<0.005		<0.005		<0.005		<0.005	
RPD									0		0		0		0		0	
C02.01	SX_IB_20220328_15_44_SS_Pri	28/03/2022		875283	MGT	Normal			<0.005		<0.005		<0.005		<0.005		<0.005	
C02.01	SX_IB_20220328_15_48_SS_Tri	28/03/2022		EM2205583	ALSE-Melbourne	Interlab_D	M22-Ma60487			<0.00001	<0.0050	<0.00005	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	
RPD											0		0		0		0	
C02.01	SX_IB_20220328_15_44_SS_Pri	28/03/2022		875283	MGT	Normal		<0.00001		<0.00001		<0.00005		<0.00001		<0.00001		<0.00001
C02.01	SX_IB_20220328_15_47_SS_Du	28/03/2022		875283	MGT	Field_D	M22-Ma60495	<0.00001		<0.00001		<0.00005		<0.00001		<0.00001		<0.00001
RPD								0		0		0		0		0		0
C02.01	SX_IB_20220328_15_44_SS_Pri	28/03/2022		875283	MGT	Normal		<0.00001		<0.00001		<0.00005		<0.00001		<0.00001		<0.00001
C02.01	SX_IB_20220328_15_47_SS_Du	28/03/2022		875283	MGT	Field_D	M22-Ma60503	<0.00001		<0.00001		<0.00005		<0.00001		<0.00001		<0.00001
RPD								0		0		0		0		0		0
C02.01	SX_IB_20220328_15_44_SS_Pri	28/03/2022		875283	MGT	Normal		<0.00001		<0.00001		<0.00005		<0.00001		<0.00001		<0.00001
C02.01	SX_IB_20220328_15_48_SS_Tri	28/03/2022		EM2205583	ALSE-Melbourne	Interlab_D	M22-Ma60503			<0.00001		<0.00005		<0.00002		<0.00002		
RPD										0		0		0		0		
C02.01	SX_IB_20220328_07_41_SS_Pri	28/03/2022		EM2205583	ALSE-Melbourne	Normal				<0.00001	<0.0050	<0.00005	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	
C02.01	SX_IB_20220328_07_45_SS_Du	28/03/2022		EM2205583	ALSE-Melbourne	Field_D	EM2205583001			<0.00001	<0.0050	<0.00005	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	
RPD										0	0	0	0	0	0	0	0	
C02.01	SX_IB_20220328_07_41_SS_Pri	28/03/2022		EM2205583	ALSE-Melbourne	Normal				<0.00001	<0.0050	<0.00005	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	
C02.01	SX_IB_20220328_07_46_SS_Tri	28/03/2022		875283	MGT	Interlab_D	EM2205583001		<0.005		<0.005		<0.005		<0.005		<0.005	
RPD											0		0		0		0	
C02.01	SX_IB_20220328_07_41_SS_Pri	28/03/2022		EM2205583	ALSE-Melbourne	Normal				<0.00001	<0.0050	<0.00005	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	
C02.01	SX_IB_20220328_07_46_SS_Tri	28/03/2022		875283	MGT	Interlab_D	EM2205583001	<0.00001		<0.00001		<0.00005		<0.00001		<0.00001		<0.00001
RPD										0		0		0		0		
C02.01	SX_IB_20220328_07_41_SS_Pri	28/03/2022		EM2205583	ALSE-Melbourne	Normal				<0.00001		<0.00005		<0.00002		<0.00002		
C02.01	SX_IB_20220328_07_45_SS_Du	28/03/2022		EM2205583	ALSE-Melbourne	Field_D	EM2205583009			<0.00001		<0.00005		<0.00002		<0.00002		
RPD										0		0		0		0		
C02.01	SX_IB_20220328_07_41_SS_Pri	28/03/2022		EM2205583	ALSE-Melbourne	Normal				<0.00001		<0.00005		<0.00002		<0.00002		
C02.01	SX_IB_20220328_07_46_SS_Tri	28/03/2022		875283	MGT	Interlab_D	EM2205583009	<0.00001		<0.00001		<0.00005		<0.00001		<0.00001		<0.00001
RPD										0		0		0		0		

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

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

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

								acid (PFPrS)		Perfluorotetradecanoic acid (PFTeDA)		Perfluorotridecanoic acid (PFTrDA)		Perfluoroundecanoic acid (PFUnDA)		Perfluorooctanesulfonic acid (PFOS)		Perfluorohexane sulfonic acid (PFHxS)	
								mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg
EQL								0.005	0.00001	0.005	0.00001	0.005	0.00001	0.005	0.00001	0.005	0.00001	0.005	0.00001	0.005
Location Code	**Field ID**	**Date**	**Depth**	**Lab Report Number**	**Lab Name**	**Sample Type**	**Parent Sample**													
C02.01	SX_IB_20220316_16_12_SS_Pri	16/03/2022		872036	MGT	Normal		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005
C02.01	SX_IB_20220316_16_15_SS_Du	16/03/2022		872036	MGT	Field_D	M22-Ma34703	<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005
RPD								0		0		0		0		0		0		0
C02.01	SX_IB_20220316_16_12_SS_Pri	16/03/2022		872036	MGT	Normal		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005
C02.01	SX_IB_20220316_16_16_SS_Tri	16/03/2022		EM2204736	ALSE-Melbourne	Interlab_D	M22-Ma34703		<0.00005	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00001	<0.0050	<0.00001	<0.0050	<0.00001	<0.0050
RPD										0		0		0		0		0		0
C02.01	SX_IB_20220316_16_12_SS_Pri	16/03/2022		872036	MGT	Normal			<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	
C02.01	SX_IB_20220316_16_15_SS_Du	16/03/2022		872036	MGT	Field_D	M22-Ma34711		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	
RPD									0		0		0		0		0		0	
C02.01	SX_IB_20220316_16_12_SS_Pri	16/03/2022		872036	MGT	Normal			<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	
C02.01	SX_IB_20220316_16_15_SS_Du	16/03/2022		872036	MGT	Field_D	M22-Ma34719		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	
RPD									0		0		0		0		0		0	
C02.01	SX_IB_20220316_16_12_SS_Pri	16/03/2022		872036	MGT	Normal			<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	
C02.01	SX_IB_20220316_16_16_SS_Tri	16/03/2022		EM2204736	ALSE-Melbourne	Interlab_D	M22-Ma34719		<0.00005		<0.00002		<0.00002		<0.00001		<0.00001		<0.00001	
RPD									0		0		0		0		0		0	
C02.01	SX_IB_20220316_08_17_SS_Pri	16/03/2022		EM2204736	ALSE-Melbourne	Normal			<0.00005	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00001	<0.0050	<0.00001	<0.0050	<0.00001	<0.0050
C02.01	SX_IB_20220316_08_20_SS_Du	16/03/2022		EM2204736	ALSE-Melbourne	Field_D	EM2204736001		<0.00005	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00001	<0.0050	<0.00001	<0.0050	<0.00001	<0.0050
RPD									0	0	0	0	0	0	0	0	0	0	0	0
C02.01	SX_IB_20220316_08_17_SS_Pri	16/03/2022		EM2204736	ALSE-Melbourne	Normal			<0.00005	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00001	<0.0050	<0.00001	<0.0050	<0.00001	<0.0050
C02.01	SX_IB_20220316_08_22_SS_Tri	16/03/2022		872036	MGT	Interlab_D	EM2204736001	<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005
RPD										0		0		0		0		0		0
C02.01	SX_IB_20220316_08_17_SS_Pri	16/03/2022		EM2204736	ALSE-Melbourne	Normal			<0.00005	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00001	<0.0050	<0.00001	<0.0050	<0.00001	<0.0050
C02.01	SX_IB_20220316_08_22_SS_Tri	16/03/2022		872036	MGT	Interlab_D	EM2204736001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	
RPD									0		0		0		0		0		0	
C02.01	SX_IB_20220316_08_17_SS_Pri	16/03/2022		EM2204736	ALSE-Melbourne	Normal			<0.00005		<0.00002		<0.00002		<0.00001		<0.00001		<0.00001	
C02.01	SX_IB_20220316_08_20_SS_Du	16/03/2022		EM2204736	ALSE-Melbourne	Field_D	EM2204736009		<0.00005		<0.00002		<0.00002		<0.00001		<0.00001		<0.00001	
RPD									0		0		0		0		0		0	
C02.01	SX_IB_20220316_08_17_SS_Pri	16/03/2022		EM2204736	ALSE-Melbourne	Normal			<0.00005		<0.00002		<0.00002		<0.00001		<0.00001		<0.00001	
C02.01	SX_IB_20220316_08_22_SS_Tri	16/03/2022		872036	MGT	Interlab_D	EM2204736009		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	
RPD									0		0		0		0		0		0	
A04.01	SX_OB_20220317_16_02_SS_Pr	17/03/2022		872310	MGT	Normal		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005
A04.01	SX_OB_20220317_16_02_SS_Du	17/03/2022		872310	MGT	Field_D	M22-Ma36471	<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005
RPD								0		0		0		0		0		0		0
A04.01	SX_OB_20220317_16_02_SS_Pr	17/03/2022		872310	MGT	Normal		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005
A04.01	SX_OB_20220317_16_03_SS_Tr	17/03/2022		EM2204843	ALSE-Melbourne	Interlab_D	M22-Ma36471		<0.00005	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00001	<0.0050	<0.00001	<0.0050	<0.00001	<0.0050
RPD										0		0		0		0		0		0
A04.01	SX_OB_20220317_16_02_SS_Pr	17/03/2022		872310	MGT	Normal			<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	
A04.01	SX_OB_20220317_16_02_SS_Du	17/03/2022		872310	MGT	Field_D	M22-Ma36481		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	
RPD									0		0		0		0		0		0	
A04.01	SX_OB_20220317_16_02_SS_Pr	17/03/2022		872310	MGT	Normal			<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	
A04.01	SX_OB_20220317_16_02_SS_Du	17/03/2022		872310	MGT	Field_D	M22-Ma36489		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	
RPD									0		0		0		0		0		0	
A04.01	SX_OB_20220317_16_02_SS_Pr	17/03/2022		872310	MGT	Normal			<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	
A04.01	SX_OB_20220317_16_03_SS_Tr	17/03/2022		EM2204843	ALSE-Melbourne	Interlab_D	M22-Ma36489		<0.00005		<0.00002		<0.00002		<0.00001		<0.00001		<0.00001	
RPD									0		0		0		0		0		0	
C02.01	SX_IB_20220317_07_53_SS_Pri	17/03/2022		EM2204843	ALSE-Melbourne	Normal			<0.00005	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00001	<0.0050	<0.00001	<0.0050	<0.00001	<0.0050
C02.01	SX_IB_20220317_07_53_SS_Du	17/03/2022		EM2204843	ALSE-Melbourne	Field_D	EM2204843001		<0.00005	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00001	<0.0050	<0.00001	<0.0050	<0.00001	<0.0050
RPD									0	0	0	0	0	0	0	0	0	0	0	0
C02.01	SX_IB_20220317_07_53_SS_Pri	17/03/2022		EM2204843	ALSE-Melbourne	Normal			<0.00005	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00001	<0.0050	<0.00001	<0.0050	<0.00001	<0.0050
C02.01	SX_IB_20220317_07_54_SS_Tri	17/03/2022		872310	MGT	Interlab_D	EM2204843001	<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005
RPD										0		0		0		0		0		0
C02.01	SX_IB_20220317_07_53_SS_Pri	17/03/2022		EM2204843	ALSE-Melbourne	Normal			<0.00005	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00001	<0.0050	<0.00001	<0.0050	<0.00001	<0.0050
C02.01	SX_IB_20220317_07_54_SS_Tri	17/03/2022		872310	MGT	Interlab_D	EM2204843001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	
RPD									0		0		0		0		0		0	
C02.01	SX_IB_20220317_07_53_SS_Pri	17/03/2022		EM2204843	ALSE-Melbourne	Normal			<0.00005		<0.00002		<0.00002		<0.00001		<0.00001		<0.00001	
C02.01	SX_IB_20220317_07_53_SS_Du	17/03/2022		EM2204843	ALSE-Melbourne	Field_D	EM2204843011		<0.00005		<0.00002		<0.00002		<0.00001		<0.00001		<0.00001	
RPD									0		0		0		0		0		0	
C02.01	SX_IB_20220317_07_53_SS_Pri	17/03/2022		EM2204843	ALSE-Melbourne	Normal			<0.00005		<0.00002		<0.00002		<0.00001		<0.00001		<0.00001	
C02.01	SX_IB_20220317_07_54_SS_Tri	17/03/2022		872310	MGT	Interlab_D	EM2204843011		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	
RPD									0		0		0		0		0		0	
C05.01	SX_OB_20220327_15_52_SS_Pr	27/03/2022		874920	MGT	Normal		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005
C05.01	SX_OB_20220327_15_59_SS_Du	27/03/2022		874920	MGT	Field_D	M22-Ma57512	<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005
RPD								0		0		0		0		0		0		0
C05.01	SX_OB_20220327_15_52_SS_Pr	27/03/2022		874920	MGT	Normal		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005

								Perfluoropentanesulfonic acid (PFPrS)	Perfluorotetradecanoic acid (PFTeDA)		Perfluorotridecanoic acid (PFTrDA)		Perfluoroundecanoic acid (PFUnDA)		Perfluorooctanesulfonic acid (PFOS)		Perfluorohexane sulfonic acid (PFHxS)	
								mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg
C05.01	SX_OB_20220327_16_00_SS_Tr	27/03/2022		EM2205473	ALSE-Melbourne	Interlab_D	M22-Ma57512		<0.00005	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00001	<0.0050	<0.00001	<0.0050
RPD										0		0		0		0		0
C05.01	SX_OB_20220327_15_52_SS_Pr	27/03/2022		874920	MGT	Normal			<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	
C05.01	SX_OB_20220327_15_59_SS_Du	27/03/2022		874920	MGT	Field_D	M22-Ma57521		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	
RPD									0		0		0		0		0	
C05.01	SX_OB_20220327_15_52_SS_Pr	27/03/2022		874920	MGT	Normal			<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	
C05.01	SX_OB_20220327_15_59_SS_Du	27/03/2022		874920	MGT	Field_D	M22-Ma57530		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	
RPD									0		0		0		0		0	
C05.01	SX_OB_20220327_15_52_SS_Pr	27/03/2022		874920	MGT	Normal			<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	
C05.01	SX_OB_20220327_16_00_SS_Tr	27/03/2022		EM2205473	ALSE-Melbourne	Interlab_D	M22-Ma57530		<0.00005		<0.00002		<0.00002		<0.00001		<0.00001	
RPD									0		0		0		0		0	
C05.01	SX_OB_20220327_07_55_SS_Pr	27/03/2022		EM2205473	ALSE-Melbourne	Normal			<0.00005	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00001	<0.0050	<0.00001	<0.0050
C05.01	SX_OB_20220327_07_58_SS_Du	27/03/2022		EM2205473	ALSE-Melbourne	Field_D	EM2205473004		<0.00005	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00001	<0.0050	<0.00001	<0.0050
RPD									0	0	0	0	0	0	0	0	0	0
C05.01	SX_OB_20220327_07_55_SS_Pr	27/03/2022		EM2205473	ALSE-Melbourne	Normal			<0.00005	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00001	<0.0050	<0.00001	<0.0050
C05.01	SX_OB_20220327_07_58_SS_Tr	27/03/2022		874920	MGT	Interlab_D	EM2205473004	<0.005		<0.005		<0.005		<0.005		<0.005		<0.005
RPD										0		0		0		0		0
C05.01	SX_OB_20220327_07_55_SS_Pr	27/03/2022		EM2205473	ALSE-Melbourne	Normal			<0.00005	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00001	<0.0050	<0.00001	<0.0050
C05.01	SX_OB_20220327_07_58_SS_Tr	27/03/2022		874920	MGT	Interlab_D	EM2205473004		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	
RPD									0		0		0		0		0	
C05.01	SX_OB_20220327_07_55_SS_Pr	27/03/2022		EM2205473	ALSE-Melbourne	Normal			<0.00005		<0.00002		<0.00002		<0.00001		<0.00001	
C05.01	SX_OB_20220327_07_58_SS_Du	27/03/2022		EM2205473	ALSE-Melbourne	Field_D	EM2205473013		<0.00005		<0.00002		<0.00002		<0.00001		<0.00001	
RPD									0		0		0		0		0	
C05.01	SX_OB_20220327_07_55_SS_Pr	27/03/2022		EM2205473	ALSE-Melbourne	Normal			<0.00005		<0.00002		<0.00002		<0.00001		<0.00001	
C05.01	SX_OB_20220327_07_58_SS_Tr	27/03/2022		874920	MGT	Interlab_D	EM2205473013		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	
RPD									0		0		0		0		0	
C02.01	SX_IB_20220328_15_44_SS_Pri	28/03/2022		875283	MGT	Normal		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005
C02.01	SX_IB_20220328_15_47_SS_Du	28/03/2022		875283	MGT	Field_D	M22-Ma60487	<0.005		<0.005		<0.005		<0.005		<0.005		<0.005
RPD								0		0		0		0		0		0
C02.01	SX_IB_20220328_15_44_SS_Pri	28/03/2022		875283	MGT	Normal		<0.005		<0.005		<0.005		<0.005		<0.005		<0.005
C02.01	SX_IB_20220328_15_48_SS_Tri	28/03/2022		EM2205583	ALSE-Melbourne	Interlab_D	M22-Ma60487		<0.00005	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00001	<0.0050	<0.00001	<0.0050
RPD										0		0		0		0		0
C02.01	SX_IB_20220328_15_44_SS_Pri	28/03/2022		875283	MGT	Normal			<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	
C02.01	SX_IB_20220328_15_47_SS_Du	28/03/2022		875283	MGT	Field_D	M22-Ma60495		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	
RPD									0		0		0		0		0	
C02.01	SX_IB_20220328_15_44_SS_Pri	28/03/2022		875283	MGT	Normal			<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	
C02.01	SX_IB_20220328_15_47_SS_Du	28/03/2022		875283	MGT	Field_D	M22-Ma60503		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	
RPD									0		0		0		0		0	
C02.01	SX_IB_20220328_15_44_SS_Pri	28/03/2022		875283	MGT	Normal			<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	
C02.01	SX_IB_20220328_15_48_SS_Tri	28/03/2022		EM2205583	ALSE-Melbourne	Interlab_D	M22-Ma60503		<0.00005		<0.00002		<0.00002		<0.00001		<0.00001	
RPD									0		0		0		0		0	
C02.01	SX_IB_20220328_07_41_SS_Pri	28/03/2022		EM2205583	ALSE-Melbourne	Normal			<0.00005	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00001	<0.0050	<0.00001	<0.0050
C02.01	SX_IB_20220328_07_45_SS_Du	28/03/2022		EM2205583	ALSE-Melbourne	Field_D	EM2205583001		<0.00005	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00001	<0.0050	<0.00001	<0.0050
RPD									0	0	0	0	0	0	0	0	0	0
C02.01	SX_IB_20220328_07_41_SS_Pri	28/03/2022		EM2205583	ALSE-Melbourne	Normal			<0.00005	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00001	<0.0050	<0.00001	<0.0050
C02.01	SX_IB_20220328_07_46_SS_Tri	28/03/2022		875283	MGT	Interlab_D	EM2205583001	<0.005		<0.005		<0.005		<0.005		<0.005		<0.005
RPD										0		0		0		0		0
C02.01	SX_IB_20220328_07_41_SS_Pri	28/03/2022		EM2205583	ALSE-Melbourne	Normal			<0.00005	<0.0050	<0.00002	<0.0050	<0.00002	<0.0050	<0.00001	<0.0050	<0.00001	<0.0050
C02.01	SX_IB_20220328_07_46_SS_Tri	28/03/2022		875283	MGT	Interlab_D	EM2205583001		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	
RPD									0		0		0		0		0	
C02.01	SX_IB_20220328_07_41_SS_Pri	28/03/2022		EM2205583	ALSE-Melbourne	Normal			<0.00005		<0.00002		<0.00002		<0.00001		<0.00001	
C02.01	SX_IB_20220328_07_45_SS_Du	28/03/2022		EM2205583	ALSE-Melbourne	Field_D	EM2205583009		<0.00005		<0.00002		<0.00002		<0.00001		<0.00001	
RPD									0		0		0		0		0	
C02.01	SX_IB_20220328_07_41_SS_Pri	28/03/2022		EM2205583	ALSE-Melbourne	Normal			<0.00005		<0.00002		<0.00002		<0.00001		<0.00001	
C02.01	SX_IB_20220328_07_46_SS_Tri	28/03/2022		875283	MGT	Interlab_D	EM2205583009		<0.00001		<0.00001		<0.00001		<0.00001		<0.00001	
RPD									0		0		0		0		0	

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

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

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

								Sum of PFHxS and PFOS		Sum of US EPA PFAS (PFOS + PFOA)*		Sum of enHealth PFAS (PFHxS + PFOS + PFOA)*		Sum of PFAS	Sum of PFAS	1,1-dichloroethane	1,1-dichloroethene	1,2,3-trichloropropane
								mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/kg	mg/kg	mg/kg
EQL								0.00001	0.005	0.00001	0.005	0.00001	0.005	0.00001	0.05	0.5	0.5	0.5
Location Code	Field ID	Date	Depth	Lab Report Number	Lab Name	Sample Type	Parent Sample											
C02.01	SX_IB_20220316_16_12_SS_Pri	16/03/2022		872036	MGT	Normal			<0.005		<0.005		<0.005		<0.05	<0.5	<0.5	<0.5
C02.01	SX_IB_20220316_16_15_SS_Du	16/03/2022		872036	MGT	Field_D	M22-Ma34703		<0.005		<0.005		<0.005		<0.05	<0.5	<0.5	<0.5
RPD									0		0		0		0	0	0	0
C02.01	SX_IB_20220316_16_12_SS_Pri	16/03/2022		872036	MGT	Normal			<0.005		<0.005		<0.005		<0.05	<0.5	<0.5	<0.5
C02.01	SX_IB_20220316_16_16_SS_Tri	16/03/2022		EM2204736	ALSE-Melbourne	Interlab_D	M22-Ma34703	<0.00001	<0.0050					<0.00010	<0.0500		<0.50	
RPD									0						0		0	
C02.01	SX_IB_20220316_16_12_SS_Pri	16/03/2022		872036	MGT	Normal		<0.00001		<0.00001		<0.00001		<0.0001				
C02.01	SX_IB_20220316_16_15_SS_Du	16/03/2022		872036	MGT	Field_D	M22-Ma34711	<0.00001		<0.00001		<0.00001		<0.0001				
RPD								0		0		0		0				
C02.01	SX_IB_20220316_16_12_SS_Pri	16/03/2022		872036	MGT	Normal		<0.00001		<0.00001		<0.00001		<0.0001				
C02.01	SX_IB_20220316_16_15_SS_Du	16/03/2022		872036	MGT	Field_D	M22-Ma34719	<0.00001		<0.00001		<0.00001		<0.0001				
RPD								0		0		0		0				
C02.01	SX_IB_20220316_16_12_SS_Pri	16/03/2022		872036	MGT	Normal		<0.00001		<0.00001		<0.00001		<0.0001				
C02.01	SX_IB_20220316_16_16_SS_Tri	16/03/2022		EM2204736	ALSE-Melbourne	Interlab_D	M22-Ma34719	<0.00001						<0.00001				
RPD								0						0				
C02.01	SX_IB_20220316_08_17_SS_Pri	16/03/2022		EM2204736	ALSE-Melbourne	Normal		<0.00001	<0.0050					<0.00010	<0.0500		<0.50	
C02.01	SX_IB_20220316_08_20_SS_Du	16/03/2022		EM2204736	ALSE-Melbourne	Field_D	EM2204736001	<0.00001	<0.0050					<0.00010	<0.0500		<0.50	
RPD								0	0					0	0		0	
C02.01	SX_IB_20220316_08_17_SS_Pri	16/03/2022		EM2204736	ALSE-Melbourne	Normal		<0.00001	<0.0050					<0.00010	<0.0500		<0.50	
C02.01	SX_IB_20220316_08_22_SS_Tri	16/03/2022		872036	MGT	Interlab_D	EM2204736001		<0.005		<0.005		<0.005		<0.05	<0.5	<0.5	<0.5
RPD									0						0		0	
C02.01	SX_IB_20220316_08_17_SS_Pri	16/03/2022		EM2204736	ALSE-Melbourne	Normal		<0.00001	<0.0050					<0.00010	<0.0500		<0.50	
C02.01	SX_IB_20220316_08_22_SS_Tri	16/03/2022		872036	MGT	Interlab_D	EM2204736001	<0.00001		<0.00001		<0.00001		<0.0001				
RPD								0						0				
C02.01	SX_IB_20220316_08_17_SS_Pri	16/03/2022		EM2204736	ALSE-Melbourne	Normal		<0.00001						<0.00001				
C02.01	SX_IB_20220316_08_20_SS_Du	16/03/2022		EM2204736	ALSE-Melbourne	Field_D	EM2204736009	<0.00001						<0.00001				
RPD								0						0				
C02.01	SX_IB_20220316_08_17_SS_Pri	16/03/2022		EM2204736	ALSE-Melbourne	Normal		<0.00001						<0.00001				
C02.01	SX_IB_20220316_08_22_SS_Tri	16/03/2022		872036	MGT	Interlab_D	EM2204736009	<0.00001		<0.00001		<0.00001		<0.0001				
RPD								0						0				
A04.01	SX_OB_20220317_16_02_SS_Pr	17/03/2022		872310	MGT	Normal			<0.005		<0.005		<0.005		<0.05	<0.5	<0.5	<0.5
A04.01	SX_OB_20220317_16_02_SS_Du	17/03/2022		872310	MGT	Field_D	M22-Ma36471		<0.005		<0.005		<0.005		<0.05	<0.5	<0.5	<0.5
RPD									0		0		0		0	0	0	0
A04.01	SX_OB_20220317_16_02_SS_Pr	17/03/2022		872310	MGT	Normal			<0.005		<0.005		<0.005		<0.05	<0.5	<0.5	<0.5
A04.01	SX_OB_20220317_16_03_SS_Tr	17/03/2022		EM2204843	ALSE-Melbourne	Interlab_D	M22-Ma36471	<0.00001	<0.0050					<0.00010	<0.0500		<0.50	
RPD									0						0		0	
A04.01	SX_OB_20220317_16_02_SS_Pr	17/03/2022		872310	MGT	Normal		<0.00001		<0.00001		<0.00001		<0.0001				
A04.01	SX_OB_20220317_16_02_SS_Du	17/03/2022		872310	MGT	Field_D	M22-Ma36481	<0.00001		<0.00001		<0.00001		<0.0001				
RPD								0		0		0		0				
A04.01	SX_OB_20220317_16_02_SS_Pr	17/03/2022		872310	MGT	Normal		<0.00001		<0.00001		<0.00001		<0.0001				
A04.01	SX_OB_20220317_16_02_SS_Du	17/03/2022		872310	MGT	Field_D	M22-Ma36489	<0.00001		<0.00001		<0.00001		<0.0001				
RPD								0		0		0		0				
A04.01	SX_OB_20220317_16_02_SS_Pr	17/03/2022		872310	MGT	Normal		<0.00001		<0.00001		<0.00001		<0.0001				
A04.01	SX_OB_20220317_16_03_SS_Tr	17/03/2022		EM2204843	ALSE-Melbourne	Interlab_D	M22-Ma36489	<0.00001						<0.00001				
RPD								0						0				
C02.01	SX_IB_20220317_07_53_SS_Pri	17/03/2022		EM2204843	ALSE-Melbourne	Normal		<0.00001	<0.0050					<0.00010	<0.0500		<0.50	
C02.01	SX_IB_20220317_07_53_SS_Du	17/03/2022		EM2204843	ALSE-Melbourne	Field_D	EM2204843001	<0.00001	<0.0050					<0.00010	<0.0500		<0.50	
RPD								0	0					0	0		0	
C02.01	SX_IB_20220317_07_53_SS_Pri	17/03/2022		EM2204843	ALSE-Melbourne	Normal		<0.00001	<0.0050					<0.00010	<0.0500		<0.50	
C02.01	SX_IB_20220317_07_54_SS_Tri	17/03/2022		872310	MGT	Interlab_D	EM2204843001		<0.005		<0.005		<0.005		<0.05	<0.5	<0.5	<0.5
RPD									0						0		0	
C02.01	SX_IB_20220317_07_53_SS_Pri	17/03/2022		EM2204843	ALSE-Melbourne	Normal		<0.00001	<0.0050					<0.00010	<0.0500		<0.50	
C02.01	SX_IB_20220317_07_54_SS_Tri	17/03/2022		872310	MGT	Interlab_D	EM2204843001	<0.00001		<0.00001		<0.00001		<0.0001				
RPD								0						0				
C02.01	SX_IB_20220317_07_53_SS_Pri	17/03/2022		EM2204843	ALSE-Melbourne	Normal		<0.00001						<0.00001				
C02.01	SX_IB_20220317_07_53_SS_Du	17/03/2022		EM2204843	ALSE-Melbourne	Field_D	EM2204843011	<0.00001						<0.00001				
RPD								0						0				
C02.01	SX_IB_20220317_07_53_SS_Pri	17/03/2022		EM2204843	ALSE-Melbourne	Normal		<0.00001						<0.00001				
C02.01	SX_IB_20220317_07_54_SS_Tri	17/03/2022		872310	MGT	Interlab_D	EM2204843011	<0.00001		<0.00001		<0.00001		<0.0001				
RPD								0						0				
C05.01	SX_OB_20220327_15_52_SS_Pr	27/03/2022		874920	MGT	Normal			<0.005		<0.005		<0.005		<0.05	<0.5	<0.5	<0.5
C05.01	SX_OB_20220327_15_59_SS_Du	27/03/2022		874920	MGT	Field_D	M22-Ma57512		<0.005		<0.005		<0.005		<0.05	<0.5	<0.5	<0.5
RPD									0		0		0		0	0	0	0
C05.01	SX_OB_20220327_15_52_SS_Pr	27/03/2022		874920	MGT	Normal			<0.005		<0.005		<0.005		<0.05	<0.5	<0.5	<0.5

								Sum of PFHxS and PFOS		Sum of US EPA PFAS (PFOS + PFOA)*		Sum of enHealth PFAS (PFHxS + PFOS + PFOA)*		Sum of PFAS	Sum of PFAS	1,1-dichloroethane	1,1-dichloroethene	1,2,3-trichloropropane
								mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/L	mg/kg	mg/kg	mg/kg	mg/kg
C05.01	SX_OB_20220327_16_00_SS_Tr	27/03/2022		EM2205473	ALSE-Melbourne	Interlab_D	M22-Ma57512	<0.00001	<0.0050					<0.00001	<0.0500		<0.50	
RPD									0						0		0	
C05.01	SX_OB_20220327_15_52_SS_Pr	27/03/2022		874920	MGT	Normal		<0.00001		<0.00001		<0.00001		<0.0001				
C05.01	SX_OB_20220327_15_59_SS_Du	27/03/2022		874920	MGT	Field_D	M22-Ma57521	<0.00001		<0.00001		<0.00001		<0.0001				
RPD								0		0		0		0				
C05.01	SX_OB_20220327_15_52_SS_Pr	27/03/2022		874920	MGT	Normal		<0.00001		<0.00001		<0.00001		<0.0001				
C05.01	SX_OB_20220327_15_59_SS_Du	27/03/2022		874920	MGT	Field_D	M22-Ma57530	<0.00001		<0.00001		<0.00001		<0.0001				
RPD								0		0		0		0				
C05.01	SX_OB_20220327_15_52_SS_Pr	27/03/2022		874920	MGT	Normal		<0.00001		<0.00001		<0.00001		<0.0001				
C05.01	SX_OB_20220327_16_00_SS_Tr	27/03/2022		EM2205473	ALSE-Melbourne	Interlab_D	M22-Ma57530	<0.00001						<0.00010				
RPD								0						0				
C05.01	SX_OB_20220327_07_55_SS_Pr	27/03/2022		EM2205473	ALSE-Melbourne	Normal		<0.00001	<0.0050					<0.00001	<0.0500		<0.50	
C05.01	SX_OB_20220327_07_58_SS_Du	27/03/2022		EM2205473	ALSE-Melbourne	Field_D	EM2205473004	<0.00001	<0.0050					<0.00001	<0.0500		<0.50	
RPD								0	0					0	0		0	
C05.01	SX_OB_20220327_07_55_SS_Pr	27/03/2022		EM2205473	ALSE-Melbourne	Normal		<0.00001	<0.0050					<0.00001	<0.0500		<0.50	
C05.01	SX_OB_20220327_07_58_SS_Tr	27/03/2022		874920	MGT	Interlab_D	EM2205473004		<0.005		<0.005		<0.005		<0.05	<0.5	<0.5	<0.5
RPD									0						0		0	
C05.01	SX_OB_20220327_07_55_SS_Pr	27/03/2022		EM2205473	ALSE-Melbourne	Normal		<0.00001	<0.0050					<0.00001	<0.0500		<0.50	
C05.01	SX_OB_20220327_07_58_SS_Tr	27/03/2022		874920	MGT	Interlab_D	EM2205473004	<0.00001		<0.00001		<0.00001		<0.0001				
RPD								0						0				
C05.01	SX_OB_20220327_07_55_SS_Pr	27/03/2022		EM2205473	ALSE-Melbourne	Normal		<0.00001						<0.00010				
C05.01	SX_OB_20220327_07_58_SS_Du	27/03/2022		EM2205473	ALSE-Melbourne	Field_D	EM2205473013	<0.00001						<0.00010				
RPD								0						0				
C05.01	SX_OB_20220327_07_55_SS_Pr	27/03/2022		EM2205473	ALSE-Melbourne	Normal		<0.00001						<0.00010				
C05.01	SX_OB_20220327_07_58_SS_Tr	27/03/2022		874920	MGT	Interlab_D	EM2205473013	<0.00001		<0.00001		<0.00001		<0.0001				
RPD								0						0				
C02.01	SX_IB_20220328_15_44_SS_Pri	28/03/2022		875283	MGT	Normal			<0.005		<0.005		<0.005		<0.05	<0.5	<0.5	<0.5
C02.01	SX_IB_20220328_15_47_SS_Du	28/03/2022		875283	MGT	Field_D	M22-Ma60487		<0.005		<0.005		<0.005		<0.05	<0.5	<0.5	<0.5
RPD									0		0		0		0	0	0	0
C02.01	SX_IB_20220328_15_44_SS_Pri	28/03/2022		875283	MGT	Normal			<0.005		<0.005		<0.005		<0.05	<0.5	<0.5	<0.5
C02.01	SX_IB_20220328_15_48_SS_Tri	28/03/2022		EM2205583	ALSE-Melbourne	Interlab_D	M22-Ma60487	<0.00001	<0.0050					<0.00010	<0.0500		<0.50	
RPD									0						0		0	
C02.01	SX_IB_20220328_15_44_SS_Pri	28/03/2022		875283	MGT	Normal		<0.00001		<0.00001		<0.00001		<0.0001				
C02.01	SX_IB_20220328_15_47_SS_Du	28/03/2022		875283	MGT	Field_D	M22-Ma60495	<0.00001		<0.00001		<0.00001		<0.0001				
RPD								0		0		0		0				
C02.01	SX_IB_20220328_15_44_SS_Pri	28/03/2022		875283	MGT	Normal		<0.00001		<0.00001		<0.00001		<0.0001				
C02.01	SX_IB_20220328_15_47_SS_Du	28/03/2022		875283	MGT	Field_D	M22-Ma60503	<0.00001		<0.00001		<0.00001		<0.0001				
RPD								0		0		0		0				
C02.01	SX_IB_20220328_15_44_SS_Pri	28/03/2022		875283	MGT	Normal		<0.00001		<0.00001		<0.00001		<0.0001				
C02.01	SX_IB_20220328_15_48_SS_Tri	28/03/2022		EM2205583	ALSE-Melbourne	Interlab_D	M22-Ma60503	<0.00001						<0.00010				
RPD								0						0				
C02.01	SX_IB_20220328_07_41_SS_Pri	28/03/2022		EM2205583	ALSE-Melbourne	Normal		<0.00001	<0.0050					<0.00010	<0.0500		<0.50	
C02.01	SX_IB_20220328_07_45_SS_Du	28/03/2022		EM2205583	ALSE-Melbourne	Field_D	EM2205583001	<0.00001	<0.0050					<0.00010	<0.0500		<0.50	
RPD								0	0					0	0		0	
C02.01	SX_IB_20220328_07_41_SS_Pri	28/03/2022		EM2205583	ALSE-Melbourne	Normal		<0.00001	<0.0050					<0.00010	<0.0500		<0.50	
C02.01	SX_IB_20220328_07_46_SS_Tri	28/03/2022		875283	MGT	Interlab_D	EM2205583001		<0.005		<0.005		<0.005		<0.05	<0.5	<0.5	<0.5
RPD									0						0		0	
C02.01	SX_IB_20220328_07_41_SS_Pri	28/03/2022		EM2205583	ALSE-Melbourne	Normal		<0.00001	<0.0050					<0.00010	<0.0500		<0.50	
C02.01	SX_IB_20220328_07_46_SS_Tri	28/03/2022		875283	MGT	Interlab_D	EM2205583001	<0.00001		<0.00001		<0.00001		<0.0001				
RPD								0						0				
C02.01	SX_IB_20220328_07_41_SS_Pri	28/03/2022		EM2205583	ALSE-Melbourne	Normal		<0.00001						<0.00010				
C02.01	SX_IB_20220328_07_45_SS_Du	28/03/2022		EM2205583	ALSE-Melbourne	Field_D	EM2205583009	<0.00001						<0.00010				
RPD								0						0				
C02.01	SX_IB_20220328_07_41_SS_Pri	28/03/2022		EM2205583	ALSE-Melbourne	Normal		<0.00001						<0.00010				
C02.01	SX_IB_20220328_07_46_SS_Tri	28/03/2022		875283	MGT	Interlab_D	EM2205583009	<0.00001		<0.00001		<0.00001		<0.0001				
RPD								0						0				

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

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

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

									1,2-dichloroethane	1,2-dichloropropane	1,3-dichloropropane	Bromochloromethane	1,1,1,2-tetrachloroethane	Bromodichloromethane	1,1,1-trichloroethane	Chloroform	1,1,2,2-tetrachloroethane	Chloromethane	cis-1,3-dichloropropene
									mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL									0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Location Code	**Field ID**	**Date**	**Depth**	**Lab Report Number**	**Lab Name**	**Sample Type**	**Parent Sample**												
C02.01	SX_IB_20220316_16_12_SS_Pri	16/03/2022		872036	MGT	Normal			<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
C02.01	SX_IB_20220316_16_15_SS_Du	16/03/2022		872036	MGT	Field_D	M22-Ma34703		<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
C02.01	SX_IB_20220316_16_12_SS_Pri	16/03/2022		872036	MGT	Normal			<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
C02.01	SX_IB_20220316_16_16_SS_Tri	16/03/2022		EM2204736	ALSE-Melbourne	Interlab_D	M22-Ma34703		<0.50				<0.50		<0.50	<0.50	<0.50		
RPD									0				0		0	0	0		
C02.01	SX_IB_20220316_16_12_SS_Pri	16/03/2022		872036	MGT	Normal													
C02.01	SX_IB_20220316_16_15_SS_Du	16/03/2022		872036	MGT	Field_D	M22-Ma34711												
RPD																			
C02.01	SX_IB_20220316_16_12_SS_Pri	16/03/2022		872036	MGT	Normal													
C02.01	SX_IB_20220316_16_15_SS_Du	16/03/2022		872036	MGT	Field_D	M22-Ma34719												
RPD																			
C02.01	SX_IB_20220316_16_12_SS_Pri	16/03/2022		872036	MGT	Normal													
C02.01	SX_IB_20220316_16_16_SS_Tri	16/03/2022		EM2204736	ALSE-Melbourne	Interlab_D	M22-Ma34719												
RPD																			
C02.01	SX_IB_20220316_08_17_SS_Pri	16/03/2022		EM2204736	ALSE-Melbourne	Normal			<0.50				<0.50		<0.50	<0.50	<0.50		
C02.01	SX_IB_20220316_08_20_SS_Du	16/03/2022		EM2204736	ALSE-Melbourne	Field_D	EM2204736001		<0.50				<0.50		<0.50	<0.50	<0.50		
RPD									0				0		0	0	0		
C02.01	SX_IB_20220316_08_17_SS_Pri	16/03/2022		EM2204736	ALSE-Melbourne	Normal			<0.50				<0.50		<0.50	<0.50	<0.50		
C02.01	SX_IB_20220316_08_22_SS_Tri	16/03/2022		872036	MGT	Interlab_D	EM2204736001		<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		
C02.01	SX_IB_20220316_08_17_SS_Pri	16/03/2022		EM2204736	ALSE-Melbourne	Normal			<0.50				<0.50		<0.50	<0.50	<0.50		
C02.01	SX_IB_20220316_08_22_SS_Tri	16/03/2022		872036	MGT	Interlab_D	EM2204736001												
RPD																			
C02.01	SX_IB_20220316_08_17_SS_Pri	16/03/2022		EM2204736	ALSE-Melbourne	Normal													
C02.01	SX_IB_20220316_08_20_SS_Du	16/03/2022		EM2204736	ALSE-Melbourne	Field_D	EM2204736009												
RPD																			
C02.01	SX_IB_20220316_08_17_SS_Pri	16/03/2022		EM2204736	ALSE-Melbourne	Normal													
C02.01	SX_IB_20220316_08_22_SS_Tri	16/03/2022		872036	MGT	Interlab_D	EM2204736009												
RPD																			
A04.01	SX_OB_20220317_16_02_SS_Pr	17/03/2022		872310	MGT	Normal			<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
A04.01	SX_OB_20220317_16_02_SS_Du	17/03/2022		872310	MGT	Field_D	M22-Ma36471		<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
A04.01	SX_OB_20220317_16_02_SS_Pr	17/03/2022		872310	MGT	Normal			<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
A04.01	SX_OB_20220317_16_03_SS_Tr	17/03/2022		EM2204843	ALSE-Melbourne	Interlab_D	M22-Ma36471		<0.50				<0.50		<0.50	<0.50	<0.50		
RPD									0				0		0	0	0		
A04.01	SX_OB_20220317_16_02_SS_Pr	17/03/2022		872310	MGT	Normal													
A04.01	SX_OB_20220317_16_02_SS_Du	17/03/2022		872310	MGT	Field_D	M22-Ma36481												
RPD																			
A04.01	SX_OB_20220317_16_02_SS_Pr	17/03/2022		872310	MGT	Normal													
A04.01	SX_OB_20220317_16_02_SS_Du	17/03/2022		872310	MGT	Field_D	M22-Ma36489												
RPD																			
A04.01	SX_OB_20220317_16_02_SS_Pr	17/03/2022		872310	MGT	Normal													
A04.01	SX_OB_20220317_16_03_SS_Tr	17/03/2022		EM2204843	ALSE-Melbourne	Interlab_D	M22-Ma36489												
RPD																			
C02.01	SX_IB_20220317_07_53_SS_Pri	17/03/2022		EM2204843	ALSE-Melbourne	Normal			<0.50				<0.50		<0.50	<0.50	<0.50		
C02.01	SX_IB_20220317_07_53_SS_Du	17/03/2022		EM2204843	ALSE-Melbourne	Field_D	EM2204843001		<0.50				<0.50		<0.50	<0.50	<0.50		
RPD									0				0		0	0	0		
C02.01	SX_IB_20220317_07_53_SS_Pri	17/03/2022		EM2204843	ALSE-Melbourne	Normal			<0.50				<0.50		<0.50	<0.50	<0.50		
C02.01	SX_IB_20220317_07_54_SS_Tri	17/03/2022		872310	MGT	Interlab_D	EM2204843001		<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		
C02.01	SX_IB_20220317_07_53_SS_Pri	17/03/2022		EM2204843	ALSE-Melbourne	Normal			<0.50				<0.50		<0.50	<0.50	<0.50		
C02.01	SX_IB_20220317_07_54_SS_Tri	17/03/2022		872310	MGT	Interlab_D	EM2204843001												
RPD																			
C02.01	SX_IB_20220317_07_53_SS_Pri	17/03/2022		EM2204843	ALSE-Melbourne	Normal													
C02.01	SX_IB_20220317_07_53_SS_Du	17/03/2022		EM2204843	ALSE-Melbourne	Field_D	EM2204843011												
RPD																			
C02.01	SX_IB_20220317_07_53_SS_Pri	17/03/2022		EM2204843	ALSE-Melbourne	Normal													
C02.01	SX_IB_20220317_07_54_SS_Tri	17/03/2022		872310	MGT	Interlab_D	EM2204843011												
RPD																			
C05.01	SX_OB_20220327_15_52_SS_Pr	27/03/2022		874920	MGT	Normal			<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
C05.01	SX_OB_20220327_15_59_SS_Du	27/03/2022		874920	MGT	Field_D	M22-Ma57512		<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
C05.01	SX_OB_20220327_15_52_SS_Pr	27/03/2022		874920	MGT	Normal			<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

								1,2-dichloroethane	1,2-dichloropropane	1,3-dichloropropane	Bromochloromethane	1,1,1,2-tetrachloroethane	Bromodichloromethane	1,1,1-trichloroethane	Chloroform	1,1,2,2-tetrachloroethane	Chloromethane	cis-1,3-dichloropropene
								mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
C05.01	SX_OB_20220327_16_00_SS_Tr	27/03/2022		EM2205473	ALSE-Melbourne	Interlab_D	M22-Ma57512	<0.50				<0.50		<0.50	<0.50	<0.50		
RPD								0				0		0	0	0		
C05.01	SX_OB_20220327_15_52_SS_Pr	27/03/2022		874920	MGT	Normal												
C05.01	SX_OB_20220327_15_59_SS_Du	27/03/2022		874920	MGT	Field_D	M22-Ma57521											
RPD																		
C05.01	SX_OB_20220327_15_52_SS_Pr	27/03/2022		874920	MGT	Normal												
C05.01	SX_OB_20220327_15_59_SS_Du	27/03/2022		874920	MGT	Field_D	M22-Ma57530											
RPD																		
C05.01	SX_OB_20220327_15_52_SS_Pr	27/03/2022		874920	MGT	Normal												
C05.01	SX_OB_20220327_16_00_SS_Tr	27/03/2022		EM2205473	ALSE-Melbourne	Interlab_D	M22-Ma57530											
RPD																		
C05.01	SX_OB_20220327_07_55_SS_Pr	27/03/2022		EM2205473	ALSE-Melbourne	Normal		<0.50				<0.50		<0.50	<0.50	<0.50		
C05.01	SX_OB_20220327_07_58_SS_Du	27/03/2022		EM2205473	ALSE-Melbourne	Field_D	EM2205473004	<0.50				<0.50		<0.50	<0.50	<0.50		
RPD								0				0		0	0	0		
C05.01	SX_OB_20220327_07_55_SS_Pr	27/03/2022		EM2205473	ALSE-Melbourne	Normal		<0.50				<0.50		<0.50	<0.50	<0.50		
C05.01	SX_OB_20220327_07_58_SS_Tr	27/03/2022		874920	MGT	Interlab_D	EM2205473004	<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		
C05.01	SX_OB_20220327_07_55_SS_Pr	27/03/2022		EM2205473	ALSE-Melbourne	Normal		<0.50				<0.50		<0.50	<0.50	<0.50		
C05.01	SX_OB_20220327_07_58_SS_Tr	27/03/2022		874920	MGT	Interlab_D	EM2205473004											
RPD																		
C05.01	SX_OB_20220327_07_55_SS_Pr	27/03/2022		EM2205473	ALSE-Melbourne	Normal												
C05.01	SX_OB_20220327_07_58_SS_Du	27/03/2022		EM2205473	ALSE-Melbourne	Field_D	EM2205473013											
RPD																		
C05.01	SX_OB_20220327_07_55_SS_Pr	27/03/2022		EM2205473	ALSE-Melbourne	Normal												
C05.01	SX_OB_20220327_07_58_SS_Tr	27/03/2022		874920	MGT	Interlab_D	EM2205473013											
RPD																		
C02.01	SX_IB_20220328_15_44_SS_Pri	28/03/2022		875283	MGT	Normal		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
C02.01	SX_IB_20220328_15_47_SS_Du	28/03/2022		875283	MGT	Field_D	M22-Ma60487	<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
C02.01	SX_IB_20220328_15_44_SS_Pri	28/03/2022		875283	MGT	Normal		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
C02.01	SX_IB_20220328_15_48_SS_Tri	28/03/2022		EM2205583	ALSE-Melbourne	Interlab_D	M22-Ma60487	<0.50				<0.50		<0.50	<0.50	<0.50		
RPD								0				0		0	0	0		
C02.01	SX_IB_20220328_15_44_SS_Pri	28/03/2022		875283	MGT	Normal												
C02.01	SX_IB_20220328_15_47_SS_Du	28/03/2022		875283	MGT	Field_D	M22-Ma60495											
RPD																		
C02.01	SX_IB_20220328_15_44_SS_Pri	28/03/2022		875283	MGT	Normal												
C02.01	SX_IB_20220328_15_47_SS_Du	28/03/2022		875283	MGT	Field_D	M22-Ma60503											
RPD																		
C02.01	SX_IB_20220328_15_44_SS_Pri	28/03/2022		875283	MGT	Normal												
C02.01	SX_IB_20220328_15_48_SS_Tri	28/03/2022		EM2205583	ALSE-Melbourne	Interlab_D	M22-Ma60503											
RPD																		
C02.01	SX_IB_20220328_07_41_SS_Pri	28/03/2022		EM2205583	ALSE-Melbourne	Normal		<0.50				<0.50		<0.50	<0.50	<0.50		
C02.01	SX_IB_20220328_07_45_SS_Du	28/03/2022		EM2205583	ALSE-Melbourne	Field_D	EM2205583001	<0.50				<0.50		<0.50	<0.50	<0.50		
RPD								0				0		0	0	0		
C02.01	SX_IB_20220328_07_41_SS_Pri	28/03/2022		EM2205583	ALSE-Melbourne	Normal		<0.50				<0.50		<0.50	<0.50	<0.50		
C02.01	SX_IB_20220328_07_46_SS_Tri	28/03/2022		875283	MGT	Interlab_D	EM2205583001	<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		
C02.01	SX_IB_20220328_07_41_SS_Pri	28/03/2022		EM2205583	ALSE-Melbourne	Normal		<0.50				<0.50		<0.50	<0.50	<0.50		
C02.01	SX_IB_20220328_07_46_SS_Tri	28/03/2022		875283	MGT	Interlab_D	EM2205583001											
RPD																		
C02.01	SX_IB_20220328_07_41_SS_Pri	28/03/2022		EM2205583	ALSE-Melbourne	Normal												
C02.01	SX_IB_20220328_07_45_SS_Du	28/03/2022		EM2205583	ALSE-Melbourne	Field_D	EM2205583009											
RPD																		
C02.01	SX_IB_20220328_07_41_SS_Pri	28/03/2022		EM2205583	ALSE-Melbourne	Normal												
C02.01	SX_IB_20220328_07_46_SS_Tri	28/03/2022		875283	MGT	Interlab_D	EM2205583009											
RPD																		

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

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

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

								Chlorinated Hydrocarbons										
								Dibromomethane	Dichloromethane	Hexachlorobutadiene	Other chlorinated hydrocarbons EPAVic	Trichloroethene	Chlorinated hydrocarbons EPAVic	cis-1,2-dichloroethene	1,1,2-trichloroethane	trans-1,3-dichloropropene	Vinyl chloride	Bromoform
								mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL								0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Location Code	Field ID	Date	Depth	Lab Report Number	Lab Name	Sample Type	Parent Sample											
C02.01	SX_IB_20220316_16_12_SS_Pri	16/03/2022		872036	MGT	Normal		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
C02.01	SX_IB_20220316_16_15_SS_Du	16/03/2022		872036	MGT	Field_D	M22-Ma34703	<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
C02.01	SX_IB_20220316_16_12_SS_Pri	16/03/2022		872036	MGT	Normal		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
C02.01	SX_IB_20220316_16_16_SS_Tri	16/03/2022		EM2204736	ALSE-Melbourne	Interlab_D	M22-Ma34703		<0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		<0.50	
RPD									0	0	0	0	0	0	0		0	
C02.01	SX_IB_20220316_16_12_SS_Pri	16/03/2022		872036	MGT	Normal												
C02.01	SX_IB_20220316_16_15_SS_Du	16/03/2022		872036	MGT	Field_D	M22-Ma34711											
RPD																		
C02.01	SX_IB_20220316_16_12_SS_Pri	16/03/2022		872036	MGT	Normal												
C02.01	SX_IB_20220316_16_15_SS_Du	16/03/2022		872036	MGT	Field_D	M22-Ma34719											
RPD																		
C02.01	SX_IB_20220316_16_12_SS_Pri	16/03/2022		872036	MGT	Normal												
C02.01	SX_IB_20220316_16_16_SS_Tri	16/03/2022		EM2204736	ALSE-Melbourne	Interlab_D	M22-Ma34719											
RPD																		
C02.01	SX_IB_20220316_08_17_SS_Pri	16/03/2022		EM2204736	ALSE-Melbourne	Normal			<0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		<0.50	
C02.01	SX_IB_20220316_08_20_SS_Du	16/03/2022		EM2204736	ALSE-Melbourne	Field_D	EM2204736001		<0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		<0.50	
RPD									0	0	0	0	0	0	0		0	
C02.01	SX_IB_20220316_08_17_SS_Pri	16/03/2022		EM2204736	ALSE-Melbourne	Normal			<0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		<0.50	
C02.01	SX_IB_20220316_08_22_SS_Tri	16/03/2022		872036	MGT	Interlab_D	EM2204736001	<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	
C02.01	SX_IB_20220316_08_17_SS_Pri	16/03/2022		EM2204736	ALSE-Melbourne	Normal			<0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		<0.50	
C02.01	SX_IB_20220316_08_22_SS_Tri	16/03/2022		872036	MGT	Interlab_D	EM2204736001											
RPD																		
C02.01	SX_IB_20220316_08_17_SS_Pri	16/03/2022		EM2204736	ALSE-Melbourne	Normal												
C02.01	SX_IB_20220316_08_22_SS_Tri	16/03/2022		872036	MGT	Interlab_D	EM2204736009											
RPD																		
C02.01	SX_IB_20220316_08_17_SS_Pri	16/03/2022		EM2204736	ALSE-Melbourne	Normal												
C02.01	SX_IB_20220316_08_20_SS_Du	16/03/2022		EM2204736	ALSE-Melbourne	Field_D	EM2204736009											
RPD																		
C02.01	SX_IB_20220316_08_17_SS_Pri	16/03/2022		EM2204736	ALSE-Melbourne	Normal												
C02.01	SX_IB_20220316_08_22_SS_Tri	16/03/2022		872036	MGT	Interlab_D	EM2204736009											
RPD																		
A04.01	SX_OB_20220317_16_02_SS_Pr	17/03/2022		872310	MGT	Normal		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
A04.01	SX_OB_20220317_16_02_SS_Du	17/03/2022		872310	MGT	Field_D	M22-Ma36471	<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
A04.01	SX_OB_20220317_16_02_SS_Pr	17/03/2022		872310	MGT	Normal		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
A04.01	SX_OB_20220317_16_03_SS_Tr	17/03/2022		EM2204843	ALSE-Melbourne	Interlab_D	M22-Ma36471		<0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		<0.50	
RPD									0	0	0	0	0	0	0		0	
A04.01	SX_OB_20220317_16_02_SS_Pr	17/03/2022		872310	MGT	Normal												
A04.01	SX_OB_20220317_16_02_SS_Du	17/03/2022		872310	MGT	Field_D	M22-Ma36481											
RPD																		
A04.01	SX_OB_20220317_16_02_SS_Pr	17/03/2022		872310	MGT	Normal												
A04.01	SX_OB_20220317_16_02_SS_Du	17/03/2022		872310	MGT	Field_D	M22-Ma36489											
RPD																		
A04.01	SX_OB_20220317_16_02_SS_Pr	17/03/2022		872310	MGT	Normal												
A04.01	SX_OB_20220317_16_03_SS_Tr	17/03/2022		EM2204843	ALSE-Melbourne	Interlab_D	M22-Ma36489											
RPD																		
C02.01	SX_IB_20220317_07_53_SS_Pri	17/03/2022		EM2204843	ALSE-Melbourne	Normal			<0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		<0.50	
C02.01	SX_IB_20220317_07_53_SS_Du	17/03/2022		EM2204843	ALSE-Melbourne	Field_D	EM2204843001		<0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		<0.50	
RPD									0	0	0	0	0	0	0		0	
C02.01	SX_IB_20220317_07_53_SS_Pri	17/03/2022		EM2204843	ALSE-Melbourne	Normal			<0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		<0.50	
C02.01	SX_IB_20220317_07_54_SS_Tri	17/03/2022		872310	MGT	Interlab_D	EM2204843001	<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	
C02.01	SX_IB_20220317_07_53_SS_Pri	17/03/2022		EM2204843	ALSE-Melbourne	Normal			<0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		<0.50	
C02.01	SX_IB_20220317_07_54_SS_Tri	17/03/2022		872310	MGT	Interlab_D	EM2204843001											
RPD																		
C02.01	SX_IB_20220317_07_53_SS_Pri	17/03/2022		EM2204843	ALSE-Melbourne	Normal												
C02.01	SX_IB_20220317_07_53_SS_Du	17/03/2022		EM2204843	ALSE-Melbourne	Field_D	EM2204843011											
RPD																		
C02.01	SX_IB_20220317_07_53_SS_Pri	17/03/2022		EM2204843	ALSE-Melbourne	Normal												
C02.01	SX_IB_20220317_07_54_SS_Tri	17/03/2022		872310	MGT	Interlab_D	EM2204843011											
RPD																		
C05.01	SX_OB_20220327_15_52_SS_Pr	27/03/2022		874920	MGT	Normal		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
C05.01	SX_OB_20220327_15_59_SS_Du	27/03/2022		874920	MGT	Field_D	M22-Ma57512	<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
C05.01	SX_OB_20220327_15_52_SS_Pr	27/03/2022		874920	MGT	Normal		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

								Chlorinated Hydrocarbons										
								Dibromomethane	Dichloromethane	Hexachlorobutadiene	Other chlorinated hydrocarbons EPAVic	Trichloroethene	Chlorinated hydrocarbons EPAVic	cis-1,2-dichloroethene	1,1,2-trichloroethane	trans-1,3-dichloropropene	Vinyl chloride	Bromoform
								mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
C05.01	SX_OB_20220327_16_00_SS_Tr	27/03/2022		EM2205473	ALSE-Melbourne	Interlab_D	M22-Ma57512		<0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		<0.50	
RPD									0	0	0	0	0	0	0		0	
C05.01	SX_OB_20220327_15_52_SS_Pr	27/03/2022		874920	MGT	Normal												
C05.01	SX_OB_20220327_15_59_SS_Du	27/03/2022		874920	MGT	Field_D	M22-Ma57521											
RPD																		
C05.01	SX_OB_20220327_15_52_SS_Pr	27/03/2022		874920	MGT	Normal												
C05.01	SX_OB_20220327_15_59_SS_Du	27/03/2022		874920	MGT	Field_D	M22-Ma57530											
RPD																		
C05.01	SX_OB_20220327_15_52_SS_Pr	27/03/2022		874920	MGT	Normal												
C05.01	SX_OB_20220327_16_00_SS_Tr	27/03/2022		EM2205473	ALSE-Melbourne	Interlab_D	M22-Ma57530											
RPD																		
C05.01	SX_OB_20220327_07_55_SS_Pr	27/03/2022		EM2205473	ALSE-Melbourne	Normal			<0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		<0.50	
C05.01	SX_OB_20220327_07_58_SS_Du	27/03/2022		EM2205473	ALSE-Melbourne	Field_D	EM2205473004		<0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		<0.50	
RPD									0	0	0	0	0	0	0		0	
C05.01	SX_OB_20220327_07_55_SS_Pr	27/03/2022		EM2205473	ALSE-Melbourne	Normal			<0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		<0.50	
C05.01	SX_OB_20220327_07_58_SS_Tr	27/03/2022		874920	MGT	Interlab_D	EM2205473004	<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	
C05.01	SX_OB_20220327_07_55_SS_Pr	27/03/2022		EM2205473	ALSE-Melbourne	Normal			<0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		<0.50	
C05.01	SX_OB_20220327_07_58_SS_Tr	27/03/2022		874920	MGT	Interlab_D	EM2205473004											
RPD																		
C05.01	SX_OB_20220327_07_55_SS_Pr	27/03/2022		EM2205473	ALSE-Melbourne	Normal												
C05.01	SX_OB_20220327_07_58_SS_Du	27/03/2022		EM2205473	ALSE-Melbourne	Field_D	EM2205473013											
RPD																		
C05.01	SX_OB_20220327_07_55_SS_Pr	27/03/2022		EM2205473	ALSE-Melbourne	Normal												
C05.01	SX_OB_20220327_07_58_SS_Tr	27/03/2022		874920	MGT	Interlab_D	EM2205473013											
RPD																		
C02.01	SX_IB_20220328_15_44_SS_Pri	28/03/2022		875283	MGT	Normal		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
C02.01	SX_IB_20220328_15_47_SS_Du	28/03/2022		875283	MGT	Field_D	M22-Ma60487	<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
C02.01	SX_IB_20220328_15_44_SS_Pri	28/03/2022		875283	MGT	Normal		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
C02.01	SX_IB_20220328_15_48_SS_Tri	28/03/2022		EM2205583	ALSE-Melbourne	Interlab_D	M22-Ma60487		<0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		<0.50	
RPD									0	0	0	0	0	0	0		0	
C02.01	SX_IB_20220328_15_44_SS_Pri	28/03/2022		875283	MGT	Normal												
C02.01	SX_IB_20220328_15_47_SS_Du	28/03/2022		875283	MGT	Field_D	M22-Ma60495											
RPD																		
C02.01	SX_IB_20220328_15_44_SS_Pri	28/03/2022		875283	MGT	Normal												
C02.01	SX_IB_20220328_15_47_SS_Du	28/03/2022		875283	MGT	Field_D	M22-Ma60503											
RPD																		
C02.01	SX_IB_20220328_15_44_SS_Pri	28/03/2022		875283	MGT	Normal												
C02.01	SX_IB_20220328_15_48_SS_Tri	28/03/2022		EM2205583	ALSE-Melbourne	Interlab_D	M22-Ma60503											
RPD																		
C02.01	SX_IB_20220328_07_41_SS_Pri	28/03/2022		EM2205583	ALSE-Melbourne	Normal			<0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		<0.50	
C02.01	SX_IB_20220328_07_45_SS_Du	28/03/2022		EM2205583	ALSE-Melbourne	Field_D	EM2205583001		<0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		<0.50	
RPD									0	0	0	0	0	0	0		0	
C02.01	SX_IB_20220328_07_41_SS_Pri	28/03/2022		EM2205583	ALSE-Melbourne	Normal			<0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		<0.50	
C02.01	SX_IB_20220328_07_46_SS_Tri	28/03/2022		875283	MGT	Interlab_D	EM2205583001	<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	
C02.01	SX_IB_20220328_07_41_SS_Pri	28/03/2022		EM2205583	ALSE-Melbourne	Normal			<0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		<0.50	
C02.01	SX_IB_20220328_07_46_SS_Tri	28/03/2022		875283	MGT	Interlab_D	EM2205583001											
RPD																		
C02.01	SX_IB_20220328_07_41_SS_Pri	28/03/2022		EM2205583	ALSE-Melbourne	Normal												
C02.01	SX_IB_20220328_07_45_SS_Du	28/03/2022		EM2205583	ALSE-Melbourne	Field_D	EM2205583009											
RPD																		
C02.01	SX_IB_20220328_07_41_SS_Pri	28/03/2022		EM2205583	ALSE-Melbourne	Normal												
C02.01	SX_IB_20220328_07_46_SS_Tri	28/03/2022		875283	MGT	Interlab_D	EM2205583009											
RPD																		

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

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

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

														NA						
												Carbon tetrachloride	Chlorodibromomethane	Chloroethane	trans-1,2-dichloroethene	Tetrachloroethene	Sum of WA DWER PFAS (n=10)*		Moisture Content	Arochlor 1232	Arochlor 1242	Arochlor 1248
												mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	UG/KG	µg/L	%	mg/kg	mg/kg	mg/kg
EQL												0.5	0.5	0.5	0.5	0.5	0.05		1	0.1	0.1	0.1
Location Code	Field ID	Date	Depth	Lab Report Number	Lab Name	Sample Type	Parent Sample													
C02.01	SX_IB_20220316_16_12_SS_Pri	16/03/2022		872036	MGT	Normal		<0.5	<0.5	<0.5	<0.5	<0.5	<10			<0.1	<0.1	<0.1		
C02.01	SX_IB_20220316_16_15_SS_Du	16/03/2022		872036	MGT	Field_D	M22-Ma34703	<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		
C02.01	SX_IB_20220316_16_12_SS_Pri	16/03/2022		872036	MGT	Normal		<0.5	<0.5	<0.5	<0.5	<0.5	<10			<0.1	<0.1	<0.1		
C02.01	SX_IB_20220316_16_16_SS_Tri	16/03/2022		EM2204736	ALSE-Melbourne	Interlab_D	M22-Ma34703	<0.50			<0.50	<0.50	<10.0	<0.05	33.1					
RPD								0			0	0	0							
C02.01	SX_IB_20220316_16_12_SS_Pri	16/03/2022		872036	MGT	Normal							<0.05							
C02.01	SX_IB_20220316_16_15_SS_Du	16/03/2022		872036	MGT	Field_D	M22-Ma34711						<0.05							
RPD													0							
C02.01	SX_IB_20220316_16_12_SS_Pri	16/03/2022		872036	MGT	Normal							<0.05							
C02.01	SX_IB_20220316_16_15_SS_Du	16/03/2022		872036	MGT	Field_D	M22-Ma34719						<0.05							
RPD													0							
C02.01	SX_IB_20220316_16_12_SS_Pri	16/03/2022		872036	MGT	Normal							<0.05							
C02.01	SX_IB_20220316_16_16_SS_Tri	16/03/2022		EM2204736	ALSE-Melbourne	Interlab_D	M22-Ma34719							<0.01						
RPD																				
C02.01	SX_IB_20220316_08_17_SS_Pri	16/03/2022		EM2204736	ALSE-Melbourne	Normal		<0.50			<0.50	<0.50	<10.0	<0.05	30.7					
C02.01	SX_IB_20220316_08_20_SS_Du	16/03/2022		EM2204736	ALSE-Melbourne	Field_D	EM2204736001	<0.50			<0.50	<0.50	<10.0	<0.05	34.4					
RPD								0			0	0	0	0	11					
C02.01	SX_IB_20220316_08_17_SS_Pri	16/03/2022		EM2204736	ALSE-Melbourne	Normal		<0.50			<0.50	<0.50	<10.0	<0.05	30.7					
C02.01	SX_IB_20220316_08_22_SS_Tri	16/03/2022		872036	MGT	Interlab_D	EM2204736001	<0.5	<0.5	<0.5	<0.5	<0.5	<10			<0.1	<0.1	<0.1		
RPD								0			0	0	0							
C02.01	SX_IB_20220316_08_17_SS_Pri	16/03/2022		EM2204736	ALSE-Melbourne	Normal		<0.50			<0.50	<0.50	<10.0	<0.05	30.7					
C02.01	SX_IB_20220316_08_22_SS_Tri	16/03/2022		872036	MGT	Interlab_D	EM2204736001						<0.05							
RPD													0							
C02.01	SX_IB_20220316_08_17_SS_Pri	16/03/2022		EM2204736	ALSE-Melbourne	Normal								<0.01						
C02.01	SX_IB_20220316_08_20_SS_Du	16/03/2022		EM2204736	ALSE-Melbourne	Field_D	EM2204736009							<0.01						
RPD														0						
C02.01	SX_IB_20220316_08_17_SS_Pri	16/03/2022		EM2204736	ALSE-Melbourne	Normal								<0.01						
C02.01	SX_IB_20220316_08_22_SS_Tri	16/03/2022		872036	MGT	Interlab_D	EM2204736009						<0.05							
RPD																				
A04.01	SX_OB_20220317_16_02_SS_Pr	17/03/2022		872310	MGT	Normal		<0.5	<0.5	<0.5	<0.5	<0.5	<10			<0.1	<0.1	<0.1		
A04.01	SX_OB_20220317_16_02_SS_Du	17/03/2022		872310	MGT	Field_D	M22-Ma36471	<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		
A04.01	SX_OB_20220317_16_02_SS_Pr	17/03/2022		872310	MGT	Normal		<0.5	<0.5	<0.5	<0.5	<0.5	<10			<0.1	<0.1	<0.1		
A04.01	SX_OB_20220317_16_03_SS_Tr	17/03/2022		EM2204843	ALSE-Melbourne	Interlab_D	M22-Ma36471	<0.50			<0.50	<0.50	<10.0	<0.05	28.6					
RPD								0			0	0	0							
A04.01	SX_OB_20220317_16_02_SS_Pr	17/03/2022		872310	MGT	Normal							<0.05							
A04.01	SX_OB_20220317_16_02_SS_Du	17/03/2022		872310	MGT	Field_D	M22-Ma36481						<0.05							
RPD													0							
A04.01	SX_OB_20220317_16_02_SS_Pr	17/03/2022		872310	MGT	Normal							<0.05							
A04.01	SX_OB_20220317_16_02_SS_Du	17/03/2022		872310	MGT	Field_D	M22-Ma36489						<0.05							
RPD													0							
A04.01	SX_OB_20220317_16_02_SS_Pr	17/03/2022		872310	MGT	Normal							<0.05							
A04.01	SX_OB_20220317_16_03_SS_Tr	17/03/2022		EM2204843	ALSE-Melbourne	Interlab_D	M22-Ma36489							<0.01						
RPD																				
C02.01	SX_IB_20220317_07_53_SS_Pri	17/03/2022		EM2204843	ALSE-Melbourne	Normal		<0.50			<0.50	<0.50	<10.0	<0.05	32.3					
C02.01	SX_IB_20220317_07_53_SS_Du	17/03/2022		EM2204843	ALSE-Melbourne	Field_D	EM2204843001	<0.50			<0.50	<0.50	<10.0	<0.05	31.7					
RPD								0			0	0	0	0	2					
C02.01	SX_IB_20220317_07_53_SS_Pri	17/03/2022		EM2204843	ALSE-Melbourne	Normal		<0.50			<0.50	<0.50	<10.0	<0.05	32.3					
C02.01	SX_IB_20220317_07_54_SS_Tri	17/03/2022		872310	MGT	Interlab_D	EM2204843001	<0.5	<0.5	<0.5	<0.5	<0.5	<10			<0.1	<0.1	<0.1		
RPD								0			0	0	0							
C02.01	SX_IB_20220317_07_53_SS_Pri	17/03/2022		EM2204843	ALSE-Melbourne	Normal		<0.50			<0.50	<0.50	<10.0	<0.05	32.3					
C02.01	SX_IB_20220317_07_54_SS_Tri	17/03/2022		872310	MGT	Interlab_D	EM2204843001						<0.05							
RPD													0							
C02.01	SX_IB_20220317_07_53_SS_Pri	17/03/2022		EM2204843	ALSE-Melbourne	Normal								<0.01						
C02.01	SX_IB_20220317_07_53_SS_Du	17/03/2022		EM2204843	ALSE-Melbourne	Field_D	EM2204843011							<0.01						
RPD														0						
C02.01	SX_IB_20220317_07_53_SS_Pri	17/03/2022		EM2204843	ALSE-Melbourne	Normal								<0.01						
C02.01	SX_IB_20220317_07_54_SS_Tri	17/03/2022		872310	MGT	Interlab_D	EM2204843011						<0.05							
RPD																				
C05.01	SX_OB_20220327_15_52_SS_Pr	27/03/2022		874920	MGT	Normal		<0.5	<0.5	<0.5	<0.5	<0.5	<10			<0.1	<0.1	<0.1		
C05.01	SX_OB_20220327_15_59_SS_Du	27/03/2022		874920	MGT	Field_D	M22-Ma57512	<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		
C05.01	SX_OB_20220327_15_52_SS_Pr	27/03/2022		874920	MGT	Normal		<0.5	<0.5	<0.5	<0.5	<0.5	<10			<0.1	<0.1	<0.1		

														NA						
								Carbon tetrachloride	Chlorodibromomethane	Chloroethane	trans-1,2-dichloroethene	Tetrachloroethene	Sum of WA DWER PFAS (n=10)*		Moisture Content	Arochlor 1232	Arochlor 1242	Arochlor 1248
								mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	UG/KG	µg/L	%	mg/kg	mg/kg	mg/kg
C05.01	SX_OB_20220327_16_00_SS_Tr	27/03/2022		EM2205473	ALSE-Melbourne	Interlab_D	M22-Ma57512	<0.50			<0.50	<0.50	<10.0	<0.01	39.3			
RPD								0			0	0	0					
C05.01	SX_OB_20220327_15_52_SS_Pr	27/03/2022		874920	MGT	Normal							<0.05					
C05.01	SX_OB_20220327_15_59_SS_Du	27/03/2022		874920	MGT	Field_D	M22-Ma57521						<0.05					
RPD													0					
C05.01	SX_OB_20220327_15_52_SS_Pr	27/03/2022		874920	MGT	Normal							<0.05					
C05.01	SX_OB_20220327_15_59_SS_Du	27/03/2022		874920	MGT	Field_D	M22-Ma57530						<0.05					
RPD													0					
C05.01	SX_OB_20220327_15_52_SS_Pr	27/03/2022		874920	MGT	Normal							<0.05					
C05.01	SX_OB_20220327_16_00_SS_Tr	27/03/2022		EM2205473	ALSE-Melbourne	Interlab_D	M22-Ma57530							<0.05				
RPD																		
C05.01	SX_OB_20220327_07_55_SS_Pr	27/03/2022		EM2205473	ALSE-Melbourne	Normal		<0.50			<0.50	<0.50	<10.0	<0.01	29.6			
C05.01	SX_OB_20220327_07_58_SS_Du	27/03/2022		EM2205473	ALSE-Melbourne	Field_D	EM2205473004	<0.50			<0.50	<0.50	<10.0	<0.01	27.7			
RPD								0			0	0	0	0	7			
C05.01	SX_OB_20220327_07_55_SS_Pr	27/03/2022		EM2205473	ALSE-Melbourne	Normal		<0.50			<0.50	<0.50	<10.0	<0.01	29.6			
C05.01	SX_OB_20220327_07_58_SS_Tr	27/03/2022		874920	MGT	Interlab_D	EM2205473004	<0.5	<0.5	<0.5	<0.5	<0.5	<10			<0.1	<0.1	<0.1
RPD								0			0	0	0					
C05.01	SX_OB_20220327_07_55_SS_Pr	27/03/2022		EM2205473	ALSE-Melbourne	Normal		<0.50			<0.50	<0.50	<10.0	<0.01	29.6			
C05.01	SX_OB_20220327_07_58_SS_Tr	27/03/2022		874920	MGT	Interlab_D	EM2205473004						<0.05					
RPD													0					
C05.01	SX_OB_20220327_07_55_SS_Pr	27/03/2022		EM2205473	ALSE-Melbourne	Normal								<0.05				
C05.01	SX_OB_20220327_07_58_SS_Du	27/03/2022		EM2205473	ALSE-Melbourne	Field_D	EM2205473013							<0.05				
RPD														0				
C05.01	SX_OB_20220327_07_55_SS_Pr	27/03/2022		EM2205473	ALSE-Melbourne	Normal								<0.05				
C05.01	SX_OB_20220327_07_58_SS_Tr	27/03/2022		874920	MGT	Interlab_D	EM2205473013						<0.05					
RPD																		
C02.01	SX_IB_20220328_15_44_SS_Pri	28/03/2022		875283	MGT	Normal		<0.5	<0.5	<0.5	<0.5	<0.5	<10			<0.1	<0.1	<0.1
C02.01	SX_IB_20220328_15_47_SS_Du	28/03/2022		875283	MGT	Field_D	M22-Ma60487	<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
C02.01	SX_IB_20220328_15_44_SS_Pri	28/03/2022		875283	MGT	Normal		<0.5	<0.5	<0.5	<0.5	<0.5	<10			<0.1	<0.1	<0.1
C02.01	SX_IB_20220328_15_48_SS_Tri	28/03/2022		EM2205583	ALSE-Melbourne	Interlab_D	M22-Ma60487	<0.50			<0.50	<0.50	<10.0	<0.05	31.3			
RPD								0			0	0	0					
C02.01	SX_IB_20220328_15_44_SS_Pri	28/03/2022		875283	MGT	Normal							<0.05					
C02.01	SX_IB_20220328_15_47_SS_Du	28/03/2022		875283	MGT	Field_D	M22-Ma60495						<0.05					
RPD													0					
C02.01	SX_IB_20220328_15_44_SS_Pri	28/03/2022		875283	MGT	Normal							<0.05					
C02.01	SX_IB_20220328_15_47_SS_Du	28/03/2022		875283	MGT	Field_D	M22-Ma60503						<0.05					
RPD													0					
C02.01	SX_IB_20220328_15_44_SS_Pri	28/03/2022		875283	MGT	Normal							<0.05					
C02.01	SX_IB_20220328_15_48_SS_Tri	28/03/2022		EM2205583	ALSE-Melbourne	Interlab_D	M22-Ma60503							<0.05				
RPD																		
C02.01	SX_IB_20220328_07_41_SS_Pri	28/03/2022		EM2205583	ALSE-Melbourne	Normal		<0.50			<0.50	<0.50	<10.0	<0.05	31.4			
C02.01	SX_IB_20220328_07_45_SS_Du	28/03/2022		EM2205583	ALSE-Melbourne	Field_D	EM2205583001	<0.50			<0.50	<0.50	<10.0	<0.05	32.0			
RPD								0			0	0	0	0	2			
C02.01	SX_IB_20220328_07_41_SS_Pri	28/03/2022		EM2205583	ALSE-Melbourne	Normal		<0.50			<0.50	<0.50	<10.0	<0.05	31.4			
C02.01	SX_IB_20220328_07_46_SS_Tri	28/03/2022		875283	MGT	Interlab_D	EM2205583001	<0.5	<0.5	<0.5	<0.5	<0.5	<10			<0.1	<0.1	<0.1
RPD								0			0	0	0					
C02.01	SX_IB_20220328_07_41_SS_Pri	28/03/2022		EM2205583	ALSE-Melbourne	Normal		<0.50			<0.50	<0.50	<10.0	<0.05	31.4			
C02.01	SX_IB_20220328_07_46_SS_Tri	28/03/2022		875283	MGT	Interlab_D	EM2205583001						<0.05					
RPD													0					
C02.01	SX_IB_20220328_07_41_SS_Pri	28/03/2022		EM2205583	ALSE-Melbourne	Normal								<0.05				
C02.01	SX_IB_20220328_07_45_SS_Du	28/03/2022		EM2205583	ALSE-Melbourne	Field_D	EM2205583009							<0.05				
RPD														0				
C02.01	SX_IB_20220328_07_41_SS_Pri	28/03/2022		EM2205583	ALSE-Melbourne	Normal								<0.05				
C02.01	SX_IB_20220328_07_46_SS_Tri	28/03/2022		875283	MGT	Interlab_D	EM2205583009						<0.05					
RPD																		

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

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

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

								PCBs					Inorganics					
								Arochlor 1254	Arochlor 1221	Arochlor 1260	Arochlor 1016	PCBs (Sum of total)	pH (after HCL)	pH (Final)	pH (Initial)	pH of Leaching Fluid	pH (aqueous extract)	Fluoride
								mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	-	-	-	-	-	mg/kg
EQL								0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	100
Location Code	Field ID	Date	Depth	Lab Report Number	Lab Name	Sample Type	Parent Sample											
C02.01	SX_IB_20220316_16_12_SS_Pri	16/03/2022		872036	MGT	Normal		<0.1	<0.1	<0.1	<0.1	<0.1					8.8	<100
C02.01	SX_IB_20220316_16_15_SS_Du	16/03/2022		872036	MGT	Field_D	M22-Ma34703	<0.1	<0.1	<0.1	<0.1	<0.1					8.7	<100
RPD								0	0	0	0	0					1	0
C02.01	SX_IB_20220316_16_12_SS_Pri	16/03/2022		872036	MGT	Normal		<0.1	<0.1	<0.1	<0.1	<0.1					8.8	<100
C02.01	SX_IB_20220316_16_16_SS_Tri	16/03/2022		EM2204736	ALSE-Melbourne	Interlab_D	M22-Ma34703					<0.1	1.5	5.1	8.8	5.0		210
RPD												0						71
C02.01	SX_IB_20220316_16_12_SS_Pri	16/03/2022		872036	MGT	Normal								5.2		5.1		
C02.01	SX_IB_20220316_16_15_SS_Du	16/03/2022		872036	MGT	Field_D	M22-Ma34711							5.2		5.1		
RPD														0		0		
C02.01	SX_IB_20220316_16_12_SS_Pri	16/03/2022		872036	MGT	Normal								9.4		6.5		
C02.01	SX_IB_20220316_16_15_SS_Du	16/03/2022		872036	MGT	Field_D	M22-Ma34719							9.3		6.5		
RPD														1		0		
C02.01	SX_IB_20220316_16_12_SS_Pri	16/03/2022		872036	MGT	Normal								9.4		6.5		
C02.01	SX_IB_20220316_16_16_SS_Tri	16/03/2022		EM2204736	ALSE-Melbourne	Interlab_D	M22-Ma34719							9.4				
RPD														0				
C02.01	SX_IB_20220316_08_17_SS_Pri	16/03/2022		EM2204736	ALSE-Melbourne	Normal						<0.1	1.6	5.1	8.9	5.0		250
C02.01	SX_IB_20220316_08_20_SS_Du	16/03/2022		EM2204736	ALSE-Melbourne	Field_D	EM2204736001					<0.1	1.5	5.0	8.7	5.0		250
RPD												0	6	2	2	0		0
C02.01	SX_IB_20220316_08_17_SS_Pri	16/03/2022		EM2204736	ALSE-Melbourne	Normal						<0.1	1.6	5.1	8.9	5.0		250
C02.01	SX_IB_20220316_08_22_SS_Tri	16/03/2022		872036	MGT	Interlab_D	EM2204736001	<0.1	<0.1	<0.1	<0.1	<0.1					9.0	<100
RPD												0						86
C02.01	SX_IB_20220316_08_17_SS_Pri	16/03/2022		EM2204736	ALSE-Melbourne	Normal						<0.1	1.6	5.1	8.9	5.0		250
C02.01	SX_IB_20220316_08_22_SS_Tri	16/03/2022		872036	MGT	Interlab_D	EM2204736001							5.3		5.1		
RPD														4		2		
C02.01	SX_IB_20220316_08_17_SS_Pri	16/03/2022		EM2204736	ALSE-Melbourne	Normal								9.3				
C02.01	SX_IB_20220316_08_20_SS_Du	16/03/2022		EM2204736	ALSE-Melbourne	Field_D	EM2204736009							9.2				
RPD														1				
C02.01	SX_IB_20220316_08_17_SS_Pri	16/03/2022		EM2204736	ALSE-Melbourne	Normal								9.3				
C02.01	SX_IB_20220316_08_22_SS_Tri	16/03/2022		872036	MGT	Interlab_D	EM2204736009							9.3		6.5		
RPD														0				
A04.01	SX_OB_20220317_16_02_SS_Pr	17/03/2022		872310	MGT	Normal		<0.1	<0.1	<0.1	<0.1	<0.1					9.6	<100
A04.01	SX_OB_20220317_16_02_SS_Du	17/03/2022		872310	MGT	Field_D	M22-Ma36471	<0.1	<0.1	<0.1	<0.1	<0.1					9.7	<100
RPD								0	0	0	0	0					1	0
A04.01	SX_OB_20220317_16_02_SS_Pr	17/03/2022		872310	MGT	Normal		<0.1	<0.1	<0.1	<0.1	<0.1					9.6	<100
A04.01	SX_OB_20220317_16_03_SS_Tr	17/03/2022		EM2204843	ALSE-Melbourne	Interlab_D	M22-Ma36471					<0.1	1.7	5.1	9.9	5.0		180
RPD												0						57
A04.01	SX_OB_20220317_16_02_SS_Pr	17/03/2022		872310	MGT	Normal								5.2		5.1		
A04.01	SX_OB_20220317_16_02_SS_Du	17/03/2022		872310	MGT	Field_D	M22-Ma36481							5.2		5.1		
RPD														0		0		
A04.01	SX_OB_20220317_16_02_SS_Pr	17/03/2022		872310	MGT	Normal								9.9		6.5		
A04.01	SX_OB_20220317_16_02_SS_Du	17/03/2022		872310	MGT	Field_D	M22-Ma36489							9.9		6.5		
RPD														0		0		
A04.01	SX_OB_20220317_16_02_SS_Pr	17/03/2022		872310	MGT	Normal								9.9		6.5		
A04.01	SX_OB_20220317_16_03_SS_Tr	17/03/2022		EM2204843	ALSE-Melbourne	Interlab_D	M22-Ma36489							10.0				
RPD														1				
C02.01	SX_IB_20220317_07_53_SS_Pri	17/03/2022		EM2204843	ALSE-Melbourne	Normal						<0.1	1.6	5.1	9.4	5.0		310
C02.01	SX_IB_20220317_07_53_SS_Du	17/03/2022		EM2204843	ALSE-Melbourne	Field_D	EM2204843001					<0.1	1.6	5.1	9.3	5.0		190
RPD												0	0	0	1	0		48
C02.01	SX_IB_20220317_07_53_SS_Pri	17/03/2022		EM2204843	ALSE-Melbourne	Normal						<0.1	1.6	5.1	9.4	5.0		310
C02.01	SX_IB_20220317_07_54_SS_Tri	17/03/2022		872310	MGT	Interlab_D	EM2204843001	<0.1	<0.1	<0.1	<0.1	<0.1					9.0	<100
RPD												0						102
C02.01	SX_IB_20220317_07_53_SS_Pri	17/03/2022		EM2204843	ALSE-Melbourne	Normal						<0.1	1.6	5.1	9.4	5.0		310
C02.01	SX_IB_20220317_07_54_SS_Tri	17/03/2022		872310	MGT	Interlab_D	EM2204843001							5.2		5.1		
RPD														2		2		
C02.01	SX_IB_20220317_07_53_SS_Pri	17/03/2022		EM2204843	ALSE-Melbourne	Normal								9.4				
C02.01	SX_IB_20220317_07_53_SS_Du	17/03/2022		EM2204843	ALSE-Melbourne	Field_D	EM2204843011							9.4				
RPD														0				
C02.01	SX_IB_20220317_07_53_SS_Pri	17/03/2022		EM2204843	ALSE-Melbourne	Normal								9.4				
C02.01	SX_IB_20220317_07_54_SS_Tri	17/03/2022		872310	MGT	Interlab_D	EM2204843011							9.2		6.5		
RPD														2				
C05.01	SX_OB_20220327_15_52_SS_Pr	27/03/2022		874920	MGT	Normal		<0.1	<0.1	<0.1	<0.1	<0.1					10	<100
C05.01	SX_OB_20220327_15_59_SS_Du	27/03/2022		874920	MGT	Field_D	M22-Ma57512	<0.1	<0.1	<0.1	<0.1	<0.1					9.7	<100
RPD								0	0	0	0	0					3	0
C05.01	SX_OB_20220327_15_52_SS_Pr	27/03/2022		874920	MGT	Normal		<0.1	<0.1	<0.1	<0.1	<0.1					10	<100

								PCBs					Inorganics					
								Arochlor 1254	Arochlor 1221	Arochlor 1260	Arochlor 1016	PCBs (Sum of total)	pH (after HCL)	pH (Final)	pH (Initial)	pH of Leaching Fluid	pH (aqueous extract)	Fluoride
								mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	-	-	-	-	-	mg/kg
C05.01	SX_OB_20220327_16_00_SS_Tr	27/03/2022		EM2205473	ALSE-Melbourne	Interlab_D	M22-Ma57512					<0.1	1.2	5.2	9.8	5.0		210
RPD												0						71
C05.01	SX_OB_20220327_15_52_SS_Pr	27/03/2022		874920	MGT	Normal								5.5		5.0		
C05.01	SX_OB_20220327_15_59_SS_Du	27/03/2022		874920	MGT	Field_D	M22-Ma57521							5.2		5.0		
RPD														6		0		
C05.01	SX_OB_20220327_15_52_SS_Pr	27/03/2022		874920	MGT	Normal								9.9		6.4		
C05.01	SX_OB_20220327_15_59_SS_Du	27/03/2022		874920	MGT	Field_D	M22-Ma57530							9.8		6.4		
RPD														1		0		
C05.01	SX_OB_20220327_15_52_SS_Pr	27/03/2022		874920	MGT	Normal								9.9		6.4		
C05.01	SX_OB_20220327_16_00_SS_Tr	27/03/2022		EM2205473	ALSE-Melbourne	Interlab_D	M22-Ma57530							10.5				
RPD														6				
C05.01	SX_OB_20220327_07_55_SS_Pr	27/03/2022		EM2205473	ALSE-Melbourne	Normal						<0.1	1.2	4.9	8.9	5.0		180
C05.01	SX_OB_20220327_07_58_SS_Du	27/03/2022		EM2205473	ALSE-Melbourne	Field_D	EM2205473004					<0.1	1.1	4.9	9.1	5.0		190
RPD												0	9	0	2	0		5
C05.01	SX_OB_20220327_07_55_SS_Pr	27/03/2022		EM2205473	ALSE-Melbourne	Normal						<0.1	1.2	4.9	8.9	5.0		180
C05.01	SX_OB_20220327_07_58_SS_Tr	27/03/2022		874920	MGT	Interlab_D	EM2205473004	<0.1	<0.1	<0.1	<0.1	<0.1					8.4	<100
RPD												0						57
C05.01	SX_OB_20220327_07_55_SS_Pr	27/03/2022		EM2205473	ALSE-Melbourne	Normal						<0.1	1.2	4.9	8.9	5.0		180
C05.01	SX_OB_20220327_07_58_SS_Tr	27/03/2022		874920	MGT	Interlab_D	EM2205473004							5.2		5.0		
RPD														6		0		
C05.01	SX_OB_20220327_07_55_SS_Pr	27/03/2022		EM2205473	ALSE-Melbourne	Normal								9.6				
C05.01	SX_OB_20220327_07_58_SS_Du	27/03/2022		EM2205473	ALSE-Melbourne	Field_D	EM2205473013							9.4				
RPD														2				
C05.01	SX_OB_20220327_07_55_SS_Pr	27/03/2022		EM2205473	ALSE-Melbourne	Normal								9.6				
C05.01	SX_OB_20220327_07_58_SS_Tr	27/03/2022		874920	MGT	Interlab_D	EM2205473013							9.0		6.4		
RPD														6				
C02.01	SX_IB_20220328_15_44_SS_Pri	28/03/2022		875283	MGT	Normal		<0.1	<0.1	<0.1	<0.1	<0.1					9.3	<100
C02.01	SX_IB_20220328_15_47_SS_Du	28/03/2022		875283	MGT	Field_D	M22-Ma60487	<0.1	<0.1	<0.1	<0.1	<0.1					8.6	<100
RPD								0	0	0	0	0					8	0
C02.01	SX_IB_20220328_15_44_SS_Pri	28/03/2022		875283	MGT	Normal		<0.1	<0.1	<0.1	<0.1	<0.1					9.3	<100
C02.01	SX_IB_20220328_15_48_SS_Tri	28/03/2022		EM2205583	ALSE-Melbourne	Interlab_D	M22-Ma60487					<0.1	1.5	5.1	9.2	5.0		360
RPD												0						**113**
C02.01	SX_IB_20220328_15_44_SS_Pri	28/03/2022		875283	MGT	Normal								5.2		5.0		
C02.01	SX_IB_20220328_15_47_SS_Du	28/03/2022		875283	MGT	Field_D	M22-Ma60495							5.2		5.0		
RPD														0		0		
C02.01	SX_IB_20220328_15_44_SS_Pri	28/03/2022		875283	MGT	Normal								9.2		6.7		
C02.01	SX_IB_20220328_15_47_SS_Du	28/03/2022		875283	MGT	Field_D	M22-Ma60503							9.2		6.7		
RPD														0		0		
C02.01	SX_IB_20220328_15_44_SS_Pri	28/03/2022		875283	MGT	Normal								9.2		6.7		
C02.01	SX_IB_20220328_15_48_SS_Tri	28/03/2022		EM2205583	ALSE-Melbourne	Interlab_D	M22-Ma60503							9.5				
RPD														3				
C02.01	SX_IB_20220328_07_41_SS_Pri	28/03/2022		EM2205583	ALSE-Melbourne	Normal						<0.1	1.6	5.0	7.7	5.0		230
C02.01	SX_IB_20220328_07_45_SS_Du	28/03/2022		EM2205583	ALSE-Melbourne	Field_D	EM2205583001					<0.1	1.6	5.2	9.3	5.0		210
RPD												0	0	4	19	0		9
C02.01	SX_IB_20220328_07_41_SS_Pri	28/03/2022		EM2205583	ALSE-Melbourne	Normal						<0.1	1.6	5.0	7.7	5.0		230
C02.01	SX_IB_20220328_07_46_SS_Tri	28/03/2022		875283	MGT	Interlab_D	EM2205583001	<0.1	<0.1	<0.1	<0.1	<0.1					9.0	<100
RPD												0						79
C02.01	SX_IB_20220328_07_41_SS_Pri	28/03/2022		EM2205583	ALSE-Melbourne	Normal						<0.1	1.6	5.0	7.7	5.0		230
C02.01	SX_IB_20220328_07_46_SS_Tri	28/03/2022		875283	MGT	Interlab_D	EM2205583001							5.1		5.0		
RPD														2		0		
C02.01	SX_IB_20220328_07_41_SS_Pri	28/03/2022		EM2205583	ALSE-Melbourne	Normal								9.4				
C02.01	SX_IB_20220328_07_45_SS_Du	28/03/2022		EM2205583	ALSE-Melbourne	Field_D	EM2205583009							9.7				
RPD														3				
C02.01	SX_IB_20220328_07_41_SS_Pri	28/03/2022		EM2205583	ALSE-Melbourne	Normal								9.4				
C02.01	SX_IB_20220328_07_46_SS_Tri	28/03/2022		875283	MGT	Interlab_D	EM2205583009							9.2		6.7		
RPD														2				

**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

										Halogenated Benzenes										Halog	
								Moisture Content (dried @ 103°C)	Cyanide Total	1,2,4-trichlorobenzene	1,2-dichlorobenzene	1,3-dichlorobenzene	1,4-dichlorobenzene	Bromobenzene	4-chlorotoluene	Chlorobenzene	Iodomethane	Bromomethane
								%	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL								1	5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Location Code	Field ID	Date	Depth	Lab Report Number	Lab Name	Sample Type	Parent Sample											
C02.01	SX_IB_20220316_16_12_SS_Pri	16/03/2022		872036	MGT	Normal		31	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
C02.01	SX_IB_20220316_16_15_SS_Du	16/03/2022		872036	MGT	Field_D	M22-Ma34703	29	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
RPD								7	0	0	0	0	0	0	0	0	0	0
C02.01	SX_IB_20220316_16_12_SS_Pri	16/03/2022		872036	MGT	Normal		31	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
C02.01	SX_IB_20220316_16_16_SS_Tri	16/03/2022		EM2204736	ALSE-Melbourne	Interlab_D	M22-Ma34703		<5	<0.50	<0.50		<0.50			<0.50		
RPD									0	0	0		0			0		
C02.01	SX_IB_20220316_16_12_SS_Pri	16/03/2022		872036	MGT	Normal												
C02.01	SX_IB_20220316_16_15_SS_Du	16/03/2022		872036	MGT	Field_D	M22-Ma34711											
RPD																		
C02.01	SX_IB_20220316_16_12_SS_Pri	16/03/2022		872036	MGT	Normal												
C02.01	SX_IB_20220316_16_15_SS_Du	16/03/2022		872036	MGT	Field_D	M22-Ma34719											
RPD																		
C02.01	SX_IB_20220316_16_12_SS_Pri	16/03/2022		872036	MGT	Normal												
C02.01	SX_IB_20220316_16_16_SS_Tri	16/03/2022		EM2204736	ALSE-Melbourne	Interlab_D	M22-Ma34719											
RPD																		
C02.01	SX_IB_20220316_08_17_SS_Pri	16/03/2022		EM2204736	ALSE-Melbourne	Normal			<5	<0.50	<0.50		<0.50			<0.50		
C02.01	SX_IB_20220316_08_20_SS_Du	16/03/2022		EM2204736	ALSE-Melbourne	Field_D	EM2204736001		<5	<0.50	<0.50		<0.50			<0.50		
RPD									0	0	0		0			0		
C02.01	SX_IB_20220316_08_17_SS_Pri	16/03/2022		EM2204736	ALSE-Melbourne	Normal			<5	<0.50	<0.50		<0.50			<0.50		
C02.01	SX_IB_20220316_08_22_SS_Tri	16/03/2022		872036	MGT	Interlab_D	EM2204736001	28	<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		
C02.01	SX_IB_20220316_08_17_SS_Pri	16/03/2022		EM2204736	ALSE-Melbourne	Normal			<5	<0.50	<0.50		<0.50			<0.50		
C02.01	SX_IB_20220316_08_22_SS_Tri	16/03/2022		872036	MGT	Interlab_D	EM2204736001											
RPD																		
C02.01	SX_IB_20220316_08_17_SS_Pri	16/03/2022		EM2204736	ALSE-Melbourne	Normal												
C02.01	SX_IB_20220316_08_20_SS_Du	16/03/2022		EM2204736	ALSE-Melbourne	Field_D	EM2204736009											
RPD																		
C02.01	SX_IB_20220316_08_17_SS_Pri	16/03/2022		EM2204736	ALSE-Melbourne	Normal												
C02.01	SX_IB_20220316_08_22_SS_Tri	16/03/2022		872036	MGT	Interlab_D	EM2204736009											
RPD																		
A04.01	SX_OB_20220317_16_02_SS_Pr	17/03/2022		872310	MGT	Normal		28	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
A04.01	SX_OB_20220317_16_02_SS_Du	17/03/2022		872310	MGT	Field_D	M22-Ma36471	23	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
RPD								20	0	0	0	0	0	0	0	0	0	0
A04.01	SX_OB_20220317_16_02_SS_Pr	17/03/2022		872310	MGT	Normal		28	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
A04.01	SX_OB_20220317_16_03_SS_Tr	17/03/2022		EM2204843	ALSE-Melbourne	Interlab_D	M22-Ma36471		<5	<0.50	<0.50		<0.50			<0.50		
RPD									0	0	0		0			0		
A04.01	SX_OB_20220317_16_02_SS_Pr	17/03/2022		872310	MGT	Normal												
A04.01	SX_OB_20220317_16_02_SS_Du	17/03/2022		872310	MGT	Field_D	M22-Ma36481											
RPD																		
A04.01	SX_OB_20220317_16_02_SS_Pr	17/03/2022		872310	MGT	Normal												
A04.01	SX_OB_20220317_16_02_SS_Du	17/03/2022		872310	MGT	Field_D	M22-Ma36489											
RPD																		
A04.01	SX_OB_20220317_16_02_SS_Pr	17/03/2022		872310	MGT	Normal												
A04.01	SX_OB_20220317_16_03_SS_Tr	17/03/2022		EM2204843	ALSE-Melbourne	Interlab_D	M22-Ma36489											
RPD																		
C02.01	SX_IB_20220317_07_53_SS_Pri	17/03/2022		EM2204843	ALSE-Melbourne	Normal			<5	<0.50	<0.50		<0.50			<0.50		
C02.01	SX_IB_20220317_07_53_SS_Du	17/03/2022		EM2204843	ALSE-Melbourne	Field_D	EM2204843001		<5	<0.50	<0.50		<0.50			<0.50		
RPD									0	0	0		0			0		
C02.01	SX_IB_20220317_07_53_SS_Pri	17/03/2022		EM2204843	ALSE-Melbourne	Normal			<5	<0.50	<0.50		<0.50			<0.50		
C02.01	SX_IB_20220317_07_54_SS_Tri	17/03/2022		872310	MGT	Interlab_D	EM2204843001	30	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
RPD									0	0	0		0			0		
C02.01	SX_IB_20220317_07_53_SS_Pri	17/03/2022		EM2204843	ALSE-Melbourne	Normal			<5	<0.50	<0.50		<0.50			<0.50		
C02.01	SX_IB_20220317_07_54_SS_Tri	17/03/2022		872310	MGT	Interlab_D	EM2204843001											
RPD																		
C02.01	SX_IB_20220317_07_53_SS_Pri	17/03/2022		EM2204843	ALSE-Melbourne	Normal												
C02.01	SX_IB_20220317_07_53_SS_Du	17/03/2022		EM2204843	ALSE-Melbourne	Field_D	EM2204843011											
RPD																		
C02.01	SX_IB_20220317_07_53_SS_Pri	17/03/2022		EM2204843	ALSE-Melbourne	Normal												
C02.01	SX_IB_20220317_07_54_SS_Tri	17/03/2022		872310	MGT	Interlab_D	EM2204843011											
RPD																		
C05.01	SX_OB_20220327_15_52_SS_Pr	27/03/2022		874920	MGT	Normal		37	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
C05.01	SX_OB_20220327_15_59_SS_Du	27/03/2022		874920	MGT	Field_D	M22-Ma57512	35	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
RPD								6	0	0	0	0	0	0	0	0	0	0
C05.01	SX_OB_20220327_15_52_SS_Pr	27/03/2022		874920	MGT	Normal		37	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

									Halogenated Benzenes											Halog	
								Moisture Content (dried @ 103°C)	Cyanide Total	1,2,4-trichlorobenzene	1,2-dichlorobenzene	1,3-dichlorobenzene	1,4-dichlorobenzene	Bromobenzene	4-chlorotoluene	Chlorobenzene	Iodomethane	Bromomethane
								%	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
C05.01	SX_OB_20220327_16_00_SS_Tr	27/03/2022		EM2205473	ALSE-Melbourne	Interlab_D	M22-Ma57512		<5	<0.50	<0.50		<0.50			<0.50		
RPD									0	0	0		0			0		
C05.01	SX_OB_20220327_15_52_SS_Pr	27/03/2022		874920	MGT	Normal												
C05.01	SX_OB_20220327_15_59_SS_Du	27/03/2022		874920	MGT	Field_D	M22-Ma57521											
RPD																		
C05.01	SX_OB_20220327_15_52_SS_Pr	27/03/2022		874920	MGT	Normal												
C05.01	SX_OB_20220327_15_59_SS_Du	27/03/2022		874920	MGT	Field_D	M22-Ma57530											
RPD																		
C05.01	SX_OB_20220327_15_52_SS_Pr	27/03/2022		874920	MGT	Normal												
C05.01	SX_OB_20220327_16_00_SS_Tr	27/03/2022		EM2205473	ALSE-Melbourne	Interlab_D	M22-Ma57530											
RPD																		
C05.01	SX_OB_20220327_07_55_SS_Pr	27/03/2022		EM2205473	ALSE-Melbourne	Normal			<5	<0.50	<0.50		<0.50			<0.50		
C05.01	SX_OB_20220327_07_58_SS_Du	27/03/2022		EM2205473	ALSE-Melbourne	Field_D	EM2205473004		<5	<0.50	<0.50		<0.50			<0.50		
RPD									0	0	0		0			0		
C05.01	SX_OB_20220327_07_55_SS_Pr	27/03/2022		EM2205473	ALSE-Melbourne	Normal			<5	<0.50	<0.50		<0.50			<0.50		
C05.01	SX_OB_20220327_07_58_SS_Tr	27/03/2022		874920	MGT	Interlab_D	EM2205473004	30	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
RPD									0	0	0		0			0		
C05.01	SX_OB_20220327_07_55_SS_Pr	27/03/2022		EM2205473	ALSE-Melbourne	Normal			<5	<0.50	<0.50		<0.50			<0.50		
C05.01	SX_OB_20220327_07_58_SS_Tr	27/03/2022		874920	MGT	Interlab_D	EM2205473004											
RPD																		
C05.01	SX_OB_20220327_07_55_SS_Pr	27/03/2022		EM2205473	ALSE-Melbourne	Normal												
C05.01	SX_OB_20220327_07_58_SS_Du	27/03/2022		EM2205473	ALSE-Melbourne	Field_D	EM2205473013											
RPD																		
C05.01	SX_OB_20220327_07_55_SS_Pr	27/03/2022		EM2205473	ALSE-Melbourne	Normal												
C05.01	SX_OB_20220327_07_58_SS_Tr	27/03/2022		874920	MGT	Interlab_D	EM2205473013											
RPD																		
C02.01	SX_IB_20220328_15_44_SS_Pri	28/03/2022		875283	MGT	Normal		30	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
C02.01	SX_IB_20220328_15_47_SS_Du	28/03/2022		875283	MGT	Field_D	M22-Ma60487	29	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
RPD								3	0	0	0	0	0	0	0	0	0	0
C02.01	SX_IB_20220328_15_44_SS_Pri	28/03/2022		875283	MGT	Normal		30	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
C02.01	SX_IB_20220328_15_48_SS_Tri	28/03/2022		EM2205583	ALSE-Melbourne	Interlab_D	M22-Ma60487		<5	<0.50	<0.50		<0.50			<0.50		
RPD									0	0	0		0			0		
C02.01	SX_IB_20220328_15_44_SS_Pri	28/03/2022		875283	MGT	Normal												
C02.01	SX_IB_20220328_15_47_SS_Du	28/03/2022		875283	MGT	Field_D	M22-Ma60495											
RPD																		
C02.01	SX_IB_20220328_15_44_SS_Pri	28/03/2022		875283	MGT	Normal												
C02.01	SX_IB_20220328_15_47_SS_Du	28/03/2022		875283	MGT	Field_D	M22-Ma60503											
RPD																		
C02.01	SX_IB_20220328_15_44_SS_Pri	28/03/2022		875283	MGT	Normal												
C02.01	SX_IB_20220328_15_48_SS_Tri	28/03/2022		EM2205583	ALSE-Melbourne	Interlab_D	M22-Ma60503											
RPD																		
C02.01	SX_IB_20220328_07_41_SS_Pri	28/03/2022		EM2205583	ALSE-Melbourne	Normal			<5	<0.50	<0.50		<0.50			<0.50		
C02.01	SX_IB_20220328_07_45_SS_Du	28/03/2022		EM2205583	ALSE-Melbourne	Field_D	EM2205583001		<5	<0.50	<0.50		<0.50			<0.50		
RPD									0	0	0		0			0		
C02.01	SX_IB_20220328_07_41_SS_Pri	28/03/2022		EM2205583	ALSE-Melbourne	Normal			<5	<0.50	<0.50		<0.50			<0.50		
C02.01	SX_IB_20220328_07_46_SS_Tri	28/03/2022		875283	MGT	Interlab_D	EM2205583001	30	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
RPD									0	0	0		0			0		
C02.01	SX_IB_20220328_07_41_SS_Pri	28/03/2022		EM2205583	ALSE-Melbourne	Normal			<5	<0.50	<0.50		<0.50			<0.50		
C02.01	SX_IB_20220328_07_46_SS_Tri	28/03/2022		875283	MGT	Interlab_D	EM2205583001											
RPD																		
C02.01	SX_IB_20220328_07_41_SS_Pri	28/03/2022		EM2205583	ALSE-Melbourne	Normal												
C02.01	SX_IB_20220328_07_45_SS_Du	28/03/2022		EM2205583	ALSE-Melbourne	Field_D	EM2205583009											
RPD																		
C02.01	SX_IB_20220328_07_41_SS_Pri	28/03/2022		EM2205583	ALSE-Melbourne	Normal												
C02.01	SX_IB_20220328_07_46_SS_Tri	28/03/2022		875283	MGT	Interlab_D	EM2205583009											
RPD																		

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

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

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

								enated Hydrocarbons			MAH							
								1,2-dibromoethane	Dichlorodifluoromethane	Trichlorofluoromethane	Total MAH	Monocylic aromatic hydrocarbons EPAVic	1,3,5-trimethylbenzene	Styrene	Isopropylbenzene	1,2,4-trimethylbenzene	4-Methyl-2-pentanone	Acetone
								mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL								0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Location Code	Field ID	Date	Depth	Lab Report Number	Lab Name	Sample Type	Parent Sample											
C02.01	SX_IB_20220316_16_12_SS_Pri	16/03/2022		872036	MGT	Normal		<0.5	<0.5	<0.5	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
C02.01	SX_IB_20220316_16_15_SS_Du	16/03/2022		872036	MGT	Field_D	M22-Ma34703	<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
C02.01	SX_IB_20220316_16_12_SS_Pri	16/03/2022		872036	MGT	Normal		<0.5	<0.5	<0.5	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
C02.01	SX_IB_20220316_16_16_SS_Tri	16/03/2022		EM2204736	ALSE-Melbourne	Interlab_D	M22-Ma34703					<0.5		<0.5				
RPD														0				
C02.01	SX_IB_20220316_16_12_SS_Pri	16/03/2022		872036	MGT	Normal												
C02.01	SX_IB_20220316_16_15_SS_Du	16/03/2022		872036	MGT	Field_D	M22-Ma34711											
RPD																		
C02.01	SX_IB_20220316_16_12_SS_Pri	16/03/2022		872036	MGT	Normal												
C02.01	SX_IB_20220316_16_15_SS_Du	16/03/2022		872036	MGT	Field_D	M22-Ma34719											
RPD																		
C02.01	SX_IB_20220316_16_12_SS_Pri	16/03/2022		872036	MGT	Normal												
C02.01	SX_IB_20220316_16_16_SS_Tri	16/03/2022		EM2204736	ALSE-Melbourne	Interlab_D	M22-Ma34719											
RPD																		
C02.01	SX_IB_20220316_08_17_SS_Pri	16/03/2022		EM2204736	ALSE-Melbourne	Normal						<0.5		<0.5				
C02.01	SX_IB_20220316_08_20_SS_Du	16/03/2022		EM2204736	ALSE-Melbourne	Field_D	EM2204736001					<0.5		<0.5				
RPD												0		0				
C02.01	SX_IB_20220316_08_17_SS_Pri	16/03/2022		EM2204736	ALSE-Melbourne	Normal						<0.5		<0.5				
C02.01	SX_IB_20220316_08_22_SS_Tri	16/03/2022		872036	MGT	Interlab_D	EM2204736001	<0.5	<0.5	<0.5	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
RPD														0				
C02.01	SX_IB_20220316_08_17_SS_Pri	16/03/2022		EM2204736	ALSE-Melbourne	Normal						<0.5		<0.5				
C02.01	SX_IB_20220316_08_22_SS_Tri	16/03/2022		872036	MGT	Interlab_D	EM2204736001											
RPD																		
C02.01	SX_IB_20220316_08_17_SS_Pri	16/03/2022		EM2204736	ALSE-Melbourne	Normal												
C02.01	SX_IB_20220316_08_20_SS_Du	16/03/2022		EM2204736	ALSE-Melbourne	Field_D	EM2204736009											
RPD																		
C02.01	SX_IB_20220316_08_17_SS_Pri	16/03/2022		EM2204736	ALSE-Melbourne	Normal												
C02.01	SX_IB_20220316_08_22_SS_Tri	16/03/2022		872036	MGT	Interlab_D	EM2204736009											
RPD																		
A04.01	SX_OB_20220317_16_02_SS_Pr	17/03/2022		872310	MGT	Normal		<0.5	<0.5	<0.5	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
A04.01	SX_OB_20220317_16_02_SS_Du	17/03/2022		872310	MGT	Field_D	M22-Ma36471	<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
A04.01	SX_OB_20220317_16_02_SS_Pr	17/03/2022		872310	MGT	Normal		<0.5	<0.5	<0.5	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
A04.01	SX_OB_20220317_16_03_SS_Tr	17/03/2022		EM2204843	ALSE-Melbourne	Interlab_D	M22-Ma36471					<0.5		<0.5				
RPD														0				
A04.01	SX_OB_20220317_16_02_SS_Pr	17/03/2022		872310	MGT	Normal												
A04.01	SX_OB_20220317_16_02_SS_Du	17/03/2022		872310	MGT	Field_D	M22-Ma36481											
RPD																		
A04.01	SX_OB_20220317_16_02_SS_Pr	17/03/2022		872310	MGT	Normal												
A04.01	SX_OB_20220317_16_02_SS_Du	17/03/2022		872310	MGT	Field_D	M22-Ma36489											
RPD																		
A04.01	SX_OB_20220317_16_02_SS_Pr	17/03/2022		872310	MGT	Normal												
A04.01	SX_OB_20220317_16_03_SS_Tr	17/03/2022		EM2204843	ALSE-Melbourne	Interlab_D	M22-Ma36489											
RPD																		
C02.01	SX_IB_20220317_07_53_SS_Pri	17/03/2022		EM2204843	ALSE-Melbourne	Normal						<0.5		<0.5				
C02.01	SX_IB_20220317_07_53_SS_Du	17/03/2022		EM2204843	ALSE-Melbourne	Field_D	EM2204843001					<0.5		<0.5				
RPD												0		0				
C02.01	SX_IB_20220317_07_53_SS_Pri	17/03/2022		EM2204843	ALSE-Melbourne	Normal						<0.5		<0.5				
C02.01	SX_IB_20220317_07_54_SS_Tri	17/03/2022		872310	MGT	Interlab_D	EM2204843001	<0.5	<0.5	<0.5	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
RPD														0				
C02.01	SX_IB_20220317_07_53_SS_Pri	17/03/2022		EM2204843	ALSE-Melbourne	Normal						<0.5		<0.5				
C02.01	SX_IB_20220317_07_54_SS_Tri	17/03/2022		872310	MGT	Interlab_D	EM2204843001											
RPD																		
C02.01	SX_IB_20220317_07_53_SS_Pri	17/03/2022		EM2204843	ALSE-Melbourne	Normal												
C02.01	SX_IB_20220317_07_53_SS_Du	17/03/2022		EM2204843	ALSE-Melbourne	Field_D	EM2204843011											
RPD																		
C02.01	SX_IB_20220317_07_53_SS_Pri	17/03/2022		EM2204843	ALSE-Melbourne	Normal												
C02.01	SX_IB_20220317_07_54_SS_Tri	17/03/2022		872310	MGT	Interlab_D	EM2204843011											
RPD																		
C05.01	SX_OB_20220327_15_52_SS_Pr	27/03/2022		874920	MGT	Normal		<0.5	<0.5	<0.5	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
C05.01	SX_OB_20220327_15_59_SS_Du	27/03/2022		874920	MGT	Field_D	M22-Ma57512	<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
C05.01	SX_OB_20220327_15_52_SS_Pr	27/03/2022		874920	MGT	Normal		<0.5	<0.5	<0.5	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

								enated Hydrocarbons			MAH							
								1,2-dibromoethane	Dichlorodifluoromethane	Trichlorofluoromethane	Total MAH	Monocylic aromatic hydrocarbons EPAVic	1,3,5-trimethylbenzene	Styrene	Isopropylbenzene	1,2,4-trimethylbenzene	4-Methyl-2-pentanone	Acetone
								mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
C05.01	SX_OB_20220327_16_00_SS_Tr	27/03/2022		EM2205473	ALSE-Melbourne	Interlab_D	M22-Ma57512					<0.5		<0.5				
RPD														0				
C05.01	SX_OB_20220327_15_52_SS_Pr	27/03/2022		874920	MGT	Normal												
C05.01	SX_OB_20220327_15_59_SS_Du	27/03/2022		874920	MGT	Field_D	M22-Ma57521											
RPD																		
C05.01	SX_OB_20220327_15_52_SS_Pr	27/03/2022		874920	MGT	Normal												
C05.01	SX_OB_20220327_15_59_SS_Du	27/03/2022		874920	MGT	Field_D	M22-Ma57530											
RPD																		
C05.01	SX_OB_20220327_15_52_SS_Pr	27/03/2022		874920	MGT	Normal												
C05.01	SX_OB_20220327_16_00_SS_Tr	27/03/2022		EM2205473	ALSE-Melbourne	Interlab_D	M22-Ma57530											
RPD																		
C05.01	SX_OB_20220327_07_55_SS_Pr	27/03/2022		EM2205473	ALSE-Melbourne	Normal						<0.5		<0.5				
C05.01	SX_OB_20220327_07_58_SS_Du	27/03/2022		EM2205473	ALSE-Melbourne	Field_D	EM2205473004					<0.5		<0.5				
RPD												0		0				
C05.01	SX_OB_20220327_07_55_SS_Pr	27/03/2022		EM2205473	ALSE-Melbourne	Normal						<0.5		<0.5				
C05.01	SX_OB_20220327_07_58_SS_Tr	27/03/2022		874920	MGT	Interlab_D	EM2205473004	<0.5	<0.5	<0.5	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
RPD														0				
C05.01	SX_OB_20220327_07_55_SS_Pr	27/03/2022		EM2205473	ALSE-Melbourne	Normal						<0.5		<0.5				
C05.01	SX_OB_20220327_07_58_SS_Tr	27/03/2022		874920	MGT	Interlab_D	EM2205473004											
RPD																		
C05.01	SX_OB_20220327_07_55_SS_Pr	27/03/2022		EM2205473	ALSE-Melbourne	Normal												
C05.01	SX_OB_20220327_07_58_SS_Du	27/03/2022		EM2205473	ALSE-Melbourne	Field_D	EM2205473013											
RPD																		
C05.01	SX_OB_20220327_07_55_SS_Pr	27/03/2022		EM2205473	ALSE-Melbourne	Normal												
C05.01	SX_OB_20220327_07_58_SS_Tr	27/03/2022		874920	MGT	Interlab_D	EM2205473013											
RPD																		
C02.01	SX_IB_20220328_15_44_SS_Pri	28/03/2022		875283	MGT	Normal		<0.5	<0.5	<0.5	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
C02.01	SX_IB_20220328_15_47_SS_Du	28/03/2022		875283	MGT	Field_D	M22-Ma60487	<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
C02.01	SX_IB_20220328_15_44_SS_Pri	28/03/2022		875283	MGT	Normal		<0.5	<0.5	<0.5	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
C02.01	SX_IB_20220328_15_48_SS_Tri	28/03/2022		EM2205583	ALSE-Melbourne	Interlab_D	M22-Ma60487					<0.5		<0.5				
RPD														0				
C02.01	SX_IB_20220328_15_44_SS_Pri	28/03/2022		875283	MGT	Normal												
C02.01	SX_IB_20220328_15_47_SS_Du	28/03/2022		875283	MGT	Field_D	M22-Ma60495											
RPD																		
C02.01	SX_IB_20220328_15_44_SS_Pri	28/03/2022		875283	MGT	Normal												
C02.01	SX_IB_20220328_15_47_SS_Du	28/03/2022		875283	MGT	Field_D	M22-Ma60503											
RPD																		
C02.01	SX_IB_20220328_15_44_SS_Pri	28/03/2022		875283	MGT	Normal												
C02.01	SX_IB_20220328_15_48_SS_Tri	28/03/2022		EM2205583	ALSE-Melbourne	Interlab_D	M22-Ma60503											
RPD																		
C02.01	SX_IB_20220328_07_41_SS_Pri	28/03/2022		EM2205583	ALSE-Melbourne	Normal						<0.5		<0.5				
C02.01	SX_IB_20220328_07_45_SS_Du	28/03/2022		EM2205583	ALSE-Melbourne	Field_D	EM2205583001					<0.5		<0.5				
RPD												0		0				
C02.01	SX_IB_20220328_07_41_SS_Pri	28/03/2022		EM2205583	ALSE-Melbourne	Normal						<0.5		<0.5				
C02.01	SX_IB_20220328_07_46_SS_Tri	28/03/2022		875283	MGT	Interlab_D	EM2205583001	<0.5	<0.5	<0.5	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
RPD														0				
C02.01	SX_IB_20220328_07_41_SS_Pri	28/03/2022		EM2205583	ALSE-Melbourne	Normal						<0.5		<0.5				
C02.01	SX_IB_20220328_07_46_SS_Tri	28/03/2022		875283	MGT	Interlab_D	EM2205583001											
RPD																		
C02.01	SX_IB_20220328_07_41_SS_Pri	28/03/2022		EM2205583	ALSE-Melbourne	Normal												
C02.01	SX_IB_20220328_07_45_SS_Du	28/03/2022		EM2205583	ALSE-Melbourne	Field_D	EM2205583009											
RPD																		
C02.01	SX_IB_20220328_07_41_SS_Pri	28/03/2022		EM2205583	ALSE-Melbourne	Normal												
C02.01	SX_IB_20220328_07_46_SS_Tri	28/03/2022		875283	MGT	Interlab_D	EM2205583009											
RPD																		

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

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

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

								Solvents			SPOCAS
								Allyl chloride	Carbon disulfide	Methyl Ethyl Ketone	pH (CaCl2)
								mg/kg	mg/kg	mg/kg	-
EQL								0.5	0.5	0.5	0.1
Location Code	Field ID	Date	Depth	Lab Report Number	Lab Name	Sample Type	Parent Sample				
C02.01	SX_IB_20220316_16_12_SS_Pri	16/03/2022		872036	MGT	Normal		<0.5	<0.5	<0.5	
C02.01	SX_IB_20220316_16_15_SS_Du	16/03/2022		872036	MGT	Field_D	M22-Ma34703	<0.5	<0.5	<0.5	
RPD								0	0	0	
C02.01	SX_IB_20220316_16_12_SS_Pri	16/03/2022		872036	MGT	Normal		<0.5	<0.5	<0.5	
C02.01	SX_IB_20220316_16_16_SS_Tri	16/03/2022		EM2204736	ALSE-Melbourne	Interlab_D	M22-Ma34703				7.8
RPD											
C02.01	SX_IB_20220316_16_12_SS_Pri	16/03/2022		872036	MGT	Normal					
C02.01	SX_IB_20220316_16_15_SS_Du	16/03/2022		872036	MGT	Field_D	M22-Ma34711				
RPD											
C02.01	SX_IB_20220316_16_12_SS_Pri	16/03/2022		872036	MGT	Normal					
C02.01	SX_IB_20220316_16_15_SS_Du	16/03/2022		872036	MGT	Field_D	M22-Ma34719				
RPD											
C02.01	SX_IB_20220316_16_12_SS_Pri	16/03/2022		872036	MGT	Normal					
C02.01	SX_IB_20220316_16_16_SS_Tri	16/03/2022		EM2204736	ALSE-Melbourne	Interlab_D	M22-Ma34719				
RPD											
C02.01	SX_IB_20220316_08_17_SS_Pri	16/03/2022		EM2204736	ALSE-Melbourne	Normal					7.8
C02.01	SX_IB_20220316_08_20_SS_Du	16/03/2022		EM2204736	ALSE-Melbourne	Field_D	EM2204736001				7.8
RPD											0
C02.01	SX_IB_20220316_08_17_SS_Pri	16/03/2022		EM2204736	ALSE-Melbourne	Normal					7.8
C02.01	SX_IB_20220316_08_22_SS_Tri	16/03/2022		872036	MGT	Interlab_D	EM2204736001	<0.5	<0.5	<0.5	
RPD											
C02.01	SX_IB_20220316_08_17_SS_Pri	16/03/2022		EM2204736	ALSE-Melbourne	Normal					7.8
C02.01	SX_IB_20220316_08_22_SS_Tri	16/03/2022		872036	MGT	Interlab_D	EM2204736001				
RPD											
C02.01	SX_IB_20220316_08_17_SS_Pri	16/03/2022		EM2204736	ALSE-Melbourne	Normal					
C02.01	SX_IB_20220316_08_20_SS_Du	16/03/2022		EM2204736	ALSE-Melbourne	Field_D	EM2204736009				
RPD											
C02.01	SX_IB_20220316_08_17_SS_Pri	16/03/2022		EM2204736	ALSE-Melbourne	Normal					
C02.01	SX_IB_20220316_08_22_SS_Tri	16/03/2022		872036	MGT	Interlab_D	EM2204736009				
RPD											
A04.01	SX_OB_20220317_16_02_SS_Pr	17/03/2022		872310	MGT	Normal		<0.5	<0.5	<0.5	
A04.01	SX_OB_20220317_16_02_SS_Du	17/03/2022		872310	MGT	Field_D	M22-Ma36471	<0.5	<0.5	<0.5	
RPD								0	0	0	
A04.01	SX_OB_20220317_16_02_SS_Pr	17/03/2022		872310	MGT	Normal		<0.5	<0.5	<0.5	
A04.01	SX_OB_20220317_16_03_SS_Tr	17/03/2022		EM2204843	ALSE-Melbourne	Interlab_D	M22-Ma36471				8.7
RPD											
A04.01	SX_OB_20220317_16_02_SS_Pr	17/03/2022		872310	MGT	Normal					
A04.01	SX_OB_20220317_16_02_SS_Du	17/03/2022		872310	MGT	Field_D	M22-Ma36481				
RPD											
A04.01	SX_OB_20220317_16_02_SS_Pr	17/03/2022		872310	MGT	Normal					
A04.01	SX_OB_20220317_16_02_SS_Du	17/03/2022		872310	MGT	Field_D	M22-Ma36489				
RPD											
A04.01	SX_OB_20220317_16_02_SS_Pr	17/03/2022		872310	MGT	Normal					
A04.01	SX_OB_20220317_16_03_SS_Tr	17/03/2022		EM2204843	ALSE-Melbourne	Interlab_D	M22-Ma36489				
RPD											
C02.01	SX_IB_20220317_07_53_SS_Pri	17/03/2022		EM2204843	ALSE-Melbourne	Normal					7.8
C02.01	SX_IB_20220317_07_53_SS_Du	17/03/2022		EM2204843	ALSE-Melbourne	Field_D	EM2204843001				7.8
RPD											0
C02.01	SX_IB_20220317_07_53_SS_Pri	17/03/2022		EM2204843	ALSE-Melbourne	Normal					7.8
C02.01	SX_IB_20220317_07_54_SS_Tri	17/03/2022		872310	MGT	Interlab_D	EM2204843001	<0.5	<0.5	<0.5	
RPD											
C02.01	SX_IB_20220317_07_53_SS_Pri	17/03/2022		EM2204843	ALSE-Melbourne	Normal					7.8
C02.01	SX_IB_20220317_07_54_SS_Tri	17/03/2022		872310	MGT	Interlab_D	EM2204843001				
RPD											
C02.01	SX_IB_20220317_07_53_SS_Pri	17/03/2022		EM2204843	ALSE-Melbourne	Normal					
C02.01	SX_IB_20220317_07_53_SS_Du	17/03/2022		EM2204843	ALSE-Melbourne	Field_D	EM2204843011				
RPD											
C02.01	SX_IB_20220317_07_53_SS_Pri	17/03/2022		EM2204843	ALSE-Melbourne	Normal					
C02.01	SX_IB_20220317_07_54_SS_Tri	17/03/2022		872310	MGT	Interlab_D	EM2204843011				
RPD											
C05.01	SX_OB_20220327_15_52_SS_Pr	27/03/2022		874920	MGT	Normal		<0.5	<0.5	<0.5	
C05.01	SX_OB_20220327_15_59_SS_Du	27/03/2022		874920	MGT	Field_D	M22-Ma57512	<0.5	<0.5	<0.5	
RPD								0	0	0	
C05.01	SX_OB_20220327_15_52_SS_Pr	27/03/2022		874920	MGT	Normal		<0.5	<0.5	<0.5	

								Solvents			SPOCAS
								Allyl chloride	Carbon disulfide	Methyl Ethyl Ketone	pH (CaCl2)
								mg/kg	mg/kg	mg/kg	-
C05.01	SX_OB_20220327_16_00_SS_Tr	27/03/2022		EM2205473	ALSE-Melbourne	Interlab_D	M22-Ma57512				9.7
RPD											
C05.01	SX_OB_20220327_15_52_SS_Pr	27/03/2022		874920	MGT	Normal					
C05.01	SX_OB_20220327_15_59_SS_Du	27/03/2022		874920	MGT	Field_D	M22-Ma57521				
RPD											
C05.01	SX_OB_20220327_15_52_SS_Pr	27/03/2022		874920	MGT	Normal					
C05.01	SX_OB_20220327_15_59_SS_Du	27/03/2022		874920	MGT	Field_D	M22-Ma57530				
RPD											
C05.01	SX_OB_20220327_15_52_SS_Pr	27/03/2022		874920	MGT	Normal					
C05.01	SX_OB_20220327_16_00_SS_Tr	27/03/2022		EM2205473	ALSE-Melbourne	Interlab_D	M22-Ma57530				
RPD											
C05.01	SX_OB_20220327_07_55_SS_Pr	27/03/2022		EM2205473	ALSE-Melbourne	Normal					7.6
C05.01	SX_OB_20220327_07_58_SS_Du	27/03/2022		EM2205473	ALSE-Melbourne	Field_D	EM2205473004				7.6
RPD											0
C05.01	SX_OB_20220327_07_55_SS_Pr	27/03/2022		EM2205473	ALSE-Melbourne	Normal					7.6
C05.01	SX_OB_20220327_07_58_SS_Tr	27/03/2022		874920	MGT	Interlab_D	EM2205473004	<0.5	<0.5	<0.5	
RPD											
C05.01	SX_OB_20220327_07_55_SS_Pr	27/03/2022		EM2205473	ALSE-Melbourne	Normal					7.6
C05.01	SX_OB_20220327_07_58_SS_Tr	27/03/2022		874920	MGT	Interlab_D	EM2205473004				
RPD											
C05.01	SX_OB_20220327_07_55_SS_Pr	27/03/2022		EM2205473	ALSE-Melbourne	Normal					
C05.01	SX_OB_20220327_07_58_SS_Du	27/03/2022		EM2205473	ALSE-Melbourne	Field_D	EM2205473013				
RPD											
C05.01	SX_OB_20220327_07_55_SS_Pr	27/03/2022		EM2205473	ALSE-Melbourne	Normal					
C05.01	SX_OB_20220327_07_58_SS_Tr	27/03/2022		874920	MGT	Interlab_D	EM2205473013				
RPD											
C02.01	SX_IB_20220328_15_44_SS_Pri	28/03/2022		875283	MGT	Normal		<0.5	<0.5	<0.5	
C02.01	SX_IB_20220328_15_47_SS_Du	28/03/2022		875283	MGT	Field_D	M22-Ma60487	<0.5	<0.5	<0.5	
RPD								0	0	0	
C02.01	SX_IB_20220328_15_44_SS_Pri	28/03/2022		875283	MGT	Normal		<0.5	<0.5	<0.5	
C02.01	SX_IB_20220328_15_48_SS_Tri	28/03/2022		EM2205583	ALSE-Melbourne	Interlab_D	M22-Ma60487				8.0
RPD											
C02.01	SX_IB_20220328_15_44_SS_Pri	28/03/2022		875283	MGT	Normal					
C02.01	SX_IB_20220328_15_47_SS_Du	28/03/2022		875283	MGT	Field_D	M22-Ma60495				
RPD											
C02.01	SX_IB_20220328_15_44_SS_Pri	28/03/2022		875283	MGT	Normal					
C02.01	SX_IB_20220328_15_47_SS_Du	28/03/2022		875283	MGT	Field_D	M22-Ma60503				
RPD											
C02.01	SX_IB_20220328_15_44_SS_Pri	28/03/2022		875283	MGT	Normal					
C02.01	SX_IB_20220328_15_48_SS_Tri	28/03/2022		EM2205583	ALSE-Melbourne	Interlab_D	M22-Ma60503				
RPD											
C02.01	SX_IB_20220328_07_41_SS_Pri	28/03/2022		EM2205583	ALSE-Melbourne	Normal					8.0
C02.01	SX_IB_20220328_07_45_SS_Du	28/03/2022		EM2205583	ALSE-Melbourne	Field_D	EM2205583001				8.1
RPD											1
C02.01	SX_IB_20220328_07_41_SS_Pri	28/03/2022		EM2205583	ALSE-Melbourne	Normal					8.0
C02.01	SX_IB_20220328_07_46_SS_Tri	28/03/2022		875283	MGT	Interlab_D	EM2205583001	<0.5	<0.5	<0.5	
RPD											
C02.01	SX_IB_20220328_07_41_SS_Pri	28/03/2022		EM2205583	ALSE-Melbourne	Normal					8.0
C02.01	SX_IB_20220328_07_46_SS_Tri	28/03/2022		875283	MGT	Interlab_D	EM2205583001				
RPD											
C02.01	SX_IB_20220328_07_41_SS_Pri	28/03/2022		EM2205583	ALSE-Melbourne	Normal					
C02.01	SX_IB_20220328_07_45_SS_Du	28/03/2022		EM2205583	ALSE-Melbourne	Field_D	EM2205583009				
RPD											
C02.01	SX_IB_20220328_07_41_SS_Pri	28/03/2022		EM2205583	ALSE-Melbourne	Normal					
C02.01	SX_IB_20220328_07_46_SS_Tri	28/03/2022		875283	MGT	Interlab_D	EM2205583009				
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

TBM Spoil Waste Categorisation Report

TBM Spoil Waste Cat Report No:	**C02.0120220412104134_02**	**This report is attached as part of a WCR form referencing WGT-302-000-WKN-CJH-105-SWI-0001_01**

ATTACHMENT B: 95% UCL AVE CALCULATIONS

UCL Statistics for Data Sets with Non-Detects

User Selected Options	
Date/Time of Computation	ProUCL 5.112/04/2022 4:09:07 PM
From File	WorkSheet.xls
Full Precision	OFF
Confidence Coefficient	95%
Number of Bootstrap Operations	2000

Arsenic

General Statistics

Total Number of Observations	36	Number of Distinct Observations	16
		Number of Missing Observations	0
Minimum	15	Mean	23.14
Maximum	38	Median	21
SD	6.128	Std. Error of Mean	1.021
Coefficient of Variation	0.265	Skewness	0.929

Normal GOF Test

Shapiro Wilk Test Statistic	0.887	**Shapiro Wilk GOF Test**
5% Shapiro Wilk Critical Value	0.935	Data Not Normal at 5% Significance Level
Lilliefors Test Statistic	0.185	**Lilliefors GOF Test**
5% Lilliefors Critical Value	0.145	Data Not Normal at 5% Significance Level

Data Not Normal at 5% Significance Level

Assuming Normal Distribution

95% Normal UCL		**95% UCLs (Adjusted for Skewness)**	
95% Student's-t UCL	24.86	95% Adjusted-CLT UCL (Chen-1995)	24.99
		95% Modified-t UCL (Johnson-1978)	24.89

Gamma GOF Test

A-D Test Statistic	1.068	**Anderson-Darling Gamma GOF Test**
5% A-D Critical Value	0.747	Data Not Gamma Distributed at 5% Significance Level
K-S Test Statistic	0.158	**Kolmogorov-Smirnov Gamma GOF Test**
5% K-S Critical Value	0.147	Data Not Gamma Distributed at 5% Significance Level

Data Not Gamma Distributed at 5% Significance Level

Gamma Statistics

k hat (MLE)	16.17	k star (bias corrected MLE)	14.84
Theta hat (MLE)	1.431	Theta star (bias corrected MLE)	1.56
nu hat (MLE)	1164	nu star (bias corrected)	1068
MLE Mean (bias corrected)	23.14	MLE Sd (bias corrected)	6.007
		Approximate Chi Square Value (0.05)	993.4
Adjusted Level of Significance	0.0428	Adjusted Chi Square Value	990.1

Assuming Gamma Distribution

95% Approximate Gamma UCL (use when n>=50))	24.88	95% Adjusted Gamma UCL (use when n<50)	24.96

Lognormal GOF Test

Shapiro Wilk Test Statistic	0.927	**Shapiro Wilk Lognormal GOF Test**
5% Shapiro Wilk Critical Value	0.935	Data Not Lognormal at 5% Significance Level
Lilliefors Test Statistic	0.142	**Lilliefors Lognormal GOF Test**
5% Lilliefors Critical Value	0.145	Data appear Lognormal at 5% Significance Level

56	**Data appear Approximate Lognormal at 5% Significance Level**											
57												
58	**Lognormal Statistics**											
59						Minimum of Logged Data	2.708			Mean of logged Data	3.11	
60						Maximum of Logged Data	3.638			SD of logged Data	0.249	
61												
62	**Assuming Lognormal Distribution**											
63						95% H-UCL	24.9			90% Chebyshev (MVUE) UCL	26.02	
64						95% Chebyshev (MVUE) UCL	27.33			97.5% Chebyshev (MVUE) UCL	29.16	
65						99% Chebyshev (MVUE) UCL	32.75					
66												
67	**Nonparametric Distribution Free UCL Statistics**											
68	**Data appear to follow a Discernible Distribution at 5% Significance Level**											
69												
70	**Nonparametric Distribution Free UCLs**											
71						95% CLT UCL	24.82			95% Jackknife UCL	24.86	
72						95% Standard Bootstrap UCL	24.79			95% Bootstrap-t UCL	25.13	
73						95% Hall's Bootstrap UCL	25.03			95% Percentile Bootstrap UCL	24.81	
74						95% BCA Bootstrap UCL	24.89					
75						90% Chebyshev(Mean, Sd) UCL	26.2			95% Chebyshev(Mean, Sd) UCL	27.59	
76						97.5% Chebyshev(Mean, Sd) UCL	29.52			99% Chebyshev(Mean, Sd) UCL	33.3	
77												
78	**Suggested UCL to Use**											
79						95% Student's-t UCL	24.86			or 95% Modified-t UCL	24.89	
80						or 95% H-UCL	24.9					
81												
82	Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.											
83	Recommendations are based upon data size, data distribution, and skewness.											
84	These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).											
85	However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.											
86												
87	**ProUCL computes and outputs H-statistic based UCLs for historical reasons only.**											
88	**H-statistic often results in unstable (both high and low) values of UCL95 as shown in examples in the Technical Guide.**											
89	**It is therefore recommended to avoid the use of H-statistic based 95% UCLs.**											
90	**Use of nonparametric methods are preferred to compute UCL95 for skewed data sets which do not follow a gamma distribution.**											
91												
92												
93	**Copper**											
94												
95	**General Statistics**											
96						Total Number of Observations	36			Number of Distinct Observations	26	
97										Number of Missing Observations	0	
98						Minimum	43			Mean	62.75	
99						Maximum	110			Median	61.5	
100						SD	11.73			Std. Error of Mean	1.954	
101						Coefficient of Variation	0.187			Skewness	1.731	
102												
103	**Normal GOF Test**											
104						Shapiro Wilk Test Statistic	0.883			**Shapiro Wilk GOF Test**		
105						5% Shapiro Wilk Critical Value	0.935			Data Not Normal at 5% Significance Level		
106						Lilliefors Test Statistic	0.109			**Lilliefors GOF Test**		
107						5% Lilliefors Critical Value	0.145			Data appear Normal at 5% Significance Level		
108	**Data appear Approximate Normal at 5% Significance Level**											
109												
110	**Assuming Normal Distribution**											

111	**95% Normal UCL**						**95% UCLs (Adjusted for Skewness)**					
112				95% Student's-t UCL		66.05				95% Adjusted-CLT UCL (Chen-1995)		66.57
113										95% Modified-t UCL (Johnson-1978)		66.15
114												
115	**Gamma GOF Test**											
116				A-D Test Statistic		0.451	**Anderson-Darling Gamma GOF Test**					
117				5% A-D Critical Value		0.746	Detected data appear Gamma Distributed at 5% Significance Level					
118				K-S Test Statistic		0.0877	**Kolmogorov-Smirnov Gamma GOF Test**					
119				5% K-S Critical Value		0.146	Detected data appear Gamma Distributed at 5% Significance Level					
120	**Detected data appear Gamma Distributed at 5% Significance Level**											
121												
122	**Gamma Statistics**											
123				k hat (MLE)		33.09	k star (bias corrected MLE)					30.36
124				Theta hat (MLE)		1.896	Theta star (bias corrected MLE)					2.067
125				nu hat (MLE)		2383	nu star (bias corrected)					2186
126				MLE Mean (bias corrected)		62.75	MLE Sd (bias corrected)					11.39
127							Approximate Chi Square Value (0.05)					2078
128				Adjusted Level of Significance		0.0428	Adjusted Chi Square Value					2073
129												
130	**Assuming Gamma Distribution**											
131			95% Approximate Gamma UCL (use when n>=50))			66	95% Adjusted Gamma UCL (use when n<50)					66.15
132												
133	**Lognormal GOF Test**											
134				Shapiro Wilk Test Statistic		0.957	**Shapiro Wilk Lognormal GOF Test**					
135				5% Shapiro Wilk Critical Value		0.935	Data appear Lognormal at 5% Significance Level					
136				Lilliefors Test Statistic		0.085	**Lilliefors Lognormal GOF Test**					
137				5% Lilliefors Critical Value		0.145	Data appear Lognormal at 5% Significance Level					
138	**Data appear Lognormal at 5% Significance Level**											
139												
140	**Lognormal Statistics**											
141				Minimum of Logged Data		3.761	Mean of logged Data					4.124
142				Maximum of Logged Data		4.7	SD of logged Data					0.173
143												
144	**Assuming Lognormal Distribution**											
145				95% H-UCL		65.99	90% Chebyshev (MVUE) UCL					68.18
146				95% Chebyshev (MVUE) UCL		70.66	97.5% Chebyshev (MVUE) UCL					74.09
147				99% Chebyshev (MVUE) UCL		80.84						
148												
149	**Nonparametric Distribution Free UCL Statistics**											
150	**Data appear to follow a Discernible Distribution at 5% Significance Level**											
151												
152	**Nonparametric Distribution Free UCLs**											
153				95% CLT UCL		65.96	95% Jackknife UCL					66.05
154				95% Standard Bootstrap UCL		66.02	95% Bootstrap-t UCL					66.48
155				95% Hall's Bootstrap UCL		68.58	95% Percentile Bootstrap UCL					66.14
156				95% BCA Bootstrap UCL		66.56						
157				90% Chebyshev(Mean, Sd) UCL		68.61	95% Chebyshev(Mean, Sd) UCL					71.27
158				97.5% Chebyshev(Mean, Sd) UCL		74.96	99% Chebyshev(Mean, Sd) UCL					82.2
159												
160	**Suggested UCL to Use**											
161				95% Student's-t UCL		66.05						
162												
163	When a data set follows an approximate (e.g., normal) distribution passing one of the GOF test											
164	When applicable, it is suggested to use a UCL based upon a distribution (e.g., gamma) passing both GOF tests in ProUCL											
165												

	A	B	C	D	E	F	G	H	I	J	K	L
166	Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.											
167	Recommendations are based upon data size, data distribution, and skewness.											
168	These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).											
169	However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.											
170												
171												
172	**Nickel**											
173												
174	**General Statistics**											
175						Total Number of Observations	36				Number of Distinct Observations	22	
176											Number of Missing Observations	0	
177						Minimum	114				Mean	161.6	
178						Maximum	230				Median	165.5	
179						SD	26.14				Std. Error of Mean	4.357	
180						Coefficient of Variation	0.162				Skewness	0.21	
181													
182	**Normal GOF Test**											
183						Shapiro Wilk Test Statistic	0.966			**Shapiro Wilk GOF Test**			
184						5% Shapiro Wilk Critical Value	0.935			Data appear Normal at 5% Significance Level			
185						Lilliefors Test Statistic	0.118			**Lilliefors GOF Test**			
186						5% Lilliefors Critical Value	0.145			Data appear Normal at 5% Significance Level			
187	**Data appear Normal at 5% Significance Level**											
188												
189	**Assuming Normal Distribution**											
190	**95% Normal UCL**									**95% UCLs (Adjusted for Skewness)**		
191						95% Student's-t UCL	169			95% Adjusted-CLT UCL (Chen-1995)	168.9	
192										95% Modified-t UCL (Johnson-1978)	169	
193												
194	**Gamma GOF Test**											
195						A-D Test Statistic	0.537			**Anderson-Darling Gamma GOF Test**			
196						5% A-D Critical Value	0.746			Detected data appear Gamma Distributed at 5% Significance Level			
197						K-S Test Statistic	0.135			**Kolmogorov-Smirnov Gamma GOF Test**			
198						5% K-S Critical Value	0.146			Detected data appear Gamma Distributed at 5% Significance Level			
199	**Detected data appear Gamma Distributed at 5% Significance Level**											
200												
201	**Gamma Statistics**											
202						k hat (MLE)	38.89				k star (bias corrected MLE)	35.66	
203						Theta hat (MLE)	4.156				Theta star (bias corrected MLE)	4.531	
204						nu hat (MLE)	2800				nu star (bias corrected)	2568	
205						MLE Mean (bias corrected)	161.6				MLE Sd (bias corrected)	27.06	
206											Approximate Chi Square Value (0.05)	2451	
207						Adjusted Level of Significance	0.0428				Adjusted Chi Square Value	2446	
208													
209	**Assuming Gamma Distribution**											
210						95% Approximate Gamma UCL (use when n>=50))	169.3				95% Adjusted Gamma UCL (use when n<50)	169.7	
211													
212	**Lognormal GOF Test**											
213						Shapiro Wilk Test Statistic	0.963			**Shapiro Wilk Lognormal GOF Test**			
214						5% Shapiro Wilk Critical Value	0.935			Data appear Lognormal at 5% Significance Level			
215						Lilliefors Test Statistic	0.146			**Lilliefors Lognormal GOF Test**			
216						5% Lilliefors Critical Value	0.145			Data Not Lognormal at 5% Significance Level			
217	**Data appear Approximate Lognormal at 5% Significance Level**											
218													
219	**Lognormal Statistics**											
220						Minimum of Logged Data	4.736				Mean of logged Data	5.072	

221	Maximum of Logged Data					5.438	SD of logged Data					0.164
222												
223	**Assuming Lognormal Distribution**											
224	95% H-UCL					169.6	90% Chebyshev (MVUE) UCL					175
225	95% Chebyshev (MVUE) UCL					181	97.5% Chebyshev (MVUE) UCL					189.4
226	99% Chebyshev (MVUE) UCL					205.8						
227												
228	**Nonparametric Distribution Free UCL Statistics**											
229	**Data appear to follow a Discernible Distribution at 5% Significance Level**											
230												
231	**Nonparametric Distribution Free UCLs**											
232	95% CLT UCL					168.8	95% Jackknife UCL					169
233	95% Standard Bootstrap UCL					168.9	95% Bootstrap-t UCL					169.2
234	95% Hall's Bootstrap UCL					169.2	95% Percentile Bootstrap UCL					168.6
235	95% BCA Bootstrap UCL					169						
236	90% Chebyshev(Mean, Sd) UCL					174.7	95% Chebyshev(Mean, Sd) UCL					180.6
237	97.5% Chebyshev(Mean, Sd) UCL					188.8	99% Chebyshev(Mean, Sd) UCL					205
238												
239	**Suggested UCL to Use**											
240	95% Student's-t UCL					169						
241												
242	Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.											
243	Recommendations are based upon data size, data distribution, and skewness.											
244	These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).											
245	However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.											
246												

TBM Spoil Waste Categorisation Report

TBM Spoil Waste Cat Report No:	**C02.0120220412104134_02**	**This report is attached as part of a WCR form referencing WGT-302-000-WKN-CJH-105-SWI-0001_01**

ATTACHMENT C: LABORATORY CERTIFICATES

CHAIN OF CUSTODY RECORD

Eurofins | Environment Testing ABN 50 005 085 521

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

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

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

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

Company	AGON Environmental - Tunnel Spoil Testing	Project №	JC0927	Project Manager	Craig Trimbur
Address	Unit H76, 63-85 Turner St, Port Melbourne VIC 3207	Project Name	20220317142125-Eurofin-22	EDD Format (ESdat, EQuIS etc)	Esdat
Contact Name	Craig Trimbur David Lawson				
Phone №	+61 400 826 907 (Craig) +61 490 411 004 (David)				
Special Directions	Please provide an interim lab report if finalised report has not been provided by 14 days from sample receipt. Please provide eSRN along with oter sample recipt documentation				
Purchase Order					
Quote ID №	Agon WGTP TST				

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

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

- Spoil Sample Preparation
- Suite WGTP-R1: TRH/ PAH/ Phenols/ OCP/ PCB/ VOC/ Vinyl Chloride/ Metals (As, Cd, Cr, Cu, Ni, Pb, Hg, Ag, Sn, Mo, Se, Zn)/ Cr6+/ CN/ Total Fluoride/ pH
- PFAS Extended Suite - 0.1- 5ug/kg
- ASLP PH 5 - PFAS 0.01-0.05 ug/l
- ASLP Reagent - PFAS 0.01-0.05ug/l

Containers — Change container type & size if necessary

- 500mL Plastic
- 250mL Plastic
- 125mL Plastic
- 200mL Amber Glass
- 40mL VOA vial
- 500mL PFAS Bottle
- Jar (Glass or HDPE)
- Other (Asbestos AS4964, WA Guidelines)

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

♦Surcharge will apply

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

№	Client Sample ID	Sampled Date/Time dd/mm/yy hh:mm	Matrix Solid (S) Water (W)	Spoil Sample Preparation	Suite WGTP-R1: TRH/ PAH/ Phenols/ OCP/ PCB/ VOC/ Vinyl Chloride/ Metals (As, Cd, Cr, Cu, Ni, Pb, Hg, Ag, Sn, Mo, Se, Zn)/ Cr6+/ CN/ Total Fluoride/ pH	PFAS Extended Suite - 0.1- 5ug/kg	ASLP PH 5 - PFAS 0.01-0.05 ug/l	ASLP Reagent - PFAS 0.01-0.05ug/l	Other (Asbestos AS4964, WA Guidelines)	Sample Comments / Dangerous Goods Hazard Warning
1	SX_IB_20220316_08_22_SS_Triplicate_EUF	16/03/22	S	X	X	X	X	X	1	
2	SX_IB_20220316_08_36_SS_Primary_EUF	16/03/22	S	X	X	X	X	X	1	
3	SX_IB_20220316_12_12_SS_Primary_EUF	16/03/22	S	X	X	X	X	X	1	
4	SX_IB_20220316_16_12_SS_Primary_EUF	16/03/22	S	X	X	X	X	X	1	
5	SX_IB_20220316_16_15_SS_Duplicate_EUF	16/03/22	S	X	X	X	X	X	1	
6	SX_IB_20220316_19_56_SS_Primary_EUF	16/03/22	S	X	X	X	X	X	1	
7	SX_IB_20220317_00_02_SS_Primary_EUF	17/03/22	S	X	X	X	X	X	1	
8	SX_IB_20220317_03_58_SS_Primary_EUF	17/03/22	S	X	X	X	X	X	1	R. 872036 17/3/17
9										
10										
11										
12										
13										
		Total Counts		8	8	8	8	8	8	

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

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

#AU_CAU001_EnviroSampleVic

From: Michael Cassidy
Sent: Thursday, 17 March 2022 2:31 PM
To: #AU_CAU001_EnviroSampleVic
Subject: FW: WGTP TST sample delivery 17.3.22
Attachments: 20220317142125-Eurofin-22_00.xlsx

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

Thanks Canh,

Kind Regards,

Michael Cassidy

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

From: Hannah Kennedy <hannah.kennedy@eprisk.com.au>
Sent: Thursday, 17 March 2022 2:28 PM
To: Michael Cassidy <MichaelCassidy@eurofins.com>
Cc: Labreports.TST <labreports.tst@agonenviro.com.au>; Craig Trimbur <Craig.Trimbur@eprisk.com.au>; motherhublabresults1@wgtp.com.au; David Lawson <David.Lawson@agonenviro.com.au>
Subject: RE: WGTP TST sample delivery 17.3.22

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

Hi Michael,

Please see the completed COC with the site reference number.

Kind Regards,

Hannah Kennedy
Graduate Environmental Scientist
M 0457 063 258 | **E** hannah.kennedy@eprisk.com.au

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

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

Attention: **David Lawson**

Report **872036-L**
Project name 20220317142125-Eurofin-22
Project ID JC0927
Received Date Mar 17, 2022

Client Sample ID			SX_IB_20220316_08_22_SS_Triplicate_EUF	SX_IB_20220316_08_36_SS_Primary_EUF	SX_IB_20220316_12_12_SS_Primary_EUF	SX_IB_20220316_16_12_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-Ma34708	M22-Ma34709	M22-Ma34710	M22-Ma34711
Date Sampled			Mar 16, 2022	Mar 16, 2022	Mar 16, 2022	Mar 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	5.1	5.1	5.1	5.1
pH (off)	0.1	pH Units	5.3	5.2	5.2	5.2
Perfluoroalkyl carboxylic acids (PFCAs)						
Perfluorobutanoic acid (PFBA)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
Perfluoropentanoic acid (PFPeA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorohexanoic acid (PFHxA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoroheptanoic acid (PFHpA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorooctanoic acid (PFOA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorononanoic acid (PFNA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorodecanoic acid (PFDA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoroundecanoic acid (PFUnDA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorododecanoic acid (PFDoDA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorotridecanoic acid (PFTrDA)[N15]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorotetradecanoic acid (PFTeDA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C4-PFBA (surr.)	1	%	88	74	97	75
13C5-PFPeA (surr.)	1	%	78	71	95	69
13C5-PFHxA (surr.)	1	%	76	65	80	64
13C4-PFHpA (surr.)	1	%	75	63	80	62
13C8-PFOA (surr.)	1	%	69	60	76	63
13C5-PFNA (surr.)	1	%	78	65	79	53
13C6-PFDA (surr.)	1	%	73	51	69	89
13C2-PFUnDA (surr.)	1	%	66	49	60	68
13C2-PFDoDA (surr.)	1	%	73	57	65	79
13C2-PFTeDA (surr.)	1	%	73	67	48	56
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_20220316_08_22_SS_Triplicate_EUF	SX_IB_20220316_08_36_SS_Primary_EUF	SX_IB_20220316_12_12_SS_Primary_EUF	SX_IB_20220316_16_16_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-Ma34708**	**M22-Ma34709**	**M22-Ma34710**	**M22-Ma34711**
Date Sampled			**Mar 16, 2022**	**Mar 16, 2022**	**Mar 16, 2022**	**Mar 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	%	87	69	88	54
D3-N-MeFOSA (surr.)	1	%	122	89	100	102
D5-N-EtFOSA (surr.)	1	%	97	77	82	86
D7-N-MeFOSE (surr.)	1	%	84	67	76	46
D9-N-EtFOSE (surr.)	1	%	89	72	83	51
D5-N-EtFOSAA (surr.)	1	%	18	13	21	32
D3-N-MeFOSAA (surr.)	1	%	10	17	22	34
Perfluoroalkyl sulfonic acids (PFSAs)						
Perfluorobutanesulfonic acid (PFBS)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorononanesulfonic acid (PFNS)[N15]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoropropanesulfonic acid (PFPrS)[N15]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoropentanesulfonic acid (PFPeS)[N15]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorohexanesulfonic acid (PFHxS)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoroheptanesulfonic acid (PFHpS)[N15]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorooctanesulfonic acid (PFOS)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorodecanesulfonic acid (PFDS)[N15]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C3-PFBS (surr.)	1	%	81	69	86	67
18O2-PFHxS (surr.)	1	%	73	62	85	65
13C8-PFOS (surr.)	1	%	80	66	78	53
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)						
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C2-4:2 FTSA (surr.)	1	%	71	64	68	47
13C2-6:2 FTSA (surr.)	1	%	62	53	64	32
13C2-8:2 FTSA (surr.)	1	%	62	45	65	46
13C2-10:2 FTSA (surr.)	1	%	68	49	57	33
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_20220316_16_15_SS_Duplicate_EUF	SX_IB_20220316_19_56_SS_Primary_EUF	SX_IB_20220317_00_02_SS_Primary_EUF	SX_IB_20220317_03_58_SS_Primary_EUF
Sample Matrix			**AUS Leachate - pH 5.0**	**AUS Leachate - pH 5.0**	**AUS Leachate - pH 5.0**	**AUS Leachate - pH 5.0**
Eurofins Sample No.			**M22-Ma34712**	**M22-Ma34713**	**M22-Ma34714**	**M22-Ma34715**
Date Sampled			**Mar 16, 2022**	**Mar 16, 2022**	**Mar 16, 2022**	**Mar 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	5.1	5.1	5.1	5.1
pH (off)	0.1	pH Units	5.2	5.2	5.2	5.2
Perfluoroalkyl carboxylic acids (PFCAs)						
Perfluorobutanoic acid (PFBA)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
Perfluoropentanoic acid (PFPeA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorohexanoic acid (PFHxA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoroheptanoic acid (PFHpA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorooctanoic acid (PFOA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorononanoic acid (PFNA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorodecanoic acid (PFDA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoroundecanoic acid (PFUnDA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorododecanoic acid (PFDoDA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorotridecanoic acid (PFTrDA)[N15]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorotetradecanoic acid (PFTeDA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C4-PFBA (surr.)	1	%	80	68	63	84
13C5-PFPeA (surr.)	1	%	73	61	62	79
13C5-PFHxA (surr.)	1	%	68	55	53	73
13C4-PFHpA (surr.)	1	%	65	53	52	71
13C8-PFOA (surr.)	1	%	65	49	51	71
13C5-PFNA (surr.)	1	%	59	89	89	62
13C6-PFDA (surr.)	1	%	50	38	37	52
13C2-PFUnDA (surr.)	1	%	87	28	34	44
13C2-PFDoDA (surr.)	1	%	95	67	79	44
13C2-PFTeDA (surr.)	1	%	55	42	51	55
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	%	65	49	52	69
D3-N-MeFOSA (surr.)	1	%	116	85	104	129
D5-N-EtFOSA (surr.)	1	%	99	71	89	106
D7-N-MeFOSE (surr.)	1	%	59	42	49	63
D9-N-EtFOSE (surr.)	1	%	64	46	52	65
D5-N-EtFOSAA (surr.)	1	%	30	33	28	11
D3-N-MeFOSAA (surr.)	1	%	38	16	28	38

Client Sample ID			SX_IB_20220316_16_15_SS_Duplicate_EUF	SX_IB_20220316_19_56_SS_Primary_EUF	SX_IB_20220317_00_02_SS_Primary_EUF	SX_IB_20220317_03_58_SS_Primary_EUF
Sample Matrix			**AUS Leachate - pH 5.0**	**AUS Leachate - pH 5.0**	**AUS Leachate - pH 5.0**	**AUS Leachate - pH 5.0**
Eurofins Sample No.			**M22-Ma34712**	**M22-Ma34713**	**M22-Ma34714**	**M22-Ma34715**
Date Sampled			**Mar 16, 2022**	**Mar 16, 2022**	**Mar 16, 2022**	**Mar 16, 2022**
Test/Reference	LOR	Unit				
Perfluoroalkyl sulfonic acids (PFSAs)						
Perfluorobutanesulfonic acid (PFBS)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorononanesulfonic acid (PFNS)[N15]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoropropanesulfonic acid (PFPrS)[N15]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoropentanesulfonic acid (PFPeS)[N15]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorohexanesulfonic acid (PFHxS)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoroheptanesulfonic acid (PFHpS)[N15]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorooctanesulfonic acid (PFOS)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorodecanesulfonic acid (PFDS)[N15]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C3-PFBS (surr.)	1	%	71	58	60	80
18O2-PFHxS (surr.)	1	%	68	44	56	74
13C8-PFOS (surr.)	1	%	58	43	47	62
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)						
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C2-4:2 FTSA (surr.)	1	%	45	38	38	52
13C2-6:2 FTSA (surr.)	1	%	36	27	30	43
13C2-8:2 FTSA (surr.)	1	%	47	36	35	20
13C2-10:2 FTSA (surr.)	1	%	45	29	33	45
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_20220316_08_22_SS_Triplicate_EUF	SX_IB_20220316_08_36_SS_Primary_EUF	SX_IB_20220316_12_12_SS_Primary_EUF	SX_IB_20220316_16_12_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-Ma34716**	**M22-Ma34717**	**M22-Ma34718**	**M22-Ma34719**
Date Sampled			**Mar 16, 2022**	**Mar 16, 2022**	**Mar 16, 2022**	**Mar 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	6.5	6.5	6.5	6.5
pH (off)	0.1	pH Units	9.3	9.3	9.4	9.4

Client Sample ID			SX_IB_20220316_08_22_SS_Triplicate_EUF	SX_IB_20220316_08_36_SS_Primary_EUF	SX_IB_20220316_12_12_SS_Primary_EUF	SX_IB_20220316_16_12_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-Ma34716**	**M22-Ma34717**	**M22-Ma34718**	**M22-Ma34719**
Date Sampled			**Mar 16, 2022**	**Mar 16, 2022**	**Mar 16, 2022**	**Mar 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 (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	%	104	79	89	76
13C5-PFPeA (surr.)	1	%	100	80	97	96
13C5-PFHxA (surr.)	1	%	86	66	75	77
13C4-PFHpA (surr.)	1	%	86	64	74	73
13C8-PFOA (surr.)	1	%	78	64	67	63
13C5-PFNA (surr.)	1	%	80	57	63	63
13C6-PFDA (surr.)	1	%	74	53	54	63
13C2-PFUnDA (surr.)	1	%	56	45	49	49
13C2-PFDoDA (surr.)	1	%	54	48	50	46
13C2-PFTeDA (surr.)	1	%	41	57	62	51
Perfluoroalkyl sulfonamido substances						
Perfluorooctane sulfonamide (FOSA)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
13C8-FOSA (surr.)	1	%	84	66	69	75
D3-N-MeFOSA (surr.)	1	%	147	135	70	75
D5-N-EtFOSA (surr.)	1	%	111	111	113	121
D7-N-MeFOSE (surr.)	1	%	59	58	55	57
D9-N-EtFOSE (surr.)	1	%	63	60	64	62
D5-N-EtFOSAA (surr.)	1	%	18	39	13	15
D3-N-MeFOSAA (surr.)	1	%	19	11	14	18
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_20220316_08_22_SS_Triplicate_EUF	SX_IB_20220316_08_36_SS_Primary_EUF	SX_IB_20220316_12_12_SS_Primary_EUF	SX_IB_20220316_16_12_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-Ma34716	M22-Ma34717	M22-Ma34718	M22-Ma34719
Date Sampled			Mar 16, 2022	Mar 16, 2022	Mar 16, 2022	Mar 16, 2022
Test/Reference	LOR	Unit				
Perfluoroalkyl sulfonic acids (PFSAs)						
Perfluorooctanesulfonic acid (PFOS)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorodecanesulfonic acid (PFDS)[N15]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C3-PFBS (surr.)	1	%	90	71	78	71
18O2-PFHxS (surr.)	1	%	85	65	65	60
13C8-PFOS (surr.)	1	%	73	61	55	48
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)						
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C2-4:2 FTSA (surr.)	1	%	66	42	53	62
13C2-6:2 FTSA (surr.)	1	%	47	39	52	66
13C2-8:2 FTSA (surr.)	1	%	73	48	55	72
13C2-10:2 FTSA (surr.)	1	%	58	47	45	56
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_20220316_16_15_SS_Duplicate_EUF	SX_IB_20220316_19_56_SS_Primary_EUF	SX_IB_20220317_00_02_SS_Primary_EUF	SX_IB_20220317_03_58_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-Ma34720	M22-Ma34721	M22-Ma34722	M22-Ma34723
Date Sampled			Mar 16, 2022	Mar 16, 2022	Mar 16, 2022	Mar 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	6.5	6.5	6.5	6.5
pH (off)	0.1	pH Units	9.3	9.4	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

Client Sample ID			SX_IB_20220316_16_15_SS_Duplicate_EUF	SX_IB_20220316_19_56_SS_Primary_EUF	SX_IB_20220317_00_02_SS_Primary_EUF	SX_IB_20220317_03_58_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-Ma34720	M22-Ma34721	M22-Ma34722	M22-Ma34723
Date Sampled			Mar 16, 2022	Mar 16, 2022	Mar 16, 2022	Mar 16, 2022
Test/Reference	LOR	Unit				
Perfluoroalkyl carboxylic acids (PFCAs)						
Perfluorododecanoic acid (PFDoDA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorotridecanoic acid (PFTrDA)[N15]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorotetradecanoic acid (PFTeDA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C4-PFBA (surr.)	1	%	79	77	90	77
13C5-PFPeA (surr.)	1	%	94	93	107	89
13C5-PFHxA (surr.)	1	%	81	77	100	77
13C4-PFHpA (surr.)	1	%	81	73	99	78
13C8-PFOA (surr.)	1	%	68	62	82	72
13C5-PFNA (surr.)	1	%	74	62	86	70
13C6-PFDA (surr.)	1	%	74	62	95	74
13C2-PFUnDA (surr.)	1	%	61	55	83	62
13C2-PFDoDA (surr.)	1	%	58	50	75	57
13C2-PFTeDA (surr.)	1	%	72	63	83	64
Perfluoroalkyl sulfonamido substances						
Perfluorooctane sulfonamide (FOSA)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
13C8-FOSA (surr.)	1	%	85	73	107	86
D3-N-MeFOSA (surr.)	1	%	82	73	106	88
D5-N-EtFOSA (surr.)	1	%	135	118	168	140
D7-N-MeFOSE (surr.)	1	%	69	57	90	69
D9-N-EtFOSE (surr.)	1	%	73	60	97	77
D5-N-EtFOSAA (surr.)	1	%	16	12	23	25
D3-N-MeFOSAA (surr.)	1	%	18	13	27	23
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	%	77	71	91	73
18O2-PFHxS (surr.)	1	%	62	59	90	73
13C8-PFOS (surr.)	1	%	61	53	68	64

Client Sample ID			SX_IB_20220316_16_15_SS_Duplicate_EUF	SX_IB_20220316_19_56_SS_Primary_EUF	SX_IB_20220317_00_02_SS_Primary_EUF	SX_IB_20220317_03_58_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-Ma34720**	**M22-Ma34721**	**M22-Ma34722**	**M22-Ma34723**
Date Sampled			**Mar 16, 2022**	**Mar 16, 2022**	**Mar 16, 2022**	**Mar 16, 2022**
Test/Reference	LOR	Unit				
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)						
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C2-4:2 FTSA (surr.)	1	%	63	65	79	60
13C2-6:2 FTSA (surr.)	1	%	68	59	98	73
13C2-8:2 FTSA (surr.)	1	%	74	72	112	79
13C2-10:2 FTSA (surr.)	1	%	65	76	112	80
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)	Melbourne	Mar 19, 2022	0 Days
- Method: LTM-GEN-7010 Leaching Procedure for Soils & Solid Wastes			
pH (Leachate fluid)	Melbourne	Mar 19, 2022	0 Days
- Method: LTM-GEN-7010 Leaching Procedure for Soils & Solid Wastes			
pH (off)	Melbourne	Mar 19, 2022	0 Days
- Method: LTM-GEN-7010 Leaching Procedure for Soils & Solid Wastes			
Per- and Polyfluoroalkyl Substances (PFASs)			
Perfluoroalkyl carboxylic acids (PFCAs)	Melbourne	Mar 19, 2022	28 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			
Perfluoroalkyl sulfonamido substances	Melbourne	Mar 19, 2022	28 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			
Perfluoroalkyl sulfonic acids (PFSAs)	Melbourne	Mar 19, 2022	28 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)	Melbourne	Mar 19, 2022	28 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			
PFASs Summations	Melbourne	Mar 17, 2022	
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			

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Project Name: 20220317142125-Eurofin-22
Project ID: JC0927

Order No.:
Report #: 872036
Phone: 08 8338 1009
Fax:

Received: Mar 17, 2022 2:31 PM
Due: Mar 22, 2022
Priority: 5 Day
Contact Name: Agon Lab 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_20220316_08_22_SS_Triplicate_EUF	Mar 16, 2022		Soil	M22-Ma34700		X	X	X
2	SX_IB_20220316_08_36_SS_Primary_EUF	Mar 16, 2022		Soil	M22-Ma34701		X	X	X
3	SX_IB_20220316_12_12_SS_Primary_EUF	Mar 16, 2022		Soil	M22-Ma34702		X	X	X
4	SX_IB_20220316_16_12_SS	Mar 16, 2022		Soil	M22-Ma34703		X	X	X

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Project Name: 20220317142125-Eurofin-22
Project ID: JC0927

Order No.:
Report #: 872036
Phone: 08 8338 1009
Fax:

Received: Mar 17, 2022 2:31 PM
Due: Mar 22, 2022
Priority: 5 Day
Contact Name: Agon Lab 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_IB_20220316_16_15_SS_Duplicate_EUF	Mar 16, 2022		Soil	M22-Ma34704		X	X	X
6	SX_IB_20220316_19_56_SS_Primary_EUF	Mar 16, 2022		Soil	M22-Ma34705		X	X	X
7	SX_IB_20220317_00_02_SS_Primary_EUF	Mar 16, 2022		Soil	M22-Ma34706		X	X	X
8	SX_IB_20220317_03_58_SS_Primary_EUF	Mar 16, 2022		Soil	M22-Ma34707		X	X	X

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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									
9	SX_IB_20220316_08_22_SS_Triplicate_EUF	Mar 16, 2022		AUS Leachate - pH 5.0	M22-Ma34708	X		X	
10	SX_IB_20220316_08_36_SS_Primary_EUF	Mar 16, 2022		AUS Leachate - pH 5.0	M22-Ma34709	X		X	
11	SX_IB_20220316_12_12_SS_Primary_EUF	Mar 16, 2022		AUS Leachate - pH 5.0	M22-Ma34710	X		X	
12	SX_IB_20220316_16_12_SS_Primary_EUF	Mar 16, 2022		AUS Leachate - pH 5.0	M22-Ma34711	X		X	
13	SX_IB_202203	Mar 16, 2022		AUS Leachate	M22-Ma34712	X		X	

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Melbourne Laboratory - NATA # 1261 Site # 1254						X	X	X	X
Sydney Laboratory - NATA # 1261 Site # 18217									
Brisbane Laboratory - NATA # 1261 Site # 20794									
Mayfield Laboratory - NATA # 1261 Site # 25079									
Perth Laboratory - NATA # 2377 Site # 2370									
External Laboratory									
	16_16_15_SS_Duplicate_EUF			- pH 5.0					
14	SX_IB_20220316_19_56_SS_Primary_EUF	Mar 16, 2022		AUS Leachate - pH 5.0	M22-Ma34713	X		X	
15	SX_IB_20220317_00_02_SS_Primary_EUF	Mar 16, 2022		AUS Leachate - pH 5.0	M22-Ma34714	X		X	
16	SX_IB_20220317_03_58_SS_Primary_EUF	Mar 16, 2022		AUS Leachate - pH 5.0	M22-Ma34715	X		X	
17	SX_IB_20220316_08_22_SS	Mar 16, 2022		AUS Leachate - Reagent	M22-Ma34716	X		X	

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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_22_SS_Triplicate_EUF			- Reagent Water					
18	SX_IB_20220316_08_36_SS_Primary_EUF	Mar 16, 2022		AUS Leachate - Reagent Water	M22-Ma34717	X		X	
19	SX_IB_20220316_12_12_SS_Primary_EUF	Mar 16, 2022		AUS Leachate - Reagent Water	M22-Ma34718	X		X	
20	SX_IB_20220316_16_12_SS_Primary_EUF	Mar 16, 2022		AUS Leachate - Reagent Water	M22-Ma34719	X		X	
21	SX_IB_20220316_16_15_SS	Mar 16, 2022		AUS Leachate - Reagent	M22-Ma34720	X		X	

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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									
	_Duplicate_EUF			Water					
22	SX_IB_20220316_19_56_SS_Primary_EUF	Mar 16, 2022		AUS Leachate - Reagent Water	M22-Ma34721	X		X	
23	SX_IB_20220317_00_02_SS_Primary_EUF	Mar 16, 2022		AUS Leachate - Reagent Water	M22-Ma34722	X		X	
24	SX_IB_20220317_03_58_SS_Primary_EUF	Mar 16, 2022		AUS Leachate - Reagent Water	M22-Ma34723	X		X	
Test Counts						16	8	24	8

Internal Quality Control Review and Glossary

General

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

Holding Times

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

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

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

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

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

Units

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

Terms

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

QC - Acceptance Criteria

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

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

Results <10 times the LOR: No Limit

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

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

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

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

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

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QC Data General Comments

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

Quality Control Results

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Method Blank							
Perfluoroalkyl carboxylic acids (PFCAs)							
Perfluorobutanoic acid (PFBA)	ug/L	< 0.05			0.05	Pass	
Perfluoropentanoic acid (PFPeA)	ug/L	< 0.01			0.01	Pass	
Perfluorohexanoic acid (PFHxA)	ug/L	< 0.01			0.01	Pass	
Perfluoroheptanoic acid (PFHpA)	ug/L	< 0.01			0.01	Pass	
Perfluorooctanoic acid (PFOA)	ug/L	< 0.01			0.01	Pass	
Perfluorononanoic acid (PFNA)	ug/L	< 0.01			0.01	Pass	
Perfluorodecanoic acid (PFDA)	ug/L	< 0.01			0.01	Pass	
Perfluoroundecanoic acid (PFUnDA)	ug/L	< 0.01			0.01	Pass	
Perfluorododecanoic acid (PFDoDA)	ug/L	< 0.01			0.01	Pass	
Perfluorotridecanoic acid (PFTrDA)	ug/L	< 0.01			0.01	Pass	
Perfluorotetradecanoic acid (PFTeDA)	ug/L	< 0.01			0.01	Pass	
Method Blank							
Perfluoroalkyl sulfonamido substances							
Perfluorooctane sulfonamide (FOSA)	ug/L	< 0.05			0.05	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	ug/L	< 0.05			0.05	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	ug/L	< 0.05			0.05	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)	ug/L	< 0.05			0.05	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)	ug/L	< 0.05			0.05	Pass	
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	ug/L	< 0.05			0.05	Pass	
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	ug/L	< 0.05			0.05	Pass	
Method Blank							
Perfluoroalkyl sulfonic acids (PFSAs)							
Perfluorobutanesulfonic acid (PFBS)	ug/L	< 0.01			0.01	Pass	
Perfluorononanesulfonic acid (PFNS)	ug/L	< 0.01			0.01	Pass	
Perfluoropropanesulfonic acid (PFPrS)	ug/L	< 0.01			0.01	Pass	
Perfluoropentanesulfonic acid (PFPeS)	ug/L	< 0.01			0.01	Pass	
Perfluorohexanesulfonic acid (PFHxS)	ug/L	< 0.01			0.01	Pass	
Perfluoroheptanesulfonic acid (PFHpS)	ug/L	< 0.01			0.01	Pass	
Perfluorooctanesulfonic acid (PFOS)	ug/L	< 0.01			0.01	Pass	
Perfluorodecanesulfonic acid (PFDS)	ug/L	< 0.01			0.01	Pass	
Method Blank							
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)							
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	ug/L	< 0.01			0.01	Pass	
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)	ug/L	< 0.05			0.05	Pass	
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	ug/L	< 0.01			0.01	Pass	
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	ug/L	< 0.01			0.01	Pass	
LCS - % Recovery							
Perfluoroalkyl carboxylic acids (PFCAs)							
Perfluorobutanoic acid (PFBA)	%	91			50-150	Pass	
Perfluoropentanoic acid (PFPeA)	%	99			50-150	Pass	
Perfluorohexanoic acid (PFHxA)	%	93			50-150	Pass	
Perfluoroheptanoic acid (PFHpA)	%	91			50-150	Pass	
Perfluorooctanoic acid (PFOA)	%	99			50-150	Pass	
Perfluorononanoic acid (PFNA)	%	83			50-150	Pass	
Perfluorodecanoic acid (PFDA)	%	96			50-150	Pass	
Perfluoroundecanoic acid (PFUnDA)	%	93			50-150	Pass	
Perfluorododecanoic acid (PFDoDA)	%	102			50-150	Pass	
Perfluorotridecanoic acid (PFTrDA)	%	86			50-150	Pass	
Perfluorotetradecanoic acid (PFTeDA)	%	102			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)	%	114			50-150	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	%	112			50-150	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)	%	103			50-150	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)	%	103			50-150	Pass	
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	%	90			50-150	Pass	
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	%	85			50-150	Pass	
LCS - % Recovery							
Perfluoroalkyl sulfonic acids (PFSAs)							
Perfluorobutanesulfonic acid (PFBS)	%	88			50-150	Pass	
Perfluorononanesulfonic acid (PFNS)	%	96			50-150	Pass	
Perfluoropropanesulfonic acid (PFPrS)	%	114			50-150	Pass	
Perfluoropentanesulfonic acid (PFPeS)	%	95			50-150	Pass	
Perfluorohexanesulfonic acid (PFHxS)	%	100			50-150	Pass	
Perfluoroheptanesulfonic acid (PFHpS)	%	90			50-150	Pass	
Perfluorooctanesulfonic acid (PFOS)	%	100			50-150	Pass	
Perfluorodecanesulfonic acid (PFDS)	%	96			50-150	Pass	
LCS - % Recovery							
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)							
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	%	105			50-150	Pass	
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)	%	110			50-150	Pass	
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	%	90			50-150	Pass	
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	%	122			50-150	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Duplicate									
Perfluoroalkyl carboxylic acids (PFCAs)				Result 1	Result 2	RPD			
Perfluorobutanoic acid (PFBA)	M22-Ma34712	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
Perfluoropentanoic acid (PFPeA)	M22-Ma34712	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorohexanoic acid (PFHxA)	M22-Ma34712	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluoroheptanoic acid (PFHpA)	M22-Ma34712	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorooctanoic acid (PFOA)	M22-Ma34712	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorononanoic acid (PFNA)	M22-Ma34712	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorodecanoic acid (PFDA)	M22-Ma34712	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluoroundecanoic acid (PFUnDA)	M22-Ma34712	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorododecanoic acid (PFDoDA)	M22-Ma34712	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorotridecanoic acid (PFTrDA)	M22-Ma34712	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorotetradecanoic acid (PFTeDA)	M22-Ma34712	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Duplicate									
Perfluoroalkyl sulfonamido substances				Result 1	Result 2	RPD			
Perfluorooctane sulfonamide (FOSA)	M22-Ma34712	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	M22-Ma34712	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	M22-Ma34712	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)	M22-Ma34712	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)	M22-Ma34712	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-Ma34712	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	M22-Ma34712	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
Duplicate									
Perfluoroalkyl sulfonic acids (PFSAs)				Result 1	Result 2	RPD			
Perfluorobutanesulfonic acid (PFBS)	M22-Ma34712	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorononanesulfonic acid (PFNS)	M22-Ma34712	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluoropropanesulfonic acid (PFPrS)	M22-Ma34712	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluoropentanesulfonic acid (PFPeS)	M22-Ma34712	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorohexanesulfonic acid (PFHxS)	M22-Ma34712	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluoroheptanesulfonic acid (PFHpS)	M22-Ma34712	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorooctanesulfonic acid (PFOS)	M22-Ma34712	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorodecanesulfonic acid (PFDS)	M22-Ma34712	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Duplicate									
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)				Result 1	Result 2	RPD			
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	M22-Ma34712	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)	M22-Ma34712	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	M22-Ma34712	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	M22-Ma34712	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Duplicate									
Perfluoroalkyl carboxylic acids (PFCAs)				Result 1	Result 2	RPD			
Perfluorobutanoic acid (PFBA)	M22-Ma34722	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
Perfluoropentanoic acid (PFPeA)	M22-Ma34722	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorohexanoic acid (PFHxA)	M22-Ma34722	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluoroheptanoic acid (PFHpA)	M22-Ma34722	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorooctanoic acid (PFOA)	M22-Ma34722	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorononanoic acid (PFNA)	M22-Ma34722	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorodecanoic acid (PFDA)	M22-Ma34722	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluoroundecanoic acid (PFUnDA)	M22-Ma34722	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorododecanoic acid (PFDoDA)	M22-Ma34722	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorotridecanoic acid (PFTrDA)	M22-Ma34722	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorotetradecanoic acid (PFTeDA)	M22-Ma34722	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	

Duplicate									
Perfluoroalkyl sulfonamido substances				Result 1	Result 2	RPD			
Perfluorooctane sulfonamide (FOSA)	M22-Ma34722	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	M22-Ma34722	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	M22-Ma34722	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)	M22-Ma34722	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)	M22-Ma34722	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	M22-Ma34722	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	M22-Ma34722	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
Duplicate									
Perfluoroalkyl sulfonic acids (PFSAs)				Result 1	Result 2	RPD			
Perfluorobutanesulfonic acid (PFBS)	M22-Ma34722	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorononanesulfonic acid (PFNS)	M22-Ma34722	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluoropropanesulfonic acid (PFPrS)	M22-Ma34722	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluoropentanesulfonic acid (PFPeS)	M22-Ma34722	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorohexanesulfonic acid (PFHxS)	M22-Ma34722	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluoroheptanesulfonic acid (PFHpS)	M22-Ma34722	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorooctanesulfonic acid (PFOS)	M22-Ma34722	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorodecanesulfonic acid (PFDS)	M22-Ma34722	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Duplicate									
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)				Result 1	Result 2	RPD			
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	M22-Ma34722	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)	M22-Ma34722	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	M22-Ma34722	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	M22-Ma34722	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	

Comments

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

Sample Integrity

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

Qualifier Codes/Comments

Code	Description
C01	Leachate Fluid Key: 1 - pH 5.0; 2 - pH 2.9; 3 - pH 9.2; 4 - Reagent (DI) water; 5 - Client sample, 6 - other
N11	Isotope dilution is used for calibration of each native compound for which an exact labelled analogue is available (Isotope Dilution Quantitation). The isotopically labelled analogues allow identification and recovery correction of the concentration of the associated native PFAS compounds.
N15	Where the native PFAS compound does not have labelled analogue then the quantification is made using the Extracted Internal Standard Analyte with the closest retention time to the analyte and no recovery correction has been made (Internal Standard Quantitation).

Authorised by:

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

Glenn Jackson
General Manager

Final Report – this report replaces any previously issued Report

- Indicates Not Requested

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

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

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

Attention: **David Lawson**

Report **872036-S**
Project name 20220317142125-Eurofin-22
Project ID JC0927
Received Date Mar 17, 2022

Client Sample ID			**SX_IB_20220316_08_22_SS_Triplicate_EUF**	**SX_IB_20220316_08_36_SS_Primary_EUF**	**SX_IB_20220316_12_12_SS_Primary_EUF**	**SX_IB_20220316_16_12_SS_Primary_EUF**
Sample Matrix			**Soil**	**Soil**	**Soil**	**Soil**
Eurofins Sample No.			**M22-Ma34700**	**M22-Ma34701**	**M22-Ma34702**	**M22-Ma34703**
Date Sampled			**Mar 16, 2022**	**Mar 16, 2022**	**Mar 16, 2022**	**Mar 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
2-Butanone (MEK)	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5

Client Sample ID			SX_IB_20220316_08_22_SS_Triplicate_EUF	SX_IB_20220316_08_36_SS_Primary_EUF	SX_IB_20220316_12_12_SS_Primary_EUF	SX_IB_20220316_16_16_SS_Primary_EUF
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M22-Ma34700	M22-Ma34701	M22-Ma34702	M22-Ma34703
Date Sampled			Mar 16, 2022	Mar 16, 2022	Mar 16, 2022	Mar 16, 2022
Test/Reference	LOR	Unit				
Volatile Organics						
2-Propanone (Acetone)	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
4-Chlorotoluene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
4-Methyl-2-pentanone (MIBK)	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Allyl chloride	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Bromobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Bromochloromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Bromodichloromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Bromoform	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Bromomethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Carbon disulfide	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Carbon Tetrachloride	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chloroform	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chloromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
cis-1.2-Dichloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
cis-1.3-Dichloropropene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Dibromochloromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Dibromomethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Dichlorodifluoromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Ethylbenzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Iodomethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Isopropyl benzene (Cumene)	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
m&p-Xylenes	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Methylene Chloride	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
o-Xylene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Styrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Tetrachloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Toluene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
trans-1.2-Dichloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
trans-1.3-Dichloropropene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Trichloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Trichlorofluoromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Vinyl chloride	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Xylenes - Total*	0.3	mg/kg	< 0.3	< 0.3	< 0.3	< 0.3
Total MAH*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Vic EPA IWRG 621 CHC (Total)*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Vic EPA IWRG 621 Other CHC (Total)*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
4-Bromofluorobenzene (surr.)	1	%	57	65	55	57
Toluene-d8 (surr.)	1	%	57	64	58	54
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

Client Sample ID			SX_IB_20220316_08_22_SS_Triplicate_EUF	SX_IB_20220316_08_36_SS_Primary_EUF	SX_IB_20220316_12_12_SS_Primary_EUF	SX_IB_20220316_16_16_SS_Primary_EUF
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M22-Ma34700	M22-Ma34701	M22-Ma34702	M22-Ma34703
Date Sampled			Mar 16, 2022	Mar 16, 2022	Mar 16, 2022	Mar 16, 2022
Test/Reference	LOR	Unit				
Polycyclic Aromatic Hydrocarbons						
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	%	83	82	80	82
p-Terphenyl-d14 (surr.)	1	%	87	88	93	91
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	%	85	82	79	80
Tetrachloro-m-xylene (surr.)	1	%	96	95	92	95

Client Sample ID			SX_IB_20220316_08_22_SS_Triplicate_EUF	SX_IB_20220316_08_36_SS_Primary_EUF	SX_IB_20220316_12_12_SS_Primary_EUF	SX_IB_20220316_16_12_SS_Primary_EUF
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M22-Ma34700	M22-Ma34701	M22-Ma34702	M22-Ma34703
Date Sampled			Mar 16, 2022	Mar 16, 2022	Mar 16, 2022	Mar 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	%	85	82	79	80
Tetrachloro-m-xylene (surr.)	1	%	96	95	92	95
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	%	92	88	86	90
Total Non-Halogenated Phenol*	20	mg/kg	< 20	< 20	< 20	< 20
Chromium (hexavalent)	1	mg/kg	< 1	< 1	< 1	< 1
Cyanide (total)	5	mg/kg	< 5	< 5	< 5	< 5
Fluoride (Total)	100	mg/kg	< 100	< 100	< 100	< 100
pH (1:5 Aqueous extract at 25°C as rec.)	0.1	pH Units	9.0	8.9	9.1	8.8
% Moisture	1	%	28	30	30	31
Heavy Metals						
Arsenic	2	mg/kg	22	35	18	21
Cadmium	0.4	mg/kg	< 0.4	< 0.4	< 0.4	< 0.4
Chromium	5	mg/kg	120	130	120	120
Copper	5	mg/kg	72	71	58	60
Lead	5	mg/kg	< 5	< 5	< 5	< 5
Mercury	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Molybdenum	5	mg/kg	< 5	< 5	< 5	< 5

Client Sample ID			SX_IB_20220316_08_22_SS_Triplicate_EUF	SX_IB_20220316_08_36_SS_Primary_EUF	SX_IB_20220316_12_12_SS_Primary_EUF	SX_IB_20220316_16_12_SS_Primary_EUF
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M22-Ma34700	M22-Ma34701	M22-Ma34702	M22-Ma34703
Date Sampled			Mar 16, 2022	Mar 16, 2022	Mar 16, 2022	Mar 16, 2022
Test/Reference	LOR	Unit				
Heavy Metals						
Nickel	5	mg/kg	180	180	160	170
Selenium	2	mg/kg	< 2	< 2	< 2	< 2
Silver	2	mg/kg	< 2	< 2	< 2	< 2
Tin	10	mg/kg	< 10	< 10	< 10	< 10
Zinc	5	mg/kg	120	130	95	110
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	%	78	74	69	71
13C5-PFPeA (surr.)	1	%	92	87	82	76
13C5-PFHxA (surr.)	1	%	83	81	76	76
13C4-PFHpA (surr.)	1	%	82	75	75	83
13C8-PFOA (surr.)	1	%	87	84	91	78
13C5-PFNA (surr.)	1	%	90	79	71	74
13C6-PFDA (surr.)	1	%	94	82	76	93
13C2-PFUnDA (surr.)	1	%	94	113	98	98
13C2-PFDoDA (surr.)	1	%	97	105	103	107
13C2-PFTeDA (surr.)	1	%	83	92	82	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	%	94	90	90	83
D3-N-MeFOSA (surr.)	1	%	119	130	120	127
D5-N-EtFOSA (surr.)	1	%	140	79	150	79
D7-N-MeFOSE (surr.)	1	%	80	79	77	77
D9-N-EtFOSE (surr.)	1	%	87	84	82	81
D5-N-EtFOSAA (surr.)	1	%	112	125	121	141
D3-N-MeFOSAA (surr.)	1	%	123	79	83	123

Client Sample ID			SX_IB_20220316_08_22_SS_Triplicate_EUF	SX_IB_20220316_08_36_SS_Primary_EUF	SX_IB_20220316_12_12_SS_Primary_EUF	SX_IB_20220316_16_12_SS_Primary_EUF
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M22-Ma34700	M22-Ma34701	M22-Ma34702	M22-Ma34703
Date Sampled			Mar 16, 2022	Mar 16, 2022	Mar 16, 2022	Mar 16, 2022
Test/Reference	LOR	Unit				
Perfluoroalkyl sulfonic acids (PFSAs)						
Perfluorobutanesulfonic acid (PFBS)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorononanesulfonic acid (PFNS)[N15]	5	ug/kg	< 5	< 5	< 5	< 5
Perfluoropropanesulfonic acid (PFPrS)[N15]	5	ug/kg	< 5	< 5	< 5	< 5
Perfluoropentanesulfonic acid (PFPeS)[N15]	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorohexanesulfonic acid (PFHxS)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
Perfluoroheptanesulfonic acid (PFHpS)[N15]	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorooctanesulfonic acid (PFOS)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorodecanesulfonic acid (PFDS)[N15]	5	ug/kg	< 5	< 5	< 5	< 5
13C3-PFBS (surr.)	1	%	78	70	70	70
18O2-PFHxS (surr.)	1	%	84	74	74	70
13C8-PFOS (surr.)	1	%	78	78	63	77
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)						
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)[N11]	10	ug/kg	< 10	< 10	< 10	< 10
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
13C2-4:2 FTSA (surr.)	1	%	80	58	63	63
13C2-6:2 FTSA (surr.)	1	%	65	50	62	56
13C2-8:2 FTSA (surr.)	1	%	118	132	124	125
13C2-10:2 FTSA (surr.)	1	%	90	140	140	112
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_20220316_16_15_SS_Duplicate_EUF	SX_IB_20220316_19_56_SS_Primary_EUF	SX_IB_20220317_00_02_SS_Primary_EUF	SX_IB_20220317_03_58_SS_Primary_EUF
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M22-Ma34704	M22-Ma34705	M22-Ma34706	M22-Ma34707
Date Sampled			Mar 16, 2022	Mar 16, 2022	Mar 16, 2022	Mar 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	58	< 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	58	< 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	53	< 50	< 50	< 50
TRH >C10-C16 less Naphthalene (F2)[N01]	50	mg/kg	53	< 50	< 50	< 50

Client Sample ID			SX_IB_20220316_16_15_SS_Duplicate_EUF	SX_IB_20220316_19_56_SS_Primary_EUF	SX_IB_20220317_00_02_SS_Primary_EUF	SX_IB_20220317_03_58_SS_Primary_EUF
Sample Matrix			**Soil**	**Soil**	**Soil**	**Soil**
Eurofins Sample No.			**M22-Ma34704**	**M22-Ma34705**	**M22-Ma34706**	**M22-Ma34707**
Date Sampled			**Mar 16, 2022**	**Mar 16, 2022**	**Mar 16, 2022**	**Mar 16, 2022**
Test/Reference	LOR	Unit				
Total Recoverable Hydrocarbons						
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
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

Client Sample ID			SX_IB_20220316_16_15_SS_Duplicate_EUF	SX_IB_20220316_19_56_SS_Primary_EUF	SX_IB_20220317_00_02_SS_Primary_EUF	SX_IB_20220317_03_58_SS_Primary_EUF
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M22-Ma34704	M22-Ma34705	M22-Ma34706	M22-Ma34707
Date Sampled			Mar 16, 2022	Mar 16, 2022	Mar 16, 2022	Mar 16, 2022
Test/Reference	LOR	Unit				
Volatile Organics						
m&p-Xylenes	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Methylene Chloride	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
o-Xylene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Styrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Tetrachloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Toluene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
trans-1.2-Dichloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
trans-1.3-Dichloropropene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Trichloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Trichlorofluoromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Vinyl chloride	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Xylenes - Total*	0.3	mg/kg	< 0.3	< 0.3	< 0.3	< 0.3
Total MAH*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Vic EPA IWRG 621 CHC (Total)*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Vic EPA IWRG 621 Other CHC (Total)*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
4-Bromofluorobenzene (surr.)	1	%	64	67	66	62
Toluene-d8 (surr.)	1	%	64	64	66	62
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	%	65	139	83	80
p-Terphenyl-d14 (surr.)	1	%	76	128	90	96
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

Client Sample ID			SX_IB_20220316_16_15_SS_Duplicate_EUF	SX_IB_20220316_19_56_SS_Primary_EUF	SX_IB_20220317_00_02_SS_Primary_EUF	SX_IB_20220317_03_58_SS_Primary_EUF
Sample Matrix			**Soil**	**Soil**	**Soil**	**Soil**
Eurofins Sample No.			**M22-Ma34704**	**M22-Ma34705**	**M22-Ma34706**	**M22-Ma34707**
Date Sampled			**Mar 16, 2022**	**Mar 16, 2022**	**Mar 16, 2022**	**Mar 16, 2022**
Test/Reference	LOR	Unit				
Organochlorine Pesticides						
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	%	56	117	89	80
Tetrachloro-m-xylene (surr.)	1	%	79	123	93	92
Polychlorinated Biphenyls						
Aroclor-1016	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Aroclor-1221	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Aroclor-1232	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Aroclor-1242	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Aroclor-1248	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Aroclor-1254	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Aroclor-1260	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Total PCB*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Dibutylchlorendate (surr.)	1	%	56	117	89	80
Tetrachloro-m-xylene (surr.)	1	%	79	123	93	92
Phenols (Halogenated)						
2-Chlorophenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2.4-Dichlorophenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2.4.5-Trichlorophenol	1	mg/kg	< 1	< 1	< 1	< 1
2.4.6-Trichlorophenol	1	mg/kg	< 1	< 1	< 1	< 1
2.6-Dichlorophenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
4-Chloro-3-methylphenol	1	mg/kg	< 1	< 1	< 1	< 1
Pentachlorophenol	1	mg/kg	< 1	< 1	< 1	< 1
Tetrachlorophenols - Total	10	mg/kg	< 10	< 10	< 10	< 10
Total Halogenated Phenol*	1	mg/kg	< 1	< 1	< 1	< 1
Phenols (non-Halogenated)						
2-Cyclohexyl-4.6-dinitrophenol	20	mg/kg	< 20	< 20	< 20	< 20
2-Methyl-4.6-dinitrophenol	5	mg/kg	< 5	< 5	< 5	< 5
2-Nitrophenol	1.0	mg/kg	< 1	< 1	< 1	< 1
2.4-Dimethylphenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2.4-Dinitrophenol	5	mg/kg	< 5	< 5	< 5	< 5
2-Methylphenol (o-Cresol)	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2

Client Sample ID			SX_IB_20220316_16_15_SS_Duplicate_EUF	SX_IB_20220316_19_56_SS_Primary_EUF	SX_IB_20220317_00_02_SS_Primary_EUF	SX_IB_20220317_03_58_SS_Primary_EUF
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M22-Ma34704	M22-Ma34705	M22-Ma34706	M22-Ma34707
Date Sampled			Mar 16, 2022	Mar 16, 2022	Mar 16, 2022	Mar 16, 2022
Test/Reference	LOR	Unit				
Phenols (non-Halogenated)						
3&4-Methylphenol (m&p-Cresol)	0.4	mg/kg	< 0.4	< 0.4	< 0.4	< 0.4
Total cresols*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
4-Nitrophenol	5	mg/kg	< 5	< 5	< 5	< 5
Dinoseb	20	mg/kg	< 20	< 20	< 20	< 20
Phenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Phenol-d6 (surr.)	1	%	72	128	94	91
Total Non-Halogenated Phenol*	20	mg/kg	< 20	< 20	< 20	< 20
Chromium (hexavalent)	1	mg/kg	< 1	< 1	< 1	< 1
Cyanide (total)	5	mg/kg	< 5	< 5	< 5	< 5
Fluoride (Total)	100	mg/kg	< 100	< 100	< 100	< 100
pH (1:5 Aqueous extract at 25°C as rec.)	0.1	pH Units	8.7	8.9	8.9	7.0
% Moisture	1	%	29	30	31	30
Heavy Metals						
Arsenic	2	mg/kg	38	22	30	26
Cadmium	0.4	mg/kg	< 0.4	< 0.4	< 0.4	< 0.4
Chromium	5	mg/kg	130	130	140	150
Copper	5	mg/kg	110	67	69	79
Lead	5	mg/kg	< 5	< 5	< 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	230	170	180	210
Selenium	2	mg/kg	< 2	< 2	< 2	< 2
Silver	2	mg/kg	< 2	< 2	< 2	< 2
Tin	10	mg/kg	< 10	< 10	< 10	< 10
Zinc	5	mg/kg	150	110	130	120
Perfluoroalkyl carboxylic acids (PFCAs)						
Perfluorobutanoic acid (PFBA)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
Perfluoropentanoic acid (PFPeA)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorohexanoic acid (PFHxA)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
Perfluoroheptanoic acid (PFHpA)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorooctanoic acid (PFOA)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorononanoic acid (PFNA)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorodecanoic acid (PFDA)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
Perfluoroundecanoic acid (PFUnDA)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorododecanoic acid (PFDoDA)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorotridecanoic acid (PFTrDA)[N15]	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorotetradecanoic acid (PFTeDA)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
13C4-PFBA (surr.)	1	%	76	99	78	69
13C5-PFPeA (surr.)	1	%	78	101	85	67
13C5-PFHxA (surr.)	1	%	72	89	83	75
13C4-PFHpA (surr.)	1	%	87	95	86	75
13C8-PFOA (surr.)	1	%	90	90	82	72
13C5-PFNA (surr.)	1	%	96	103	83	79
13C6-PFDA (surr.)	1	%	96	103	81	75
13C2-PFUnDA (surr.)	1	%	96	122	108	96
13C2-PFDoDA (surr.)	1	%	107	115	101	95
13C2-PFTeDA (surr.)	1	%	87	110	86	82

Client Sample ID			SX_IB_20220316_16_15_SS_Duplicate_EUF	SX_IB_20220316_19_56_SS_Primary_EUF	SX_IB_20220317_00_02_SS_Primary_EUF	SX_IB_20220317_03_58_SS_Primary_EUF
Sample Matrix			**Soil**	**Soil**	**Soil**	**Soil**
Eurofins Sample No.			**M22-Ma34704**	**M22-Ma34705**	**M22-Ma34706**	**M22-Ma34707**
Date Sampled			**Mar 16, 2022**	**Mar 16, 2022**	**Mar 16, 2022**	**Mar 16, 2022**
Test/Reference	LOR	Unit				
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	%	80	112	98	84
D3-N-MeFOSA (surr.)	1	%	101	104	124	109
D5-N-EtFOSA (surr.)	1	%	115	93	138	127
D7-N-MeFOSE (surr.)	1	%	83	117	87	76
D9-N-EtFOSE (surr.)	1	%	86	115	85	77
D5-N-EtFOSAA (surr.)	1	%	122	137	121	101
D3-N-MeFOSAA (surr.)	1	%	85	76	148	129
Perfluoroalkyl sulfonic acids (PFSAs)						
Perfluorobutanesulfonic acid (PFBS)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorononanesulfonic acid (PFNS)[N15]	5	ug/kg	< 5	< 5	< 5	< 5
Perfluoropropanesulfonic acid (PFPrS)[N15]	5	ug/kg	< 5	< 5	< 5	< 5
Perfluoropentanesulfonic acid (PFPeS)[N15]	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorohexanesulfonic acid (PFHxS)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
Perfluoroheptanesulfonic acid (PFHpS)[N15]	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorooctanesulfonic acid (PFOS)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorodecanesulfonic acid (PFDS)[N15]	5	ug/kg	< 5	< 5	< 5	< 5
13C3-PFBS (surr.)	1	%	83	94	78	74
18O2-PFHxS (surr.)	1	%	88	105	81	71
13C8-PFOS (surr.)	1	%	102	58	89	66
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)						
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)[N11]	10	ug/kg	< 10	< 10	< 10	< 10
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
13C2-4:2 FTSA (surr.)	1	%	97	68	79	63
13C2-6:2 FTSA (surr.)	1	%	52	95	62	60
13C2-8:2 FTSA (surr.)	1	%	85	65	135	119
13C2-10:2 FTSA (surr.)	1	%	83	64	137	118
PFASs Summations						
Sum (PFHxS + PFOS)*	5	ug/kg	< 5	< 5	< 5	< 5
Sum of US EPA PFAS (PFOS + PFOA)*	5	ug/kg	< 5	< 5	< 5	< 5
Sum of enHealth PFAS (PFHxS + PFOS + PFOA)*	5	ug/kg	< 5	< 5	< 5	< 5
Sum of WA DWER PFAS (n=10)*	10	ug/kg	< 10	< 10	< 10	< 10
Sum of PFASs (n=30)*	50	ug/kg	< 50	< 50	< 50	< 50

Sample History

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

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

Description	Testing Site	Extracted	Holding Time
IWRG 621 WGTP Suite			
Total Recoverable Hydrocarbons - 1999 NEPM Fractions	Melbourne	Mar 19, 2022	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
Total Recoverable Hydrocarbons - 2013 NEPM Fractions	Melbourne	Mar 19, 2022	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
Total Recoverable Hydrocarbons - 2013 NEPM Fractions	Melbourne	Mar 19, 2022	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
Volatile Organics	Melbourne	Mar 19, 2022	7 Days
- Method: USEPA 8260 - MGT 350A Volatile Organics by GCMS			
Volatile Organics	Melbourne	Mar 19, 2022	7 Days
- Method: LTM-ORG-2150 VOCs in Soils Liquid and other Aqueous Matrices (USEPA 8260)			
Polycyclic Aromatic Hydrocarbons	Melbourne	Mar 19, 2022	14 Days
- Method: LTM-ORG-2130 PAH and Phenols in Soil and Water			
Organochlorine Pesticides	Melbourne	Mar 19, 2022	14 Days
- Method: LTM-ORG-2220 OCP & PCB in Soil and Water (USEPA 8270)			
Polychlorinated Biphenyls	Melbourne	Mar 19, 2022	28 Days
- Method: LTM-ORG-2220 OCP & PCB in Soil and Water (USEPA 8082)			
Phenols (Halogenated)	Melbourne	Mar 19, 2022	14 Days
- Method: LTM-ORG-2130 PAH and Phenols in Soil and Water			
Phenols (non-Halogenated)	Melbourne	Mar 19, 2022	14 Days
- Method: LTM-ORG-2130 PAH and Phenols in Soil and Water			
Chromium (hexavalent)	Melbourne	Mar 19, 2022	28 Days
- Method: LTM-INO-4100 Hexavalent Chromium by Spectrometric detection			
Cyanide (total)	Melbourne	Mar 19, 2022	14 Days
- Method: LTM-INO-4020 Total Free WAD Cyanide by CFA			
Fluoride (Total)	Melbourne	Mar 21, 2022	28 Days
- Method: LTM-INO-4150 Determination of Total Fluoride PART A – CIC			
- Method: LTM-INO-4150 Determination of Total Fluoride PART B – ISE			
pH (1:5 Aqueous extract at 25°C as rec.)	Melbourne	Mar 19, 2022	7 Days
- Method: LTM-GEN-7090 pH in soil by ISE			
Metals IWRG 621 : Metals M12	Melbourne	Mar 19, 2022	28 Days
- Method: LTM-MET-3040 Metals in Waters, Soils & Sediments by ICP-MS			
% Moisture	Melbourne	Mar 17, 2022	14 Days
- Method: LTM-GEN-7080 Moisture			
Per- and Polyfluoroalkyl Substances (PFASs)			
Perfluoroalkyl carboxylic acids (PFCAs)	Melbourne	Mar 19, 2022	28 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			
Perfluoroalkyl sulfonamido substances	Melbourne	Mar 19, 2022	28 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			
Perfluoroalkyl sulfonic acids (PFSAs)	Melbourne	Mar 19, 2022	28 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)	Melbourne	Mar 19, 2022	28 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			
PFASs Summations	Melbourne	Mar 17, 2022	
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			

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Address: 3/224 Glen Osmond Road
Fullarton
SA 5063

Project Name: 20220317142125-Eurofin-22
Project ID: JC0927

Order No.:
Report #: 872036
Phone: 08 8338 1009
Fax:

Received: Mar 17, 2022 2:31 PM
Due: Mar 22, 2022
Priority: 5 Day
Contact Name: Agon Lab 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_20220316_08_22_SS_Triplicate_EUF	Mar 16, 2022		Soil	M22-Ma34700		X	X	X
2	SX_IB_20220316_08_36_SS_Primary_EUF	Mar 16, 2022		Soil	M22-Ma34701		X	X	X
3	SX_IB_20220316_12_12_SS_Primary_EUF	Mar 16, 2022		Soil	M22-Ma34702		X	X	X
4	SX_IB_20220316_16_12_SS	Mar 16, 2022		Soil	M22-Ma34703		X	X	X

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

Project Name: 20220317142125-Eurofin-22
Project ID: JC0927

Order No.:
Report #: 872036
Phone: 08 8338 1009
Fax:

Received: Mar 17, 2022 2:31 PM
Due: Mar 22, 2022
Priority: 5 Day
Contact Name: Agon Lab 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_IB_20220316_16_15_SS_Duplicate_EUF	Mar 16, 2022		Soil	M22-Ma34704		X	X	X
6	SX_IB_20220316_19_56_SS_Primary_EUF	Mar 16, 2022		Soil	M22-Ma34705		X	X	X
7	SX_IB_20220317_00_02_SS_Primary_EUF	Mar 16, 2022		Soil	M22-Ma34706		X	X	X
8	SX_IB_20220317_03_58_SS_Primary_EUF	Mar 16, 2022		Soil	M22-Ma34707		X	X	X

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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									
9	SX_IB_20220316_08_22_SS_Triplicate_EUF	Mar 16, 2022		AUS Leachate - pH 5.0	M22-Ma34708	X		X	
10	SX_IB_20220316_08_36_SS_Primary_EUF	Mar 16, 2022		AUS Leachate - pH 5.0	M22-Ma34709	X		X	
11	SX_IB_20220316_12_12_SS_Primary_EUF	Mar 16, 2022		AUS Leachate - pH 5.0	M22-Ma34710	X		X	
12	SX_IB_20220316_16_12_SS_Primary_EUF	Mar 16, 2022		AUS Leachate - pH 5.0	M22-Ma34711	X		X	
13	SX_IB_202203	Mar 16, 2022		AUS Leachate	M22-Ma34712	X		X	

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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_16_15_SS_Duplicate_EUF			- pH 5.0					
14	SX_IB_20220316_19_56_SS_Primary_EUF	Mar 16, 2022		AUS Leachate - pH 5.0	M22-Ma34713	X		X	
15	SX_IB_20220317_00_02_SS_Primary_EUF	Mar 16, 2022		AUS Leachate - pH 5.0	M22-Ma34714	X		X	
16	SX_IB_20220317_03_58_SS_Primary_EUF	Mar 16, 2022		AUS Leachate - pH 5.0	M22-Ma34715	X		X	
17	SX_IB_20220316_08_22_SS	Mar 16, 2022		AUS Leachate - Reagent	M22-Ma34716	X		X	

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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_22_SS_Triplicate_EUF			- Reagent Water					
18	SX_IB_20220316_08_36_SS_Primary_EUF	Mar 16, 2022		AUS Leachate - Reagent Water	M22-Ma34717	X		X	
19	SX_IB_20220316_12_12_SS_Primary_EUF	Mar 16, 2022		AUS Leachate - Reagent Water	M22-Ma34718	X		X	
20	SX_IB_20220316_16_12_SS_Primary_EUF	Mar 16, 2022		AUS Leachate - Reagent Water	M22-Ma34719	X		X	
21	SX_IB_20220316_16_15_SS	Mar 16, 2022		AUS Leachate - Reagent	M22-Ma34720	X		X	

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Brisbane Laboratory - NATA # 1261 Site # 20794									
Mayfield Laboratory - NATA # 1261 Site # 25079									
Perth Laboratory - NATA # 2377 Site # 2370									
External Laboratory									
	_Duplicate_EUF			Water					
22	SX_IB_20220316_19_56_SS_Primary_EUF	Mar 16, 2022		AUS Leachate - Reagent Water	M22-Ma34721	X		X	
23	SX_IB_20220317_00_02_SS_Primary_EUF	Mar 16, 2022		AUS Leachate - Reagent Water	M22-Ma34722	X		X	
24	SX_IB_20220317_03_58_SS_Primary_EUF	Mar 16, 2022		AUS Leachate - Reagent Water	M22-Ma34723	X		X	
Test Counts						16	8	24	8

Internal Quality Control Review and Glossary

General

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

Holding Times

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

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

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

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

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

Units

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

Terms

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

QC - Acceptance Criteria

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

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

Results <10 times the LOR: No Limit

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

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

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

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

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

.

QC Data General Comments

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

Quality Control Results

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

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

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

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Zinc	mg/kg	< 5			5	Pass	
Method Blank							
Perfluoroalkyl carboxylic acids (PFCAs)							
Perfluorobutanoic acid (PFBA)	ug/kg	< 5			5	Pass	
Perfluoropentanoic acid (PFPeA)	ug/kg	< 5			5	Pass	
Perfluorohexanoic acid (PFHxA)	ug/kg	< 5			5	Pass	
Perfluoroheptanoic acid (PFHpA)	ug/kg	< 5			5	Pass	
Perfluorooctanoic acid (PFOA)	ug/kg	< 5			5	Pass	
Perfluorononanoic acid (PFNA)	ug/kg	< 5			5	Pass	
Perfluorodecanoic acid (PFDA)	ug/kg	< 5			5	Pass	
Perfluoroundecanoic acid (PFUnDA)	ug/kg	< 5			5	Pass	
Perfluorododecanoic acid (PFDoDA)	ug/kg	< 5			5	Pass	
Perfluorotridecanoic acid (PFTrDA)	ug/kg	< 5			5	Pass	
Perfluorotetradecanoic acid (PFTeDA)	ug/kg	< 5			5	Pass	
Method Blank							
Perfluoroalkyl sulfonamido substances							
Perfluorooctane sulfonamide (FOSA)	ug/kg	< 5			5	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	ug/kg	< 5			5	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	ug/kg	< 5			5	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)	ug/kg	< 5			5	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)	ug/kg	< 5			5	Pass	
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	ug/kg	< 10			10	Pass	
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	ug/kg	< 10			10	Pass	
Method Blank							
Perfluoroalkyl sulfonic acids (PFSAs)							
Perfluorobutanesulfonic acid (PFBS)	ug/kg	< 5			5	Pass	
Perfluorononanesulfonic acid (PFNS)	ug/kg	< 5			5	Pass	
Perfluoropropanesulfonic acid (PFPrS)	ug/kg	< 5			5	Pass	
Perfluoropentanesulfonic acid (PFPeS)	ug/kg	< 5			5	Pass	
Perfluorohexanesulfonic acid (PFHxS)	ug/kg	< 5			5	Pass	
Perfluoroheptanesulfonic acid (PFHpS)	ug/kg	< 5			5	Pass	
Perfluorooctanesulfonic acid (PFOS)	ug/kg	< 5			5	Pass	
Perfluorodecanesulfonic acid (PFDS)	ug/kg	< 5			5	Pass	
Method Blank							
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)							
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	ug/kg	< 5			5	Pass	
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)	ug/kg	< 10			10	Pass	
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	ug/kg	< 5			5	Pass	
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	ug/kg	< 5			5	Pass	
LCS - % Recovery							
Total Recoverable Hydrocarbons							
TRH C6-C9	%	89			70-130	Pass	
TRH C10-C14	%	100			70-130	Pass	
Naphthalene	%	100			70-130	Pass	
TRH C6-C10	%	87			70-130	Pass	
TRH >C10-C16	%	95			70-130	Pass	
LCS - % Recovery							
Volatile Organics							
1.1-Dichloroethene	%	91			70-130	Pass	
1.1.1-Trichloroethane	%	70			70-130	Pass	
1.2-Dichlorobenzene	%	108			70-130	Pass	
1.2-Dichloroethane	%	77			70-130	Pass	
Benzene	%	77			70-130	Pass	
Ethylbenzene	%	86			70-130	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
m&p-Xylenes	%	89			70-130	Pass	
Toluene	%	87			70-130	Pass	
Trichloroethene	%	100			70-130	Pass	
Xylenes - Total*	%	90			70-130	Pass	
LCS - % Recovery							
Polycyclic Aromatic Hydrocarbons							
Acenaphthene	%	100			70-130	Pass	
Acenaphthylene	%	96			70-130	Pass	
Anthracene	%	107			70-130	Pass	
Benz(a)anthracene	%	100			70-130	Pass	
Benzo(a)pyrene	%	95			70-130	Pass	
Benzo(b&j)fluoranthene	%	103			70-130	Pass	
Benzo(g.h.i)perylene	%	73			70-130	Pass	
Benzo(k)fluoranthene	%	80			70-130	Pass	
Chrysene	%	96			70-130	Pass	
Dibenz(a.h)anthracene	%	104			70-130	Pass	
Fluoranthene	%	113			70-130	Pass	
Fluorene	%	110			70-130	Pass	
Indeno(1.2.3-cd)pyrene	%	88			70-130	Pass	
Naphthalene	%	100			70-130	Pass	
Phenanthrene	%	107			70-130	Pass	
Pyrene	%	114			70-130	Pass	
LCS - % Recovery							
Organochlorine Pesticides							
Chlordanes - Total	%	94			70-130	Pass	
4.4'-DDD	%	74			70-130	Pass	
4.4'-DDE	%	94			70-130	Pass	
4.4'-DDT	%	82			70-130	Pass	
a-HCH	%	78			70-130	Pass	
Aldrin	%	97			70-130	Pass	
b-HCH	%	91			70-130	Pass	
d-HCH	%	107			70-130	Pass	
Dieldrin	%	87			70-130	Pass	
Endosulfan I	%	90			70-130	Pass	
Endosulfan II	%	88			70-130	Pass	
Endosulfan sulphate	%	81			70-130	Pass	
Endrin	%	113			70-130	Pass	
Endrin aldehyde	%	77			70-130	Pass	
Endrin ketone	%	88			70-130	Pass	
g-HCH (Lindane)	%	91			70-130	Pass	
Heptachlor	%	80			70-130	Pass	
Heptachlor epoxide	%	90			70-130	Pass	
Hexachlorobenzene	%	103			70-130	Pass	
Methoxychlor	%	89			70-130	Pass	
LCS - % Recovery							
Polychlorinated Biphenyls							
Aroclor-1260	%	96			70-130	Pass	
LCS - % Recovery							
Phenols (Halogenated)							
2-Chlorophenol	%	67			25-140	Pass	
2.4-Dichlorophenol	%	71			25-140	Pass	
2.4.5-Trichlorophenol	%	82			25-140	Pass	
2.4.6-Trichlorophenol	%	63			25-140	Pass	
2.6-Dichlorophenol	%	67			25-140	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
4-Chloro-3-methylphenol	%	67			25-140	Pass	
Pentachlorophenol	%	67			25-140	Pass	
Tetrachlorophenols - Total	%	95			25-140	Pass	
LCS - % Recovery							
Phenols (non-Halogenated)							
2-Methyl-4.6-dinitrophenol	%	77			25-140	Pass	
2-Nitrophenol	%	97			25-140	Pass	
2.4-Dimethylphenol	%	48			25-140	Pass	
2.4-Dinitrophenol	%	51			25-140	Pass	
2-Methylphenol (o-Cresol)	%	61			25-140	Pass	
3&4-Methylphenol (m&p-Cresol)	%	64			25-140	Pass	
4-Nitrophenol	%	105			25-140	Pass	
Dinoseb	%	103			25-140	Pass	
Phenol	%	67			25-140	Pass	
LCS - % Recovery							
Chromium (hexavalent)	%	92			70-130	Pass	
Cyanide (total)	%	84			70-130	Pass	
Fluoride (Total)	%	84			70-130	Pass	
LCS - % Recovery							
Heavy Metals							
Arsenic	%	107			80-120	Pass	
Cadmium	%	100			80-120	Pass	
Chromium	%	108			80-120	Pass	
Copper	%	104			80-120	Pass	
Lead	%	106			80-120	Pass	
Mercury	%	113			80-120	Pass	
Molybdenum	%	115			80-120	Pass	
Nickel	%	100			80-120	Pass	
Selenium	%	104			80-120	Pass	
Silver	%	104			80-120	Pass	
Tin	%	112			80-120	Pass	
Zinc	%	111			80-120	Pass	
LCS - % Recovery							
Perfluoroalkyl carboxylic acids (PFCAs)							
Perfluorobutanoic acid (PFBA)	%	97			50-150	Pass	
Perfluoropentanoic acid (PFPeA)	%	89			50-150	Pass	
Perfluorohexanoic acid (PFHxA)	%	93			50-150	Pass	
Perfluoroheptanoic acid (PFHpA)	%	88			50-150	Pass	
Perfluorooctanoic acid (PFOA)	%	89			50-150	Pass	
Perfluorononanoic acid (PFNA)	%	110			50-150	Pass	
Perfluorodecanoic acid (PFDA)	%	97			50-150	Pass	
Perfluoroundecanoic acid (PFUnDA)	%	100			50-150	Pass	
Perfluorododecanoic acid (PFDoDA)	%	97			50-150	Pass	
Perfluorotridecanoic acid (PFTrDA)	%	95			50-150	Pass	
Perfluorotetradecanoic acid (PFTeDA)	%	101			50-150	Pass	
LCS - % Recovery							
Perfluoroalkyl sulfonamido substances							
Perfluorooctane sulfonamide (FOSA)	%	97			50-150	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	%	92			50-150	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	%	90			50-150	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)	%	93			50-150	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)	%	94			50-150	Pass	
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	%	88			50-150	Pass	
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	%	85			50-150	Pass	

Test			Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
LCS - % Recovery									
Perfluoroalkyl sulfonic acids (PFSAs)									
Perfluorobutanesulfonic acid (PFBS)			%	92			50-150	Pass	
Perfluorononanesulfonic acid (PFNS)			%	103			50-150	Pass	
Perfluoropropanesulfonic acid (PFPrS)			%	103			50-150	Pass	
Perfluoropentanesulfonic acid (PFPeS)			%	79			50-150	Pass	
Perfluorohexanesulfonic acid (PFHxS)			%	93			50-150	Pass	
Perfluoroheptanesulfonic acid (PFHpS)			%	65			50-150	Pass	
Perfluorooctanesulfonic acid (PFOS)			%	83			50-150	Pass	
Perfluorodecanesulfonic acid (PFDS)			%	95			50-150	Pass	
LCS - % Recovery									
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)									
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)			%	87			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)			%	99			50-150	Pass	
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)			%	87			50-150	Pass	
Test	**Lab Sample ID**	**QA Source**	**Units**	**Result 1**			**Acceptance Limits**	**Pass Limits**	**Qualifying Code**
Spike - % Recovery									
Volatile Organics				Result 1					
1.1-Dichloroethene	M22-Ma25050	NCP	%	91			70-130	Pass	
Spike - % Recovery									
Polycyclic Aromatic Hydrocarbons				Result 1					
Acenaphthene	M22-Ma31324	NCP	%	83			70-130	Pass	
Acenaphthylene	M22-Ma31324	NCP	%	79			70-130	Pass	
Anthracene	M22-Ma31324	NCP	%	79			70-130	Pass	
Benz(a)anthracene	M22-Ma31324	NCP	%	74			70-130	Pass	
Benzo(a)pyrene	M22-Ma31324	NCP	%	76			70-130	Pass	
Benzo(b&j)fluoranthene	M22-Ma31324	NCP	%	73			70-130	Pass	
Benzo(g.h.i)perylene	M22-Ma31324	NCP	%	88			70-130	Pass	
Benzo(k)fluoranthene	M22-Ma31324	NCP	%	94			70-130	Pass	
Chrysene	M22-Ma31324	NCP	%	71			70-130	Pass	
Dibenz(a.h)anthracene	M22-Ma31324	NCP	%	97			70-130	Pass	
Fluoranthene	M22-Ma31324	NCP	%	88			70-130	Pass	
Fluorene	M22-Ma31324	NCP	%	87			70-130	Pass	
Indeno(1.2.3-cd)pyrene	M22-Ma31324	NCP	%	75			70-130	Pass	
Naphthalene	M22-Ma31324	NCP	%	82			70-130	Pass	
Phenanthrene	M22-Ma31324	NCP	%	84			70-130	Pass	
Pyrene	M22-Ma31324	NCP	%	88			70-130	Pass	
Spike - % Recovery									
Phenols (Halogenated)				Result 1					
2-Chlorophenol	M22-Ma31324	NCP	%	85			30-130	Pass	
2.4-Dichlorophenol	M22-Ma31324	NCP	%	95			30-130	Pass	
2.4.5-Trichlorophenol	M22-Ma31324	NCP	%	105			30-130	Pass	
2.4.6-Trichlorophenol	M22-Ma31324	NCP	%	89			30-130	Pass	
2.6-Dichlorophenol	M22-Ma31324	NCP	%	89			30-130	Pass	
4-Chloro-3-methylphenol	M22-Ma31324	NCP	%	94			30-130	Pass	
Pentachlorophenol	M22-Ma31324	NCP	%	105			30-130	Pass	
Spike - % Recovery									
Phenols (non-Halogenated)				Result 1					
2-Methyl-4.6-dinitrophenol	M22-Ma31324	NCP	%	125			30-130	Pass	
2-Nitrophenol	M22-Ma31324	NCP	%	124			30-130	Pass	
2.4-Dimethylphenol	M22-Ma31324	NCP	%	109			30-130	Pass	
2.4-Dinitrophenol	M22-Ma31324	NCP	%	147			30-130	Fail	Q08
2-Methylphenol (o-Cresol)	M22-Ma31324	NCP	%	89			30-130	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
3&4-Methylphenol (m&p-Cresol)	M22-Ma31324	NCP	%	92			30-130	Pass	
4-Nitrophenol	M22-Ma31324	NCP	%	128			30-130	Pass	
Dinoseb	M22-Ma31324	NCP	%	140			30-130	Fail	Q08
Phenol	M22-Ma31324	NCP	%	88			30-130	Pass	
Spike - % Recovery									
				Result 1					
Chromium (hexavalent)	M22-Ma25181	NCP	%	79			70-130	Pass	
Fluoride (Total)	M22-Ma38818	NCP	%	91			70-130	Pass	
Spike - % Recovery									
Heavy Metals				Result 1					
Copper	M22-Ma22054	NCP	%	95			75-125	Pass	
Spike - % Recovery									
Perfluoroalkyl carboxylic acids (PFCAs)				Result 1					
Perfluorobutanoic acid (PFBA)	M22-Ma34700	CP	%	99			50-150	Pass	
Perfluoropentanoic acid (PFPeA)	M22-Ma34700	CP	%	101			50-150	Pass	
Perfluorohexanoic acid (PFHxA)	M22-Ma34700	CP	%	93			50-150	Pass	
Perfluoroheptanoic acid (PFHpA)	M22-Ma34700	CP	%	91			50-150	Pass	
Perfluorooctanoic acid (PFOA)	M22-Ma34700	CP	%	96			50-150	Pass	
Perfluorononanoic acid (PFNA)	M22-Ma34700	CP	%	106			50-150	Pass	
Perfluorodecanoic acid (PFDA)	M22-Ma34700	CP	%	102			50-150	Pass	
Perfluoroundecanoic acid (PFUnDA)	M22-Ma34700	CP	%	101			50-150	Pass	
Perfluorododecanoic acid (PFDoDA)	M22-Ma34700	CP	%	104			50-150	Pass	
Perfluorotridecanoic acid (PFTrDA)	M22-Ma34700	CP	%	102			50-150	Pass	
Perfluorotetradecanoic acid (PFTeDA)	M22-Ma34700	CP	%	107			50-150	Pass	
Spike - % Recovery									
Perfluoroalkyl sulfonamido substances				Result 1					
Perfluorooctane sulfonamide (FOSA)	M22-Ma40319	NCP	%	87			50-150	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	M22-Ma40319	NCP	%	90			50-150	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	M22-Ma40319	NCP	%	94			50-150	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)	M22-Ma40319	NCP	%	89			50-150	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)	M22-Ma40319	NCP	%	93			50-150	Pass	
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	M22-Ma40319	NCP	%	78			50-150	Pass	
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	M22-Ma40319	NCP	%	79			50-150	Pass	
Spike - % Recovery									
Perfluoroalkyl sulfonic acids (PFSAs)				Result 1					
Perfluorobutanesulfonic acid (PFBS)	M22-Ma40319	NCP	%	85			50-150	Pass	
Perfluorononanesulfonic acid (PFNS)	M22-Ma40319	NCP	%	101			50-150	Pass	
Perfluoropropanesulfonic acid (PFPrS)	M22-Ma40319	NCP	%	95			50-150	Pass	
Perfluoropentanesulfonic acid (PFPeS)	M22-Ma40319	NCP	%	84			50-150	Pass	
Perfluorohexanesulfonic acid (PFHxS)	M22-Ma40319	NCP	%	87			50-150	Pass	
Perfluoroheptanesulfonic acid (PFHpS)	M22-Ma40319	NCP	%	76			50-150	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Perfluorooctanesulfonic acid (PFOS)	M22-Ma40319	NCP	%	101			50-150	Pass	
Perfluorodecanesulfonic acid (PFDS)	M22-Ma40319	NCP	%	98			50-150	Pass	
Spike - % Recovery									
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)				Result 1					
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	M22-Ma40319	NCP	%	79			50-150	Pass	
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)	M22-Ma40319	NCP	%	112			50-150	Pass	
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	M22-Ma40319	NCP	%	103			50-150	Pass	
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	M22-Ma40319	NCP	%	83			50-150	Pass	
Spike - % Recovery									
Total Recoverable Hydrocarbons				Result 1					
TRH C10-C14	M22-Ma34701	CP	%	99			70-130	Pass	
TRH >C10-C16	M22-Ma34701	CP	%	93			70-130	Pass	
Spike - % Recovery									
				Result 1					
Cyanide (total)	M22-Ma34701	CP	%	95			70-130	Pass	
Spike - % Recovery									
Heavy Metals				Result 1					
Arsenic	M22-Ma34701	CP	%	82			75-125	Pass	
Cadmium	M22-Ma34701	CP	%	118			75-125	Pass	
Chromium	M22-Ma34701	CP	%	116			75-125	Pass	
Lead	M22-Ma34701	CP	%	111			75-125	Pass	
Mercury	M22-Ma34701	CP	%	106			75-125	Pass	
Molybdenum	M22-Ma34701	CP	%	115			75-125	Pass	
Nickel	M22-Ma34701	CP	%	115			75-125	Pass	
Selenium	M22-Ma34701	CP	%	87			75-125	Pass	
Silver	M22-Ma34701	CP	%	121			75-125	Pass	
Tin	M22-Ma34701	CP	%	117			75-125	Pass	
Zinc	M22-Ma34701	CP	%	88			75-125	Pass	
Spike - % Recovery									
Total Recoverable Hydrocarbons				Result 1					
TRH C6-C9	M22-Ma34705	CP	%	89			70-130	Pass	
Naphthalene	M22-Ma34705	CP	%	74			70-130	Pass	
TRH C6-C10	M22-Ma34705	CP	%	85			70-130	Pass	
Spike - % Recovery									
Volatile Organics				Result 1					
1.1.1-Trichloroethane	M22-Ma34705	CP	%	79			70-130	Pass	
1.2-Dichlorobenzene	M22-Ma34705	CP	%	71			70-130	Pass	
1.2-Dichloroethane	M22-Ma34705	CP	%	74			70-130	Pass	
Benzene	M22-Ma34705	CP	%	72			70-130	Pass	
Ethylbenzene	M22-Ma34705	CP	%	81			70-130	Pass	
m&p-Xylenes	M22-Ma34705	CP	%	79			70-130	Pass	
o-Xylene	M22-Ma34705	CP	%	86			70-130	Pass	
Toluene	M22-Ma34705	CP	%	82			70-130	Pass	
Trichloroethene	M22-Ma34705	CP	%	80			70-130	Pass	
Xylenes - Total*	M22-Ma34705	CP	%	82			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-Ma34700	CP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH C10-C14	M22-Ma34700	CP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH C15-C28	M22-Ma34700	CP	mg/kg	< 50	< 50	<1	30%	Pass	
TRH C29-C36	M22-Ma34700	CP	mg/kg	< 50	< 50	<1	30%	Pass	
Naphthalene	M22-Ma34700	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
TRH C6-C10	M22-Ma34700	CP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH >C10-C16	M22-Ma34700	CP	mg/kg	< 50	< 50	<1	30%	Pass	
TRH >C16-C34	M22-Ma34700	CP	mg/kg	< 100	< 100	<1	30%	Pass	
TRH >C34-C40	M22-Ma34700	CP	mg/kg	< 100	< 100	<1	30%	Pass	
Duplicate									
Volatile Organics				Result 1	Result 2	RPD			
Hexachlorobutadiene	M22-Ma34700	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
Volatile Organics				Result 1	Result 2	RPD			
1.1-Dichloroethane	M22-Ma34700	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2.4-Trichlorobenzene	M22-Ma34700	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1-Dichloroethene	M22-Ma34700	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1.1-Trichloroethane	M22-Ma34700	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1.1.2-Tetrachloroethane	M22-Ma34700	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1.2-Trichloroethane	M22-Ma34700	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1.2.2-Tetrachloroethane	M22-Ma34700	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2-Dibromoethane	M22-Ma34700	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2-Dichlorobenzene	M22-Ma34700	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2-Dichloroethane	M22-Ma34700	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2-Dichloropropane	M22-Ma34700	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2.3-Trichloropropane	M22-Ma34700	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2.4-Trimethylbenzene	M22-Ma34700	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.3-Dichlorobenzene	M22-Ma34700	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.3-Dichloropropane	M22-Ma34700	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.3.5-Trimethylbenzene	M22-Ma34700	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.4-Dichlorobenzene	M22-Ma34700	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2-Butanone (MEK)	M22-Ma34700	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2-Propanone (Acetone)	M22-Ma34700	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
4-Chlorotoluene	M22-Ma34700	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
4-Methyl-2-pentanone (MIBK)	M22-Ma34700	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Allyl chloride	M22-Ma34700	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzene	M22-Ma34700	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Bromobenzene	M22-Ma34700	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Bromochloromethane	M22-Ma34700	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Bromodichloromethane	M22-Ma34700	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Bromoform	M22-Ma34700	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Bromomethane	M22-Ma34700	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Carbon disulfide	M22-Ma34700	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Carbon Tetrachloride	M22-Ma34700	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chlorobenzene	M22-Ma34700	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chloroethane	M22-Ma34700	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chloroform	M22-Ma34700	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chloromethane	M22-Ma34700	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
cis-1.2-Dichloroethene	M22-Ma34700	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
cis-1.3-Dichloropropene	M22-Ma34700	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dibromochloromethane	M22-Ma34700	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dibromomethane	M22-Ma34700	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	

Duplicate									
Volatile Organics				Result 1	Result 2	RPD			
Dichlorodifluoromethane	M22-Ma34700	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Ethylbenzene	M22-Ma34700	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Iodomethane	M22-Ma34700	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Isopropyl benzene (Cumene)	M22-Ma34700	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
m&p-Xylenes	M22-Ma34700	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Methylene Chloride	M22-Ma34700	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
o-Xylene	M22-Ma34700	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Styrene	M22-Ma34700	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Tetrachloroethene	M22-Ma34700	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Toluene	M22-Ma34700	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
trans-1.2-Dichloroethene	M22-Ma34700	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
trans-1.3-Dichloropropene	M22-Ma34700	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Trichloroethene	M22-Ma34700	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Trichlorofluoromethane	M22-Ma34700	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Vinyl chloride	M22-Ma34700	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Xylenes - Total*	M22-Ma34700	CP	mg/kg	< 0.3	< 0.3	<1	30%	Pass	
Duplicate									
Polycyclic Aromatic Hydrocarbons				Result 1	Result 2	RPD			
Acenaphthene	M22-Ma34700	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Acenaphthylene	M22-Ma34700	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Anthracene	M22-Ma34700	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benz(a)anthracene	M22-Ma34700	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(a)pyrene	M22-Ma34700	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(b&j)fluoranthene	M22-Ma34700	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(g.h.i)perylene	M22-Ma34700	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(k)fluoranthene	M22-Ma34700	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chrysene	M22-Ma34700	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dibenz(a.h)anthracene	M22-Ma34700	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Fluoranthene	M22-Ma34700	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Fluorene	M22-Ma34700	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Indeno(1.2.3-cd)pyrene	M22-Ma34700	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Naphthalene	M22-Ma34700	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Phenanthrene	M22-Ma34700	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Pyrene	M22-Ma34700	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
Organochlorine Pesticides				Result 1	Result 2	RPD			
Chlordanes - Total	M22-Ma34700	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
4.4'-DDD	M22-Ma34700	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
4.4'-DDE	M22-Ma34700	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
4.4'-DDT	M22-Ma34700	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
a-HCH	M22-Ma34700	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Aldrin	M22-Ma34700	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
b-HCH	M22-Ma34700	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
d-HCH	M22-Ma34700	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Dieldrin	M22-Ma34700	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan I	M22-Ma34700	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan II	M22-Ma34700	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan sulphate	M22-Ma34700	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin	M22-Ma34700	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin aldehyde	M22-Ma34700	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin ketone	M22-Ma34700	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
g-HCH (Lindane)	M22-Ma34700	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Heptachlor	M22-Ma34700	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Hexachlorobenzene	M22-Ma34700	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	

Duplicate									
Organochlorine Pesticides				Result 1	Result 2	RPD			
Methoxychlor	M22-Ma34700	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Toxaphene	M22-Ma34700	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
Polychlorinated Biphenyls				Result 1	Result 2	RPD			
Aroclor-1016	M22-Ma34700	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Aroclor-1221	M22-Ma34700	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Aroclor-1232	M22-Ma34700	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Aroclor-1242	M22-Ma34700	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Aroclor-1248	M22-Ma34700	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Aroclor-1254	M22-Ma34700	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Aroclor-1260	M22-Ma34700	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Total PCB*	M22-Ma34700	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Duplicate									
Phenols (Halogenated)				Result 1	Result 2	RPD			
2-Chlorophenol	M22-Ma34700	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2.4-Dichlorophenol	M22-Ma34700	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2.4.5-Trichlorophenol	M22-Ma34700	CP	mg/kg	< 1	< 1	<1	30%	Pass	
2.4.6-Trichlorophenol	M22-Ma34700	CP	mg/kg	< 1	< 1	<1	30%	Pass	
2.6-Dichlorophenol	M22-Ma36470	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
4-Chloro-3-methylphenol	M22-Ma34700	CP	mg/kg	< 1	< 1	<1	30%	Pass	
Pentachlorophenol	M22-Ma34700	CP	mg/kg	< 1	< 1	<1	30%	Pass	
Tetrachlorophenols - Total	M22-Ma34700	CP	mg/kg	< 10	< 10	<1	30%	Pass	
Duplicate									
Phenols (non-Halogenated)				Result 1	Result 2	RPD			
2-Cyclohexyl-4.6-dinitrophenol	M22-Ma34700	CP	mg/kg	< 20	< 20	<1	30%	Pass	
2-Methyl-4.6-dinitrophenol	M22-Ma34700	CP	mg/kg	< 5	< 5	<1	30%	Pass	
2-Nitrophenol	M22-Ma34700	CP	mg/kg	< 1	< 1	<1	30%	Pass	
2.4-Dimethylphenol	M22-Ma34700	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2.4-Dinitrophenol	M22-Ma34700	CP	mg/kg	< 5	< 5	<1	30%	Pass	
2-Methylphenol (o-Cresol)	M22-Ma34700	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
3&4-Methylphenol (m&p-Cresol)	M22-Ma34700	CP	mg/kg	< 0.4	< 0.4	<1	30%	Pass	
4-Nitrophenol	M22-Ma34700	CP	mg/kg	< 5	< 5	<1	30%	Pass	
Dinoseb	M22-Ma34700	CP	mg/kg	< 20	< 20	<1	30%	Pass	
Phenol	M22-Ma34700	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
				Result 1	Result 2	RPD			
Cyanide (total)	M22-Ma34700	CP	mg/kg	< 5	< 5	<1	30%	Pass	
pH (1:5 Aqueous extract at 25°C as rec.)	M22-Ma34700	CP	pH Units	9.0	9.0	pass	30%	Pass	
% Moisture	M22-Ma36076	NCP	%	6.8	8.3	19	30%	Pass	
Duplicate									
Heavy Metals				Result 1	Result 2	RPD			
Arsenic	M22-Ma34700	CP	mg/kg	22	22	1.0	30%	Pass	
Cadmium	M22-Ma34700	CP	mg/kg	< 0.4	< 0.4	<1	30%	Pass	
Chromium	M22-Ma34700	CP	mg/kg	120	120	<1	30%	Pass	
Copper	M22-Ma34700	CP	mg/kg	72	72	<1	30%	Pass	
Lead	M22-Ma34700	CP	mg/kg	< 5	< 5	<1	30%	Pass	
Mercury	M22-Ma34700	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Molybdenum	M22-Ma34700	CP	mg/kg	< 5	< 5	<1	30%	Pass	
Nickel	M22-Ma34700	CP	mg/kg	180	180	1.0	30%	Pass	
Selenium	M22-Ma34700	CP	mg/kg	< 2	< 2	<1	30%	Pass	
Silver	M22-Ma34700	CP	mg/kg	< 2	< 2	<1	30%	Pass	
Tin	M22-Ma34700	CP	mg/kg	< 10	< 10	<1	30%	Pass	
Zinc	M22-Ma34700	CP	mg/kg	120	120	4.0	30%	Pass	

Duplicate								
Perfluoroalkyl carboxylic acids (PFCAs)				Result 1	Result 2	RPD		
Perfluorobutanoic acid (PFBA)	M22-Ma38563	NCP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluoropentanoic acid (PFPeA)	M22-Ma38563	NCP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluorohexanoic acid (PFHxA)	M22-Ma38563	NCP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluoroheptanoic acid (PFHpA)	M22-Ma38563	NCP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluorooctanoic acid (PFOA)	M22-Ma38563	NCP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluorononanoic acid (PFNA)	M22-Ma38563	NCP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluorodecanoic acid (PFDA)	M22-Ma38563	NCP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluoroundecanoic acid (PFUnDA)	M22-Ma38563	NCP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluorododecanoic acid (PFDoDA)	M22-Ma38563	NCP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluorotridecanoic acid (PFTrDA)	M22-Ma38563	NCP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluorotetradecanoic acid (PFTeDA)	M22-Ma38563	NCP	ug/kg	< 5	< 5	<1	30%	Pass
Duplicate								
Perfluoroalkyl sulfonamido substances				Result 1	Result 2	RPD		
Perfluorooctane sulfonamide (FOSA)	M22-Ma38563	NCP	ug/kg	< 5	< 5	<1	30%	Pass
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	M22-Ma38563	NCP	ug/kg	< 5	< 5	<1	30%	Pass
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	M22-Ma38563	NCP	ug/kg	< 5	< 5	<1	30%	Pass
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)	M22-Ma38563	NCP	ug/kg	< 5	< 5	<1	30%	Pass
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)	M22-Ma38563	NCP	ug/kg	< 5	< 5	<1	30%	Pass
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	M22-Ma38563	NCP	ug/kg	< 10	< 10	<1	30%	Pass
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	M22-Ma38563	NCP	ug/kg	< 10	< 10	<1	30%	Pass
Duplicate								
Perfluoroalkyl sulfonic acids (PFSAs)				Result 1	Result 2	RPD		
Perfluorobutanesulfonic acid (PFBS)	M22-Ma38563	NCP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluorononanesulfonic acid (PFNS)	M22-Ma38563	NCP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluoropropanesulfonic acid (PFPrS)	M22-Ma38563	NCP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluoropentanesulfonic acid (PFPeS)	M22-Ma38563	NCP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluorohexanesulfonic acid (PFHxS)	M22-Ma38563	NCP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluoroheptanesulfonic acid (PFHpS)	M22-Ma38563	NCP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluorooctanesulfonic acid (PFOS)	M22-Ma38563	NCP	ug/kg	22	22	1.0	30%	Pass
Perfluorodecanesulfonic acid (PFDS)	M22-Ma38563	NCP	ug/kg	< 5	< 5	<1	30%	Pass
Duplicate								
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)				Result 1	Result 2	RPD		
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	M22-Ma38563	NCP	ug/kg	< 5	< 5	<1	30%	Pass
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)	M22-Ma38563	NCP	ug/kg	< 10	< 10	<1	30%	Pass
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	M22-Ma38563	NCP	ug/kg	< 5	< 5	<1	30%	Pass
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	M22-Ma38563	NCP	ug/kg	< 5	< 5	<1	30%	Pass

Duplicate									
Heavy Metals				Result 1	Result 2	RPD			
Arsenic	M22-Ma34701	CP	mg/kg	35	35	1.0	30%	Pass	
Cadmium	M22-Ma34701	CP	mg/kg	< 0.4	< 0.4	<1	30%	Pass	
Chromium	M22-Ma34701	CP	mg/kg	130	130	1.0	30%	Pass	
Copper	M22-Ma34701	CP	mg/kg	71	71	<1	30%	Pass	
Lead	M22-Ma34701	CP	mg/kg	< 5	< 5	<1	30%	Pass	
Mercury	M22-Ma34701	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Molybdenum	M22-Ma34701	CP	mg/kg	< 5	< 5	<1	30%	Pass	
Nickel	M22-Ma34701	CP	mg/kg	180	180	<1	30%	Pass	
Selenium	M22-Ma34701	CP	mg/kg	< 2	< 2	<1	30%	Pass	
Silver	M22-Ma34701	CP	mg/kg	< 2	< 2	<1	30%	Pass	
Tin	M22-Ma34701	CP	mg/kg	< 10	< 10	<1	30%	Pass	
Zinc	M22-Ma34701	CP	mg/kg	130	130	<1	30%	Pass	
Duplicate									
				Result 1	Result 2	RPD			
Fluoride (Total)	M22-Ma34702	CP	mg/kg	< 100	< 100	<1	30%	Pass	
Duplicate									
				Result 1	Result 2	RPD			
Chromium (hexavalent)	M22-Ma34705	CP	mg/kg	< 1	< 1	<1	30%	Pass	
Duplicate									
				Result 1	Result 2	RPD			
Chromium (hexavalent)	M22-Ma34707	CP	mg/kg	< 1	< 1	<1	30%	Pass	

Comments

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

Sample Integrity

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

Qualifier Codes/Comments

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

Authorised by:

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

Glenn Jackson
General Manager

Final Report – this report replaces any previously issued Report

- Indicates Not Requested

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

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

CHAIN OF CUSTODY RECORD

Eurofins | Environment Testing ABN 50 005 085 521

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

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

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

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

Company	AGON Environmental - Tunnel Spoil Testing	**Project №**	JC0927	**Project Manager**	Craig Trimbur
Address	Unit H76, 63-85 Turner St, Port Melbourne VIC 3207	**Project Name**	20220318043419-Eurofin-12	**EDD Format** ESdat, EQuIS etc	Esdat
Contact Name	Craig Trimbur David Lawson				
Phone №	+61 400 826 907 (Craig) +61 490 411 004 (David)				
Special Directions	Please provide an interim lab report if finalised report has not been provided by 14 days from sample receipt. Please provide eSRN along with oter sample recipt documentation.				
Purchase Order					
Quote ID №	Agon WGTP TST				

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

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

№	Client Sample ID	Sampled Date/Time dd/mm/yy hh:mm	Matrix Solid (S) Water (W)	Spoil Sample Preparation	Suite WGTP-R1- TRH/ PAH/ Phenols/ OCP/ PCB/ VOC/ Vinyl Chloride/ Metals (As, Cd, Cr, Cu, Ni, Pb,Hg, Ag, Sn, Mo, Se, Zn)/ Cr6+/ CN/ Total Fluoride/ pH	PFAS Extended Suite - 0.1 - 5ug/kg	ASLP PH 5 - PFAS 0.01-0.05 ug/l	ASLP Reagent - PFAS 0.01-0.05ug/l	Containers: 500mL Plastic	250mL Plastic	125mL Plastic	200mL Amber Glass	40mL VOA vial	500mL PFAS Bottle	Jar (Glass or HDPE)	Other (Asbestos AS4964, WA Guidelines)	Sample Comments / Dangerous Goods Hazard Warning
1	SX_IB_20220317_07_54_SS_Triplicate_EUF	03.17.2022 7:54	S	X	X	X	X	X									1	
2	SX_IB_20220317_08_03_SS_Primary_EUF	03.17.2022 8:03	S	X	X	X	X	X									1	
3	SX_OB_20220317_11_58_SS_Primary_EUF	03.17.2022 11:58	S	X	X	X	X	X									1	
4	SX_OB_20220317_16_02_SS_Primary_EUF	03.17.2022 16:02	S	X	X	X	X	X									1	
5	SX_OB_20220317_16_02_SS_Duplicate_EUF	03.17.2022 16:02	S	X	X	X	X	X									1	
6	SX_OB_20220317_16_17_SR_Rinsate_EUF	03.17.2022 16:17	W			X											1	
7	SX_OB_20220317_16_19_SB_Blank_EUF	03.17.2022 16:19	W			X											1	
8	SX_OB_20220317_19_50_SS_Primary_EUF	17.03.2022 19:50	S	X	X	X	X	X									1	
9	SX_OB_20220318_00_06_SS_Primary_EUF	18.03.2022 00:06	S	X	X	X	X	X									1	
10	SX_OB_20220318_03_55_SS_Primary_EUF	18.03.2022 03:55	S	X	X	X	X	X									1	
11																		
12																		
13																		
	Total Counts			8	8	10	8	8									10	

Containers — Change container type & size if necessary

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

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

Method of Shipment: ☑ Courier (#) ☐ Hand Delivered ☐ Postal

	Name	Signature	Date	Time
Laboratory Use Only Received By	MICHAEL	SYD | BNE | MEL | PER | ADL | NTL | DRW		18/3	12:35pm
Received By		SYD | BNE | MEL | PER | ADL | NTL | DRW			

Temperature: 22.6
Report №: 872310

NO ICE
22.8
-0.2
22.6

Jake

Eurofins Environment Testing Australia Pty Ltd

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

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

Attention: **David Lawson**

Report **872310-L**
Project name 20220318043419-Eurofin-12
Project ID JC0927
Received Date Mar 18, 2022

Client Sample ID			SX_IB_20220317_07_54_SS_Triplicate_EUF	SX_IB_20220317_08_03_SS_Primary_EUF	SX_OB_20220317_11_58_SS_Primary_EUF	SX_OB_20220317_16_02_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-Ma36478	M22-Ma36479	M22-Ma36480	M22-Ma36481
Date Sampled			Mar 17, 2022	Mar 17, 2022	Mar 17, 2022	Mar 17, 2022
Test/Reference	LOR	Unit				
AUS Leaching Procedure						
Leachate Fluid[C01]		comment	1.0	1.0	1.0	1.0
pH (initial)	0.1	pH Units	N/A	N/A	N/A	N/A
pH (Leachate fluid)	0.1	pH Units	5.1	5.1	5.1	5.1
pH (off)	0.1	pH Units	5.2	5.2	5.2	5.2
Perfluoroalkyl carboxylic acids (PFCAs)						
Perfluorobutanoic acid (PFBA)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
Perfluoropentanoic acid (PFPeA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorohexanoic acid (PFHxA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoroheptanoic acid (PFHpA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorooctanoic acid (PFOA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorononanoic acid (PFNA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorodecanoic acid (PFDA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoroundecanoic acid (PFUnDA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorododecanoic acid (PFDoDA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorotridecanoic acid (PFTrDA)[N15]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorotetradecanoic acid (PFTeDA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C4-PFBA (surr.)	1	%	90	103	106	105
13C5-PFPeA (surr.)	1	%	109	117	123	128
13C5-PFHxA (surr.)	1	%	109	125	122	128
13C4-PFHpA (surr.)	1	%	103	120	113	122
13C8-PFOA (surr.)	1	%	98	116	69	46
13C5-PFNA (surr.)	1	%	99	112	101	114
13C6-PFDA (surr.)	1	%	84	93	76	96
13C2-PFUnDA (surr.)	1	%	73	79	51	73
13C2-PFDoDA (surr.)	1	%	73	66	45	64
13C2-PFTeDA (surr.)	1	%	95	37	22	31
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_20220317_07_54_SS_Triplicate_EUF	SX_IB_20220317_08_03_SS_Primary_EUF	SX_OB_20220317_11_58_SS_Primary_EUF	SX_OB_20220317_16_02_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-Ma36478**	**M22-Ma36479**	**M22-Ma36480**	**M22-Ma36481**
Date Sampled			**Mar 17, 2022**	**Mar 17, 2022**	**Mar 17, 2022**	**Mar 17, 2022**
Test/Reference	LOR	Unit				
Perfluoroalkyl sulfonamido substances						
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
13C8-FOSA (surr.)	1	%	88	99	81	104
D3-N-MeFOSA (surr.)	1	%	107	71	66	103
D5-N-EtFOSA (surr.)	1	%	135	78	68	110
D7-N-MeFOSE (surr.)	1	%	79	78	65	87
D9-N-EtFOSE (surr.)	1	%	85	86	66	90
D5-N-EtFOSAA (surr.)	1	%	19	23	14	25
D3-N-MeFOSAA (surr.)	1	%	21	23	17	29
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	%	95	108	105	108
18O2-PFHxS (surr.)	1	%	107	122	118	122
13C8-PFOS (surr.)	1	%	90	102	89	95
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)						
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C2-4:2 FTSA (surr.)	1	%	94	117	111	109
13C2-6:2 FTSA (surr.)	1	%	98	126	123	135
13C2-8:2 FTSA (surr.)	1	%	102	128	100	129
13C2-10:2 FTSA (surr.)	1	%	88	85	57	77
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_20220317_16_02_SS_Duplicate_EUF	SX_OB_20220317_19_50_SS_Primary_EUF	SX_OB_20220318_00_06_SS_Primary_EUF	SX_OB_20220318_03_55_SS_Primary_EUF
Sample Matrix			**AUS Leachate - pH 5.0**	**AUS Leachate - pH 5.0**	**AUS Leachate - pH 5.0**	**AUS Leachate - pH 5.0**
Eurofins Sample No.			**M22-Ma36482**	**M22-Ma36483**	**M22-Ma36484**	**M22-Ma36485**
Date Sampled			**Mar 17, 2022**	**Mar 17, 2022**	**Mar 18, 2022**	**Mar 18, 2022**
Test/Reference	LOR	Unit				
AUS Leaching Procedure						
Leachate Fluid[C01]		comment	1.0	1.0	1.0	1.0
pH (initial)	0.1	pH Units	N/A	N/A	N/A	N/A
pH (Leachate fluid)	0.1	pH Units	5.1	5.1	5.1	5.1
pH (off)	0.1	pH Units	5.2	5.2	5.2	5.2
Perfluoroalkyl carboxylic acids (PFCAs)						
Perfluorobutanoic acid (PFBA)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
Perfluoropentanoic acid (PFPeA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorohexanoic acid (PFHxA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoroheptanoic acid (PFHpA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorooctanoic acid (PFOA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorononanoic acid (PFNA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorodecanoic acid (PFDA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoroundecanoic acid (PFUnDA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorododecanoic acid (PFDoDA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorotridecanoic acid (PFTrDA)[N15]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorotetradecanoic acid (PFTeDA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C4-PFBA (surr.)	1	%	102	106	103	104
13C5-PFPeA (surr.)	1	%	119	125	120	119
13C5-PFHxA (surr.)	1	%	123	126	118	126
13C4-PFHpA (surr.)	1	%	122	126	119	125
13C8-PFOA (surr.)	1	%	40	53	36	38
13C5-PFNA (surr.)	1	%	110	121	98	113
13C6-PFDA (surr.)	1	%	94	97	75	98
13C2-PFUnDA (surr.)	1	%	73	74	51	74
13C2-PFDoDA (surr.)	1	%	75	64	40	65
13C2-PFTeDA (surr.)	1	%	48	38	18	36
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	%	105	104	89	102
D3-N-MeFOSA (surr.)	1	%	108	92	92	91
D5-N-EtFOSA (surr.)	1	%	119	94	101	93
D7-N-MeFOSE (surr.)	1	%	86	84	74	85
D9-N-EtFOSE (surr.)	1	%	96	89	78	89
D5-N-EtFOSAA (surr.)	1	%	18	22	17	28
D3-N-MeFOSAA (surr.)	1	%	23	23	18	29

Client Sample ID			SX_OB_20220317_16_02_SS_Duplicate_EUF	SX_OB_20220317_19_50_SS_Primary_EUF	SX_OB_20220318_00_06_SS_Primary_EUF	SX_OB_20220318_03_55_SS_Primary_EUF
Sample Matrix			**AUS Leachate - pH 5.0**	**AUS Leachate - pH 5.0**	**AUS Leachate - pH 5.0**	**AUS Leachate - pH 5.0**
Eurofins Sample No.			**M22-Ma36482**	**M22-Ma36483**	**M22-Ma36484**	**M22-Ma36485**
Date Sampled			Mar 17, 2022	Mar 17, 2022	Mar 18, 2022	Mar 18, 2022
Test/Reference	LOR	Unit				
Perfluoroalkyl sulfonic acids (PFSAs)						
Perfluorobutanesulfonic acid (PFBS)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorononanesulfonic acid (PFNS)[N15]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoropropanesulfonic acid (PFPrS)[N15]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoropentanesulfonic acid (PFPeS)[N15]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorohexanesulfonic acid (PFHxS)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoroheptanesulfonic acid (PFHpS)[N15]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorooctanesulfonic acid (PFOS)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorodecanesulfonic acid (PFDS)[N15]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C3-PFBS (surr.)	1	%	103	108	96	99
18O2-PFHxS (surr.)	1	%	119	126	106	114
13C8-PFOS (surr.)	1	%	108	102	81	94
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)						
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C2-4:2 FTSA (surr.)	1	%	118	118	105	119
13C2-6:2 FTSA (surr.)	1	%	134	141	117	131
13C2-8:2 FTSA (surr.)	1	%	134	132	102	139
13C2-10:2 FTSA (surr.)	1	%	91	100	52	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_20220317_07_54_SS_Triplicate_EUF	SX_IB_20220317_08_03_SS_Primary_EUF	SX_OB_20220317_11_58_SS_Primary_EUF	SX_OB_20220317_16_02_SS_Primary_EUF
Sample Matrix			**AUS Leachate - Reagent Water**	**AUS Leachate - Reagent Water**	**AUS Leachate - Reagent Water**	**AUS Leachate - Reagent Water**
Eurofins Sample No.			**M22-Ma36486**	**M22-Ma36487**	**M22-Ma36488**	**M22-Ma36489**
Date Sampled			Mar 17, 2022	Mar 17, 2022	Mar 17, 2022	Mar 17, 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	6.5	6.5	6.5	6.5
pH (off)	0.1	pH Units	9.2	9.3	9.4	9.9

Client Sample ID			SX_IB_20220317_07_54_SS_Triplicate_EUF	SX_IB_20220317_08_03_SS_Primary_EUF	SX_OB_20220317_11_58_SS_Primary_EUF	SX_OB_20220317_16_02_SS_Primary_EUF
Sample Matrix			**AUS Leachate - Reagent Water**	**AUS Leachate - Reagent Water**	**AUS Leachate - Reagent Water**	**AUS Leachate - Reagent Water**
Eurofins Sample No.			**M22-Ma36486**	**M22-Ma36487**	**M22-Ma36488**	**M22-Ma36489**
Date Sampled			**Mar 17, 2022**	**Mar 17, 2022**	**Mar 17, 2022**	**Mar 17, 2022**
Test/Reference	LOR	Unit				
Perfluoroalkyl carboxylic acids (PFCAs)						
Perfluorobutanoic acid (PFBA)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
Perfluoropentanoic acid (PFPeA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorohexanoic acid (PFHxA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoroheptanoic acid (PFHpA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorooctanoic acid (PFOA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorononanoic acid (PFNA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorodecanoic acid (PFDA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoroundecanoic acid (PFUnDA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorododecanoic acid (PFDoDA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorotridecanoic acid (PFTrDA)[N15]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorotetradecanoic acid (PFTeDA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C4-PFBA (surr.)	1	%	98	78	77	73
13C5-PFPeA (surr.)	1	%	117	116	124	116
13C5-PFHxA (surr.)	1	%	116	92	96	90
13C4-PFHpA (surr.)	1	%	115	92	93	97
13C8-PFOA (surr.)	1	%	104	124	99	52
13C5-PFNA (surr.)	1	%	111	97	102	106
13C6-PFDA (surr.)	1	%	96	92	95	104
13C2-PFUnDA (surr.)	1	%	84	95	97	102
13C2-PFDoDA (surr.)	1	%	78	69	77	87
13C2-PFTeDA (surr.)	1	%	89	37	36	44
Perfluoroalkyl sulfonamido substances						
Perfluorooctane sulfonamide (FOSA)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
13C8-FOSA (surr.)	1	%	99	87	92	99
D3-N-MeFOSA (surr.)	1	%	131	82	88	148
D5-N-EtFOSA (surr.)	1	%	143	44	46	57
D7-N-MeFOSE (surr.)	1	%	80	48	60	59
D9-N-EtFOSE (surr.)	1	%	85	49	63	64
D5-N-EtFOSAA (surr.)	1	%	25	87	85	100
D3-N-MeFOSAA (surr.)	1	%	25	121	93	99
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_20220317_07_54_SS_Triplicate_EUF	SX_IB_20220317_08_03_SS_Primary_EUF	SX_OB_20220317_11_58_SS_Primary_EUF	SX_OB_20220317_16_02_SS_Primary_EUF
Sample Matrix			AUS Leachate - Reagent Water	AUS Leachate - Reagent Water	AUS Leachate - Reagent Water	AUS Leachate - Reagent Water
Eurofins Sample No.			M22-Ma36486	M22-Ma36487	M22-Ma36488	M22-Ma36489
Date Sampled			Mar 17, 2022	Mar 17, 2022	Mar 17, 2022	Mar 17, 2022
Test/Reference	LOR	Unit				
Perfluoroalkyl sulfonic acids (PFSAs)						
Perfluorooctanesulfonic acid (PFOS)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorodecanesulfonic acid (PFDS)[N15]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C3-PFBS (surr.)	1	%	96	94	95	80
18O2-PFHxS (surr.)	1	%	109	95	93	104
13C8-PFOS (surr.)	1	%	90	100	103	103
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)						
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C2-4:2 FTSA (surr.)	1	%	117	76	83	84
13C2-6:2 FTSA (surr.)	1	%	143	102	122	143
13C2-8:2 FTSA (surr.)	1	%	132	107	136	107
13C2-10:2 FTSA (surr.)	1	%	113	77	84	85
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_20220317_16_02_SS_Duplicate_EUF	SX_OB_20220317_19_50_SS_Primary_EUF	SX_OB_20220318_00_06_SS_Primary_EUF	SX_OB_20220318_03_55_SS_Primary_EUF
Sample Matrix			AUS Leachate - Reagent Water	AUS Leachate - Reagent Water	AUS Leachate - Reagent Water	AUS Leachate - Reagent Water
Eurofins Sample No.			M22-Ma36490	M22-Ma36491	M22-Ma36492	M22-Ma36493
Date Sampled			Mar 17, 2022	Mar 17, 2022	Mar 18, 2022	Mar 18, 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	6.5	6.5	6.5	6.5
pH (off)	0.1	pH Units	9.9	9.8	9.9	9.9
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_OB_20220317_16_02_SS_Duplicate_EUF	SX_OB_20220317_19_50_SS_Primary_EUF	SX_OB_20220318_00_06_SS_Primary_EUF	SX_OB_20220318_03_55_SS_Primary_EUF
Sample Matrix			AUS Leachate - Reagent Water	AUS Leachate - Reagent Water	AUS Leachate - Reagent Water	AUS Leachate - Reagent Water
Eurofins Sample No.			M22-Ma36490	M22-Ma36491	M22-Ma36492	M22-Ma36493
Date Sampled			Mar 17, 2022	Mar 17, 2022	Mar 18, 2022	Mar 18, 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	%	76	79	77	74
13C5-PFPeA (surr.)	1	%	116	113	112	111
13C5-PFHxA (surr.)	1	%	92	94	90	93
13C4-PFHpA (surr.)	1	%	91	96	100	96
13C8-PFOA (surr.)	1	%	50	63	52	53
13C5-PFNA (surr.)	1	%	102	104	112	111
13C6-PFDA (surr.)	1	%	101	98	108	105
13C2-PFUnDA (surr.)	1	%	99	99	109	112
13C2-PFDoDA (surr.)	1	%	82	75	91	89
13C2-PFTeDA (surr.)	1	%	48	45	50	47
Perfluoroalkyl sulfonamido substances						
Perfluorooctane sulfonamide (FOSA)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
13C8-FOSA (surr.)	1	%	95	97	97	98
D3-N-MeFOSA (surr.)	1	%	110	164	107	114
D5-N-EtFOSA (surr.)	1	%	88	68	73	39
D7-N-MeFOSE (surr.)	1	%	58	50	57	53
D9-N-EtFOSE (surr.)	1	%	63	58	60	56
D5-N-EtFOSAA (surr.)	1	%	94	90	111	126
D3-N-MeFOSAA (surr.)	1	%	101	89	113	116
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	%	82	87	82	81
18O2-PFHxS (surr.)	1	%	102	95	93	89
13C8-PFOS (surr.)	1	%	101	103	108	100

Client Sample ID			SX_OB_20220317_16_02_SS_Duplicate_EUF	SX_OB_20220317_19_50_SS_Primary_EUF	SX_OB_20220318_00_06_SS_Primary_EUF	SX_OB_20220318_03_55_SS_Primary_EUF
Sample Matrix			**AUS Leachate - Reagent Water**	**AUS Leachate - Reagent Water**	**AUS Leachate - Reagent Water**	**AUS Leachate - Reagent Water**
Eurofins Sample No.			**M22-Ma36490**	**M22-Ma36491**	**M22-Ma36492**	**M22-Ma36493**
Date Sampled			**Mar 17, 2022**	**Mar 17, 2022**	**Mar 18, 2022**	**Mar 18, 2022**
Test/Reference	LOR	Unit				
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)						
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C2-4:2 FTSA (surr.)	1	%	84	83	83	87
13C2-6:2 FTSA (surr.)	1	%	140	120	132	161
13C2-8:2 FTSA (surr.)	1	%	147	130	149	106
13C2-10:2 FTSA (surr.)	1	%	78	73	94	96
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)	Melbourne	Mar 19, 2022	0 Days
- Method: LTM-GEN-7010 Leaching Procedure for Soils & Solid Wastes			
pH (Leachate fluid)	Melbourne	Mar 19, 2022	0 Days
- Method: LTM-GEN-7010 Leaching Procedure for Soils & Solid Wastes			
pH (off)	Melbourne	Mar 19, 2022	0 Days
- Method: LTM-GEN-7010 Leaching Procedure for Soils & Solid Wastes			
Per- and Polyfluoroalkyl Substances (PFASs)			
Perfluoroalkyl carboxylic acids (PFCAs)	Melbourne	Mar 19, 2022	28 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			
Perfluoroalkyl sulfonamido substances	Melbourne	Mar 19, 2022	28 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			
Perfluoroalkyl sulfonic acids (PFSAs)	Melbourne	Mar 19, 2022	28 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)	Melbourne	Mar 19, 2022	28 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			
PFASs Summations	Melbourne	Mar 18, 2022	
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			

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Project Name: 20220318043419-Eurofin-12
Project ID: JC0927

Order No.:
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Received: Mar 18, 2022 12:35 PM
Due: Mar 25, 2022
Priority: 5 Day
Contact Name: Agon Lab Reports (Spoil Project)

Eurofins Analytical Services Manager : Michael Cassidy

Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	IWRG 621 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_20220317_07_54_SS_Triplicate_EUF	Mar 17, 2022	7:54AM	Soil	M22-Ma36468		X	X	X
2	SX_IB_20220317_08_03_SS_Primary_EUF	Mar 17, 2022	8:03AM	Soil	M22-Ma36469		X	X	X
3	SX_OB_20220317_11_58_SS_Primary_EUF	Mar 17, 2022	11:58AM	Soil	M22-Ma36470		X	X	X
4	SX_OB_20220	Mar 17, 2022	4:02PM	Soil	M22-Ma36471		X	X	X

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Project Name: 20220318043419-Eurofin-12
Project ID: JC0927

Order No.:
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Phone: 08 8338 1009
Fax:

Received: Mar 18, 2022 12:35 PM
Due: Mar 25, 2022
Priority: 5 Day
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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									
	317_16_02_SS_Primary_EUF								
5	SX_OB_20220317_16_02_SS_Duplicate_EUF	Mar 17, 2022	4:02PM	Soil	M22-Ma36472		X	X	X
6	SX_OB_20220317_16_17_SR_Rinsate_EUF	Mar 17, 2022	4:17PM	Water	M22-Ma36473			X	
7	SX_OB_20220317_16_19_SB_Blank_EUF	Mar 17, 2022	4:19PM	Water	M22-Ma36474			X	

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Melbourne Laboratory - NATA # 1261 Site # 1254						X	X	X	X
Sydney Laboratory - NATA # 1261 Site # 18217									
Brisbane Laboratory - NATA # 1261 Site # 20794									
Mayfield Laboratory - NATA # 1261 Site # 25079									
Perth Laboratory - NATA # 2377 Site # 2370									
External Laboratory									
8	SX_OB_20220317_19_50_SS_Primary_EUF	Mar 17, 2022	7:50PM	Soil	M22-Ma36475		X	X	X
9	SX_OB_20220318_00_06_SS_Primary_EUF	Mar 18, 2022	12:06AM	Soil	M22-Ma36476		X	X	X
10	SX_OB_20220318_03_55_SS_Primary_EUF	Mar 18, 2022	3:55AM	Soil	M22-Ma36477		X	X	X
11	SX_IB_20220317_07_54_SS	Mar 17, 2022	7:54AM	AUS Leachate - pH 5.0	M22-Ma36478	X		X	

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Melbourne Laboratory - NATA # 1261 Site # 1254						X	X	X	X
Sydney Laboratory - NATA # 1261 Site # 18217									
Brisbane Laboratory - NATA # 1261 Site # 20794									
Mayfield Laboratory - NATA # 1261 Site # 25079									
Perth Laboratory - NATA # 2377 Site # 2370									
External Laboratory									
	_Triplicate_EUF								
12	SX_IB_20220317_08_03_SS_Primary_EUF	Mar 17, 2022	8:03AM	AUS Leachate - pH 5.0	M22-Ma36479	X		X	
13	SX_OB_20220317_11_58_SS_Primary_EUF	Mar 17, 2022	11:58AM	AUS Leachate - pH 5.0	M22-Ma36480	X		X	
14	SX_OB_20220317_16_02_SS_Primary_EUF	Mar 17, 2022	4:02PM	AUS Leachate - pH 5.0	M22-Ma36481	X		X	
15	SX_OB_20220	Mar 17, 2022	4:02PM	AUS Leachate	M22-Ma36482	X		X	

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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_20220317_16_02_SS_Duplicate_EUF	Mar 17, 2022	4:02PM	AUS Leachate - pH 5.0	M22-Ma36482				
16	SX_OB_20220317_19_50_SS_Primary_EUF	Mar 17, 2022	7:50PM	AUS Leachate - pH 5.0	M22-Ma36483	X		X	
17	SX_OB_20220318_00_06_SS_Primary_EUF	Mar 18, 2022	12:06AM	AUS Leachate - pH 5.0	M22-Ma36484	X		X	
18	SX_OB_20220318_03_55_S	Mar 18, 2022	3:55AM	AUS Leachate - pH 5.0	M22-Ma36485	X		X	

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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									
	S_Primary_EUF								
19	SX_IB_20220317_07_54_SS_Triplicate_EUF	Mar 17, 2022	7:54AM	AUS Leachate - Reagent Water	M22-Ma36486	X		X	
20	SX_IB_20220317_08_03_SS_Primary_EUF	Mar 17, 2022	8:03AM	AUS Leachate - Reagent Water	M22-Ma36487	X		X	
21	SX_OB_20220317_11_58_SS_Primary_EUF	Mar 17, 2022	11:58AM	AUS Leachate - Reagent Water	M22-Ma36488	X		X	
22	SX_OB_20220	Mar 17, 2022	4:02PM	AUS Leachate	M22-Ma36489	X		X	

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Melbourne Laboratory - NATA # 1261 Site # 1254						X	X	X	X
Sydney Laboratory - NATA # 1261 Site # 18217									
Brisbane Laboratory - NATA # 1261 Site # 20794									
Mayfield Laboratory - NATA # 1261 Site # 25079									
Perth Laboratory - NATA # 2377 Site # 2370									
External Laboratory									
22	SX_OB_20220317_16_02_SS_Primary_EUF	Mar 17, 2022	4:02PM	AUS Leachate - Reagent Water	M22-Ma36489				
23	SX_OB_20220317_16_02_SS_Duplicate_EUF	Mar 17, 2022	4:02PM	AUS Leachate - Reagent Water	M22-Ma36490	X		X	
24	SX_OB_20220317_19_50_SS_Primary_EUF	Mar 17, 2022	7:50PM	AUS Leachate - Reagent Water	M22-Ma36491	X		X	
25	SX_OB_20220318_00_06_S	Mar 18, 2022	12:06AM	AUS Leachate - Reagent	M22-Ma36492	X		X	

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Sydney Laboratory - NATA # 1261 Site # 18217									
Brisbane Laboratory - NATA # 1261 Site # 20794									
Mayfield Laboratory - NATA # 1261 Site # 25079									
Perth Laboratory - NATA # 2377 Site # 2370									
External Laboratory									
	S_Primary_EUF			Water					
26	SX_OB_20220318_03_55_SS_Primary_EUF	Mar 18, 2022	3:55AM	AUS Leachate - Reagent Water	M22-Ma36493	X		X	
Test Counts						16	8	26	8

Internal Quality Control Review and Glossary

General

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

Holding Times

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

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

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

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

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

Units

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

Terms

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

QC - Acceptance Criteria

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

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

Results <10 times the LOR: No Limit

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

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

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

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

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

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QC Data General Comments

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

Quality Control Results

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Method Blank							
Perfluoroalkyl carboxylic acids (PFCAs)							
Perfluorobutanoic acid (PFBA)	ug/L	< 0.05			0.05	Pass	
Perfluoropentanoic acid (PFPeA)	ug/L	< 0.01			0.01	Pass	
Perfluorohexanoic acid (PFHxA)	ug/L	< 0.01			0.01	Pass	
Perfluoroheptanoic acid (PFHpA)	ug/L	< 0.01			0.01	Pass	
Perfluorooctanoic acid (PFOA)	ug/L	< 0.01			0.01	Pass	
Perfluorononanoic acid (PFNA)	ug/L	< 0.01			0.01	Pass	
Perfluorodecanoic acid (PFDA)	ug/L	< 0.01			0.01	Pass	
Perfluoroundecanoic acid (PFUnDA)	ug/L	< 0.01			0.01	Pass	
Perfluorododecanoic acid (PFDoDA)	ug/L	< 0.01			0.01	Pass	
Perfluorotridecanoic acid (PFTrDA)	ug/L	< 0.01			0.01	Pass	
Perfluorotetradecanoic acid (PFTeDA)	ug/L	< 0.01			0.01	Pass	
Method Blank							
Perfluoroalkyl sulfonamido substances							
Perfluorooctane sulfonamide (FOSA)	ug/L	< 0.05			0.05	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	ug/L	< 0.05			0.05	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	ug/L	< 0.05			0.05	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)	ug/L	< 0.05			0.05	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)	ug/L	< 0.05			0.05	Pass	
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	ug/L	< 0.05			0.05	Pass	
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	ug/L	< 0.05			0.05	Pass	
Method Blank							
Perfluoroalkyl sulfonic acids (PFSAs)							
Perfluorobutanesulfonic acid (PFBS)	ug/L	< 0.01			0.01	Pass	
Perfluorononanesulfonic acid (PFNS)	ug/L	< 0.01			0.01	Pass	
Perfluoropropanesulfonic acid (PFPrS)	ug/L	< 0.01			0.01	Pass	
Perfluoropentanesulfonic acid (PFPeS)	ug/L	< 0.01			0.01	Pass	
Perfluorohexanesulfonic acid (PFHxS)	ug/L	< 0.01			0.01	Pass	
Perfluoroheptanesulfonic acid (PFHpS)	ug/L	< 0.01			0.01	Pass	
Perfluorooctanesulfonic acid (PFOS)	ug/L	< 0.01			0.01	Pass	
Perfluorodecanesulfonic acid (PFDS)	ug/L	< 0.01			0.01	Pass	
Method Blank							
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)							
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	ug/L	< 0.01			0.01	Pass	
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)	ug/L	< 0.05			0.05	Pass	
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	ug/L	< 0.01			0.01	Pass	
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	ug/L	< 0.01			0.01	Pass	
LCS - % Recovery							
Perfluoroalkyl carboxylic acids (PFCAs)							
Perfluorobutanoic acid (PFBA)	%	91			50-150	Pass	
Perfluoropentanoic acid (PFPeA)	%	81			50-150	Pass	
Perfluorohexanoic acid (PFHxA)	%	91			50-150	Pass	
Perfluoroheptanoic acid (PFHpA)	%	95			50-150	Pass	
Perfluorooctanoic acid (PFOA)	%	98			50-150	Pass	
Perfluorononanoic acid (PFNA)	%	91			50-150	Pass	
Perfluorodecanoic acid (PFDA)	%	87			50-150	Pass	
Perfluoroundecanoic acid (PFUnDA)	%	100			50-150	Pass	
Perfluorododecanoic acid (PFDoDA)	%	97			50-150	Pass	
Perfluorotridecanoic acid (PFTrDA)	%	97			50-150	Pass	
Perfluorotetradecanoic acid (PFTeDA)	%	94			50-150	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
LCS - % Recovery							
Perfluoroalkyl sulfonamido substances							
Perfluorooctane sulfonamide (FOSA)	%	101			50-150	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	%	96			50-150	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	%	74			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)	%	86			50-150	Pass	
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	%	89			50-150	Pass	
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	%	86			50-150	Pass	
LCS - % Recovery							
Perfluoroalkyl sulfonic acids (PFSAs)							
Perfluorobutanesulfonic acid (PFBS)	%	90			50-150	Pass	
Perfluorononanesulfonic acid (PFNS)	%	91			50-150	Pass	
Perfluoropropanesulfonic acid (PFPrS)	%	111			50-150	Pass	
Perfluoropentanesulfonic acid (PFPeS)	%	97			50-150	Pass	
Perfluorohexanesulfonic acid (PFHxS)	%	94			50-150	Pass	
Perfluoroheptanesulfonic acid (PFHpS)	%	109			50-150	Pass	
Perfluorooctanesulfonic acid (PFOS)	%	82			50-150	Pass	
Perfluorodecanesulfonic acid (PFDS)	%	85			50-150	Pass	
LCS - % Recovery							
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)							
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	%	101			50-150	Pass	
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)	%	103			50-150	Pass	
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	%	94			50-150	Pass	
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	%	101			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-Ma36479	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
Perfluoropentanoic acid (PFPeA)	M22-Ma36479	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorohexanoic acid (PFHxA)	M22-Ma36479	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluoroheptanoic acid (PFHpA)	M22-Ma36479	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorooctanoic acid (PFOA)	M22-Ma36479	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorononanoic acid (PFNA)	M22-Ma36479	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorodecanoic acid (PFDA)	M22-Ma36479	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluoroundecanoic acid (PFUnDA)	M22-Ma36479	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorododecanoic acid (PFDoDA)	M22-Ma36479	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorotridecanoic acid (PFTrDA)	M22-Ma36479	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorotetradecanoic acid (PFTeDA)	M22-Ma36479	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Duplicate									
Perfluoroalkyl sulfonamido substances				Result 1	Result 2	RPD			
Perfluorooctane sulfonamide (FOSA)	M22-Ma36479	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	M22-Ma36479	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	M22-Ma36479	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)	M22-Ma36479	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)	M22-Ma36479	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-Ma36479	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	M22-Ma36479	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
Duplicate									
Perfluoroalkyl sulfonic acids (PFSAs)				Result 1	Result 2	RPD			
Perfluorobutanesulfonic acid (PFBS)	M22-Ma36479	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorononanesulfonic acid (PFNS)	M22-Ma36479	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluoropropanesulfonic acid (PFPrS)	M22-Ma36479	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluoropentanesulfonic acid (PFPeS)	M22-Ma36479	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorohexanesulfonic acid (PFHxS)	M22-Ma36479	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluoroheptanesulfonic acid (PFHpS)	M22-Ma36479	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorooctanesulfonic acid (PFOS)	M22-Ma36479	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorodecanesulfonic acid (PFDS)	M22-Ma36479	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Duplicate									
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)				Result 1	Result 2	RPD			
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	M22-Ma36479	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)	M22-Ma36479	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	M22-Ma36479	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	M22-Ma36479	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Duplicate									
Perfluoroalkyl carboxylic acids (PFCAs)				Result 1	Result 2	RPD			
Perfluorobutanoic acid (PFBA)	M22-Ma36487	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
Perfluoropentanoic acid (PFPeA)	M22-Ma36487	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorohexanoic acid (PFHxA)	M22-Ma36487	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluoroheptanoic acid (PFHpA)	M22-Ma36487	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorooctanoic acid (PFOA)	M22-Ma36487	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorononanoic acid (PFNA)	M22-Ma36487	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorodecanoic acid (PFDA)	M22-Ma36487	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluoroundecanoic acid (PFUnDA)	M22-Ma36487	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorododecanoic acid (PFDoDA)	M22-Ma36487	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorotridecanoic acid (PFTrDA)	M22-Ma36487	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorotetradecanoic acid (PFTeDA)	M22-Ma36487	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	

Duplicate									
Perfluoroalkyl sulfonamido substances				Result 1	Result 2	RPD			
Perfluorooctane sulfonamide (FOSA)	M22-Ma36487	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	M22-Ma36487	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	M22-Ma36487	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)	M22-Ma36487	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)	M22-Ma36487	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	M22-Ma36487	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	M22-Ma36487	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
Duplicate									
Perfluoroalkyl sulfonic acids (PFSAs)				Result 1	Result 2	RPD			
Perfluorobutanesulfonic acid (PFBS)	M22-Ma36487	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorononanesulfonic acid (PFNS)	M22-Ma36487	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluoropropanesulfonic acid (PFPrS)	M22-Ma36487	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluoropentanesulfonic acid (PFPeS)	M22-Ma36487	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorohexanesulfonic acid (PFHxS)	M22-Ma36487	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluoroheptanesulfonic acid (PFHpS)	M22-Ma36487	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorooctanesulfonic acid (PFOS)	M22-Ma36487	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorodecanesulfonic acid (PFDS)	M22-Ma36487	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Duplicate									
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)				Result 1	Result 2	RPD			
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	M22-Ma36487	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)	M22-Ma36487	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	M22-Ma36487	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	M22-Ma36487	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	

Comments

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

Sample Integrity

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

Qualifier Codes/Comments

Code	Description
C01	Leachate Fluid Key: 1 - pH 5.0; 2 - pH 2.9; 3 - pH 9.2; 4 - Reagent (DI) water; 5 - Client sample, 6 - other
N11	Isotope dilution is used for calibration of each native compound for which an exact labelled analogue is available (Isotope Dilution Quantitation). The isotopically labelled analogues allow identification and recovery correction of the concentration of the associated native PFAS compounds.
N15	Where the native PFAS compound does not have labelled analogue then the quantification is made using the Extracted Internal Standard Analyte with the closest retention time to the analyte and no recovery correction has been made (Internal Standard Quantitation).

Authorised by:

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

Glenn Jackson
General Manager

Final Report – this report replaces any previously issued Report

- Indicates Not Requested

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

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

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

Attention: **David Lawson**

Report **872310-S**
Project name 20220318043419-Eurofin-12
Project ID JC0927
Received Date Mar 18, 2022

Client Sample ID			SX_IB_20220317_07_54_SS_Triplicate_EUF	SX_IB_20220317_08_03_SS_Primary_EUF	SX_OB_20220317_11_58_SS_Primary_EUF	SX_OB_20220317_16_02_SS_Primary_EUF
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M22-Ma36468	M22-Ma36469	M22-Ma36470	M22-Ma36471
Date Sampled			Mar 17, 2022	Mar 17, 2022	Mar 17, 2022	Mar 17, 2022
Test/Reference	LOR	Unit				
Total Recoverable Hydrocarbons						
TRH C6-C9	20	mg/kg	< 20	< 20	< 20	< 20
TRH C10-C14	20	mg/kg	< 20	< 20	< 20	< 20
TRH C15-C28	50	mg/kg	< 50	< 50	< 50	< 50
TRH C29-C36	50	mg/kg	< 50	< 50	< 50	< 50
TRH C10-C36 (Total)	50	mg/kg	< 50	< 50	< 50	< 50
Naphthalene[N02]	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
TRH C6-C10	20	mg/kg	< 20	< 20	< 20	< 20
TRH C6-C10 less BTEX (F1)[N04]	20	mg/kg	< 20	< 20	< 20	< 20
TRH >C10-C16	50	mg/kg	< 50	< 50	< 50	< 50
TRH >C10-C16 less Naphthalene (F2)[N01]	50	mg/kg	< 50	< 50	< 50	< 50
TRH >C16-C34	100	mg/kg	< 100	< 100	< 100	< 100
TRH >C34-C40	100	mg/kg	< 100	< 100	< 100	< 100
TRH >C10-C40 (total)*	100	mg/kg	< 100	< 100	< 100	< 100
Volatile Organics						
Hexachlorobutadiene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Volatile Organics						
1.1-Dichloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2.4-Trichlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.1-Dichloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.1.1-Trichloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.1.1.2-Tetrachloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.1.2-Trichloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.1.2.2-Tetrachloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2-Dibromoethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2-Dichlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2-Dichloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2-Dichloropropane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2.3-Trichloropropane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2.4-Trimethylbenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.3-Dichlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.3-Dichloropropane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.3.5-Trimethylbenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.4-Dichlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2-Butanone (MEK)	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5

Client Sample ID			SX_IB_20220317_07_54_SS_Triplicate_EUF	SX_IB_20220317_08_03_SS_Primary_EUF	SX_OB_20220317_11_58_SS_Primary_EUF	SX_OB_20220317_16_02_SS_Primary_EUF
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M22-Ma36468	M22-Ma36469	M22-Ma36470	M22-Ma36471
Date Sampled			Mar 17, 2022	Mar 17, 2022	Mar 17, 2022	Mar 17, 2022
Test/Reference	LOR	Unit				
Volatile Organics						
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	%	63	52	59	65
Toluene-d8 (surr.)	1	%	93	72	84	98
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

Client Sample ID			SX_IB_20220317_07_54_SS_Triplicate_EUF	SX_IB_20220317_08_03_SS_Primary_EUF	SX_OB_20220317_11_58_SS_Primary_EUF	SX_OB_20220317_16_02_SS_Primary_EUF
Sample Matrix			**Soil**	**Soil**	**Soil**	**Soil**
Eurofins Sample No.			**M22-Ma36468**	**M22-Ma36469**	**M22-Ma36470**	**M22-Ma36471**
Date Sampled			**Mar 17, 2022**	**Mar 17, 2022**	**Mar 17, 2022**	**Mar 17, 2022**
Test/Reference	LOR	Unit				
Polycyclic Aromatic Hydrocarbons						
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	%	133	68	139	54
p-Terphenyl-d14 (surr.)	1	%	122	76	124	66
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	%	108	68	130	67
Tetrachloro-m-xylene (surr.)	1	%	120	87	125	76

Client Sample ID			SX_IB_20220317_07_54_SS_Triplicate_EUF	SX_IB_20220317_08_03_SS_Primary_EUF	SX_OB_20220317_11_58_SS_Primary_EUF	SX_OB_20220317_16_02_SS_Primary_EUF
Sample Matrix			**Soil**	**Soil**	**Soil**	**Soil**
Eurofins Sample No.			**M22-Ma36468**	**M22-Ma36469**	**M22-Ma36470**	**M22-Ma36471**
Date Sampled			**Mar 17, 2022**	**Mar 17, 2022**	**Mar 17, 2022**	**Mar 17, 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	%	108	68	130	67
Tetrachloro-m-xylene (surr.)	1	%	120	87	125	76
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	%	121	83	132	64
Total Non-Halogenated Phenol*	20	mg/kg	< 20	< 20	< 20	< 20
Chromium (hexavalent)	1	mg/kg	< 1	< 1	< 1	< 1
Cyanide (total)	5	mg/kg	< 5	< 5	< 5	< 5
Fluoride (Total)	100	mg/kg	< 100	< 100	< 100	< 100
pH (1:5 Aqueous extract at 25°C as rec.)	0.1	pH Units	9.0	8.9	9.5	9.6
% Moisture	1	%	30	28	32	28
Heavy Metals						
Arsenic	2	mg/kg	28	25	43	37
Cadmium	0.4	mg/kg	< 0.4	< 0.4	< 0.4	< 0.4
Chromium	5	mg/kg	110	130	130	120
Copper	5	mg/kg	73	75	72	61
Lead	5	mg/kg	5.0	5.5	6.0	< 5
Mercury	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Molybdenum	5	mg/kg	< 5	< 5	< 5	< 5

Client Sample ID			SX_IB_20220317_07_54_SS_Triplicate_EUF	SX_IB_20220317_08_03_SS_Primary_EUF	SX_OB_20220317_11_58_SS_Primary_EUF	SX_OB_20220317_16_02_SS_Primary_EUF
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M22-Ma36468	M22-Ma36469	M22-Ma36470	M22-Ma36471
Date Sampled			Mar 17, 2022	Mar 17, 2022	Mar 17, 2022	Mar 17, 2022
Test/Reference	LOR	Unit				
Heavy Metals						
Nickel	5	mg/kg	180	200	230	200
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	140	140	170	130
Perfluoroalkyl carboxylic acids (PFCAs)						
Perfluorobutanoic acid (PFBA)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
Perfluoropentanoic acid (PFPeA)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorohexanoic acid (PFHxA)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
Perfluoroheptanoic acid (PFHpA)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorooctanoic acid (PFOA)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorononanoic acid (PFNA)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorodecanoic acid (PFDA)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
Perfluoroundecanoic acid (PFUnDA)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorododecanoic acid (PFDoDA)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorotridecanoic acid (PFTrDA)[N15]	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorotetradecanoic acid (PFTeDA)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
13C4-PFBA (surr.)	1	%	75	73	75	79
13C5-PFPeA (surr.)	1	%	73	84	77	79
13C5-PFHxA (surr.)	1	%	83	72	85	76
13C4-PFHpA (surr.)	1	%	80	81	80	94
13C8-PFOA (surr.)	1	%	87	86	80	85
13C5-PFNA (surr.)	1	%	79	82	102	94
13C6-PFDA (surr.)	1	%	63	96	68	108
13C2-PFUnDA (surr.)	1	%	87	98	91	106
13C2-PFDoDA (surr.)	1	%	110	97	104	108
13C2-PFTeDA (surr.)	1	%	91	77	85	86
Perfluoroalkyl sulfonamido substances						
Perfluorooctane sulfonamide (FOSA)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)[N11]	10	ug/kg	< 10	< 10	< 10	< 10
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)[N11]	10	ug/kg	< 10	< 10	< 10	< 10
13C8-FOSA (surr.)	1	%	85	74	89	86
D3-N-MeFOSA (surr.)	1	%	104	99	101	113
D5-N-EtFOSA (surr.)	1	%	137	111	138	128
D7-N-MeFOSE (surr.)	1	%	87	78	93	90
D9-N-EtFOSE (surr.)	1	%	93	81	92	88
D5-N-EtFOSAA (surr.)	1	%	87	100	76	128
D3-N-MeFOSAA (surr.)	1	%	90	84	77	99

Client Sample ID			SX_IB_20220317_07_54_SS_Triplicate_EUF	SX_IB_20220317_08_03_SS_Primary_EUF	SX_OB_20220317_11_58_SS_Primary_EUF	SX_OB_20220317_16_02_SS_Primary_EUF
Sample Matrix			**Soil**	**Soil**	**Soil**	**Soil**
Eurofins Sample No.			**M22-Ma36468**	**M22-Ma36469**	**M22-Ma36470**	**M22-Ma36471**
Date Sampled			**Mar 17, 2022**	**Mar 17, 2022**	**Mar 17, 2022**	**Mar 17, 2022**
Test/Reference	LOR	Unit				
Perfluoroalkyl sulfonic acids (PFSAs)						
Perfluorobutanesulfonic acid (PFBS)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorononanesulfonic acid (PFNS)[N15]	5	ug/kg	< 5	< 5	< 5	< 5
Perfluoropropanesulfonic acid (PFPrS)[N15]	5	ug/kg	< 5	< 5	< 5	< 5
Perfluoropentanesulfonic acid (PFPeS)[N15]	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorohexanesulfonic acid (PFHxS)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
Perfluoroheptanesulfonic acid (PFHpS)[N15]	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorooctanesulfonic acid (PFOS)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorodecanesulfonic acid (PFDS)[N15]	5	ug/kg	< 5	< 5	< 5	< 5
13C3-PFBS (surr.)	1	%	70	83	76	96
18O2-PFHxS (surr.)	1	%	63	99	67	91
13C8-PFOS (surr.)	1	%	64	67	69	93
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)						
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)[N11]	10	ug/kg	< 10	< 10	< 10	< 10
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
13C2-4:2 FTSA (surr.)	1	%	55	96	56	122
13C2-6:2 FTSA (surr.)	1	%	55	55	59	70
13C2-8:2 FTSA (surr.)	1	%	134	85	75	100
13C2-10:2 FTSA (surr.)	1	%	81	90	72	110
PFASs Summations						
Sum (PFHxS + PFOS)*	5	ug/kg	< 5	< 5	< 5	< 5
Sum of US EPA PFAS (PFOS + PFOA)*	5	ug/kg	< 5	< 5	< 5	< 5
Sum of enHealth PFAS (PFHxS + PFOS + PFOA)*	5	ug/kg	< 5	< 5	< 5	< 5
Sum of WA DWER PFAS (n=10)*	10	ug/kg	< 10	< 10	< 10	< 10
Sum of PFASs (n=30)*	50	ug/kg	< 50	< 50	< 50	< 50

Client Sample ID			SX_OB_20220317_16_02_SS_Duplicate_EUF	SX_OB_20220317_19_50_SS_Primary_EUF	SX_OB_20220318_00_06_SS_Primary_EUF	SX_OB_20220318_03_55_SS_Primary_EUF
Sample Matrix			**Soil**	**Soil**	**Soil**	**Soil**
Eurofins Sample No.			**M22-Ma36472**	**M22-Ma36475**	**M22-Ma36476**	**M22-Ma36477**
Date Sampled			**Mar 17, 2022**	**Mar 17, 2022**	**Mar 18, 2022**	**Mar 18, 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

Client Sample ID			SX_OB_20220317_16_02_SS_Duplicate_EUF	SX_OB_20220317_19_50_SS_Primary_EUF	SX_OB_20220318_00_06_SS_Primary_EUF	SX_OB_20220318_03_55_SS_Primary_EUF
Sample Matrix			**Soil**	**Soil**	**Soil**	**Soil**
Eurofins Sample No.			**M22-Ma36472**	**M22-Ma36475**	**M22-Ma36476**	**M22-Ma36477**
Date Sampled			**Mar 17, 2022**	**Mar 17, 2022**	**Mar 18, 2022**	**Mar 18, 2022**
Test/Reference	LOR	Unit				
Total Recoverable Hydrocarbons						
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
Ethylbenzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1

Client Sample ID			SX_OB_20220317_16_02_SS_Duplicate_EUF	SX_OB_20220317_19_50_SS_Primary_EUF	SX_OB_20220318_00_06_SS_Primary_EUF	SX_OB_20220318_03_55_SS_Primary_EUF
Sample Matrix			**Soil**	**Soil**	**Soil**	**Soil**
Eurofins Sample No.			**M22-Ma36472**	**M22-Ma36475**	**M22-Ma36476**	**M22-Ma36477**
Date Sampled			**Mar 17, 2022**	**Mar 17, 2022**	**Mar 18, 2022**	**Mar 18, 2022**
Test/Reference	LOR	Unit				
Volatile Organics						
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	%	61	56	57	62
Toluene-d8 (surr.)	1	%	92	82	85	55
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	%	65	52	66	138
p-Terphenyl-d14 (surr.)	1	%	76	57	76	120
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

Client Sample ID			SX_OB_20220317_16_02_SS_Duplicate_EUF	SX_OB_20220317_19_50_SS_Primary_EUF	SX_OB_20220318_00_06_SS_Primary_EUF	SX_OB_20220318_03_55_SS_Primary_EUF
Sample Matrix			**Soil**	**Soil**	**Soil**	**Soil**
Eurofins Sample No.			**M22-Ma36472**	**M22-Ma36475**	**M22-Ma36476**	**M22-Ma36477**
Date Sampled			**Mar 17, 2022**	**Mar 17, 2022**	**Mar 18, 2022**	**Mar 18, 2022**
Test/Reference	LOR	Unit				
Organochlorine Pesticides						
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	%	75	55	76	131
Tetrachloro-m-xylene (surr.)	1	%	84	63	84	127
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	%	75	55	76	131
Tetrachloro-m-xylene (surr.)	1	%	84	63	84	127
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_20220317_16_02_SS_Duplicate_EUF	SX_OB_20220317_19_50_SS_Primary_EUF	SX_OB_20220318_00_06_SS_Primary_EUF	SX_OB_20220318_03_55_SS_Primary_EUF
Sample Matrix			**Soil**	**Soil**	**Soil**	**Soil**
Eurofins Sample No.			**M22-Ma36472**	**M22-Ma36475**	**M22-Ma36476**	**M22-Ma36477**
Date Sampled			**Mar 17, 2022**	**Mar 17, 2022**	**Mar 18, 2022**	**Mar 18, 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	%	72	59	75	124
Total Non-Halogenated Phenol*	20	mg/kg	< 20	< 20	< 20	< 20
Chromium (hexavalent)	1	mg/kg	< 1	< 1	< 1	< 1
Cyanide (total)	5	mg/kg	< 5	< 5	< 5	< 5
Fluoride (Total)	100	mg/kg	< 100	< 100	< 100	< 100
pH (1:5 Aqueous extract at 25°C as rec.)	0.1	pH Units	9.7	9.3	9.8	7.6
% Moisture	1	%	23	32	32	28
Heavy Metals						
Arsenic	2	mg/kg	42	46	50	44
Cadmium	0.4	mg/kg	< 0.4	< 0.4	< 0.4	< 0.4
Chromium	5	mg/kg	120	130	120	110
Copper	5	mg/kg	68	73	78	68
Lead	5	mg/kg	< 5	5.6	< 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	230	190	220	210
Selenium	2	mg/kg	< 2	< 2	< 2	< 2
Silver	2	mg/kg	< 2	< 2	< 2	< 2
Tin	10	mg/kg	< 10	< 10	< 10	< 10
Zinc	5	mg/kg	140	130	130	130
Perfluoroalkyl carboxylic acids (PFCAs)						
Perfluorobutanoic acid (PFBA)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
Perfluoropentanoic acid (PFPeA)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorohexanoic acid (PFHxA)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
Perfluoroheptanoic acid (PFHpA)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorooctanoic acid (PFOA)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorononanoic acid (PFNA)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorodecanoic acid (PFDA)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
Perfluoroundecanoic acid (PFUnDA)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorododecanoic acid (PFDoDA)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorotridecanoic acid (PFTrDA)[N15]	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorotetradecanoic acid (PFTeDA)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
13C4-PFBA (surr.)	1	%	74	83	79	74
13C5-PFPeA (surr.)	1	%	89	99	92	76
13C5-PFHxA (surr.)	1	%	72	83	75	77

Client Sample ID			SX_OB_20220317_16_02_SS_Duplicate_EUF	SX_OB_20220317_19_50_SS_Primary_EUF	SX_OB_20220318_00_06_SS_Primary_EUF	SX_OB_20220318_03_55_SS_Primary_EUF
Sample Matrix			**Soil**	**Soil**	**Soil**	**Soil**
Eurofins Sample No.			**M22-Ma36472**	**M22-Ma36475**	**M22-Ma36476**	**M22-Ma36477**
Date Sampled			**Mar 17, 2022**	**Mar 17, 2022**	**Mar 18, 2022**	**Mar 18, 2022**
Test/Reference	LOR	Unit				
Perfluoroalkyl carboxylic acids (PFCAs)						
13C4-PFHpA (surr.)	1	%	80	94	97	77
13C8-PFOA (surr.)	1	%	78	96	82	68
13C5-PFNA (surr.)	1	%	77	116	105	84
13C6-PFDA (surr.)	1	%	92	105	90	61
13C2-PFUnDA (surr.)	1	%	99	114	101	89
13C2-PFDoDA (surr.)	1	%	105	113	102	105
13C2-PFTeDA (surr.)	1	%	82	93	89	78
Perfluoroalkyl sulfonamido substances						
Perfluorooctane sulfonamide (FOSA)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)[N11]	10	ug/kg	< 10	< 10	< 10	< 10
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)[N11]	10	ug/kg	< 10	< 10	< 10	< 10
13C8-FOSA (surr.)	1	%	81	85	80	84
D3-N-MeFOSA (surr.)	1	%	102	118	117	102
D5-N-EtFOSA (surr.)	1	%	116	135	126	132
D7-N-MeFOSE (surr.)	1	%	82	95	86	87
D9-N-EtFOSE (surr.)	1	%	85	94	88	94
D5-N-EtFOSAA (surr.)	1	%	134	122	122	87
D3-N-MeFOSAA (surr.)	1	%	92	98	81	86
Perfluoroalkyl sulfonic acids (PFSAs)						
Perfluorobutanesulfonic acid (PFBS)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorononanesulfonic acid (PFNS)[N15]	5	ug/kg	< 5	< 5	< 5	< 5
Perfluoropropanesulfonic acid (PFPrS)[N15]	5	ug/kg	< 5	< 5	< 5	< 5
Perfluoropentanesulfonic acid (PFPeS)[N15]	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorohexanesulfonic acid (PFHxS)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
Perfluoroheptanesulfonic acid (PFHpS)[N15]	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorooctanesulfonic acid (PFOS)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorodecanesulfonic acid (PFDS)[N15]	5	ug/kg	< 5	< 5	< 5	< 5
13C3-PFBS (surr.)	1	%	91	103	97	73
18O2-PFHxS (surr.)	1	%	96	101	98	78
13C8-PFOS (surr.)	1	%	84	104	91	59
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)						
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)[N11]	10	ug/kg	< 10	< 10	< 10	< 10
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
13C2-4:2 FTSA (surr.)	1	%	100	110	136	76
13C2-6:2 FTSA (surr.)	1	%	59	60	68	54

Client Sample ID			SX_OB_20220317_16_02_SS_Duplicate_EUF	SX_OB_20220317_19_50_SS_Primary_EUF	SX_OB_20220318_00_06_SS_Primary_EUF	SX_OB_20220318_03_55_SS_Primary_EUF
Sample Matrix			**Soil**	**Soil**	**Soil**	**Soil**
Eurofins Sample No.			**M22-Ma36472**	**M22-Ma36475**	**M22-Ma36476**	**M22-Ma36477**
Date Sampled			**Mar 17, 2022**	**Mar 17, 2022**	**Mar 18, 2022**	**Mar 18, 2022**
Test/Reference	LOR	Unit				
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)						
13C2-8:2 FTSA (surr.)	1	%	84	112	91	120
13C2-10:2 FTSA (surr.)	1	%	96	98	88	82
PFASs Summations						
Sum (PFHxS + PFOS)*	5	ug/kg	< 5	< 5	< 5	< 5
Sum of US EPA PFAS (PFOS + PFOA)*	5	ug/kg	< 5	< 5	< 5	< 5
Sum of enHealth PFAS (PFHxS + PFOS + PFOA)*	5	ug/kg	< 5	< 5	< 5	< 5
Sum of WA DWER PFAS (n=10)*	10	ug/kg	< 10	< 10	< 10	< 10
Sum of PFASs (n=30)*	50	ug/kg	< 50	< 50	< 50	< 50

Sample History

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

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

Description	Testing Site	Extracted	Holding Time
IWRG 621 WGTP Suite			
Total Recoverable Hydrocarbons - 1999 NEPM Fractions	Melbourne	Mar 19, 2022	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
Total Recoverable Hydrocarbons - 2013 NEPM Fractions	Melbourne	Mar 19, 2022	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
Total Recoverable Hydrocarbons - 2013 NEPM Fractions	Melbourne	Mar 19, 2022	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
Volatile Organics	Melbourne	Mar 19, 2022	7 Days
- Method: USEPA 8260 - MGT 350A Volatile Organics by GCMS			
Volatile Organics	Melbourne	Mar 19, 2022	7 Days
- Method: LTM-ORG-2150 VOCs in Soils Liquid and other Aqueous Matrices (USEPA 8260)			
Polycyclic Aromatic Hydrocarbons	Melbourne	Mar 19, 2022	14 Days
- Method: LTM-ORG-2130 PAH and Phenols in Soil and Water			
Organochlorine Pesticides	Melbourne	Mar 19, 2022	14 Days
- Method: LTM-ORG-2220 OCP & PCB in Soil and Water (USEPA 8270)			
Polychlorinated Biphenyls	Melbourne	Mar 19, 2022	28 Days
- Method: LTM-ORG-2220 OCP & PCB in Soil and Water (USEPA 8082)			
Phenols (Halogenated)	Melbourne	Mar 19, 2022	14 Days
- Method: LTM-ORG-2130 PAH and Phenols in Soil and Water			
Phenols (non-Halogenated)	Melbourne	Mar 19, 2022	14 Days
- Method: LTM-ORG-2130 PAH and Phenols in Soil and Water			
Chromium (hexavalent)	Melbourne	Mar 19, 2022	28 Days
- Method: LTM-INO-4100 Hexavalent Chromium by Spectrometric detection			
Cyanide (total)	Melbourne	Mar 19, 2022	14 Days
- Method: LTM-INO-4020 Total Free WAD Cyanide by CFA			
Fluoride (Total)	Melbourne	Mar 21, 2022	28 Days
- Method: LTM-INO-4150 Determination of Total Fluoride PART A – CIC			
- Method: LTM-INO-4150 Determination of Total Fluoride PART B – ISE			
pH (1:5 Aqueous extract at 25°C as rec.)	Melbourne	Mar 19, 2022	7 Days
- Method: LTM-GEN-7090 pH in soil by ISE			
Metals IWRG 621 : Metals M12	Melbourne	Mar 19, 2022	28 Days
- Method: LTM-MET-3040 Metals in Waters, Soils & Sediments by ICP-MS			
% Moisture	Melbourne	Mar 18, 2022	14 Days
- Method: LTM-GEN-7080 Moisture			
Per- and Polyfluoroalkyl Substances (PFASs)			
Perfluoroalkyl carboxylic acids (PFCAs)	Melbourne	Mar 19, 2022	28 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			
Perfluoroalkyl sulfonamido substances	Melbourne	Mar 19, 2022	28 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			
Perfluoroalkyl sulfonic acids (PFSAs)	Melbourne	Mar 19, 2022	28 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)	Melbourne	Mar 19, 2022	28 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			
PFASs Summations	Melbourne	Mar 18, 2022	
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			

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Fax:

Received: Mar 18, 2022 12:35 PM
Due: Mar 25, 2022
Priority: 5 Day
Contact Name: Agon Lab Reports (Spoil Project)

Eurofins Analytical Services Manager : Michael Cassidy

Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	IWRG 621 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_20220317_07_54_SS_Triplicate_EUF	Mar 17, 2022	7:54AM	Soil	M22-Ma36468		X	X	X
2	SX_IB_20220317_08_03_SS_Primary_EUF	Mar 17, 2022	8:03AM	Soil	M22-Ma36469		X	X	X
3	SX_OB_20220317_11_58_SS_Primary_EUF	Mar 17, 2022	11:58AM	Soil	M22-Ma36470		X	X	X
4	SX_OB_20220	Mar 17, 2022	4:02PM	Soil	M22-Ma36471		X	X	X

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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									
	317_16_02_SS_Primary_EUF								
5	SX_OB_20220317_16_02_SS_Duplicate_EUF	Mar 17, 2022	4:02PM	Soil	M22-Ma36472		X	X	X
6	SX_OB_20220317_16_17_SR_Rinsate_EUF	Mar 17, 2022	4:17PM	Water	M22-Ma36473			X	
7	SX_OB_20220317_16_19_SB_Blank_EUF	Mar 17, 2022	4:19PM	Water	M22-Ma36474			X	

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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_20220317_19_50_SS_Primary_EUF	Mar 17, 2022	7:50PM	Soil	M22-Ma36475		X	X	X
9	SX_OB_20220318_00_06_SS_Primary_EUF	Mar 18, 2022	12:06AM	Soil	M22-Ma36476		X	X	X
10	SX_OB_20220318_03_55_SS_Primary_EUF	Mar 18, 2022	3:55AM	Soil	M22-Ma36477		X	X	X
11	SX_IB_20220317_07_54_SS	Mar 17, 2022	7:54AM	AUS Leachate - pH 5.0	M22-Ma36478	X		X	

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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									
	_Triplicate_EUF								
12	SX_IB_20220317_08_03_SS_Primary_EUF	Mar 17, 2022	8:03AM	AUS Leachate - pH 5.0	M22-Ma36479	X		X	
13	SX_OB_20220317_11_58_SS_Primary_EUF	Mar 17, 2022	11:58AM	AUS Leachate - pH 5.0	M22-Ma36480	X		X	
14	SX_OB_20220317_16_02_SS_Primary_EUF	Mar 17, 2022	4:02PM	AUS Leachate - pH 5.0	M22-Ma36481	X		X	
15	SX_OB_20220	Mar 17, 2022	4:02PM	AUS Leachate	M22-Ma36482	X		X	

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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_OB_20220317_16_02_SS_Duplicate_EUF	Mar 17, 2022	4:02PM	AUS Leachate - pH 5.0	M22-Ma36482				
16	SX_OB_20220317_19_50_SS_Primary_EUF	Mar 17, 2022	7:50PM	AUS Leachate - pH 5.0	M22-Ma36483	X		X	
17	SX_OB_20220318_00_06_SS_Primary_EUF	Mar 18, 2022	12:06AM	AUS Leachate - pH 5.0	M22-Ma36484	X		X	
18	SX_OB_20220318_03_55_S	Mar 18, 2022	3:55AM	AUS Leachate - pH 5.0	M22-Ma36485	X		X	

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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									
	S_Primary_EUF								
19	SX_IB_20220317_07_54_SS_Triplicate_EUF	Mar 17, 2022	7:54AM	AUS Leachate - Reagent Water	M22-Ma36486	X		X	
20	SX_IB_20220317_08_03_SS_Primary_EUF	Mar 17, 2022	8:03AM	AUS Leachate - Reagent Water	M22-Ma36487	X		X	
21	SX_OB_20220317_11_58_SS_Primary_EUF	Mar 17, 2022	11:58AM	AUS Leachate - Reagent Water	M22-Ma36488	X		X	
22	SX_OB_20220	Mar 17, 2022	4:02PM	AUS Leachate	M22-Ma36489	X		X	

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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									
22	SX_OB_20220317_16_02_SS_Primary_EUF	Mar 17, 2022	4:02PM	AUS Leachate - Reagent Water	M22-Ma36489				
23	SX_OB_20220317_16_02_SS_Duplicate_EUF	Mar 17, 2022	4:02PM	AUS Leachate - Reagent Water	M22-Ma36490	X		X	
24	SX_OB_20220317_19_50_SS_Primary_EUF	Mar 17, 2022	7:50PM	AUS Leachate - Reagent Water	M22-Ma36491	X		X	
25	SX_OB_20220318_00_06_S	Mar 18, 2022	12:06AM	AUS Leachate - Reagent	M22-Ma36492	X		X	

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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									
	S_Primary_EUF			Water					
26	SX_OB_20220318_03_55_SS_Primary_EUF	Mar 18, 2022	3:55AM	AUS Leachate - Reagent Water	M22-Ma36493	X		X	
Test Counts						16	8	26	8

Internal Quality Control Review and Glossary

General

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

Holding Times

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

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

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

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

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

Units

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

Terms

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

QC - Acceptance Criteria

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

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

Results <10 times the LOR: No Limit

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

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

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

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

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

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QC Data General Comments

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

Quality Control Results

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

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

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

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Zinc	mg/kg	< 5			5	Pass	
Method Blank							
Perfluoroalkyl carboxylic acids (PFCAs)							
Perfluorobutanoic acid (PFBA)	ug/kg	< 5			5	Pass	
Perfluoropentanoic acid (PFPeA)	ug/kg	< 5			5	Pass	
Perfluorohexanoic acid (PFHxA)	ug/kg	< 5			5	Pass	
Perfluoroheptanoic acid (PFHpA)	ug/kg	< 5			5	Pass	
Perfluorooctanoic acid (PFOA)	ug/kg	< 5			5	Pass	
Perfluorononanoic acid (PFNA)	ug/kg	< 5			5	Pass	
Perfluorodecanoic acid (PFDA)	ug/kg	< 5			5	Pass	
Perfluoroundecanoic acid (PFUnDA)	ug/kg	< 5			5	Pass	
Perfluorododecanoic acid (PFDoDA)	ug/kg	< 5			5	Pass	
Perfluorotridecanoic acid (PFTrDA)	ug/kg	< 5			5	Pass	
Perfluorotetradecanoic acid (PFTeDA)	ug/kg	< 5			5	Pass	
Method Blank							
Perfluoroalkyl sulfonamido substances							
Perfluorooctane sulfonamide (FOSA)	ug/kg	< 5			5	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	ug/kg	< 5			5	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	ug/kg	< 5			5	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)	ug/kg	< 5			5	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)	ug/kg	< 5			5	Pass	
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	ug/kg	< 10			10	Pass	
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	ug/kg	< 10			10	Pass	
Method Blank							
Perfluoroalkyl sulfonic acids (PFSAs)							
Perfluorobutanesulfonic acid (PFBS)	ug/kg	< 5			5	Pass	
Perfluorononanesulfonic acid (PFNS)	ug/kg	< 5			5	Pass	
Perfluoropropanesulfonic acid (PFPrS)	ug/kg	< 5			5	Pass	
Perfluoropentanesulfonic acid (PFPeS)	ug/kg	< 5			5	Pass	
Perfluorohexanesulfonic acid (PFHxS)	ug/kg	< 5			5	Pass	
Perfluoroheptanesulfonic acid (PFHpS)	ug/kg	< 5			5	Pass	
Perfluorooctanesulfonic acid (PFOS)	ug/kg	< 5			5	Pass	
Perfluorodecanesulfonic acid (PFDS)	ug/kg	< 5			5	Pass	
Method Blank							
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)							
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	ug/kg	< 5			5	Pass	
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)	ug/kg	< 10			10	Pass	
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	ug/kg	< 5			5	Pass	
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	ug/kg	< 5			5	Pass	
LCS - % Recovery							
Total Recoverable Hydrocarbons							
TRH C6-C9	%	109			70-130	Pass	
TRH C10-C14	%	117			70-130	Pass	
Naphthalene	%	114			70-130	Pass	
TRH C6-C10	%	100			70-130	Pass	
TRH >C10-C16	%	114			70-130	Pass	
LCS - % Recovery							
Volatile Organics							
1.1-Dichloroethene	%	103			70-130	Pass	
1.1.1-Trichloroethane	%	95			70-130	Pass	
1.2-Dichlorobenzene	%	115			70-130	Pass	
1.2-Dichloroethane	%	111			70-130	Pass	
Benzene	%	109			70-130	Pass	
Ethylbenzene	%	117			70-130	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
m&p-Xylenes	%	120			70-130	Pass	
Toluene	%	111			70-130	Pass	
Trichloroethene	%	114			70-130	Pass	
Xylenes - Total*	%	118			70-130	Pass	
LCS - % Recovery							
Polycyclic Aromatic Hydrocarbons							
Acenaphthene	%	95			70-130	Pass	
Acenaphthylene	%	90			70-130	Pass	
Anthracene	%	104			70-130	Pass	
Benz(a)anthracene	%	91			70-130	Pass	
Benzo(a)pyrene	%	95			70-130	Pass	
Benzo(b&j)fluoranthene	%	101			70-130	Pass	
Benzo(g.h.i)perylene	%	71			70-130	Pass	
Benzo(k)fluoranthene	%	115			70-130	Pass	
Chrysene	%	92			70-130	Pass	
Dibenz(a.h)anthracene	%	80			70-130	Pass	
Fluoranthene	%	107			70-130	Pass	
Fluorene	%	103			70-130	Pass	
Indeno(1.2.3-cd)pyrene	%	85			70-130	Pass	
Naphthalene	%	92			70-130	Pass	
Phenanthrene	%	98			70-130	Pass	
Pyrene	%	108			70-130	Pass	
LCS - % Recovery							
Organochlorine Pesticides							
Chlordanes - Total	%	79			70-130	Pass	
4.4'-DDD	%	86			70-130	Pass	
4.4'-DDE	%	109			70-130	Pass	
4.4'-DDT	%	97			70-130	Pass	
a-HCH	%	87			70-130	Pass	
Aldrin	%	108			70-130	Pass	
b-HCH	%	104			70-130	Pass	
d-HCH	%	101			70-130	Pass	
Dieldrin	%	108			70-130	Pass	
Endosulfan I	%	105			70-130	Pass	
Endosulfan II	%	100			70-130	Pass	
Endosulfan sulphate	%	95			70-130	Pass	
Endrin	%	113			70-130	Pass	
Endrin aldehyde	%	84			70-130	Pass	
Endrin ketone	%	84			70-130	Pass	
g-HCH (Lindane)	%	103			70-130	Pass	
Heptachlor	%	111			70-130	Pass	
Heptachlor epoxide	%	114			70-130	Pass	
Hexachlorobenzene	%	114			70-130	Pass	
Methoxychlor	%	121			70-130	Pass	
LCS - % Recovery							
Polychlorinated Biphenyls							
Aroclor-1260	%	79			70-130	Pass	
LCS - % Recovery							
Phenols (Halogenated)							
2-Chlorophenol	%	93			25-140	Pass	
2.4-Dichlorophenol	%	98			25-140	Pass	
2.4.5-Trichlorophenol	%	106			25-140	Pass	
2.4.6-Trichlorophenol	%	91			25-140	Pass	
2.6-Dichlorophenol	%	93			25-140	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
4-Chloro-3-methylphenol	%	94			25-140	Pass	
Pentachlorophenol	%	71			25-140	Pass	
Tetrachlorophenols - Total	%	107			25-140	Pass	
LCS - % Recovery							
Phenols (non-Halogenated)							
2-Methyl-4.6-dinitrophenol	%	74			25-140	Pass	
2-Nitrophenol	%	130			25-140	Pass	
2.4-Dimethylphenol	%	77			25-140	Pass	
2.4-Dinitrophenol	%	38			25-140	Pass	
2-Methylphenol (o-Cresol)	%	86			25-140	Pass	
3&4-Methylphenol (m&p-Cresol)	%	93			25-140	Pass	
4-Nitrophenol	%	123			25-140	Pass	
Dinoseb	%	105			25-140	Pass	
Phenol	%	94			25-140	Pass	
LCS - % Recovery							
Chromium (hexavalent)	%	93			70-130	Pass	
Cyanide (total)	%	84			70-130	Pass	
Fluoride (Total)	%	82			70-130	Pass	
LCS - % Recovery							
Heavy Metals							
Arsenic	%	106			80-120	Pass	
Cadmium	%	105			80-120	Pass	
Chromium	%	111			80-120	Pass	
Copper	%	109			80-120	Pass	
Lead	%	117			80-120	Pass	
Mercury	%	106			80-120	Pass	
Molybdenum	%	106			80-120	Pass	
Nickel	%	105			80-120	Pass	
Selenium	%	107			80-120	Pass	
Silver	%	110			80-120	Pass	
Tin	%	107			80-120	Pass	
Zinc	%	106			80-120	Pass	
LCS - % Recovery							
Perfluoroalkyl carboxylic acids (PFCAs)							
Perfluorobutanoic acid (PFBA)	%	96			50-150	Pass	
Perfluoropentanoic acid (PFPeA)	%	81			50-150	Pass	
Perfluorohexanoic acid (PFHxA)	%	88			50-150	Pass	
Perfluoroheptanoic acid (PFHpA)	%	80			50-150	Pass	
Perfluorooctanoic acid (PFOA)	%	105			50-150	Pass	
Perfluorononanoic acid (PFNA)	%	115			50-150	Pass	
Perfluorodecanoic acid (PFDA)	%	109			50-150	Pass	
Perfluoroundecanoic acid (PFUnDA)	%	101			50-150	Pass	
Perfluorododecanoic acid (PFDoDA)	%	93			50-150	Pass	
Perfluorotridecanoic acid (PFTrDA)	%	121			50-150	Pass	
Perfluorotetradecanoic acid (PFTeDA)	%	91			50-150	Pass	
LCS - % Recovery							
Perfluoroalkyl sulfonamido substances							
Perfluorooctane sulfonamide (FOSA)	%	104			50-150	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	%	88			50-150	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	%	102			50-150	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)	%	80			50-150	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)	%	92			50-150	Pass	
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	%	90			50-150	Pass	
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	%	83			50-150	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
LCS - % Recovery							
Perfluoroalkyl sulfonic acids (PFSAs)							
Perfluorobutanesulfonic acid (PFBS)	%	83			50-150	Pass	
Perfluorononanesulfonic acid (PFNS)	%	101			50-150	Pass	
Perfluoropropanesulfonic acid (PFPrS)	%	87			50-150	Pass	
Perfluoropentanesulfonic acid (PFPeS)	%	103			50-150	Pass	
Perfluorohexanesulfonic acid (PFHxS)	%	113			50-150	Pass	
Perfluoroheptanesulfonic acid (PFHpS)	%	109			50-150	Pass	
Perfluorooctanesulfonic acid (PFOS)	%	96			50-150	Pass	
Perfluorodecanesulfonic acid (PFDS)	%	104			50-150	Pass	
LCS - % Recovery							
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)							
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	%	95			50-150	Pass	
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)	%	93			50-150	Pass	
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	%	114			50-150	Pass	
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	%	95			50-150	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Spike - % Recovery									
Total Recoverable Hydrocarbons				Result 1					
TRH C6-C9	M22-Ma38842	NCP	%	77			70-130	Pass	
TRH C10-C14	M22-Ma31027	NCP	%	114			70-130	Pass	
Naphthalene	M22-Ma38842	NCP	%	79			70-130	Pass	
TRH C6-C10	M22-Ma38842	NCP	%	86			70-130	Pass	
TRH >C10-C16	M22-Ma31027	NCP	%	110			70-130	Pass	
Spike - % Recovery									
Volatile Organics				Result 1					
1.1-Dichloroethene	M22-Ma38842	NCP	%	76			70-130	Pass	
1.1.1-Trichloroethane	M22-Ma38842	NCP	%	72			70-130	Pass	
1.2-Dichlorobenzene	M22-Ma38842	NCP	%	78			70-130	Pass	
1.2-Dichloroethane	M22-Ma38842	NCP	%	80			70-130	Pass	
Benzene	M22-Ma38842	NCP	%	73			70-130	Pass	
Ethylbenzene	M22-Ma38842	NCP	%	72			70-130	Pass	
m&p-Xylenes	M22-Ma38842	NCP	%	75			70-130	Pass	
o-Xylene	M22-Ma38842	NCP	%	74			70-130	Pass	
Toluene	M22-Ma38842	NCP	%	74			70-130	Pass	
Trichloroethene	M22-Ma38842	NCP	%	90			70-130	Pass	
Xylenes - Total*	M22-Ma38842	NCP	%	75			70-130	Pass	
Spike - % Recovery									
Polycyclic Aromatic Hydrocarbons				Result 1					
Acenaphthene	M22-Ma31324	NCP	%	83			70-130	Pass	
Acenaphthylene	M22-Ma31324	NCP	%	79			70-130	Pass	
Anthracene	M22-Ma31324	NCP	%	79			70-130	Pass	
Benz(a)anthracene	M22-Ma31324	NCP	%	74			70-130	Pass	
Benzo(a)pyrene	M22-Ma31324	NCP	%	76			70-130	Pass	
Benzo(b&j)fluoranthene	M22-Ma31324	NCP	%	73			70-130	Pass	
Benzo(g.h.i)perylene	M22-Ma31324	NCP	%	88			70-130	Pass	
Benzo(k)fluoranthene	M22-Ma31324	NCP	%	94			70-130	Pass	
Chrysene	M22-Ma31324	NCP	%	71			70-130	Pass	
Dibenz(a.h)anthracene	M22-Ma31324	NCP	%	97			70-130	Pass	
Fluoranthene	M22-Ma31324	NCP	%	88			70-130	Pass	
Fluorene	M22-Ma31324	NCP	%	87			70-130	Pass	
Indeno(1.2.3-cd)pyrene	M22-Ma31324	NCP	%	75			70-130	Pass	
Naphthalene	M22-Ma31324	NCP	%	82			70-130	Pass	
Phenanthrene	M22-Ma31324	NCP	%	84			70-130	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Pyrene	M22-Ma31324	NCP	%	88			70-130	Pass	
Spike - % Recovery									
Phenols (Halogenated)				Result 1					
2-Chlorophenol	M22-Ma31324	NCP	%	85			30-130	Pass	
2.4-Dichlorophenol	M22-Ma31324	NCP	%	95			30-130	Pass	
2.4.5-Trichlorophenol	M22-Ma31324	NCP	%	105			30-130	Pass	
2.4.6-Trichlorophenol	M22-Ma31324	NCP	%	89			30-130	Pass	
2.6-Dichlorophenol	M22-Ma31324	NCP	%	89			30-130	Pass	
4-Chloro-3-methylphenol	M22-Ma31324	NCP	%	94			30-130	Pass	
Pentachlorophenol	M22-Ma31324	NCP	%	105			30-130	Pass	
Spike - % Recovery									
Phenols (non-Halogenated)				Result 1					
2-Methyl-4.6-dinitrophenol	M22-Ma31324	NCP	%	125			30-130	Pass	
2-Nitrophenol	M22-Ma31324	NCP	%	124			30-130	Pass	
2.4-Dimethylphenol	M22-Ma31324	NCP	%	109			30-130	Pass	
2.4-Dinitrophenol	M22-Ma31324	NCP	%	147			30-130	Fail	Q08
2-Methylphenol (o-Cresol)	M22-Ma31324	NCP	%	89			30-130	Pass	
3&4-Methylphenol (m&p-Cresol)	M22-Ma31324	NCP	%	92			30-130	Pass	
4-Nitrophenol	M22-Ma31324	NCP	%	128			30-130	Pass	
Dinoseb	M22-Ma31324	NCP	%	140			30-130	Fail	Q08
Phenol	M22-Ma31324	NCP	%	88			30-130	Pass	
Spike - % Recovery									
				Result 1					
Chromium (hexavalent)	M22-Ma19804	NCP	%	87			70-130	Pass	
Cyanide (total)	M22-Ma34701	NCP	%	95			70-130	Pass	
Fluoride (Total)	M22-Ma38818	NCP	%	91			70-130	Pass	
Spike - % Recovery									
Heavy Metals				Result 1					
Nickel	M22-Ma38742	NCP	%	99			75-125	Pass	
Spike - % Recovery									
Heavy Metals				Result 1					
Arsenic	M22-Ma36471	CP	%	108			75-125	Pass	
Cadmium	M22-Ma36471	CP	%	116			75-125	Pass	
Chromium	M22-Ma36471	CP	%	102			75-125	Pass	
Copper	M22-Ma36471	CP	%	110			75-125	Pass	
Lead	M22-Ma36471	CP	%	111			75-125	Pass	
Mercury	M22-Ma36471	CP	%	95			75-125	Pass	
Molybdenum	M22-Ma36471	CP	%	112			75-125	Pass	
Selenium	M22-Ma36471	CP	%	93			75-125	Pass	
Silver	M22-Ma36471	CP	%	120			75-125	Pass	
Tin	M22-Ma36471	CP	%	112			75-125	Pass	
Zinc	M22-Ma36471	CP	%	127			75-125	Fail	Q08
Spike - % Recovery									
Perfluoroalkyl carboxylic acids (PFCAs)				Result 1					
Perfluorobutanoic acid (PFBA)	M22-Ma36476	CP	%	98			50-150	Pass	
Perfluoropentanoic acid (PFPeA)	M22-Ma36476	CP	%	81			50-150	Pass	
Perfluorohexanoic acid (PFHxA)	M22-Ma36476	CP	%	94			50-150	Pass	
Perfluoroheptanoic acid (PFHpA)	M22-Ma36476	CP	%	91			50-150	Pass	
Perfluorooctanoic acid (PFOA)	M22-Ma36476	CP	%	99			50-150	Pass	
Perfluorononanoic acid (PFNA)	M22-Ma36476	CP	%	105			50-150	Pass	
Perfluorodecanoic acid (PFDA)	M22-Ma36476	CP	%	100			50-150	Pass	
Perfluoroundecanoic acid (PFUnDA)	M22-Ma36476	CP	%	103			50-150	Pass	
Perfluorododecanoic acid (PFDoDA)	M22-Ma36476	CP	%	104			50-150	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Perfluorotridecanoic acid (PFTrDA)	M22-Ma36476	CP	%	103			50-150	Pass	
Perfluorotetradecanoic acid (PFTeDA)	M22-Ma36476	CP	%	99			50-150	Pass	
Spike - % Recovery									
Perfluoroalkyl sulfonamido substances				Result 1					
Perfluorooctane sulfonamide (FOSA)	M22-Ma36476	CP	%	99			50-150	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	M22-Ma36476	CP	%	99			50-150	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	M22-Ma36476	CP	%	97			50-150	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)	M22-Ma36476	CP	%	107			50-150	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)	M22-Ma36476	CP	%	94			50-150	Pass	
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	M22-Ma36476	CP	%	87			50-150	Pass	
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	M22-Ma36476	CP	%	120			50-150	Pass	
Spike - % Recovery									
Perfluoroalkyl sulfonic acids (PFSAs)				Result 1					
Perfluorobutanesulfonic acid (PFBS)	M22-Ma36476	CP	%	86			50-150	Pass	
Perfluorononanesulfonic acid (PFNS)	M22-Ma36476	CP	%	109			50-150	Pass	
Perfluoropropanesulfonic acid (PFPrS)	M22-Ma36476	CP	%	93			50-150	Pass	
Perfluoropentanesulfonic acid (PFPeS)	M22-Ma36476	CP	%	94			50-150	Pass	
Perfluorohexanesulfonic acid (PFHxS)	M22-Ma36476	CP	%	94			50-150	Pass	
Perfluoroheptanesulfonic acid (PFHpS)	M22-Ma36476	CP	%	69			50-150	Pass	
Perfluorooctanesulfonic acid (PFOS)	M22-Ma36476	CP	%	92			50-150	Pass	
Perfluorodecanesulfonic acid (PFDS)	M22-Ma36476	CP	%	95			50-150	Pass	
Spike - % Recovery									
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)				Result 1					
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	M22-Ma36476	CP	%	92			50-150	Pass	
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)	M22-Ma36476	CP	%	75			50-150	Pass	
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	M22-Ma36476	CP	%	92			50-150	Pass	
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	M22-Ma36476	CP	%	87			50-150	Pass	
Test	**Lab Sample ID**	**QA Source**	**Units**	**Result 1**			**Acceptance Limits**	**Pass Limits**	**Qualifying Code**
Duplicate									
Organochlorine Pesticides				Result 1	Result 2	RPD			
Heptachlor epoxide	M22-Ma47973	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Duplicate									
				Result 1	Result 2	RPD			
Chromium (hexavalent)	M22-Ma36468	CP	mg/kg	< 1	< 1	<1	30%	Pass	
Cyanide (total)	M22-Ma34700	NCP	mg/kg	< 5	< 5	<1	30%	Pass	
pH (1:5 Aqueous extract at 25°C as rec.)	M22-Ma33161	NCP	pH Units	8.0	8.2	pass	30%	Pass	

Duplicate									
				Result 1	Result 2	RPD			
% Moisture	M22-Ma36469	CP	%	28	30	8.0	30%	Pass	
Duplicate									
Total Recoverable Hydrocarbons				Result 1	Result 2	RPD			
TRH C6-C9	M22-Ma36470	CP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH C10-C14	M22-Ma36470	CP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH C15-C28	M22-Ma36470	CP	mg/kg	< 50	< 50	<1	30%	Pass	
TRH C29-C36	M22-Ma36470	CP	mg/kg	< 50	< 50	<1	30%	Pass	
Naphthalene	M22-Ma36470	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
TRH C6-C10	M22-Ma36470	CP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH >C10-C16	M22-Ma36470	CP	mg/kg	< 50	< 50	<1	30%	Pass	
TRH >C16-C34	M22-Ma36470	CP	mg/kg	< 100	< 100	<1	30%	Pass	
TRH >C34-C40	M22-Ma36470	CP	mg/kg	< 100	< 100	<1	30%	Pass	
Duplicate									
Volatile Organics				Result 1	Result 2	RPD			
Hexachlorobutadiene	M22-Ma36470	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
Volatile Organics				Result 1	Result 2	RPD			
1.1-Dichloroethane	M22-Ma36470	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2.4-Trichlorobenzene	M22-Ma36470	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1-Dichloroethene	M22-Ma36470	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1.1-Trichloroethane	M22-Ma36470	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1.1.2-Tetrachloroethane	M22-Ma36470	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1.2-Trichloroethane	M22-Ma36470	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1.2.2-Tetrachloroethane	M22-Ma36470	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2-Dibromoethane	M22-Ma36470	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2-Dichlorobenzene	M22-Ma36470	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2-Dichloroethane	M22-Ma36470	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2-Dichloropropane	M22-Ma36470	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2.3-Trichloropropane	M22-Ma36470	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2.4-Trimethylbenzene	M22-Ma36470	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.3-Dichlorobenzene	M22-Ma36470	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.3-Dichloropropane	M22-Ma36470	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.3.5-Trimethylbenzene	M22-Ma36470	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.4-Dichlorobenzene	M22-Ma36470	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2-Butanone (MEK)	M22-Ma36470	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2-Propanone (Acetone)	M22-Ma36470	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
4-Chlorotoluene	M22-Ma36470	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
4-Methyl-2-pentanone (MIBK)	M22-Ma36470	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Allyl chloride	M22-Ma36470	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzene	M22-Ma36470	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Bromobenzene	M22-Ma36470	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Bromochloromethane	M22-Ma36470	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Bromodichloromethane	M22-Ma36470	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Bromoform	M22-Ma36470	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Bromomethane	M22-Ma36470	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Carbon disulfide	M22-Ma36470	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Carbon Tetrachloride	M22-Ma36470	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chlorobenzene	M22-Ma36470	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chloroethane	M22-Ma36470	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chloroform	M22-Ma36470	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chloromethane	M22-Ma36470	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
cis-1.2-Dichloroethene	M22-Ma36470	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
cis-1.3-Dichloropropene	M22-Ma36470	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dibromochloromethane	M22-Ma36470	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	

Duplicate									
Volatile Organics				Result 1	Result 2	RPD			
Dibromomethane	M22-Ma36470	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dichlorodifluoromethane	M22-Ma36470	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Ethylbenzene	M22-Ma36470	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Iodomethane	M22-Ma36470	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Isopropyl benzene (Cumene)	M22-Ma36470	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
m&p-Xylenes	M22-Ma36470	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Methylene Chloride	M22-Ma36470	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
o-Xylene	M22-Ma36470	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Styrene	M22-Ma36470	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Tetrachloroethene	M22-Ma36470	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Toluene	M22-Ma36470	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
trans-1.2-Dichloroethene	M22-Ma36470	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
trans-1.3-Dichloropropene	M22-Ma36470	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Trichloroethene	M22-Ma36470	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Trichlorofluoromethane	M22-Ma36470	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Vinyl chloride	M22-Ma36470	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Xylenes - Total*	M22-Ma36470	CP	mg/kg	< 0.3	< 0.3	<1	30%	Pass	
Duplicate									
Polycyclic Aromatic Hydrocarbons				Result 1	Result 2	RPD			
Acenaphthene	M22-Ma36470	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Acenaphthylene	M22-Ma36470	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Anthracene	M22-Ma36470	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benz(a)anthracene	M22-Ma36470	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(a)pyrene	M22-Ma36470	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(b&j)fluoranthene	M22-Ma36470	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(g.h.i)perylene	M22-Ma36470	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(k)fluoranthene	M22-Ma36470	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chrysene	M22-Ma36470	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dibenz(a.h)anthracene	M22-Ma36470	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Fluoranthene	M22-Ma36470	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Fluorene	M22-Ma36470	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Indeno(1.2.3-cd)pyrene	M22-Ma36470	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Naphthalene	M22-Ma36470	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Phenanthrene	M22-Ma36470	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Pyrene	M22-Ma36470	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
Organochlorine Pesticides				Result 1	Result 2	RPD			
Chlordanes - Total	M22-Ma36470	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
4.4'-DDD	M22-Ma36470	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
4.4'-DDE	M22-Ma36470	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
4.4'-DDT	M22-Ma36470	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
a-HCH	M22-Ma36470	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Aldrin	M22-Ma36470	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
b-HCH	M22-Ma36470	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
d-HCH	M22-Ma36470	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Dieldrin	M22-Ma36470	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan I	M22-Ma36470	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan II	M22-Ma36470	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan sulphate	M22-Ma36470	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin	M22-Ma36470	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin aldehyde	M22-Ma36470	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin ketone	M22-Ma36470	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
g-HCH (Lindane)	M22-Ma36470	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Heptachlor	M22-Ma36470	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	

Duplicate									
Organochlorine Pesticides				Result 1	Result 2	RPD			
Hexachlorobenzene	M22-Ma36470	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Methoxychlor	M22-Ma36470	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Toxaphene	M22-Ma36470	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
Polychlorinated Biphenyls				Result 1	Result 2	RPD			
Aroclor-1016	M22-Ma36470	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Aroclor-1221	M22-Ma36470	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Aroclor-1232	M22-Ma36470	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Aroclor-1242	M22-Ma36470	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Aroclor-1248	M22-Ma36470	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Aroclor-1254	M22-Ma36470	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Aroclor-1260	M22-Ma36470	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Total PCB*	M22-Ma36470	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Duplicate									
Phenols (Halogenated)				Result 1	Result 2	RPD			
2-Chlorophenol	M22-Ma36470	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2.4-Dichlorophenol	M22-Ma36470	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2.4.5-Trichlorophenol	M22-Ma36470	CP	mg/kg	< 1	< 1	<1	30%	Pass	
2.4.6-Trichlorophenol	M22-Ma36470	CP	mg/kg	< 1	< 1	<1	30%	Pass	
2.6-Dichlorophenol	M22-Ma36470	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
4-Chloro-3-methylphenol	M22-Ma36470	CP	mg/kg	< 1	< 1	<1	30%	Pass	
Pentachlorophenol	M22-Ma36470	CP	mg/kg	< 1	< 1	<1	30%	Pass	
Tetrachlorophenols - Total	M22-Ma36470	CP	mg/kg	< 10	< 10	<1	30%	Pass	
Duplicate									
Phenols (non-Halogenated)				Result 1	Result 2	RPD			
2-Cyclohexyl-4.6-dinitrophenol	M22-Ma36470	CP	mg/kg	< 20	< 20	<1	30%	Pass	
2-Methyl-4.6-dinitrophenol	M22-Ma36470	CP	mg/kg	< 5	< 5	<1	30%	Pass	
2-Nitrophenol	M22-Ma36470	CP	mg/kg	< 1	< 1	<1	30%	Pass	
2.4-Dimethylphenol	M22-Ma36470	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2.4-Dinitrophenol	M22-Ma36470	CP	mg/kg	< 5	< 5	<1	30%	Pass	
2-Methylphenol (o-Cresol)	M22-Ma36470	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
3&4-Methylphenol (m&p-Cresol)	M22-Ma36470	CP	mg/kg	< 0.4	< 0.4	<1	30%	Pass	
4-Nitrophenol	M22-Ma36470	CP	mg/kg	< 5	< 5	<1	30%	Pass	
Dinoseb	M22-Ma36470	CP	mg/kg	< 20	< 20	<1	30%	Pass	
Phenol	M22-Ma36470	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
Heavy Metals				Result 1	Result 2	RPD			
Arsenic	M22-Ma36471	CP	mg/kg	37	38	2.0	30%	Pass	
Cadmium	M22-Ma36471	CP	mg/kg	< 0.4	< 0.4	<1	30%	Pass	
Chromium	M22-Ma36471	CP	mg/kg	120	120	3.0	30%	Pass	
Copper	M22-Ma36471	CP	mg/kg	61	62	2.0	30%	Pass	
Lead	M22-Ma36471	CP	mg/kg	< 5	< 5	<1	30%	Pass	
Mercury	M22-Ma36471	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Molybdenum	M22-Ma36471	CP	mg/kg	< 5	< 5	<1	30%	Pass	
Nickel	M22-Ma36471	CP	mg/kg	200	200	2.0	30%	Pass	
Selenium	M22-Ma36471	CP	mg/kg	< 2	< 2	<1	30%	Pass	
Silver	M22-Ma36471	CP	mg/kg	< 2	< 2	<1	30%	Pass	
Tin	M22-Ma36471	CP	mg/kg	< 10	< 10	<1	30%	Pass	
Zinc	M22-Ma36471	CP	mg/kg	130	130	2.0	30%	Pass	

Duplicate								
Perfluoroalkyl carboxylic acids (PFCAs)				Result 1	Result 2	RPD		
Perfluorobutanoic acid (PFBA)	M22-Ma36475	CP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluoropentanoic acid (PFPeA)	M22-Ma36475	CP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluorohexanoic acid (PFHxA)	M22-Ma36475	CP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluoroheptanoic acid (PFHpA)	M22-Ma36475	CP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluorooctanoic acid (PFOA)	M22-Ma36475	CP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluorononanoic acid (PFNA)	M22-Ma36475	CP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluorodecanoic acid (PFDA)	M22-Ma36475	CP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluoroundecanoic acid (PFUnDA)	M22-Ma36475	CP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluorododecanoic acid (PFDoDA)	M22-Ma36475	CP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluorotridecanoic acid (PFTrDA)	M22-Ma36475	CP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluorotetradecanoic acid (PFTeDA)	M22-Ma36475	CP	ug/kg	< 5	< 5	<1	30%	Pass
Duplicate								
Perfluoroalkyl sulfonamido substances				Result 1	Result 2	RPD		
Perfluorooctane sulfonamide (FOSA)	M22-Ma36475	CP	ug/kg	< 5	< 5	<1	30%	Pass
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	M22-Ma36475	CP	ug/kg	< 5	< 5	<1	30%	Pass
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	M22-Ma36475	CP	ug/kg	< 5	< 5	<1	30%	Pass
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)	M22-Ma36475	CP	ug/kg	< 5	< 5	<1	30%	Pass
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)	M22-Ma36475	CP	ug/kg	< 5	< 5	<1	30%	Pass
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	M22-Ma36475	CP	ug/kg	< 10	< 10	<1	30%	Pass
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	M22-Ma36475	CP	ug/kg	< 10	< 10	<1	30%	Pass
Duplicate								
Perfluoroalkyl sulfonic acids (PFSAs)				Result 1	Result 2	RPD		
Perfluorobutanesulfonic acid (PFBS)	M22-Ma36475	CP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluorononanesulfonic acid (PFNS)	M22-Ma36475	CP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluoropropanesulfonic acid (PFPrS)	M22-Ma36475	CP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluoropentanesulfonic acid (PFPeS)	M22-Ma36475	CP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluorohexanesulfonic acid (PFHxS)	M22-Ma36475	CP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluoroheptanesulfonic acid (PFHpS)	M22-Ma36475	CP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluorooctanesulfonic acid (PFOS)	M22-Ma36475	CP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluorodecanesulfonic acid (PFDS)	M22-Ma36475	CP	ug/kg	< 5	< 5	<1	30%	Pass
Duplicate								
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)				Result 1	Result 2	RPD		
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	M22-Ma36475	CP	ug/kg	< 5	< 5	<1	30%	Pass
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)	M22-Ma36475	CP	ug/kg	< 10	< 10	<1	30%	Pass
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	M22-Ma36475	CP	ug/kg	< 5	< 5	<1	30%	Pass
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	M22-Ma36475	CP	ug/kg	< 5	< 5	<1	30%	Pass

Duplicate									
				Result 1	Result 2	RPD			
Fluoride (Total)	M22-Ma36476	CP	mg/kg	< 100	< 100	<1	30%	Pass	

Comments

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

Sample Integrity

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

Qualifier Codes/Comments

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

Authorised by:

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

Glenn Jackson
General Manager

Final Report – this report replaces any previously issued Report

- Indicates Not Requested

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

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

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

Attention: **David Lawson**

Report **872310-W**
Project name 20220318043419-Eurofin-12
Project ID JC0927
Received Date Mar 18, 2022

Client Sample ID			**SX_OB_20220317_16_17_SR_Rinsate_EUF**	**SX_OB_20220317_16_19_SB_Blank_EUF**
Sample Matrix			**Water**	**Water**
Eurofins Sample No.			**M22-Ma36473**	**M22-Ma36474**
Date Sampled			**Mar 17, 2022**	**Mar 17, 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	%	70	78
13C5-PFPeA (surr.)	1	%	90	117
13C5-PFHxA (surr.)	1	%	85	122
13C4-PFHpA (surr.)	1	%	68	90
13C8-PFOA (surr.)	1	%	65	89
13C5-PFNA (surr.)	1	%	64	123
13C6-PFDA (surr.)	1	%	76	87
13C2-PFUnDA (surr.)	1	%	66	27
13C2-PFDoDA (surr.)	1	%	56	14
13C2-PFTeDA (surr.)	1	%	37	18
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	%	101	36
D3-N-MeFOSA (surr.)	1	%	85	15

Client Sample ID			SX_OB_20220317_16_17_SR_Rinsate_EUF	SX_OB_20220317_16_19_SB_Blank_EUF
Sample Matrix			**Water**	**Water**
Eurofins Sample No.			**M22-Ma36473**	**M22-Ma36474**
Date Sampled			**Mar 17, 2022**	**Mar 17, 2022**
Test/Reference	LOR	Unit		
Perfluoroalkyl sulfonamido substances				
D5-N-EtFOSA (surr.)	1	%	105	17
D7-N-MeFOSE (surr.)	1	%	85	19
D9-N-EtFOSE (surr.)	1	%	82	12
D5-N-EtFOSAA (surr.)	1	%	28	15
D3-N-MeFOSAA (surr.)	1	%	27	14
Perfluoroalkyl sulfonic acids (PFSAs)				
Perfluorobutanesulfonic acid (PFBS)[N11]	0.01	ug/L	< 0.01	< 0.01
Perfluorononanesulfonic acid (PFNS)[N15]	0.01	ug/L	< 0.01	< 0.01
Perfluoropropanesulfonic acid (PFPrS)[N15]	0.01	ug/L	< 0.01	< 0.01
Perfluoropentanesulfonic acid (PFPeS)[N15]	0.01	ug/L	< 0.01	< 0.01
Perfluorohexanesulfonic acid (PFHxS)[N11]	0.01	ug/L	< 0.01	< 0.01
Perfluoroheptanesulfonic acid (PFHpS)[N15]	0.01	ug/L	< 0.01	< 0.01
Perfluorooctanesulfonic acid (PFOS)[N11]	0.01	ug/L	< 0.01	< 0.01
Perfluorodecanesulfonic acid (PFDS)[N15]	0.01	ug/L	< 0.01	< 0.01
13C3-PFBS (surr.)	1	%	80	102
18O2-PFHxS (surr.)	1	%	70	83
13C8-PFOS (surr.)	1	%	80	112
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)				
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)[N11]	0.01	ug/L	< 0.01	< 0.01
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)[N11]	0.05	ug/L	< 0.05	< 0.05
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)[N11]	0.01	ug/L	< 0.01	< 0.01
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)[N11]	0.01	ug/L	< 0.01	< 0.01
13C2-4:2 FTSA (surr.)	1	%	53	139
13C2-6:2 FTSA (surr.)	1	%	65	157
13C2-8:2 FTSA (surr.)	1	%	72	113
13C2-10:2 FTSA (surr.)	1	%	44	11
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	Mar 18, 2022	28 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			
Perfluoroalkyl sulfonamido substances	Melbourne	Mar 18, 2022	28 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			
Perfluoroalkyl sulfonic acids (PFSAs)	Melbourne	Mar 18, 2022	28 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)	Melbourne	Mar 18, 2022	28 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			
PFASs Summations	Melbourne	Mar 18, 2022	
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			

eurofins | Environment Testing

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Phone : 0800 856 450
IANZ # 1290

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

Project Name: 20220318043419-Eurofin-12
Project ID: JC0927

Order No.:
Report #: 872310
Phone: 08 8338 1009
Fax:

Received: Mar 18, 2022 12:35 PM
Due: Mar 25, 2022
Priority: 5 Day
Contact Name: Agon Lab Reports (Spoil Project)

Eurofins Analytical Services Manager : Michael Cassidy

Sample Detail	AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	IWRG 621 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_20220317_07_54_SS_Triplicate_EUF	Mar 17, 2022	7:54AM	Soil	M22-Ma36468		X	X	X
2	SX_IB_20220317_08_03_SS_Primary_EUF	Mar 17, 2022	8:03AM	Soil	M22-Ma36469		X	X	X
3	SX_OB_20220317_11_58_SS_Primary_EUF	Mar 17, 2022	11:58AM	Soil	M22-Ma36470		X	X	X
4	SX_OB_20220	Mar 17, 2022	4:02PM	Soil	M22-Ma36471		X	X	X

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Project Name: 20220318043419-Eurofin-12
Project ID: JC0927

Order No.:
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Fax:

Received: Mar 18, 2022 12:35 PM
Due: Mar 25, 2022
Priority: 5 Day
Contact Name: Agon Lab Reports (Spoil Project)

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Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	IWRG 621 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									
	317_16_02_SS_Primary_EUF								
5	SX_OB_20220317_16_02_SS_Duplicate_EUF	Mar 17, 2022	4:02PM	Soil	M22-Ma36472		X	X	X
6	SX_OB_20220317_16_17_SR_Rinsate_EUF	Mar 17, 2022	4:17PM	Water	M22-Ma36473			X	
7	SX_OB_20220317_16_19_SB_Blank_EUF	Mar 17, 2022	4:19PM	Water	M22-Ma36474			X	

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Melbourne Laboratory - NATA # 1261 Site # 1254						X	X	X	X
Sydney Laboratory - NATA # 1261 Site # 18217									
Brisbane Laboratory - NATA # 1261 Site # 20794									
Mayfield Laboratory - NATA # 1261 Site # 25079									
Perth Laboratory - NATA # 2377 Site # 2370									
External Laboratory									
8	SX_OB_20220317_19_50_SS_Primary_EUF	Mar 17, 2022	7:50PM	Soil	M22-Ma36475		X	X	X
9	SX_OB_20220318_00_06_SS_Primary_EUF	Mar 18, 2022	12:06AM	Soil	M22-Ma36476		X	X	X
10	SX_OB_20220318_03_55_SS_Primary_EUF	Mar 18, 2022	3:55AM	Soil	M22-Ma36477		X	X	X
11	SX_IB_20220317_07_54_SS	Mar 17, 2022	7:54AM	AUS Leachate - pH 5.0	M22-Ma36478	X		X	

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Melbourne Laboratory - NATA # 1261 Site # 1254						X	X	X	X
Sydney Laboratory - NATA # 1261 Site # 18217									
Brisbane Laboratory - NATA # 1261 Site # 20794									
Mayfield Laboratory - NATA # 1261 Site # 25079									
Perth Laboratory - NATA # 2377 Site # 2370									
External Laboratory									
	_Triplicate_EUF								
12	SX_IB_20220317_08_03_SS_Primary_EUF	Mar 17, 2022	8:03AM	AUS Leachate - pH 5.0	M22-Ma36479	X		X	
13	SX_OB_20220317_11_58_SS_Primary_EUF	Mar 17, 2022	11:58AM	AUS Leachate - pH 5.0	M22-Ma36480	X		X	
14	SX_OB_20220317_16_02_SS_Primary_EUF	Mar 17, 2022	4:02PM	AUS Leachate - pH 5.0	M22-Ma36481	X		X	
15	SX_OB_20220	Mar 17, 2022	4:02PM	AUS Leachate	M22-Ma36482	X		X	

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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_20220317_16_02_SS_Duplicate_EUF	Mar 17, 2022	4:02PM	AUS Leachate - pH 5.0	M22-Ma36482				
16	SX_OB_20220317_19_50_SS_Primary_EUF	Mar 17, 2022	7:50PM	AUS Leachate - pH 5.0	M22-Ma36483	X		X	
17	SX_OB_20220318_00_06_SS_Primary_EUF	Mar 18, 2022	12:06AM	AUS Leachate - pH 5.0	M22-Ma36484	X		X	
18	SX_OB_20220318_03_55_S	Mar 18, 2022	3:55AM	AUS Leachate - pH 5.0	M22-Ma36485	X		X	

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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									
	S_Primary_EUF								
19	SX_IB_20220317_07_54_SS_Triplicate_EUF	Mar 17, 2022	7:54AM	AUS Leachate - Reagent Water	M22-Ma36486	X		X	
20	SX_IB_20220317_08_03_SS_Primary_EUF	Mar 17, 2022	8:03AM	AUS Leachate - Reagent Water	M22-Ma36487	X		X	
21	SX_OB_20220317_11_58_SS_Primary_EUF	Mar 17, 2022	11:58AM	AUS Leachate - Reagent Water	M22-Ma36488	X		X	
22	SX_OB_20220	Mar 17, 2022	4:02PM	AUS Leachate	M22-Ma36489	X		X	

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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									
22	SX_OB_20220317_16_02_SS_Primary_EUF	Mar 17, 2022	4:02PM	AUS Leachate - Reagent Water	M22-Ma36489				
23	SX_OB_20220317_16_02_SS_Duplicate_EUF	Mar 17, 2022	4:02PM	AUS Leachate - Reagent Water	M22-Ma36490	X		X	
24	SX_OB_20220317_19_50_SS_Primary_EUF	Mar 17, 2022	7:50PM	AUS Leachate - Reagent Water	M22-Ma36491	X		X	
25	SX_OB_20220318_00_06_S	Mar 18, 2022	12:06AM	AUS Leachate - Reagent	M22-Ma36492	X		X	

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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									
	S_Primary_EUF			Water					
26	SX_OB_20220318_03_55_SS_Primary_EUF	Mar 18, 2022	3:55AM	AUS Leachate - Reagent Water	M22-Ma36493	X		X	
Test Counts						16	8	26	8

Internal Quality Control Review and Glossary

General

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

Holding Times

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

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

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

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

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

Units

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

Terms

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

QC - Acceptance Criteria

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

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

Results <10 times the LOR: No Limit

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

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

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

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

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

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QC Data General Comments

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

Quality Control Results

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Method Blank							
Perfluoroalkyl carboxylic acids (PFCAs)							
Perfluorobutanoic acid (PFBA)	ug/L	< 0.05			0.05	Pass	
Perfluoropentanoic acid (PFPeA)	ug/L	< 0.01			0.01	Pass	
Perfluorohexanoic acid (PFHxA)	ug/L	< 0.01			0.01	Pass	
Perfluoroheptanoic acid (PFHpA)	ug/L	< 0.01			0.01	Pass	
Perfluorooctanoic acid (PFOA)	ug/L	< 0.01			0.01	Pass	
Perfluorononanoic acid (PFNA)	ug/L	< 0.01			0.01	Pass	
Perfluorodecanoic acid (PFDA)	ug/L	< 0.01			0.01	Pass	
Perfluoroundecanoic acid (PFUnDA)	ug/L	< 0.01			0.01	Pass	
Perfluorododecanoic acid (PFDoDA)	ug/L	< 0.01			0.01	Pass	
Perfluorotridecanoic acid (PFTrDA)	ug/L	< 0.01			0.01	Pass	
Perfluorotetradecanoic acid (PFTeDA)	ug/L	< 0.01			0.01	Pass	
Method Blank							
Perfluoroalkyl sulfonamido substances							
Perfluorooctane sulfonamide (FOSA)	ug/L	< 0.05			0.05	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	ug/L	< 0.05			0.05	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	ug/L	< 0.05			0.05	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)	ug/L	< 0.05			0.05	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)	ug/L	< 0.05			0.05	Pass	
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	ug/L	< 0.05			0.05	Pass	
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	ug/L	< 0.05			0.05	Pass	
Method Blank							
Perfluoroalkyl sulfonic acids (PFSAs)							
Perfluorobutanesulfonic acid (PFBS)	ug/L	< 0.01			0.01	Pass	
Perfluorononanesulfonic acid (PFNS)	ug/L	< 0.01			0.01	Pass	
Perfluoropropanesulfonic acid (PFPrS)	ug/L	< 0.01			0.01	Pass	
Perfluoropentanesulfonic acid (PFPeS)	ug/L	< 0.01			0.01	Pass	
Perfluorohexanesulfonic acid (PFHxS)	ug/L	< 0.01			0.01	Pass	
Perfluoroheptanesulfonic acid (PFHpS)	ug/L	< 0.01			0.01	Pass	
Perfluorooctanesulfonic acid (PFOS)	ug/L	< 0.01			0.01	Pass	
Perfluorodecanesulfonic acid (PFDS)	ug/L	< 0.01			0.01	Pass	
Method Blank							
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)							
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	ug/L	< 0.01			0.01	Pass	
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)	ug/L	< 0.05			0.05	Pass	
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	ug/L	< 0.01			0.01	Pass	
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	ug/L	< 0.01			0.01	Pass	
LCS - % Recovery							
Perfluoroalkyl carboxylic acids (PFCAs)							
Perfluorobutanoic acid (PFBA)	%	83			50-150	Pass	
Perfluoropentanoic acid (PFPeA)	%	110			50-150	Pass	
Perfluorohexanoic acid (PFHxA)	%	95			50-150	Pass	
Perfluoroheptanoic acid (PFHpA)	%	93			50-150	Pass	
Perfluorooctanoic acid (PFOA)	%	100			50-150	Pass	
Perfluorononanoic acid (PFNA)	%	93			50-150	Pass	
Perfluorodecanoic acid (PFDA)	%	89			50-150	Pass	
Perfluoroundecanoic acid (PFUnDA)	%	100			50-150	Pass	
Perfluorododecanoic acid (PFDoDA)	%	102			50-150	Pass	
Perfluorotridecanoic acid (PFTrDA)	%	114			50-150	Pass	
Perfluorotetradecanoic acid (PFTeDA)	%	113			50-150	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
LCS - % Recovery							
Perfluoroalkyl sulfonamido substances							
Perfluorooctane sulfonamide (FOSA)	%	103			50-150	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	%	146			50-150	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	%	128			50-150	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)	%	98			50-150	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)	%	100			50-150	Pass	
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	%	89			50-150	Pass	
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	%	87			50-150	Pass	
LCS - % Recovery							
Perfluoroalkyl sulfonic acids (PFSAs)							
Perfluorobutanesulfonic acid (PFBS)	%	81			50-150	Pass	
Perfluorononanesulfonic acid (PFNS)	%	70			50-150	Pass	
Perfluoropropanesulfonic acid (PFPrS)	%	106			50-150	Pass	
Perfluoropentanesulfonic acid (PFPeS)	%	99			50-150	Pass	
Perfluorohexanesulfonic acid (PFHxS)	%	89			50-150	Pass	
Perfluoroheptanesulfonic acid (PFHpS)	%	93			50-150	Pass	
Perfluorooctanesulfonic acid (PFOS)	%	88			50-150	Pass	
Perfluorodecanesulfonic acid (PFDS)	%	54			50-150	Pass	
LCS - % Recovery							
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)							
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	%	98			50-150	Pass	
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)	%	146			50-150	Pass	
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	%	88			50-150	Pass	
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	%	119			50-150	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Spike - % Recovery									
Perfluoroalkyl carboxylic acids (PFCAs)				Result 1					
Perfluorobutanoic acid (PFBA)	N22-Ma27822	NCP	%	83			50-150	Pass	
Perfluoropentanoic acid (PFPeA)	N22-Ma27822	NCP	%	95			50-150	Pass	
Perfluorohexanoic acid (PFHxA)	N22-Ma27822	NCP	%	86			50-150	Pass	
Perfluoroheptanoic acid (PFHpA)	N22-Ma27822	NCP	%	85			50-150	Pass	
Perfluorooctanoic acid (PFOA)	N22-Ma27822	NCP	%	90			50-150	Pass	
Perfluorononanoic acid (PFNA)	N22-Ma27822	NCP	%	86			50-150	Pass	
Perfluorodecanoic acid (PFDA)	N22-Ma27822	NCP	%	98			50-150	Pass	
Perfluoroundecanoic acid (PFUnDA)	N22-Ma27822	NCP	%	88			50-150	Pass	
Perfluorododecanoic acid (PFDoDA)	N22-Ma27822	NCP	%	95			50-150	Pass	
Perfluorotridecanoic acid (PFTrDA)	N22-Ma27822	NCP	%	111			50-150	Pass	
Perfluorotetradecanoic acid (PFTeDA)	N22-Ma27822	NCP	%	97			50-150	Pass	
Spike - % Recovery									
Perfluoroalkyl sulfonamido substances				Result 1					
Perfluorooctane sulfonamide (FOSA)	N22-Ma27822	NCP	%	94			50-150	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	N22-Ma27822	NCP	%	89			50-150	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	N22-Ma27822	NCP	%	105			50-150	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)	N22-Ma27822	NCP	%	92			50-150	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)	N22-Ma27822	NCP	%	92			50-150	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	N22-Ma27822	NCP	%	90			50-150	Pass	
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	N22-Ma27822	NCP	%	86			50-150	Pass	
Spike - % Recovery									
Perfluoroalkyl sulfonic acids (PFSAs)				Result 1					
Perfluorobutanesulfonic acid (PFBS)	N22-Ma27822	NCP	%	81			50-150	Pass	
Perfluorononanesulfonic acid (PFNS)	N22-Ma27822	NCP	%	69			50-150	Pass	
Perfluoropropanesulfonic acid (PFPrS)	N22-Ma27822	NCP	%	105			50-150	Pass	
Perfluoropentanesulfonic acid (PFPeS)	N22-Ma27822	NCP	%	81			50-150	Pass	
Perfluorohexanesulfonic acid (PFHxS)	N22-Ma27822	NCP	%	81			50-150	Pass	
Perfluoroheptanesulfonic acid (PFHpS)	N22-Ma27822	NCP	%	82			50-150	Pass	
Perfluorooctanesulfonic acid (PFOS)	N22-Ma27822	NCP	%	94			50-150	Pass	
Perfluorodecanesulfonic acid (PFDS)	N22-Ma27822	NCP	%	51			50-150	Pass	
Spike - % Recovery									
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)				Result 1					
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	N22-Ma27822	NCP	%	96			50-150	Pass	
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)	N22-Ma27822	NCP	%	94			50-150	Pass	
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	N22-Ma27822	NCP	%	86			50-150	Pass	
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	N22-Ma27822	NCP	%	79			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-Ma25011	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
Perfluoropentanoic acid (PFPeA)	M22-Ma25011	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorohexanoic acid (PFHxA)	M22-Ma25011	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluoroheptanoic acid (PFHpA)	M22-Ma25011	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorooctanoic acid (PFOA)	M22-Ma25011	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorononanoic acid (PFNA)	M22-Ma25011	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorodecanoic acid (PFDA)	M22-Ma25011	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluoroundecanoic acid (PFUnDA)	M22-Ma25011	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorododecanoic acid (PFDoDA)	M22-Ma25011	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorotridecanoic acid (PFTrDA)	M22-Ma25011	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorotetradecanoic acid (PFTeDA)	M22-Ma25011	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	

Duplicate									
Perfluoroalkyl sulfonamido substances				Result 1	Result 2	RPD			
Perfluorooctane sulfonamide (FOSA)	M22-Ma25011	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	M22-Ma25011	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	M22-Ma25011	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)	M22-Ma25011	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)	M22-Ma25011	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	M22-Ma25011	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	M22-Ma25011	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
Duplicate									
Perfluoroalkyl sulfonic acids (PFSAs)				Result 1	Result 2	RPD			
Perfluorobutanesulfonic acid (PFBS)	M22-Ma25011	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorononanesulfonic acid (PFNS)	M22-Ma25011	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluoropropanesulfonic acid (PFPrS)	M22-Ma25011	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluoropentanesulfonic acid (PFPeS)	M22-Ma25011	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorohexanesulfonic acid (PFHxS)	M22-Ma25011	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluoroheptanesulfonic acid (PFHpS)	M22-Ma25011	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorooctanesulfonic acid (PFOS)	M22-Ma25011	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorodecanesulfonic acid (PFDS)	M22-Ma25011	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Duplicate									
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)				Result 1	Result 2	RPD			
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	M22-Ma25011	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)	M22-Ma25011	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	M22-Ma25011	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	M22-Ma25011	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	

Comments

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

Sample Integrity

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

Qualifier Codes/Comments

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

Authorised by:

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

Glenn Jackson
General Manager

Final Report – this report replaces any previously issued Report

- Indicates Not Requested

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

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

CHAIN OF CUSTODY RECORD

Eurofins | Environment Testing ABN 50 005 085 521

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

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

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

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

Company	AGON Environmental - Tunnel Spoil Testing	Project №	JC0927	Project Manager	Craig Trimbur
Address	Unit H76, 63-85 Turner St, Port Melbourne VIC 3207	Project Name	WGTP-Tunnel Ref: 20220328061722-Eurofin-8	EDD Format (Order, EQuIS etc)	Esdat
Contact Name	Craig Trimbur David Lawson				
Phone №	+61 400 826 907 (Craig) +61 490 411 004 (David)				
Special Directions	Please provide an interim lab report if finalised report has not been provided by 14 days from sample receipt. Please provide eSRN along with oter sample recipt documentation.				
Purchase Order					
Quote ID №	Agon WGTP TST				

Sampler(s)	Louis - EP
Handed over by	WGTH
Email for Invoice	finance@agonenviro.com.au LabReports.TST@agonenviro.com.au
Email for Results	LabReports.TST@agonenviro.com.au agonenvironmental@esdat.com.au motherhublabresults1@wgtp.com.au Amrit.Kaur@agile-analytics.com.au

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

Containers (Change container type & size if necessary)

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

♦Surcharge will apply

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

№	Client Sample ID	Sampled Date/Time dd/mm/yy hh:mm	Matrix Solid (S) Water (W)	Spoil Sample Preparation	Suite WGTP-R1 - TRH/ PAH/ Phenols/ OCP/ PCB/ VOC/ Vinyl Chloride/ Metals (As, Cd, Cr, Cu, Ni, Pb,Hg, Ag, Sn, Mo, Se, Zn)/ Cr6+/ CN/ Total Fluoride/ pH	PFAS Extended Suite - 0.1- 5ug/kg	ASLP PH 5 - PFAS 0.01-0.05 ug/l	ASLP Reagent - PFAS 0.01-0.05ug/l	500mL Plastic	250mL Plastic	125mL Plastic	200mL Amber Glass	40mL VOA vial	500mL PFAS Bottle	Jar (Glass or HDPE)	Other (Asbestos AS4964, WA Guidelines)	Sample Comments / Dangerous Goods Hazard Warning
2	SX_IB_20220328_00_07_SS_Primary_EUF	28/03/22 00:07	S	X	X	X	X	X									1	
3	SX_IB_20220328_04_00_SS_Primary_EUF	28/03/2022 04:00	S	X	X	X	X	X									1	
4																	1	
5																	1	
6																	1	
7																	1	
8																	1	
9																	1	
10																		20.9 -0.2 20.7 counter
11																		
12																		
13																		
	Total Counts			2	2	2	2	2									8	

Method of Shipment	☑ Courier (#)	☐ Hand Delivered	☐ Postal	Name	Will O'Hair	Signature		Date	28/03/2022	Time	
Laboratory Use Only	Received By	ELAINE G	SYD | BNE | MEL | PER | ADL | NTL | DRW	Signature		Date	29/3/22	Time	12:39	Temperature	
	Received By		SYD | BNE | MEL | PER | ADL | NTL | DRW	Signature		Date		Time		Report №	874916

Jake

EAU009_R16 Modified by: Dr. R Symons Approved by: G Jackson Approved on: 8 August 2019

eurofins | Environment Testing

www.eurofins.com.au EnviroSales@eurofins.com

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NATA # 1261 Site # 18217

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NATA # 1261 Site # 20794

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43 Detroit Drive
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IANZ # 1290

Sample Receipt Advice

Company name:	Agon Environmental Pty Ltd - VIC
Contact name:	Agon Lab Reports (Spoil Project)
Project name:	20220328061722-Eurofin-8
Project ID:	JC0927
Turnaround time:	5 Day
Date/Time received	Mar 28, 2022 12:39 PM
Eurofins reference	874916

Sample Information

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

Notes

Contact

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

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

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

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

eurofins | Environment Testing

web: www.eurofins.com.au
email: EnviroSales@eurofins.com

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IANZ # 1290

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

Project Name: 20220328061722-Eurofin-8
Project ID: JC0927

Order No.:
Report #: 874916
Phone: 08 8338 1009
Fax:

Received: Mar 28, 2022 12:39 PM
Due: Apr 4, 2022
Priority: 5 Day
Contact Name: Agon Lab Reports (Spoil Project)

Eurofins Analytical Services Manager : Michael Cassidy

Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	IWRG 621 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_20220328_00_07_SS_Primary_EUF	Mar 28, 2022	12:07AM	Soil	M22-Ma57495		X	X	X
2	SX_IB_20220328_04_00_SS_Primary_EUF	Mar 28, 2022	4:00AM	Soil	M22-Ma57496		X	X	X
3	SX_IB_20220328_00_07_SS_Primary_EUF	Mar 28, 2022	12:07AM	AUS Leachate - pH 5.0	M22-Ma57497	X		X	
4	SX_IB_20220328_04_00_SS_Primary_EUF	Mar 28, 2022	4:00AM	AUS Leachate - pH 5.0	M22-Ma57498	X		X	

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Project Name: 20220328061722-Eurofin-8
Project ID: JC0927

Order No.:
Report #: 874916
Phone: 08 8338 1009
Fax:

Received: Mar 28, 2022 12:39 PM
Due: Apr 4, 2022
Priority: 5 Day
Contact Name: Agon Lab Reports (Spoil Project)

Eurofins Analytical Services Manager : Michael Cassidy

Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	IWRG 621 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									
5	SX_IB_20220328_00_07_SS_Primary_EUF	Mar 28, 2022	12:07AM	AUS Leachate - Reagent Water	M22-Ma57499	X		X	
6	SX_IB_20220328_04_00_SS_Primary_EUF	Mar 28, 2022	4:00AM	AUS Leachate - Reagent Water	M22-Ma57500	X		X	
Test Counts						4	2	6	2

Agon Environmental Pty Ltd - VIC
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NATA Accredited
Accreditation Number 1261
Site Number 1254

Accredited for compliance with ISO/IEC 17025 – Testing
NATA is a signatory to the ILAC Mutual Recognition Arrangement for the mutual recognition of the equivalence of testing, medical testing, calibration, inspection, proficiency testing scheme providers and reference materials producers reports and certificates.

Attention: **David Lawson**

Report **874916-L**
Project name 20220328061722-Eurofin-8
Project ID JC0927
Received Date Mar 28, 2022

Client Sample ID			SX_IB_20220328_00_07_SS_Primary_EUF	SX_IB_20220328_04_00_SS_Primary_EUF	SX_IB_20220328_00_07_SS_Primary_EUF	SX_IB_20220328_04_00_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-Ma57497	M22-Ma57498	M22-Ma57499	M22-Ma57500
Date Sampled			Mar 28, 2022	Mar 28, 2022	Mar 28, 2022	Mar 28, 2022
Test/Reference	LOR	Unit				
AUS Leaching Procedure						
Leachate Fluid[C01]		comment	1.0	1.0	4.0	4.0
pH (initial)	0.1	pH Units	N/A	N/A	N/A	N/A
pH (Leachate fluid)	0.1	pH Units	5.0	5.0	6.4	6.4
pH (off)	0.1	pH Units	5.4	5.1	10	9.3
Perfluoroalkyl carboxylic acids (PFCAs)						
Perfluorobutanoic acid (PFBA)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
Perfluoropentanoic acid (PFPeA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorohexanoic acid (PFHxA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoroheptanoic acid (PFHpA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorooctanoic acid (PFOA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorononanoic acid (PFNA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorodecanoic acid (PFDA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoroundecanoic acid (PFUnDA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorododecanoic acid (PFDoDA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorotridecanoic acid (PFTrDA)[N15]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorotetradecanoic acid (PFTeDA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C4-PFBA (surr.)	1	%	83	82	67	70
13C5-PFPeA (surr.)	1	%	96	102	79	87
13C5-PFHxA (surr.)	1	%	105	99	89	94
13C4-PFHpA (surr.)	1	%	106	106	92	93
13C8-PFOA (surr.)	1	%	122	120	99	105
13C5-PFNA (surr.)	1	%	95	84	91	90
13C6-PFDA (surr.)	1	%	112	93	110	107
13C2-PFUnDA (surr.)	1	%	100	72	71	71
13C2-PFDoDA (surr.)	1	%	113	73	141	130
13C2-PFTeDA (surr.)	1	%	124	72	147	130
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_20220328_00_07_SS_Primary_EUF	SX_IB_20220328_04_00_SS_Primary_EUF	SX_IB_20220328_00_07_SS_Primary_EUF	SX_IB_20220328_04_00_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-Ma57497**	**M22-Ma57498**	**M22-Ma57499**	**M22-Ma57500**
Date Sampled			**Mar 28, 2022**	**Mar 28, 2022**	**Mar 28, 2022**	**Mar 28, 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	%	128	108	93	89
D3-N-MeFOSA (surr.)	1	%	112	150	46	27
D5-N-EtFOSA (surr.)	1	%	105	140	37	20
D7-N-MeFOSE (surr.)	1	%	140	106	53	64
D9-N-EtFOSE (surr.)	1	%	144	109	53	58
D5-N-EtFOSAA (surr.)	1	%	123	87	40	38
D3-N-MeFOSAA (surr.)	1	%	108	75	42	42
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	%	116	119	87	92
18O2-PFHxS (surr.)	1	%	95	91	88	94
13C8-PFOS (surr.)	1	%	83	75	92	90
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)						
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C2-4:2 FTSA (surr.)	1	%	100	96	98	108
13C2-6:2 FTSA (surr.)	1	%	138	138	119	131
13C2-8:2 FTSA (surr.)	1	%	88	65	93	81
13C2-10:2 FTSA (surr.)	1	%	95	54	81	67
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)	Melbourne	Mar 29, 2022	0 Days
- Method: LTM-GEN-7010 Leaching Procedure for Soils & Solid Wastes			
pH (Leachate fluid)	Melbourne	Mar 29, 2022	0 Days
- Method: LTM-GEN-7010 Leaching Procedure for Soils & Solid Wastes			
pH (off)	Melbourne	Mar 29, 2022	0 Days
- Method: LTM-GEN-7010 Leaching Procedure for Soils & Solid Wastes			
Per- and Polyfluoroalkyl Substances (PFASs)			
Perfluoroalkyl carboxylic acids (PFCAs)	Melbourne	Mar 29, 2022	28 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			
Perfluoroalkyl sulfonamido substances	Melbourne	Mar 29, 2022	28 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			
Perfluoroalkyl sulfonic acids (PFSAs)	Melbourne	Mar 29, 2022	28 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)	Melbourne	Mar 29, 2022	28 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			
PFASs Summations	Melbourne	Mar 28, 2022	
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			

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Project Name: 20220328061722-Eurofin-8
Project ID: JC0927

Order No.:
Report #: 874916
Phone: 08 8338 1009
Fax:

Received: Mar 28, 2022 12:39 PM
Due: Apr 4, 2022
Priority: 5 Day
Contact Name: Agon Lab Reports (Spoil Project)

Eurofins Analytical Services Manager : Michael Cassidy

Sample Detail	AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	IWRG 621 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_20220328_00_07_SS_Primary_EUF	Mar 28, 2022	12:07AM	Soil	M22-Ma57495		X	X	X
2	SX_IB_20220328_04_00_SS_Primary_EUF	Mar 28, 2022	4:00AM	Soil	M22-Ma57496		X	X	X
3	SX_IB_20220328_00_07_SS_Primary_EUF	Mar 28, 2022	12:07AM	AUS Leachate - pH 5.0	M22-Ma57497	X		X	
4	SX_IB_20220328_04_00_SS_Primary_EUF	Mar 28, 2022	4:00AM	AUS Leachate - pH 5.0	M22-Ma57498	X		X	

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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									
5	SX_IB_20220328_00_07_SS_Primary_EUF	Mar 28, 2022	12:07AM	AUS Leachate - Reagent Water	M22-Ma57499	X		X	
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Test Counts						4	2	6	2

Internal Quality Control Review and Glossary

General

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

Holding Times

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

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

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

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

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

Units

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

Terms

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

QC - Acceptance Criteria

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

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

Results <10 times the LOR: No Limit

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

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

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

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

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

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QC Data General Comments

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

Quality Control Results

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Method Blank							
Perfluoroalkyl carboxylic acids (PFCAs)							
Perfluorobutanoic acid (PFBA)	ug/L	< 0.05			0.05	Pass	
Perfluoropentanoic acid (PFPeA)	ug/L	< 0.01			0.01	Pass	
Perfluorohexanoic acid (PFHxA)	ug/L	< 0.01			0.01	Pass	
Perfluoroheptanoic acid (PFHpA)	ug/L	< 0.01			0.01	Pass	
Perfluorooctanoic acid (PFOA)	ug/L	< 0.01			0.01	Pass	
Perfluorononanoic acid (PFNA)	ug/L	< 0.01			0.01	Pass	
Perfluorodecanoic acid (PFDA)	ug/L	< 0.01			0.01	Pass	
Perfluoroundecanoic acid (PFUnDA)	ug/L	< 0.01			0.01	Pass	
Perfluorododecanoic acid (PFDoDA)	ug/L	< 0.01			0.01	Pass	
Perfluorotridecanoic acid (PFTrDA)	ug/L	< 0.01			0.01	Pass	
Perfluorotetradecanoic acid (PFTeDA)	ug/L	< 0.01			0.01	Pass	
Method Blank							
Perfluoroalkyl sulfonamido substances							
Perfluorooctane sulfonamide (FOSA)	ug/L	< 0.05			0.05	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	ug/L	< 0.05			0.05	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	ug/L	< 0.05			0.05	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)	ug/L	< 0.05			0.05	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)	ug/L	< 0.05			0.05	Pass	
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	ug/L	< 0.05			0.05	Pass	
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	ug/L	< 0.05			0.05	Pass	
Method Blank							
Perfluoroalkyl sulfonic acids (PFSAs)							
Perfluorobutanesulfonic acid (PFBS)	ug/L	< 0.01			0.01	Pass	
Perfluorononanesulfonic acid (PFNS)	ug/L	< 0.01			0.01	Pass	
Perfluoropropanesulfonic acid (PFPrS)	ug/L	< 0.01			0.01	Pass	
Perfluoropentanesulfonic acid (PFPeS)	ug/L	< 0.01			0.01	Pass	
Perfluorohexanesulfonic acid (PFHxS)	ug/L	< 0.01			0.01	Pass	
Perfluoroheptanesulfonic acid (PFHpS)	ug/L	< 0.01			0.01	Pass	
Perfluorooctanesulfonic acid (PFOS)	ug/L	< 0.01			0.01	Pass	
Perfluorodecanesulfonic acid (PFDS)	ug/L	< 0.01			0.01	Pass	
Method Blank							
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)							
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	ug/L	< 0.01			0.01	Pass	
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)	ug/L	< 0.05			0.05	Pass	
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	ug/L	< 0.01			0.01	Pass	
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	ug/L	< 0.01			0.01	Pass	
LCS - % Recovery							
Perfluoroalkyl carboxylic acids (PFCAs)							
Perfluorobutanoic acid (PFBA)	%	122			50-150	Pass	
Perfluoropentanoic acid (PFPeA)	%	121			50-150	Pass	
Perfluorohexanoic acid (PFHxA)	%	120			50-150	Pass	
Perfluoroheptanoic acid (PFHpA)	%	117			50-150	Pass	
Perfluorooctanoic acid (PFOA)	%	121			50-150	Pass	
Perfluorononanoic acid (PFNA)	%	131			50-150	Pass	
Perfluorodecanoic acid (PFDA)	%	148			50-150	Pass	
Perfluoroundecanoic acid (PFUnDA)	%	135			50-150	Pass	
Perfluorododecanoic acid (PFDoDA)	%	133			50-150	Pass	
Perfluorotridecanoic acid (PFTrDA)	%	107			50-150	Pass	
Perfluorotetradecanoic acid (PFTeDA)	%	128			50-150	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
LCS - % Recovery							
Perfluoroalkyl sulfonamido substances							
Perfluorooctane sulfonamide (FOSA)	%	119			50-150	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	%	119			50-150	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	%	123			50-150	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)	%	103			50-150	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)	%	111			50-150	Pass	
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	%	107			50-150	Pass	
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	%	107			50-150	Pass	
LCS - % Recovery							
Perfluoroalkyl sulfonic acids (PFSAs)							
Perfluorobutanesulfonic acid (PFBS)	%	107			50-150	Pass	
Perfluorononanesulfonic acid (PFNS)	%	110			50-150	Pass	
Perfluoropropanesulfonic acid (PFPrS)	%	104			50-150	Pass	
Perfluoropentanesulfonic acid (PFPeS)	%	112			50-150	Pass	
Perfluorohexanesulfonic acid (PFHxS)	%	126			50-150	Pass	
Perfluoroheptanesulfonic acid (PFHpS)	%	121			50-150	Pass	
Perfluorooctanesulfonic acid (PFOS)	%	117			50-150	Pass	
Perfluorodecanesulfonic acid (PFDS)	%	84			50-150	Pass	
LCS - % Recovery							
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)							
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	%	141			50-150	Pass	
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)	%	140			50-150	Pass	
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	%	130			50-150	Pass	
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	%	109			50-150	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Duplicate									
Perfluoroalkyl carboxylic acids (PFCAs)				Result 1	Result 2	RPD			
Perfluorobutanoic acid (PFBA)	M22-Ma57523	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
Perfluoropentanoic acid (PFPeA)	M22-Ma57523	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorohexanoic acid (PFHxA)	M22-Ma57523	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluoroheptanoic acid (PFHpA)	M22-Ma57523	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorooctanoic acid (PFOA)	M22-Ma57523	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorononanoic acid (PFNA)	M22-Ma57523	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorodecanoic acid (PFDA)	M22-Ma57523	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluoroundecanoic acid (PFUnDA)	M22-Ma57523	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorododecanoic acid (PFDoDA)	M22-Ma57523	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorotridecanoic acid (PFTrDA)	M22-Ma57523	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorotetradecanoic acid (PFTeDA)	M22-Ma57523	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Duplicate									
Perfluoroalkyl sulfonamido substances				Result 1	Result 2	RPD			
Perfluorooctane sulfonamide (FOSA)	M22-Ma57523	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	M22-Ma57523	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	M22-Ma57523	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)	M22-Ma57523	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)	M22-Ma57523	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-Ma57523	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	M22-Ma57523	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
Duplicate									
Perfluoroalkyl sulfonic acids (PFSAs)				Result 1	Result 2	RPD			
Perfluorobutanesulfonic acid (PFBS)	M22-Ma57523	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorononanesulfonic acid (PFNS)	M22-Ma57523	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluoropropanesulfonic acid (PFPrS)	M22-Ma57523	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluoropentanesulfonic acid (PFPeS)	M22-Ma57523	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorohexanesulfonic acid (PFHxS)	M22-Ma57523	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluoroheptanesulfonic acid (PFHpS)	M22-Ma57523	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorooctanesulfonic acid (PFOS)	M22-Ma57523	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorodecanesulfonic acid (PFDS)	M22-Ma57523	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Duplicate									
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)				Result 1	Result 2	RPD			
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	M22-Ma57523	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)	M22-Ma57523	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	M22-Ma57523	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	M22-Ma57523	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
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:

Callum McEwan	Analytical Services Manager
Joseph Edouard	Senior Analyst-PFAS (VIC)

Glenn Jackson
General Manager

Final Report – this report replaces any previously issued Report

- Indicates Not Requested

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

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

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

Attention: **David Lawson**

Report **874916-S**
Project name 20220328061722-Eurofin-8
Project ID JC0927
Received Date Mar 28, 2022

Client Sample ID			**SX_IB_20220328_00_07_SS_Primary_EUF**	**SX_IB_20220328_04_00_SS_Primary_EUF**
Sample Matrix			**Soil**	**Soil**
Eurofins Sample No.			**M22-Ma57495**	**M22-Ma57496**
Date Sampled			**Mar 28, 2022**	**Mar 28, 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
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

Client Sample ID			SX_IB_20220328_00_07_SS_Primary_EUF	SX_IB_20220328_04_00_SS_Primary_EUF
Sample Matrix			**Soil**	**Soil**
Eurofins Sample No.			**M22-Ma57495**	**M22-Ma57496**
Date Sampled			**Mar 28, 2022**	**Mar 28, 2022**
Test/Reference	LOR	Unit		
Volatile Organics				
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	%	61	87
Toluene-d8 (surr.)	1	%	57	85
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

Client Sample ID			SX_IB_20220328_00_07_SS_Primary_EUF	SX_IB_20220328_04_00_SS_Primary_EUF
Sample Matrix			**Soil**	**Soil**
Eurofins Sample No.			**M22-Ma57495**	**M22-Ma57496**
Date Sampled			**Mar 28, 2022**	**Mar 28, 2022**
Test/Reference	LOR	Unit		
Polycyclic Aromatic Hydrocarbons				
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	%	73	97
p-Terphenyl-d14 (surr.)	1	%	79	73
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
Dibutylchlorendate (surr.)	1	%	64	82
Tetrachloro-m-xylene (surr.)	1	%	130	75

Client Sample ID			SX_IB_20220328_00_07_SS_Primary_EUF	SX_IB_20220328_04_00_SS_Primary_EUF
Sample Matrix			**Soil**	**Soil**
Eurofins Sample No.			**M22-Ma57495**	**M22-Ma57496**
Date Sampled			**Mar 28, 2022**	**Mar 28, 2022**
Test/Reference	LOR	Unit		
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	%	64	82
Tetrachloro-m-xylene (surr.)	1	%	130	75
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	%	45	45
Total Non-Halogenated Phenol*	20	mg/kg	< 20	< 20
Chromium (hexavalent)	1	mg/kg	< 1	< 1
Cyanide (total)	5	mg/kg	< 5	< 5
Fluoride (Total)	100	mg/kg	< 100	< 100
pH (1:5 Aqueous extract at 25°C as rec.)	0.1	pH Units	10	8.5
% Moisture	1	%	35	31
Heavy Metals				
Arsenic	2	mg/kg	33	20
Cadmium	0.4	mg/kg	< 0.4	< 0.4
Chromium	5	mg/kg	130	110
Copper	5	mg/kg	66	60
Lead	5	mg/kg	6.5	< 5
Mercury	0.1	mg/kg	< 0.1	< 0.1
Molybdenum	5	mg/kg	< 5	< 5

Client Sample ID			SX_IB_20220328_00_07_SS_Primary_EUF	SX_IB_20220328_04_00_SS_Primary_EUF
Sample Matrix			**Soil**	**Soil**
Eurofins Sample No.			**M22-Ma57495**	**M22-Ma57496**
Date Sampled			**Mar 28, 2022**	**Mar 28, 2022**
Test/Reference	LOR	Unit		
Heavy Metals				
Nickel	5	mg/kg	170	160
Selenium	2	mg/kg	< 2	< 2
Silver	2	mg/kg	< 2	< 2
Tin	10	mg/kg	< 10	< 10
Zinc	5	mg/kg	120	110
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	%	79	80
13C5-PFPeA (surr.)	1	%	84	82
13C5-PFHxA (surr.)	1	%	84	82
13C4-PFHpA (surr.)	1	%	81	80
13C8-PFOA (surr.)	1	%	79	85
13C5-PFNA (surr.)	1	%	60	70
13C6-PFDA (surr.)	1	%	81	94
13C2-PFUnDA (surr.)	1	%	115	108
13C2-PFDoDA (surr.)	1	%	113	101
13C2-PFTeDA (surr.)	1	%	122	89
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	%	93	92
D3-N-MeFOSA (surr.)	1	%	78	77
D5-N-EtFOSA (surr.)	1	%	83	82
D7-N-MeFOSE (surr.)	1	%	80	74
D9-N-EtFOSE (surr.)	1	%	86	76
D5-N-EtFOSAA (surr.)	1	%	115	88
D3-N-MeFOSAA (surr.)	1	%	88	65

Client Sample ID			SX_IB_20220328_00_07_SS_Primary_EUF	SX_IB_20220328_04_00_SS_Primary_EUF
Sample Matrix			**Soil**	**Soil**
Eurofins Sample No.			**M22-Ma57495**	**M22-Ma57496**
Date Sampled			**Mar 28, 2022**	**Mar 28, 2022**
Test/Reference	LOR	Unit		
Perfluoroalkyl sulfonic acids (PFSAs)				
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	%	76	79
18O2-PFHxS (surr.)	1	%	72	76
13C8-PFOS (surr.)	1	%	74	73
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)				
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	%	69	62
13C2-6:2 FTSA (surr.)	1	%	73	59
13C2-8:2 FTSA (surr.)	1	%	65	85
13C2-10:2 FTSA (surr.)	1	%	101	71
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	Melbourne	Mar 29, 2022	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
Total Recoverable Hydrocarbons - 2013 NEPM Fractions	Melbourne	Mar 29, 2022	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
Total Recoverable Hydrocarbons - 2013 NEPM Fractions	Melbourne	Mar 29, 2022	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
Volatile Organics	Melbourne	Mar 29, 2022	7 Days
- Method: USEPA 8260 - MGT 350A Volatile Organics by GCMS			
Volatile Organics	Melbourne	Mar 29, 2022	7 Days
- Method: LTM-ORG-2150 VOCs in Soils Liquid and other Aqueous Matrices (USEPA 8260)			
Polycyclic Aromatic Hydrocarbons	Melbourne	Mar 29, 2022	14 Days
- Method: LTM-ORG-2130 PAH and Phenols in Soil and Water			
Organochlorine Pesticides	Melbourne	Mar 29, 2022	14 Days
- Method: LTM-ORG-2220 OCP & PCB in Soil and Water (USEPA 8270)			
Polychlorinated Biphenyls	Melbourne	Mar 29, 2022	28 Days
- Method: LTM-ORG-2220 OCP & PCB in Soil and Water (USEPA 8082)			
Phenols (Halogenated)	Melbourne	Mar 29, 2022	14 Days
- Method: LTM-ORG-2130 PAH and Phenols in Soil and Water			
Phenols (non-Halogenated)	Melbourne	Mar 29, 2022	14 Days
- Method: LTM-ORG-2130 PAH and Phenols in Soil and Water			
Chromium (hexavalent)	Melbourne	Mar 29, 2022	28 Days
- Method: LTM-INO-4100 Hexavalent Chromium by Spectrometric detection			
Cyanide (total)	Melbourne	Mar 29, 2022	14 Days
- Method: LTM-INO-4020 Total Free WAD Cyanide by CFA			
Fluoride (Total)	Melbourne	Mar 30, 2022	28 Days
- Method: LTM-INO-4150 Determination of Total Fluoride PART A – CIC			
pH (1:5 Aqueous extract at 25°C as rec.)	Melbourne	Mar 29, 2022	7 Days
- Method: LTM-GEN-7090 pH in soil by ISE			
Metals IWRG 621 : Metals M12	Melbourne	Mar 29, 2022	28 Days
- Method:			
% Moisture	Melbourne	Mar 28, 2022	14 Days
- Method: LTM-GEN-7080 Moisture			
Per- and Polyfluoroalkyl Substances (PFASs)			
Perfluoroalkyl carboxylic acids (PFCAs)	Melbourne	Mar 29, 2022	28 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			
Perfluoroalkyl sulfonamido substances	Melbourne	Mar 29, 2022	28 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			
Perfluoroalkyl sulfonic acids (PFSAs)	Melbourne	Mar 29, 2022	28 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)	Melbourne	Mar 29, 2022	28 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			
PFASs Summations	Melbourne	Mar 28, 2022	
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			

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Project Name: 20220328061722-Eurofin-8
Project ID: JC0927

Order No.:
Report #: 874916
Phone: 08 8338 1009
Fax:

Received: Mar 28, 2022 12:39 PM
Due: Apr 4, 2022
Priority: 5 Day
Contact Name: Agon Lab Reports (Spoil Project)

Eurofins Analytical Services Manager : Michael Cassidy

Sample Detail	AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	IWRG 621 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_20220328_00_07_SS_Primary_EUF	Mar 28, 2022	12:07AM	Soil	M22-Ma57495		X	X	X
2	SX_IB_20220328_04_00_SS_Primary_EUF	Mar 28, 2022	4:00AM	Soil	M22-Ma57496		X	X	X
3	SX_IB_20220328_00_07_SS_Primary_EUF	Mar 28, 2022	12:07AM	AUS Leachate - pH 5.0	M22-Ma57497	X		X	
4	SX_IB_20220328_04_00_SS_Primary_EUF	Mar 28, 2022	4:00AM	AUS Leachate - pH 5.0	M22-Ma57498	X		X	

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SA 5063

Project Name: 20220328061722-Eurofin-8
Project ID: JC0927

Order No.:
Report #: 874916
Phone: 08 8338 1009
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Received: Mar 28, 2022 12:39 PM
Due: Apr 4, 2022
Priority: 5 Day
Contact Name: Agon Lab Reports (Spoil Project)

Eurofins Analytical Services Manager : Michael Cassidy

Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	IWRG 621 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									
5	SX_IB_20220328_00_07_SS_Primary_EUF	Mar 28, 2022	12:07AM	AUS Leachate - Reagent Water	M22-Ma57499	X		X	
6	SX_IB_20220328_04_00_SS_Primary_EUF	Mar 28, 2022	4:00AM	AUS Leachate - Reagent Water	M22-Ma57500	X		X	
Test Counts						4	2	6	2

Internal Quality Control Review and Glossary

General

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

Holding Times

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

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

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

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

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

Units

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

Terms

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

QC - Acceptance Criteria

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

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

Results <10 times the LOR: No Limit

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

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

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

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

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

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QC Data General Comments

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

Quality Control Results

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

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

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

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Zinc	mg/kg	< 5			5	Pass	
Method Blank							
Perfluoroalkyl carboxylic acids (PFCAs)							
Perfluorobutanoic acid (PFBA)	ug/kg	< 5			5	Pass	
Perfluoropentanoic acid (PFPeA)	ug/kg	< 5			5	Pass	
Perfluorohexanoic acid (PFHxA)	ug/kg	< 5			5	Pass	
Perfluoroheptanoic acid (PFHpA)	ug/kg	< 5			5	Pass	
Perfluorooctanoic acid (PFOA)	ug/kg	< 5			5	Pass	
Perfluorononanoic acid (PFNA)	ug/kg	< 5			5	Pass	
Perfluorodecanoic acid (PFDA)	ug/kg	< 5			5	Pass	
Perfluoroundecanoic acid (PFUnDA)	ug/kg	< 5			5	Pass	
Perfluorododecanoic acid (PFDoDA)	ug/kg	< 5			5	Pass	
Perfluorotridecanoic acid (PFTrDA)	ug/kg	< 5			5	Pass	
Perfluorotetradecanoic acid (PFTeDA)	ug/kg	< 5			5	Pass	
Method Blank							
Perfluoroalkyl sulfonamido substances							
Perfluorooctane sulfonamide (FOSA)	ug/kg	< 5			5	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	ug/kg	< 5			5	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	ug/kg	< 5			5	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)	ug/kg	< 5			5	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)	ug/kg	< 5			5	Pass	
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	ug/kg	< 10			10	Pass	
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	ug/kg	< 10			10	Pass	
Method Blank							
Perfluoroalkyl sulfonic acids (PFSAs)							
Perfluorobutanesulfonic acid (PFBS)	ug/kg	< 5			5	Pass	
Perfluorononanesulfonic acid (PFNS)	ug/kg	< 5			5	Pass	
Perfluoropropanesulfonic acid (PFPrS)	ug/kg	< 5			5	Pass	
Perfluoropentanesulfonic acid (PFPeS)	ug/kg	< 5			5	Pass	
Perfluorohexanesulfonic acid (PFHxS)	ug/kg	< 5			5	Pass	
Perfluoroheptanesulfonic acid (PFHpS)	ug/kg	< 5			5	Pass	
Perfluorooctanesulfonic acid (PFOS)	ug/kg	< 5			5	Pass	
Perfluorodecanesulfonic acid (PFDS)	ug/kg	< 5			5	Pass	
Method Blank							
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)							
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	ug/kg	< 5			5	Pass	
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)	ug/kg	< 10			10	Pass	
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	ug/kg	< 5			5	Pass	
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	ug/kg	< 5			5	Pass	
LCS - % Recovery							
Total Recoverable Hydrocarbons							
TRH C6-C9	%	94			70-130	Pass	
TRH C10-C14	%	95			70-130	Pass	
Naphthalene	%	83			70-130	Pass	
TRH C6-C10	%	92			70-130	Pass	
TRH >C10-C16	%	94			70-130	Pass	
LCS - % Recovery							
Volatile Organics							
1.1-Dichloroethene	%	75			70-130	Pass	
1.1.1-Trichloroethane	%	85			70-130	Pass	
1.2-Dichlorobenzene	%	106			70-130	Pass	
1.2-Dichloroethane	%	90			70-130	Pass	
Benzene	%	77			70-130	Pass	
Ethylbenzene	%	85			70-130	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
m&p-Xylenes	%	83			70-130	Pass	
Toluene	%	85			70-130	Pass	
Trichloroethene	%	78			70-130	Pass	
Xylenes - Total*	%	83			70-130	Pass	
LCS - % Recovery							
Polycyclic Aromatic Hydrocarbons							
Acenaphthene	%	128			70-130	Pass	
Acenaphthylene	%	128			70-130	Pass	
Anthracene	%	111			70-130	Pass	
Benz(a)anthracene	%	112			70-130	Pass	
Benzo(a)pyrene	%	121			70-130	Pass	
Benzo(b&j)fluoranthene	%	118			70-130	Pass	
Benzo(g.h.i)perylene	%	76			70-130	Pass	
Benzo(k)fluoranthene	%	119			70-130	Pass	
Chrysene	%	110			70-130	Pass	
Dibenz(a.h)anthracene	%	113			70-130	Pass	
Fluoranthene	%	116			70-130	Pass	
Fluorene	%	127			70-130	Pass	
Indeno(1.2.3-cd)pyrene	%	119			70-130	Pass	
Naphthalene	%	122			70-130	Pass	
Phenanthrene	%	113			70-130	Pass	
Pyrene	%	126			70-130	Pass	
LCS - % Recovery							
Organochlorine Pesticides							
Chlordanes - Total	%	95			70-130	Pass	
4.4'-DDD	%	97			70-130	Pass	
4.4'-DDE	%	83			70-130	Pass	
4.4'-DDT	%	82			70-130	Pass	
a-HCH	%	91			70-130	Pass	
Aldrin	%	88			70-130	Pass	
b-HCH	%	94			70-130	Pass	
d-HCH	%	88			70-130	Pass	
Dieldrin	%	108			70-130	Pass	
Endosulfan I	%	85			70-130	Pass	
Endosulfan II	%	86			70-130	Pass	
Endosulfan sulphate	%	83			70-130	Pass	
Endrin	%	97			70-130	Pass	
Endrin aldehyde	%	107			70-130	Pass	
Endrin ketone	%	117			70-130	Pass	
g-HCH (Lindane)	%	100			70-130	Pass	
Heptachlor	%	86			70-130	Pass	
Heptachlor epoxide	%	81			70-130	Pass	
Hexachlorobenzene	%	80			70-130	Pass	
Methoxychlor	%	71			70-130	Pass	
LCS - % Recovery							
Polychlorinated Biphenyls							
Aroclor-1260	%	109			70-130	Pass	
LCS - % Recovery							
Phenols (Halogenated)							
2-Chlorophenol	%	76			25-140	Pass	
2.4-Dichlorophenol	%	54			25-140	Pass	
2.4.5-Trichlorophenol	%	47			25-140	Pass	
2.4.6-Trichlorophenol	%	59			25-140	Pass	
2.6-Dichlorophenol	%	52			25-140	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
4-Chloro-3-methylphenol	%	59			25-140	Pass	
Pentachlorophenol	%	48			25-140	Pass	
Tetrachlorophenols - Total	%	47			25-140	Pass	
LCS - % Recovery							
Phenols (non-Halogenated)							
2-Cyclohexyl-4.6-dinitrophenol	%	74			25-140	Pass	
2-Methyl-4.6-dinitrophenol	%	38			25-140	Pass	
2-Nitrophenol	%	56			25-140	Pass	
2.4-Dimethylphenol	%	61			25-140	Pass	
2.4-Dinitrophenol	%	68			25-140	Pass	
2-Methylphenol (o-Cresol)	%	75			25-140	Pass	
3&4-Methylphenol (m&p-Cresol)	%	66			25-140	Pass	
4-Nitrophenol	%	44			25-140	Pass	
Dinoseb	%	46			25-140	Pass	
Phenol	%	78			25-140	Pass	
LCS - % Recovery							
Chromium (hexavalent)	%	107			70-130	Pass	
Cyanide (total)	%	95			70-130	Pass	
Fluoride (Total)	%	73			70-130	Pass	
LCS - % Recovery							
Heavy Metals							
Arsenic	%	112			80-120	Pass	
Cadmium	%	108			80-120	Pass	
Chromium	%	113			80-120	Pass	
Copper	%	112			80-120	Pass	
Lead	%	114			80-120	Pass	
Mercury	%	117			80-120	Pass	
Molybdenum	%	111			80-120	Pass	
Nickel	%	109			80-120	Pass	
Selenium	%	109			80-120	Pass	
Silver	%	109			80-120	Pass	
Tin	%	118			80-120	Pass	
Zinc	%	110			80-120	Pass	
LCS - % Recovery							
Perfluoroalkyl carboxylic acids (PFCAs)							
Perfluorobutanoic acid (PFBA)	%	89			50-150	Pass	
Perfluoropentanoic acid (PFPeA)	%	82			50-150	Pass	
Perfluorohexanoic acid (PFHxA)	%	92			50-150	Pass	
Perfluoroheptanoic acid (PFHpA)	%	89			50-150	Pass	
Perfluorooctanoic acid (PFOA)	%	102			50-150	Pass	
Perfluorononanoic acid (PFNA)	%	106			50-150	Pass	
Perfluorodecanoic acid (PFDA)	%	104			50-150	Pass	
Perfluoroundecanoic acid (PFUnDA)	%	95			50-150	Pass	
Perfluorododecanoic acid (PFDoDA)	%	97			50-150	Pass	
Perfluorotridecanoic acid (PFTrDA)	%	111			50-150	Pass	
Perfluorotetradecanoic acid (PFTeDA)	%	97			50-150	Pass	
LCS - % Recovery							
Perfluoroalkyl sulfonamido substances							
Perfluorooctane sulfonamide (FOSA)	%	95			50-150	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	%	89			50-150	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	%	99			50-150	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)	%	87			50-150	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)	%	91			50-150	Pass	
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	%	73			50-150	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	%	87			50-150	Pass	
LCS - % Recovery							
Perfluoroalkyl sulfonic acids (PFSAs)							
Perfluorobutanesulfonic acid (PFBS)	%	86			50-150	Pass	
Perfluorononanesulfonic acid (PFNS)	%	95			50-150	Pass	
Perfluoropropanesulfonic acid (PFPrS)	%	90			50-150	Pass	
Perfluoropentanesulfonic acid (PFPeS)	%	81			50-150	Pass	
Perfluorohexanesulfonic acid (PFHxS)	%	83			50-150	Pass	
Perfluoroheptanesulfonic acid (PFHpS)	%	119			50-150	Pass	
Perfluorooctanesulfonic acid (PFOS)	%	88			50-150	Pass	
Perfluorodecanesulfonic acid (PFDS)	%	103			50-150	Pass	
LCS - % Recovery							
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)							
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	%	96			50-150	Pass	
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)	%	95			50-150	Pass	
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	%	116			50-150	Pass	
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	%	80			50-150	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Spike - % Recovery									
Total Recoverable Hydrocarbons				Result 1					
TRH C6-C9	M22-Ma52653	NCP	%	98			70-130	Pass	
TRH C10-C14	M22-Ma56622	NCP	%	102			70-130	Pass	
Naphthalene	M22-Ma52653	NCP	%	107			70-130	Pass	
TRH C6-C10	M22-Ma52653	NCP	%	93			70-130	Pass	
TRH >C10-C16	M22-Ma56622	NCP	%	102			70-130	Pass	
Spike - % Recovery									
Volatile Organics				Result 1					
1.1-Dichloroethene	M22-Ma52653	NCP	%	71			70-130	Pass	
1.1.1-Trichloroethane	M22-Ma52653	NCP	%	70			70-130	Pass	
1.2-Dichlorobenzene	M22-Ma52653	NCP	%	120			70-130	Pass	
1.2-Dichloroethane	M22-Ma52653	NCP	%	91			70-130	Pass	
Benzene	M22-Ma52653	NCP	%	81			70-130	Pass	
Ethylbenzene	M22-Ma52653	NCP	%	98			70-130	Pass	
m&p-Xylenes	M22-Ma52653	NCP	%	95			70-130	Pass	
o-Xylene	M22-Ma52653	NCP	%	96			70-130	Pass	
Toluene	M22-Ma52653	NCP	%	97			70-130	Pass	
Trichloroethene	M22-Ma56316	NCP	%	74			70-130	Pass	
Xylenes - Total*	M22-Ma52653	NCP	%	95			70-130	Pass	
Spike - % Recovery									
Polycyclic Aromatic Hydrocarbons				Result 1					
Acenaphthene	M22-Ma59201	NCP	%	76			70-130	Pass	
Acenaphthylene	M22-Ma59201	NCP	%	73			70-130	Pass	
Anthracene	M22-Ma59201	NCP	%	80			70-130	Pass	
Benz(a)anthracene	M22-Ma59201	NCP	%	85			70-130	Pass	
Benzo(a)pyrene	M22-Ma59201	NCP	%	80			70-130	Pass	
Benzo(b&j)fluoranthene	M22-Ma59201	NCP	%	71			70-130	Pass	
Benzo(g.h.i)perylene	M22-Ma59201	NCP	%	77			70-130	Pass	
Benzo(k)fluoranthene	M22-Ma59201	NCP	%	74			70-130	Pass	
Chrysene	M22-Ma59201	NCP	%	80			70-130	Pass	
Dibenz(a.h)anthracene	M22-Ma59201	NCP	%	74			70-130	Pass	
Fluoranthene	M22-Ma59201	NCP	%	79			70-130	Pass	
Fluorene	M22-Ma59201	NCP	%	84			70-130	Pass	
Indeno(1.2.3-cd)pyrene	M22-Ma59201	NCP	%	73			70-130	Pass	
Naphthalene	M22-Ma59201	NCP	%	77			70-130	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Phenanthrene	M22-Ma59201	NCP	%	73			70-130	Pass	
Pyrene	M22-Ma59201	NCP	%	86			70-130	Pass	
Spike - % Recovery									
Phenols (Halogenated)				Result 1					
2-Chlorophenol	M22-Ma59201	NCP	%	58			30-130	Pass	
2.4-Dichlorophenol	M22-Ma59201	NCP	%	51			30-130	Pass	
2.4.5-Trichlorophenol	M22-Ma59201	NCP	%	44			30-130	Pass	
2.4.6-Trichlorophenol	M22-Ma59201	NCP	%	44			30-130	Pass	
2.6-Dichlorophenol	M22-Ma59201	NCP	%	48			30-130	Pass	
4-Chloro-3-methylphenol	M22-Ma59201	NCP	%	42			30-130	Pass	
Pentachlorophenol	M22-Ma59201	NCP	%	36			30-130	Pass	
Tetrachlorophenols - Total	M22-Ma59201	NCP	%	41			30-130	Pass	
Spike - % Recovery									
Phenols (non-Halogenated)				Result 1					
2-Cyclohexyl-4.6-dinitrophenol	M22-Ma47594	NCP	%	85			30-130	Pass	
2-Methyl-4.6-dinitrophenol	M22-Ma59201	NCP	%	38			30-130	Pass	
2-Nitrophenol	M22-Ma59201	NCP	%	40			30-130	Pass	
2.4-Dimethylphenol	M22-Ma59201	NCP	%	45			30-130	Pass	
2.4-Dinitrophenol	M22-Ma59201	NCP	%	34			30-130	Pass	
2-Methylphenol (o-Cresol)	M22-Ma59201	NCP	%	56			30-130	Pass	
3&4-Methylphenol (m&p-Cresol)	M22-Ma59201	NCP	%	43			30-130	Pass	
4-Nitrophenol	M22-Ma59201	NCP	%	51			30-130	Pass	
Dinoseb	M22-Ma59201	NCP	%	36			30-130	Pass	
Phenol	M22-Ma59201	NCP	%	49			30-130	Pass	
Spike - % Recovery									
				Result 1					
Chromium (hexavalent)	M22-Ma57514	NCP	%	73			70-130	Pass	
Cyanide (total)	M22-Ma60375	NCP	%	73			70-130	Pass	
Fluoride (Total)	M22-Ma57507	NCP	%	101			70-130	Pass	
Spike - % Recovery									
Heavy Metals				Result 1					
Arsenic	M22-Ma59454	NCP	%	119			75-125	Pass	
Cadmium	M22-Ma59454	NCP	%	106			75-125	Pass	
Chromium	M22-Ma59454	NCP	%	100			75-125	Pass	
Copper	M22-Ma59454	NCP	%	125			75-125	Pass	
Lead	M22-Ma59344	NCP	%	95			75-125	Pass	
Mercury	M22-Ma59344	NCP	%	117			75-125	Pass	
Molybdenum	M22-Ma59454	NCP	%	102			75-125	Pass	
Nickel	M22-Ma59454	NCP	%	92			75-125	Pass	
Selenium	M22-Ma59454	NCP	%	98			75-125	Pass	
Silver	M22-Ma59454	NCP	%	105			75-125	Pass	
Tin	M22-Ma59344	NCP	%	107			75-125	Pass	
Zinc	M22-Ma59344	NCP	%	92			75-125	Pass	
Spike - % Recovery									
Perfluoroalkyl carboxylic acids (PFCAs)				Result 1					
Perfluorobutanoic acid (PFBA)	M22-Ma53353	NCP	%	87			50-150	Pass	
Perfluoropentanoic acid (PFPeA)	M22-Ma53353	NCP	%	72			50-150	Pass	
Perfluorohexanoic acid (PFHxA)	M22-Ma53353	NCP	%	82			50-150	Pass	
Perfluoroheptanoic acid (PFHpA)	M22-Ma53353	NCP	%	85			50-150	Pass	
Perfluorooctanoic acid (PFOA)	M22-Ma53353	NCP	%	83			50-150	Pass	
Perfluorononanoic acid (PFNA)	M22-Ma53353	NCP	%	106			50-150	Pass	
Perfluorodecanoic acid (PFDA)	M22-Ma53353	NCP	%	98			50-150	Pass	
Perfluoroundecanoic acid (PFUnDA)	M22-Ma53353	NCP	%	87			50-150	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Perfluorododecanoic acid (PFDoDA)	M22-Ma53353	NCP	%	100			50-150	Pass	
Perfluorotridecanoic acid (PFTrDA)	M22-Ma53353	NCP	%	83			50-150	Pass	
Perfluorotetradecanoic acid (PFTeDA)	M22-Ma53353	NCP	%	91			50-150	Pass	
Spike - % Recovery									
Perfluoroalkyl sulfonamido substances				Result 1					
Perfluorooctane sulfonamide (FOSA)	M22-Ma53353	NCP	%	88			50-150	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	M22-Ma53353	NCP	%	79			50-150	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	M22-Ma53353	NCP	%	81			50-150	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)	M22-Ma53353	NCP	%	74			50-150	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)	M22-Ma53353	NCP	%	95			50-150	Pass	
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	M22-Ma53353	NCP	%	70			50-150	Pass	
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	M22-Ma53353	NCP	%	84			50-150	Pass	
Spike - % Recovery									
Perfluoroalkyl sulfonic acids (PFSAs)				Result 1					
Perfluorobutanesulfonic acid (PFBS)	M22-Ma53353	NCP	%	73			50-150	Pass	
Perfluorononanesulfonic acid (PFNS)	M22-Ma53353	NCP	%	94			50-150	Pass	
Perfluoropropanesulfonic acid (PFPrS)	M22-Ma53353	NCP	%	78			50-150	Pass	
Perfluoropentanesulfonic acid (PFPeS)	M22-Ma53353	NCP	%	73			50-150	Pass	
Perfluorohexanesulfonic acid (PFHxS)	M22-Ma53353	NCP	%	74			50-150	Pass	
Perfluoroheptanesulfonic acid (PFHpS)	M22-Ma53353	NCP	%	89			50-150	Pass	
Perfluorooctanesulfonic acid (PFOS)	M22-Ma53353	NCP	%	81			50-150	Pass	
Perfluorodecanesulfonic acid (PFDS)	M22-Ma53353	NCP	%	94			50-150	Pass	
Spike - % Recovery									
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)				Result 1					
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	M22-Ma53353	NCP	%	116			50-150	Pass	
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)	M22-Ma53353	NCP	%	85			50-150	Pass	
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	M22-Ma53353	NCP	%	116			50-150	Pass	
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	M22-Ma53353	NCP	%	68			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-Ma59447	NCP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH C10-C14	M22-Ma56621	NCP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH C15-C28	M22-Ma56621	NCP	mg/kg	< 50	< 50	<1	30%	Pass	
TRH C29-C36	M22-Ma56621	NCP	mg/kg	< 50	< 50	<1	30%	Pass	
Naphthalene	M22-Ma59447	NCP	mg/kg	< 0.5	< 0.5	<1	30%	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-C10	M22-Ma59447	NCP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH >C10-C16	M22-Ma56621	NCP	mg/kg	< 50	< 50	<1	30%	Pass	
TRH >C16-C34	M22-Ma56621	NCP	mg/kg	< 100	< 100	<1	30%	Pass	
TRH >C34-C40	M22-Ma56621	NCP	mg/kg	< 100	< 100	<1	30%	Pass	
Duplicate									
Volatile Organics				Result 1	Result 2	RPD			
Hexachlorobutadiene	M22-Ma59447	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
Volatile Organics				Result 1	Result 2	RPD			
1.1-Dichloroethane	M22-Ma59447	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2.4-Trichlorobenzene	M22-Ma59447	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1-Dichloroethene	M22-Ma59447	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1.1-Trichloroethane	M22-Ma59447	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1.1.2-Tetrachloroethane	M22-Ma59447	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1.2-Trichloroethane	M22-Ma59447	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1.2.2-Tetrachloroethane	M22-Ma59447	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2-Dibromoethane	M22-Ma59447	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2-Dichlorobenzene	M22-Ma59447	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2-Dichloroethane	M22-Ma59447	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2-Dichloropropane	M22-Ma59447	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2.3-Trichloropropane	M22-Ma59447	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2.4-Trimethylbenzene	M22-Ma59447	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.3-Dichlorobenzene	M22-Ma59447	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.3-Dichloropropane	M22-Ma59447	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.3.5-Trimethylbenzene	M22-Ma59447	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.4-Dichlorobenzene	M22-Ma59447	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2-Butanone (MEK)	M22-Ma59447	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2-Propanone (Acetone)	M22-Ma59447	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
4-Chlorotoluene	M22-Ma59447	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
4-Methyl-2-pentanone (MIBK)	M22-Ma59447	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Allyl chloride	M22-Ma59447	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzene	M22-Ma59447	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Bromobenzene	M22-Ma59447	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Bromochloromethane	M22-Ma59447	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Bromodichloromethane	M22-Ma59447	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Bromoform	M22-Ma59447	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Bromomethane	M22-Ma59447	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Carbon disulfide	M22-Ma59447	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Carbon Tetrachloride	M22-Ma59447	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chlorobenzene	M22-Ma59447	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chloroethane	M22-Ma59447	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chloroform	M22-Ma59447	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chloromethane	M22-Ma59447	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
cis-1.2-Dichloroethene	M22-Ma59447	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
cis-1.3-Dichloropropene	M22-Ma59447	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dibromochloromethane	M22-Ma59447	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dibromomethane	M22-Ma59447	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dichlorodifluoromethane	M22-Ma59447	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Ethylbenzene	M22-Ma59447	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Iodomethane	M22-Ma59447	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Isopropyl benzene (Cumene)	M22-Ma59447	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
m&p-Xylenes	M22-Ma59447	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	

Duplicate									
Volatile Organics				Result 1	Result 2	RPD			
Methylene Chloride	M22-Ma59447	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
o-Xylene	M22-Ma59447	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Styrene	M22-Ma59447	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Tetrachloroethene	M22-Ma59447	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Toluene	M22-Ma59447	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
trans-1.2-Dichloroethene	M22-Ma59447	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
trans-1.3-Dichloropropene	M22-Ma59447	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Trichloroethene	M22-Ma59447	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Trichlorofluoromethane	M22-Ma59447	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Vinyl chloride	M22-Ma59447	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Xylenes - Total*	M22-Ma59447	NCP	mg/kg	< 0.3	< 0.3	<1	30%	Pass	
Duplicate									
Polycyclic Aromatic Hydrocarbons				Result 1	Result 2	RPD			
Acenaphthene	M22-Ma59201	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Acenaphthylene	M22-Ma59201	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Anthracene	M22-Ma59201	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benz(a)anthracene	M22-Ma59201	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(a)pyrene	M22-Ma59201	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(b&j)fluoranthene	M22-Ma59201	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(g.h.i)perylene	M22-Ma59201	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(k)fluoranthene	M22-Ma59201	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chrysene	M22-Ma59201	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dibenz(a.h)anthracene	M22-Ma59201	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Fluoranthene	M22-Ma59201	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Fluorene	M22-Ma59201	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Indeno(1.2.3-cd)pyrene	M22-Ma59201	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Naphthalene	M22-Ma59201	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Phenanthrene	M22-Ma59201	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Pyrene	M22-Ma59201	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
Organochlorine Pesticides				Result 1	Result 2	RPD			
Chlordanes - Total	M22-Ma59201	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
4.4'-DDD	M22-Ma59201	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
4.4'-DDE	M22-Ma59201	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
4.4'-DDT	M22-Ma59201	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
a-HCH	M22-Ma59201	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Aldrin	M22-Ma59201	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
b-HCH	M22-Ma59201	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
d-HCH	M22-Ma59201	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Dieldrin	M22-Ma59201	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan I	M22-Ma59201	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan II	M22-Ma59201	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan sulphate	M22-Ma59201	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin	M22-Ma59201	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin aldehyde	M22-Ma59201	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin ketone	M22-Ma59201	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
g-HCH (Lindane)	M22-Ma59201	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Heptachlor	M22-Ma59201	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Hexachlorobenzene	M22-Ma59201	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Methoxychlor	M22-Ma59201	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Toxaphene	M22-Ma59201	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	

Duplicate									
Polychlorinated Biphenyls				Result 1	Result 2	RPD			
Aroclor-1016	M22-Ma59201	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Aroclor-1221	M22-Ma59201	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Aroclor-1232	M22-Ma59201	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Aroclor-1242	M22-Ma59201	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Aroclor-1248	M22-Ma59201	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Aroclor-1254	M22-Ma59201	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Aroclor-1260	M22-Ma59201	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Total PCB*	M22-Ma59201	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Duplicate									
Phenols (Halogenated)				Result 1	Result 2	RPD			
2-Chlorophenol	M22-Ma59201	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2.4-Dichlorophenol	M22-Ma59201	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2.4.5-Trichlorophenol	M22-Ma59201	NCP	mg/kg	< 1	< 1	<1	30%	Pass	
2.4.6-Trichlorophenol	M22-Ma59201	NCP	mg/kg	< 1	< 1	<1	30%	Pass	
4-Chloro-3-methylphenol	M22-Ma59201	NCP	mg/kg	< 1	< 1	<1	30%	Pass	
Pentachlorophenol	M22-Ma59201	NCP	mg/kg	< 1	< 1	<1	30%	Pass	
Tetrachlorophenols - Total	M22-Ma59201	NCP	mg/kg	< 10	< 10	<1	30%	Pass	
Duplicate									
Phenols (non-Halogenated)				Result 1	Result 2	RPD			
2-Cyclohexyl-4.6-dinitrophenol	M22-Ma59201	NCP	mg/kg	< 20	< 20	<1	30%	Pass	
2-Methyl-4.6-dinitrophenol	M22-Ma59201	NCP	mg/kg	< 5	< 5	<1	30%	Pass	
2-Nitrophenol	M22-Ma59201	NCP	mg/kg	< 1	< 1	<1	30%	Pass	
2.4-Dimethylphenol	M22-Ma59201	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2.4-Dinitrophenol	M22-Ma59201	NCP	mg/kg	< 5	< 5	<1	30%	Pass	
2-Methylphenol (o-Cresol)	M22-Ma59201	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
3&4-Methylphenol (m&p-Cresol)	M22-Ma59201	NCP	mg/kg	< 0.4	< 0.4	<1	30%	Pass	
4-Nitrophenol	M22-Ma59201	NCP	mg/kg	< 5	< 5	<1	30%	Pass	
Dinoseb	M22-Ma59201	NCP	mg/kg	< 20	< 20	<1	30%	Pass	
Phenol	M22-Ma59201	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
				Result 1	Result 2	RPD			
Chromium (hexavalent)	M22-Ma57495	CP	mg/kg	< 1	< 1	<1	30%	Pass	
Cyanide (total)	M22-Ma57495	CP	mg/kg	< 5	< 5	<1	30%	Pass	
Fluoride (Total)	M22-Ma57506	NCP	mg/kg	< 100	< 100	<1	30%	Pass	
pH (1:5 Aqueous extract at 25°C as rec.)	M22-Ma59452	NCP	pH Units	8.2	8.6	pass	30%	Pass	
% Moisture	N22-Ma57754	NCP	%	23	25	8.0	30%	Pass	
Duplicate									
Heavy Metals				Result 1	Result 2	RPD			
Arsenic	M22-Ma59454	NCP	mg/kg	21	20	6.0	30%	Pass	
Cadmium	M22-Ma59454	NCP	mg/kg	0.5	0.4	13	30%	Pass	
Chromium	M22-Ma59454	NCP	mg/kg	41	36	10	30%	Pass	
Copper	M22-Ma59454	NCP	mg/kg	66	53	20	30%	Pass	
Lead	M22-Ma59454	NCP	mg/kg	200	250	25	30%	Pass	
Mercury	M22-Ma59454	NCP	mg/kg	0.2	0.3	25	30%	Pass	
Molybdenum	M22-Ma59454	NCP	mg/kg	< 5	< 5	<1	30%	Pass	
Nickel	M22-Ma59454	NCP	mg/kg	43	47	7.0	30%	Pass	
Selenium	M22-Ma59454	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Silver	M22-Ma59454	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Tin	M22-Ma59454	NCP	mg/kg	< 10	13	56	30%	Fail	Q15
Zinc	M22-Ma59454	NCP	mg/kg	380	400	5.0	30%	Pass	

Duplicate								
Perfluoroalkyl carboxylic acids (PFCAs)				Result 1	Result 2	RPD		
Perfluorobutanoic acid (PFBA)	M22-Ma57513	NCP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluoropentanoic acid (PFPeA)	M22-Ma57513	NCP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluorohexanoic acid (PFHxA)	M22-Ma57513	NCP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluoroheptanoic acid (PFHpA)	M22-Ma57513	NCP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluorooctanoic acid (PFOA)	M22-Ma57513	NCP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluorononanoic acid (PFNA)	M22-Ma57513	NCP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluorodecanoic acid (PFDA)	M22-Ma57513	NCP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluoroundecanoic acid (PFUnDA)	M22-Ma57513	NCP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluorododecanoic acid (PFDoDA)	M22-Ma57513	NCP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluorotridecanoic acid (PFTrDA)	M22-Ma57513	NCP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluorotetradecanoic acid (PFTeDA)	M22-Ma57513	NCP	ug/kg	< 5	< 5	<1	30%	Pass
Duplicate								
Perfluoroalkyl sulfonamido substances				Result 1	Result 2	RPD		
Perfluorooctane sulfonamide (FOSA)	M22-Ma57513	NCP	ug/kg	< 5	< 5	<1	30%	Pass
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	M22-Ma57513	NCP	ug/kg	< 5	< 5	<1	30%	Pass
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	M22-Ma57513	NCP	ug/kg	< 5	< 5	<1	30%	Pass
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)	M22-Ma57513	NCP	ug/kg	< 5	< 5	<1	30%	Pass
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)	M22-Ma57513	NCP	ug/kg	< 5	< 5	<1	30%	Pass
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	M22-Ma57513	NCP	ug/kg	< 10	< 10	<1	30%	Pass
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	M22-Ma57513	NCP	ug/kg	< 10	< 10	<1	30%	Pass
Duplicate								
Perfluoroalkyl sulfonic acids (PFSAs)				Result 1	Result 2	RPD		
Perfluorobutanesulfonic acid (PFBS)	M22-Ma57513	NCP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluorononanesulfonic acid (PFNS)	M22-Ma57513	NCP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluoropropanesulfonic acid (PFPrS)	M22-Ma57513	NCP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluoropentanesulfonic acid (PFPeS)	M22-Ma57513	NCP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluorohexanesulfonic acid (PFHxS)	M22-Ma57513	NCP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluoroheptanesulfonic acid (PFHpS)	M22-Ma57513	NCP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluorooctanesulfonic acid (PFOS)	M22-Ma57513	NCP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluorodecanesulfonic acid (PFDS)	M22-Ma57513	NCP	ug/kg	< 5	< 5	<1	30%	Pass
Duplicate								
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)				Result 1	Result 2	RPD		
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	M22-Ma57513	NCP	ug/kg	< 5	< 5	<1	30%	Pass
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)	M22-Ma57513	NCP	ug/kg	< 10	< 10	<1	30%	Pass
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	M22-Ma57513	NCP	ug/kg	< 5	< 5	<1	30%	Pass
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	M22-Ma57513	NCP	ug/kg	< 5	< 5	<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
N01	F2 is determined by arithmetically subtracting the "naphthalene" value from the ">C10-C16" value. The naphthalene value used in this calculation is obtained from volatiles (Purge & Trap analysis).
N02	Where we have reported both volatile (P&T GCMS) and semivolatile (GCMS) naphthalene data, results may not be identical. Provided correct sample handling protocols have been followed, any observed differences in results are likely to be due to procedural differences within each methodology. Results determined by both techniques have passed all QAQC acceptance criteria, and are entirely technically valid.
N04	F1 is determined by arithmetically subtracting the "Total BTEX" value from the "C6-C10" value. The "Total BTEX" value is obtained by summing the concentrations of BTEX analytes. The "C6-C10" value is obtained by quantitating against a standard of mixed aromatic/aliphatic analytes.
N07	Please note:- These two PAH isomers closely co-elute using the most contemporary analytical methods and both the reported concentration (and the TEQ) apply specifically to the total of the two co-eluting PAHs
N11	Isotope dilution is used for calibration of each native compound for which an exact labelled analogue is available (Isotope Dilution Quantitation). The isotopically labelled analogues allow identification and recovery correction of the concentration of the associated native PFAS compounds.
N15	Where the native PFAS compound does not have labelled analogue then the quantification is made using the Extracted Internal Standard Analyte with the closest retention time to the analyte and no recovery correction has been made (Internal Standard Quantitation).
Q15	The RPD reported passes Eurofins Environment Testing's QC - Acceptance Criteria as defined in the Internal Quality Control Review and Glossary page of this report.

Authorised by:

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

Glenn Jackson
General Manager

Final Report – this report replaces any previously issued Report

- Indicates Not Requested

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

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

CHAIN OF CUSTODY RECORD

Eurofins | Environment Testing ABN 50 005 085 521

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

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

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

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

Company	AGON Environmental - Tunnel Spoil Testing	Project №	JC0927	Project Manager	Craig Trimbur
Address	Unit H76, 63-85 Turner St, Port Melbourne VIC 3207	Project Name	WGTP-Tunnel Ref:20220328061259-Eurofin-8	EDD Format ESdat, EQuIS etc	Esdat
Contact Name	Craig Trimbur David Lawson				
Phone №	+61 400 826 907 (Craig) +61 490 411 004 (David)				
Special Directions	Please provide an interim lab report if finalised report has not been provided by 14 days from sample receipt. Please provide eSRN along with oter sample recipt documentation.				
Purchase Order					
Quote ID №	Agon WGTP TST				

Sampler(s)	LR - EP
Handed over by	
Email for Invoice	finance@agonenviro.com.au LabReports.TST@agonenviro.com.au
Email for Results	LabReports.TST@agonenviro.com.au agonenvironmental@esdat.com.au motherhublabresults1@wgtp.com.au Amrit.Kaur@agile-analytics.com.au

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

Containers (Change container type & size if necessary.)

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

♦Surcharge will apply

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

№	Client Sample ID	Sampled Date/Time dd/mm/yy hh:mm	Matrix Solid (S) Water (W)	Spoil Sample Preparation	Suite WGTP-R1-TRH/ PAH/ Phenols/ OCP/ PCB/ VOC/ Vinyl Chloride/ Metals (As, Cd, Cr, Cu, Ni, Pb,Hg, Ag, Sn, Mo, Se, Zn)/ Cr6+/ CN/ Total Fluoride/ pH	PFAS Extended Suite - 0.1- 5ug/kg	ASLP PH 5 - PFAS 0.01-0.05 ug/l	ASLP Reagent - PFAS 0.01-0.05ug/l	500mL Plastic	250mL Plastic	125mL Plastic	200mL Amber Glass	40mL VOA vial	500mL PFAS Bottle	Jar (Glass or HDPE)	Other (Asbestos AS4964, WA Guidelines)	Sample Comments / Dangerous Goods Hazard Warning
1	SX_OB_20220326_20_12_SS_Primary_EUF	26/03/2022 20:12	S	X	X	X	X	X								1	
2	SX_OB_20220327_00_13_SS_Primary_EUF	27/03/2022 00:13	S	X	X	X	X	X								1	
3	SX_OB_20220327_04_00_SS_Primary_EUF	27/03/2022 04:00	S	X	X	X	X	X								1	
4	SX_OB_20220327_07_58_SS_Triplicate_EUF	27/03/2022 07:58	S	X	X	X	X	X								1	
5	SX_OB_20220327_08_03_SS_Primary_EUF	27/03/2022 08:03	S	X	X	X	X	X								1	
6	SX_OB_20220327_11_44_SS_Primary_EUF	27/03/2022 11:44	S	X	X	X	X	X								1	
7	SX_OB_20220327_15_52_SS_Primary_EUF	27/03/2022 15:52	S	X	X	X	X	X								1	
8	SX_OB_20220327_15_59_SS_Duplicate_EUF	27/03/2022 15:59	S	X	X	X	X	X								1	
9	SX_OB_20220327_20_01_SS_Primary_EUF	27/03/2022 20:01	S	X	X	X	X	X								1	
10																	
11																	
12																	
13																	
			Total Counts	9	9	9	9	9								9	

Method of Shipment	☑ Courier (#)	☐ Hand Delivered	☐ Postal	Name	Will O	Signature	WOH	Date	28/03/2022	Time	

Laboratory Use Only	Received By	Jake	SYD ☐ BNE ☐ MEL ☑ PER ☐ ADL ☐ NTL ☐ DRW	Signature		Date	28/3	Time	12:39	Temperature	20.7
	Received By		SYD ☐ BNE ☐ MEL ☐ PER ☐ ADL ☐ NTL ☐ DRW	Signature		Date		Time		Report №	874920

Jake

Eurofins Environment Testing Australia Pty Ltd

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

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 **874920-L**
Project name 20220328061259-Eurofin-8
Project ID JC0927
Received Date Mar 28, 2022

Client Sample ID			**SX_OB_20220326_20_12_SS_Primary_EUF**	**SX_OB_20220327_00_13_SS_Primary_EUF**	**SX_OB_20220327_04_00_SS_Primary_EUF**	**SX_OB_20220327_07_58_SS_Triplicate_EUF**
Sample Matrix			**AUS Leachate - pH 5.0**	**AUS Leachate - pH 5.0**	**AUS Leachate - pH 5.0**	**AUS Leachate - pH 5.0**
Eurofins Sample No.			**M22-Ma57515**	**M22-Ma57516**	**M22-Ma57517**	**M22-Ma57518**
Date Sampled			**Mar 26, 2022**	**Mar 27, 2022**	**Mar 27, 2022**	**Mar 27, 2022**
Test/Reference	LOR	Unit				
AUS Leaching Procedure						
Leachate Fluid[C01]		comment	1.0	1.0	1.0	1.0
pH (initial)	0.1	pH Units	N/A	N/A	N/A	N/A
pH (Leachate fluid)	0.1	pH Units	5.0	5.0	5.0	5.0
pH (off)	0.1	pH Units	5.2	5.2	5.2	5.2
Perfluoroalkyl carboxylic acids (PFCAs)						
Perfluorobutanoic acid (PFBA)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
Perfluoropentanoic acid (PFPeA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorohexanoic acid (PFHxA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoroheptanoic acid (PFHpA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorooctanoic acid (PFOA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorononanoic acid (PFNA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorodecanoic acid (PFDA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoroundecanoic acid (PFUnDA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorododecanoic acid (PFDoDA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorotridecanoic acid (PFTrDA)[N15]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorotetradecanoic acid (PFTeDA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C4-PFBA (surr.)	1	%	80	79	83	82
13C5-PFPeA (surr.)	1	%	93	94	94	96
13C5-PFHxA (surr.)	1	%	44	44	54	54
13C4-PFHpA (surr.)	1	%	104	99	98	104
13C8-PFOA (surr.)	1	%	118	108	112	116
13C5-PFNA (surr.)	1	%	98	93	91	90
13C6-PFDA (surr.)	1	%	93	97	85	92
13C2-PFUnDA (surr.)	1	%	102	83	76	89
13C2-PFDoDA (surr.)	1	%	116	107	87	105
13C2-PFTeDA (surr.)	1	%	138	143	111	110
Perfluoroalkyl sulfonamido substances						
Perfluorooctane sulfonamide (FOSA)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05

Client Sample ID			SX_OB_20220326_20_12_SS_Primary_EUF	SX_OB_20220327_00_13_SS_Primary_EUF	SX_OB_20220327_04_00_SS_Primary_EUF	SX_OB_20220327_07_58_SS_Triplicate_EUF
Sample Matrix			**AUS Leachate - pH 5.0**	**AUS Leachate - pH 5.0**	**AUS Leachate - pH 5.0**	**AUS Leachate - pH 5.0**
Eurofins Sample No.			**M22-Ma57515**	**M22-Ma57516**	**M22-Ma57517**	**M22-Ma57518**
Date Sampled			**Mar 26, 2022**	**Mar 27, 2022**	**Mar 27, 2022**	**Mar 27, 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	%	104	93	89	95
D3-N-MeFOSA (surr.)	1	%	44	48	50	129
D5-N-EtFOSA (surr.)	1	%	41	52	51	124
D7-N-MeFOSE (surr.)	1	%	91	86	80	100
D9-N-EtFOSE (surr.)	1	%	99	96	94	108
D5-N-EtFOSAA (surr.)	1	%	111	103	76	91
D3-N-MeFOSAA (surr.)	1	%	88	74	65	87
Perfluoroalkyl sulfonic acids (PFSAs)						
Perfluorobutanesulfonic acid (PFBS)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorononanesulfonic acid (PFNS)[N15]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoropropanesulfonic acid (PFPrS)[N15]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoropentanesulfonic acid (PFPeS)[N15]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorohexanesulfonic acid (PFHxS)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoroheptanesulfonic acid (PFHpS)[N15]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorooctanesulfonic acid (PFOS)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorodecanesulfonic acid (PFDS)[N15]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C3-PFBS (surr.)	1	%	61	61	73	83
18O2-PFHxS (surr.)	1	%	90	76	83	90
13C8-PFOS (surr.)	1	%	81	75	66	74
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)						
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C2-4:2 FTSA (surr.)	1	%	123	120	127	116
13C2-6:2 FTSA (surr.)	1	%	136	123	126	135
13C2-8:2 FTSA (surr.)	1	%	166	114	99	104
13C2-10:2 FTSA (surr.)	1	%	103	77	72	82
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_20220327_08_03_SS_Primary_EUF	SX_OB_20220327_11_44_SS_Primary_EUF	SX_OB_20220327_15_52_SS_Primary_EUF	SX_OB_20220327_15_59_SS_Duplicate_EUF
Sample Matrix			**AUS Leachate - pH 5.0**	**AUS Leachate - pH 5.0**	**AUS Leachate - pH 5.0**	**AUS Leachate - pH 5.0**
Eurofins Sample No.			**M22-Ma57519**	**M22-Ma57520**	**M22-Ma57521**	**M22-Ma57522**
Date Sampled			**Mar 27, 2022**	**Mar 27, 2022**	**Mar 27, 2022**	**Mar 27, 2022**
Test/Reference	LOR	Unit				
AUS Leaching Procedure						
Leachate Fluid[C01]		comment	1.0	1.0	1.0	1.0
pH (initial)	0.1	pH Units	N/A	N/A	N/A	N/A
pH (Leachate fluid)	0.1	pH Units	5.0	5.0	5.0	5.0
pH (off)	0.1	pH Units	5.0	5.1	5.5	5.2
Perfluoroalkyl carboxylic acids (PFCAs)						
Perfluorobutanoic acid (PFBA)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
Perfluoropentanoic acid (PFPeA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorohexanoic acid (PFHxA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoroheptanoic acid (PFHpA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorooctanoic acid (PFOA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorononanoic acid (PFNA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorodecanoic acid (PFDA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoroundecanoic acid (PFUnDA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorododecanoic acid (PFDoDA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorotridecanoic acid (PFTrDA)[N15]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorotetradecanoic acid (PFTeDA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C4-PFBA (surr.)	1	%	84	81	82	81
13C5-PFPeA (surr.)	1	%	103	99	97	105
13C5-PFHxA (surr.)	1	%	49	97	97	74
13C4-PFHpA (surr.)	1	%	108	103	107	104
13C8-PFOA (surr.)	1	%	118	113	111	112
13C5-PFNA (surr.)	1	%	103	81	91	88
13C6-PFDA (surr.)	1	%	110	79	103	96
13C2-PFUnDA (surr.)	1	%	105	82	97	86
13C2-PFDoDA (surr.)	1	%	128	90	115	96
13C2-PFTeDA (surr.)	1	%	135	92	134	95
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	%	119	99	117	109
D3-N-MeFOSA (surr.)	1	%	61	116	142	131
D5-N-EtFOSA (surr.)	1	%	61	115	144	122
D7-N-MeFOSE (surr.)	1	%	104	95	120	104
D9-N-EtFOSE (surr.)	1	%	107	104	153	115
D5-N-EtFOSAA (surr.)	1	%	132	88	109	111
D3-N-MeFOSAA (surr.)	1	%	98	82	91	86

Client Sample ID			SX_OB_20220327_08_03_SS_Primary_EUF	SX_OB_20220327_11_44_SS_Primary_EUF	SX_OB_20220327_15_52_SS_Primary_EUF	SX_OB_20220327_15_59_SS_Duplicate_EUF
Sample Matrix			**AUS Leachate - pH 5.0**	**AUS Leachate - pH 5.0**	**AUS Leachate - pH 5.0**	**AUS Leachate - pH 5.0**
Eurofins Sample No.			**M22-Ma57519**	**M22-Ma57520**	**M22-Ma57521**	**M22-Ma57522**
Date Sampled			**Mar 27, 2022**	**Mar 27, 2022**	**Mar 27, 2022**	**Mar 27, 2022**
Test/Reference	LOR	Unit				
Perfluoroalkyl sulfonic acids (PFSAs)						
Perfluorobutanesulfonic acid (PFBS)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorononanesulfonic acid (PFNS)[N15]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoropropanesulfonic acid (PFPrS)[N15]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoropentanesulfonic acid (PFPeS)[N15]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorohexanesulfonic acid (PFHxS)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoroheptanesulfonic acid (PFHpS)[N15]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorooctanesulfonic acid (PFOS)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorodecanesulfonic acid (PFDS)[N15]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C3-PFBS (surr.)	1	%	71	113	115	99
18O2-PFHxS (surr.)	1	%	89	82	90	83
13C8-PFOS (surr.)	1	%	82	73	78	80
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)						
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C2-4:2 FTSA (surr.)	1	%	130	101	98	104
13C2-6:2 FTSA (surr.)	1	%	144	101	131	137
13C2-8:2 FTSA (surr.)	1	%	130	67	83	84
13C2-10:2 FTSA (surr.)	1	%	100	76	89	70
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_20220327_20_01_SS_Primary_EUF	SX_OB_20220326_20_12_SS_Primary_EUF	SX_OB_20220327_00_13_SS_Primary_EUF	SX_OB_20220327_04_00_SS_Primary_EUF
Sample Matrix			**AUS Leachate - pH 5.0**	**AUS Leachate - Reagent Water**	**AUS Leachate - Reagent Water**	**AUS Leachate - Reagent Water**
Eurofins Sample No.			**M22-Ma57523**	**M22-Ma57524**	**M22-Ma57525**	**M22-Ma57526**
Date Sampled			**Mar 27, 2022**	**Mar 26, 2022**	**Mar 27, 2022**	**Mar 27, 2022**
Test/Reference	LOR	Unit				
AUS Leaching Procedure						
Leachate Fluid[C01]		comment	1.0	4.0	4.0	4.0
pH (initial)	0.1	pH Units	N/A	N/A	N/A	N/A
pH (Leachate fluid)	0.1	pH Units	5.0	6.4	6.4	6.4
pH (off)	0.1	pH Units	5.1	8.7	9.1	9.0

Client Sample ID			SX_OB_20220327_20_01_SS_Primary_EUF	SX_OB_20220326_20_12_SS_Primary_EUF	SX_OB_20220327_00_13_SS_Primary_EUF	SX_OB_20220327_04_00_SS_Primary_EUF
Sample Matrix			AUS Leachate - pH 5.0	AUS Leachate - Reagent Water	AUS Leachate - Reagent Water	AUS Leachate - Reagent Water
Eurofins Sample No.			M22-Ma57523	M22-Ma57524	M22-Ma57525	M22-Ma57526
Date Sampled			Mar 27, 2022	Mar 26, 2022	Mar 27, 2022	Mar 27, 2022
Test/Reference	LOR	Unit				
Perfluoroalkyl carboxylic acids (PFCAs)						
Perfluorobutanoic acid (PFBA)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
Perfluoropentanoic acid (PFPeA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorohexanoic acid (PFHxA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoroheptanoic acid (PFHpA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorooctanoic acid (PFOA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorononanoic acid (PFNA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorodecanoic acid (PFDA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoroundecanoic acid (PFUnDA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorododecanoic acid (PFDoDA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorotridecanoic acid (PFTrDA)[N15]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorotetradecanoic acid (PFTeDA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C4-PFBA (surr.)	1	%	81	83	79	82
13C5-PFPeA (surr.)	1	%	101	85	85	105
13C5-PFHxA (surr.)	1	%	95	50	51	65
13C4-PFHpA (surr.)	1	%	101	100	96	100
13C8-PFOA (surr.)	1	%	117	110	108	110
13C5-PFNA (surr.)	1	%	86	111	110	106
13C6-PFDA (surr.)	1	%	101	102	101	101
13C2-PFUnDA (surr.)	1	%	92	93	91	88
13C2-PFDoDA (surr.)	1	%	103	83	78	84
13C2-PFTeDA (surr.)	1	%	98	128	143	123
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	%	100	120	115	118
D3-N-MeFOSA (surr.)	1	%	132	67	145	153
D5-N-EtFOSA (surr.)	1	%	127	69	125	127
D7-N-MeFOSE (surr.)	1	%	104	71	79	95
D9-N-EtFOSE (surr.)	1	%	109	68	76	86
D5-N-EtFOSAA (surr.)	1	%	95	103	97	111
D3-N-MeFOSAA (surr.)	1	%	87	106	98	106
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_20220327_20_01_SS_Primary_EUF	SX_OB_20220326_20_12_SS_Primary_EUF	SX_OB_20220327_00_13_SS_Primary_EUF	SX_OB_20220327_04_00_SS_Primary_EUF
Sample Matrix			AUS Leachate - pH 5.0	AUS Leachate - Reagent Water	AUS Leachate - Reagent Water	AUS Leachate - Reagent Water
Eurofins Sample No.			M22-Ma57523	M22-Ma57524	M22-Ma57525	M22-Ma57526
Date Sampled			Mar 27, 2022	Mar 26, 2022	Mar 27, 2022	Mar 27, 2022
Test/Reference	LOR	Unit				
Perfluoroalkyl sulfonic acids (PFSAs)						
Perfluorooctanesulfonic acid (PFOS)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorodecanesulfonic acid (PFDS)[N15]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C3-PFBS (surr.)	1	%	112	79	83	96
18O2-PFHxS (surr.)	1	%	89	128	127	130
13C8-PFOS (surr.)	1	%	76	122	116	122
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)						
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C2-4:2 FTSA (surr.)	1	%	98	130	131	122
13C2-6:2 FTSA (surr.)	1	%	116	129	125	122
13C2-8:2 FTSA (surr.)	1	%	70	141	109	114
13C2-10:2 FTSA (surr.)	1	%	82	91	80	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

Client Sample ID			SX_OB_20220327_07_58_SS_Triplicate_EUF	SX_OB_20220327_08_03_SS_Primary_EUF	SX_OB_20220327_11_44_SS_Primary_EUF	SX_OB_20220327_15_52_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-Ma57527	M22-Ma57528	M22-Ma57529	M22-Ma57530
Date Sampled			Mar 27, 2022	Mar 27, 2022	Mar 27, 2022	Mar 27, 2022
Test/Reference	LOR	Unit				
AUS Leaching Procedure						
Leachate Fluid[C01]		comment	4.0	4.0	4.0	4.0
pH (initial)	0.1	pH Units	N/A	N/A	N/A	N/A
pH (Leachate fluid)	0.1	pH Units	6.4	6.4	6.4	6.4
pH (off)	0.1	pH Units	9.0	8.9	9.1	9.9
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_OB_20220327_07_58_SS_Triplicate_EUF	SX_OB_20220327_08_03_SS_Primary_EUF	SX_OB_20220327_11_44_SS_Primary_EUF	SX_OB_20220327_15_52_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-Ma57527**	**M22-Ma57528**	**M22-Ma57529**	**M22-Ma57530**
Date Sampled			**Mar 27, 2022**	**Mar 27, 2022**	**Mar 27, 2022**	**Mar 27, 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	%	83	84	83	81
13C5-PFPeA (surr.)	1	%	90	88	92	88
13C5-PFHxA (surr.)	1	%	66	55	128	122
13C4-PFHpA (surr.)	1	%	98	102	99	100
13C8-PFOA (surr.)	1	%	114	105	105	115
13C5-PFNA (surr.)	1	%	103	123	93	105
13C6-PFDA (surr.)	1	%	91	106	96	105
13C2-PFUnDA (surr.)	1	%	89	92	81	97
13C2-PFDoDA (surr.)	1	%	67	77	73	84
13C2-PFTeDA (surr.)	1	%	102	119	92	141
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	%	104	122	112	129
D3-N-MeFOSA (surr.)	1	%	66	85	153	127
D5-N-EtFOSA (surr.)	1	%	57	80	122	100
D7-N-MeFOSE (surr.)	1	%	68	80	69	108
D9-N-EtFOSE (surr.)	1	%	65	72	64	118
D5-N-EtFOSAA (surr.)	1	%	99	90	95	96
D3-N-MeFOSAA (surr.)	1	%	97	102	93	118
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	%	93	88	124	122
18O2-PFHxS (surr.)	1	%	133	125	138	137
13C8-PFOS (surr.)	1	%	115	132	123	123

Client Sample ID			SX_OB_20220327_07_58_SS_Triplicate_EUF	SX_OB_20220327_08_03_SS_Primary_EUF	SX_OB_20220327_11_44_SS_Primary_EUF	SX_OB_20220327_15_52_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-Ma57527**	**M22-Ma57528**	**M22-Ma57529**	**M22-Ma57530**
Date Sampled			**Mar 27, 2022**	**Mar 27, 2022**	**Mar 27, 2022**	**Mar 27, 2022**
Test/Reference	LOR	Unit				
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)						
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C2-4:2 FTSA (surr.)	1	%	118	137	111	112
13C2-6:2 FTSA (surr.)	1	%	136	143	103	112
13C2-8:2 FTSA (surr.)	1	%	99	104	92	91
13C2-10:2 FTSA (surr.)	1	%	71	79	75	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_OB_20220327_15_59_SS_Duplicate_EUF	SX_OB_20220327_20_01_SS_Primary_EUF
Sample Matrix			**AUS Leachate - Reagent Water**	**AUS Leachate - Reagent Water**
Eurofins Sample No.			**M22-Ma57531**	**M22-Ma57532**
Date Sampled			**Mar 27, 2022**	**Mar 27, 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	6.4	6.4
pH (off)	0.1	pH Units	9.8	9.3
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	%	75	76
13C5-PFPeA (surr.)	1	%	85	75

Client Sample ID			SX_OB_20220327_15_59_SS_Duplicate_EUF	SX_OB_20220327_20_01_SS_Primary_EUF
Sample Matrix			AUS Leachate - Reagent Water	AUS Leachate - Reagent Water
Eurofins Sample No.			M22-Ma57531	M22-Ma57532
Date Sampled			Mar 27, 2022	Mar 27, 2022
Test/Reference	LOR	Unit		
Perfluoroalkyl carboxylic acids (PFCAs)				
13C5-PFHxA (surr.)	1	%	81	111
13C4-PFHpA (surr.)	1	%	91	86
13C8-PFOA (surr.)	1	%	104	106
13C5-PFNA (surr.)	1	%	96	89
13C6-PFDA (surr.)	1	%	110	103
13C2-PFUnDA (surr.)	1	%	96	93
13C2-PFDoDA (surr.)	1	%	100	83
13C2-PFTeDA (surr.)	1	%	117	140
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	%	118	121
D3-N-MeFOSA (surr.)	1	%	135	106
D5-N-EtFOSA (surr.)	1	%	100	76
D7-N-MeFOSE (surr.)	1	%	92	92
D9-N-EtFOSE (surr.)	1	%	96	81
D5-N-EtFOSAA (surr.)	1	%	100	129
D3-N-MeFOSAA (surr.)	1	%	82	129
Perfluoroalkyl sulfonic acids (PFSAs)				
Perfluorobutanesulfonic acid (PFBS)[N11]	0.01	ug/L	< 0.01	< 0.01
Perfluorononanesulfonic acid (PFNS)[N15]	0.01	ug/L	< 0.01	< 0.01
Perfluoropropanesulfonic acid (PFPrS)[N15]	0.01	ug/L	< 0.01	< 0.01
Perfluoropentanesulfonic acid (PFPeS)[N15]	0.01	ug/L	< 0.01	< 0.01
Perfluorohexanesulfonic acid (PFHxS)[N11]	0.01	ug/L	< 0.01	< 0.01
Perfluoroheptanesulfonic acid (PFHpS)[N15]	0.01	ug/L	< 0.01	< 0.01
Perfluorooctanesulfonic acid (PFOS)[N11]	0.01	ug/L	< 0.01	< 0.01
Perfluorodecanesulfonic acid (PFDS)[N15]	0.01	ug/L	< 0.01	< 0.01
13C3-PFBS (surr.)	1	%	102	119
18O2-PFHxS (surr.)	1	%	118	130
13C8-PFOS (surr.)	1	%	112	117
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)				
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)[N11]	0.01	ug/L	< 0.01	< 0.01
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)[N11]	0.05	ug/L	< 0.05	< 0.05
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)[N11]	0.01	ug/L	< 0.01	< 0.01
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)[N11]	0.01	ug/L	< 0.01	< 0.01

Client Sample ID			SX_OB_20220327_15_59_SS_Duplicate_EUF	SX_OB_20220327_20_01_SS_Primary_EUF
Sample Matrix			AUS Leachate - Reagent Water	AUS Leachate - Reagent Water
Eurofins Sample No.			M22-Ma57531	M22-Ma57532
Date Sampled			Mar 27, 2022	Mar 27, 2022
Test/Reference	LOR	Unit		
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)				
13C2-4:2 FTSA (surr.)	1	%	111	106
13C2-6:2 FTSA (surr.)	1	%	115	100
13C2-8:2 FTSA (surr.)	1	%	88	75
13C2-10:2 FTSA (surr.)	1	%	93	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)	Melbourne	Mar 29, 2022	0 Days
- Method: LTM-GEN-7010 Leaching Procedure for Soils & Solid Wastes			
pH (Leachate fluid)	Melbourne	Mar 29, 2022	0 Days
- Method: LTM-GEN-7010 Leaching Procedure for Soils & Solid Wastes			
pH (off)	Melbourne	Mar 29, 2022	0 Days
- Method: LTM-GEN-7010 Leaching Procedure for Soils & Solid Wastes			
Per- and Polyfluoroalkyl Substances (PFASs)			
Perfluoroalkyl carboxylic acids (PFCAs)	Melbourne	Mar 29, 2022	28 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			
Perfluoroalkyl sulfonamido substances	Melbourne	Mar 29, 2022	28 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			
Perfluoroalkyl sulfonic acids (PFSAs)	Melbourne	Mar 29, 2022	28 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)	Melbourne	Mar 29, 2022	28 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			
PFASs Summations	Melbourne	Mar 28, 2022	
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			

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Project Name: 20220328061259-Eurofin-8
Project ID: JC0927

Order No.:
Report #: 874920
Phone: 08 8338 1009
Fax:

Received: Mar 28, 2022 12:39 PM
Due: Apr 4, 2022
Priority: 5 Day
Contact Name: Agon Lab Reports (Spoil Project)

Eurofins Analytical Services Manager : Michael Cassidy

Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	IWRG 621 WGTP Suite
Melbourne Laboratory - NATA # 1261 Site # 1254						X	X	X	X
Sydney Laboratory - NATA # 1261 Site # 18217									
Brisbane Laboratory - NATA # 1261 Site # 20794									
Mayfield Laboratory - NATA # 1261 Site # 25079									
Perth Laboratory - NATA # 2377 Site # 2370									
External Laboratory									
No	**Sample ID**	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**				
1	SX_OB_20220326_20_12_SS_Primary_EUF	Mar 26, 2022	8:12PM	Soil	M22-Ma57506		X	X	X
2	SX_OB_20220327_00_13_SS_Primary_EUF	Mar 27, 2022	12:13AM	Soil	M22-Ma57507		X	X	X
3	SX_OB_20220327_04_00_SS_Primary_EUF	Mar 27, 2022	4:00AM	Soil	M22-Ma57508		X	X	X

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Order No.:
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Phone: 08 8338 1009
Fax:

Received: Mar 28, 2022 12:39 PM
Due: Apr 4, 2022
Priority: 5 Day
Contact Name: Agon Lab Reports (Spoil Project)

Eurofins Analytical Services Manager : Michael Cassidy

Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	IWRG 621 WGTP Suite
Melbourne Laboratory - NATA # 1261 Site # 1254						X	X	X	X
Sydney Laboratory - NATA # 1261 Site # 18217									
Brisbane Laboratory - NATA # 1261 Site # 20794									
Mayfield Laboratory - NATA # 1261 Site # 25079									
Perth Laboratory - NATA # 2377 Site # 2370									
External Laboratory									
4	SX_OB_20220327_07_58_SS_Triplicate_EUF	Mar 27, 2022	7:58AM	Soil	M22-Ma57509		X	X	X
5	SX_OB_20220327_08_03_SS_Primary_EUF	Mar 27, 2022	8:03AM	Soil	M22-Ma57510		X	X	X
6	SX_OB_20220327_11_44_SS_Primary_EUF	Mar 27, 2022	11:44AM	Soil	M22-Ma57511		X	X	X
7	SX_OB_20220327_15_52_S	Mar 27, 2022	3:52PM	Soil	M22-Ma57512		X	X	X

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Received: Mar 28, 2022 12:39 PM
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Priority: 5 Day
Contact Name: Agon Lab Reports (Spoil Project)

Eurofins Analytical Services Manager : Michael Cassidy

Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	IWRG 621 WGTP Suite
Melbourne Laboratory - NATA # 1261 Site # 1254						X	X	X	X
Sydney Laboratory - NATA # 1261 Site # 18217									
Brisbane Laboratory - NATA # 1261 Site # 20794									
Mayfield Laboratory - NATA # 1261 Site # 25079									
Perth Laboratory - NATA # 2377 Site # 2370									
External Laboratory									
	S_Primary_EUF								
8	SX_OB_20220327_15_59_SS_Duplicate_EUF	Mar 27, 2022	3:59PM	Soil	M22-Ma57513		X	X	X
9	SX_OB_20220327_20_01_SS_Primary_EUF	Mar 27, 2022	8:01PM	Soil	M22-Ma57514		X	X	X
10	SX_OB_20220326_20_12_SS_Primary_EUF	Mar 26, 2022	8:12PM	AUS Leachate - pH 5.0	M22-Ma57515	X		X	

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Eurofins Analytical Services Manager : Michael Cassidy

Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	IWRG 621 WGTP Suite
Melbourne Laboratory - NATA # 1261 Site # 1254						X	X	X	X
Sydney Laboratory - NATA # 1261 Site # 18217									
Brisbane Laboratory - NATA # 1261 Site # 20794									
Mayfield Laboratory - NATA # 1261 Site # 25079									
Perth Laboratory - NATA # 2377 Site # 2370									
External Laboratory									
11	SX_OB_20220327_00_13_SS_Primary_EUF	Mar 27, 2022	12:13AM	AUS Leachate - pH 5.0	M22-Ma57516	X		X	
12	SX_OB_20220327_04_00_SS_Primary_EUF	Mar 27, 2022	4:00AM	AUS Leachate - pH 5.0	M22-Ma57517	X		X	
13	SX_OB_20220327_07_58_SS_Triplicate_EUF	Mar 27, 2022	7:58AM	AUS Leachate - pH 5.0	M22-Ma57518	X		X	
14	SX_OB_20220327_08_03_S	Mar 27, 2022	8:03AM	AUS Leachate - pH 5.0	M22-Ma57519	X		X	

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Project ID: JC0927

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Phone: 08 8338 1009
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Received: Mar 28, 2022 12:39 PM
Due: Apr 4, 2022
Priority: 5 Day
Contact Name: Agon Lab Reports (Spoil Project)

Eurofins Analytical Services Manager : Michael Cassidy

Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	IWRG 621 WGTP Suite
Melbourne Laboratory - NATA # 1261 Site # 1254						X	X	X	X
Sydney Laboratory - NATA # 1261 Site # 18217									
Brisbane Laboratory - NATA # 1261 Site # 20794									
Mayfield Laboratory - NATA # 1261 Site # 25079									
Perth Laboratory - NATA # 2377 Site # 2370									
External Laboratory									
	S_Primary_EUF								
15	SX_OB_20220327_11_44_SS_Primary_EUF	Mar 27, 2022	11:44AM	AUS Leachate - pH 5.0	M22-Ma57520	X		X	
16	SX_OB_20220327_15_52_SS_Primary_EUF	Mar 27, 2022	3:52PM	AUS Leachate - pH 5.0	M22-Ma57521	X		X	
17	SX_OB_20220327_15_59_SS_Duplicate_EUF	Mar 27, 2022	3:59PM	AUS Leachate - pH 5.0	M22-Ma57522	X		X	

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Project ID: JC0927

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

Eurofins Analytical Services Manager : Michael Cassidy

Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	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									
18	SX_OB_20220327_20_01_SS_Primary_EUF	Mar 27, 2022	8:01PM	AUS Leachate - pH 5.0	M22-Ma57523	X		X	
19	SX_OB_20220326_20_12_SS_Primary_EUF	Mar 26, 2022	8:12PM	AUS Leachate - Reagent Water	M22-Ma57524	X		X	
20	SX_OB_20220327_00_13_SS_Primary_EUF	Mar 27, 2022	12:13AM	AUS Leachate - Reagent Water	M22-Ma57525	X		X	
21	SX_OB_20220327_04_00_S	Mar 27, 2022	4:00AM	AUS Leachate - Reagent	M22-Ma57526	X		X	

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Project Name: 20220328061259-Eurofin-8
Project ID: JC0927

Order No.:
Report #: 874920
Phone: 08 8338 1009
Fax:

Received: Mar 28, 2022 12:39 PM
Due: Apr 4, 2022
Priority: 5 Day
Contact Name: Agon Lab Reports (Spoil Project)

Eurofins Analytical Services Manager : Michael Cassidy

Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	IWRG 621 WGTP Suite
Melbourne Laboratory - NATA # 1261 Site # 1254						X	X	X	X
Sydney Laboratory - NATA # 1261 Site # 18217									
Brisbane Laboratory - NATA # 1261 Site # 20794									
Mayfield Laboratory - NATA # 1261 Site # 25079									
Perth Laboratory - NATA # 2377 Site # 2370									
External Laboratory									
	S_Primary_EUF			Water					
22	SX_OB_20220327_07_58_SS_Triplicate_EUF	Mar 27, 2022	7:58AM	AUS Leachate - Reagent Water	M22-Ma57527	X		X	
23	SX_OB_20220327_08_03_SS_Primary_EUF	Mar 27, 2022	8:03AM	AUS Leachate - Reagent Water	M22-Ma57528	X		X	
24	SX_OB_20220327_11_44_SS_Primary_EUF	Mar 27, 2022	11:44AM	AUS Leachate - Reagent Water	M22-Ma57529	X		X	

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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									
25	SX_OB_20220327_15_52_SS_Primary_EUF	Mar 27, 2022	3:52PM	AUS Leachate - Reagent Water	M22-Ma57530	X		X	
26	SX_OB_20220327_15_59_SS_Duplicate_EUF	Mar 27, 2022	3:59PM	AUS Leachate - Reagent Water	M22-Ma57531	X		X	
27	SX_OB_20220327_20_01_SS_Primary_EUF	Mar 27, 2022	8:01PM	AUS Leachate - Reagent Water	M22-Ma57532	X		X	
Test Counts						18	9	27	9

Internal Quality Control Review and Glossary

General

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

Holding Times

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

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

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

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

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

Units

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

Terms

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

QC - Acceptance Criteria

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

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

Results <10 times the LOR: No Limit

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

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

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

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

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

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QC Data General Comments

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

Quality Control Results

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Method Blank							
Perfluoroalkyl carboxylic acids (PFCAs)							
Perfluorobutanoic acid (PFBA)	ug/L	< 0.05			0.05	Pass	
Perfluoropentanoic acid (PFPeA)	ug/L	< 0.01			0.01	Pass	
Perfluorohexanoic acid (PFHxA)	ug/L	< 0.01			0.01	Pass	
Perfluoroheptanoic acid (PFHpA)	ug/L	< 0.01			0.01	Pass	
Perfluorooctanoic acid (PFOA)	ug/L	< 0.01			0.01	Pass	
Perfluorononanoic acid (PFNA)	ug/L	< 0.01			0.01	Pass	
Perfluorodecanoic acid (PFDA)	ug/L	< 0.01			0.01	Pass	
Perfluoroundecanoic acid (PFUnDA)	ug/L	< 0.01			0.01	Pass	
Perfluorododecanoic acid (PFDoDA)	ug/L	< 0.01			0.01	Pass	
Perfluorotridecanoic acid (PFTrDA)	ug/L	< 0.01			0.01	Pass	
Perfluorotetradecanoic acid (PFTeDA)	ug/L	< 0.01			0.01	Pass	
Method Blank							
Perfluoroalkyl sulfonamido substances							
Perfluorooctane sulfonamide (FOSA)	ug/L	< 0.05			0.05	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	ug/L	< 0.05			0.05	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	ug/L	< 0.05			0.05	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)	ug/L	< 0.05			0.05	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)	ug/L	< 0.05			0.05	Pass	
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	ug/L	< 0.05			0.05	Pass	
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	ug/L	< 0.05			0.05	Pass	
Method Blank							
Perfluoroalkyl sulfonic acids (PFSAs)							
Perfluorobutanesulfonic acid (PFBS)	ug/L	< 0.01			0.01	Pass	
Perfluorononanesulfonic acid (PFNS)	ug/L	< 0.01			0.01	Pass	
Perfluoropropanesulfonic acid (PFPrS)	ug/L	< 0.01			0.01	Pass	
Perfluoropentanesulfonic acid (PFPeS)	ug/L	< 0.01			0.01	Pass	
Perfluorohexanesulfonic acid (PFHxS)	ug/L	< 0.01			0.01	Pass	
Perfluoroheptanesulfonic acid (PFHpS)	ug/L	< 0.01			0.01	Pass	
Perfluorooctanesulfonic acid (PFOS)	ug/L	< 0.01			0.01	Pass	
Perfluorodecanesulfonic acid (PFDS)	ug/L	< 0.01			0.01	Pass	
Method Blank							
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)							
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	ug/L	< 0.01			0.01	Pass	
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)	ug/L	< 0.05			0.05	Pass	
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	ug/L	< 0.01			0.01	Pass	
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	ug/L	< 0.01			0.01	Pass	
LCS - % Recovery							
Perfluoroalkyl carboxylic acids (PFCAs)							
Perfluorobutanoic acid (PFBA)	%	98			50-150	Pass	
Perfluoropentanoic acid (PFPeA)	%	99			50-150	Pass	
Perfluorohexanoic acid (PFHxA)	%	101			50-150	Pass	
Perfluoroheptanoic acid (PFHpA)	%	101			50-150	Pass	
Perfluorooctanoic acid (PFOA)	%	112			50-150	Pass	
Perfluorononanoic acid (PFNA)	%	107			50-150	Pass	
Perfluorodecanoic acid (PFDA)	%	120			50-150	Pass	
Perfluoroundecanoic acid (PFUnDA)	%	108			50-150	Pass	
Perfluorododecanoic acid (PFDoDA)	%	115			50-150	Pass	
Perfluorotridecanoic acid (PFTrDA)	%	113			50-150	Pass	
Perfluorotetradecanoic acid (PFTeDA)	%	105			50-150	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
LCS - % Recovery							
Perfluoroalkyl sulfonamido substances							
Perfluorooctane sulfonamide (FOSA)	%	115			50-150	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	%	122			50-150	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	%	115			50-150	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)	%	100			50-150	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)	%	102			50-150	Pass	
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	%	98			50-150	Pass	
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	%	108			50-150	Pass	
LCS - % Recovery							
Perfluoroalkyl sulfonic acids (PFSAs)							
Perfluorobutanesulfonic acid (PFBS)	%	92			50-150	Pass	
Perfluorononanesulfonic acid (PFNS)	%	89			50-150	Pass	
Perfluoropropanesulfonic acid (PFPrS)	%	90			50-150	Pass	
Perfluoropentanesulfonic acid (PFPeS)	%	101			50-150	Pass	
Perfluorohexanesulfonic acid (PFHxS)	%	110			50-150	Pass	
Perfluoroheptanesulfonic acid (PFHpS)	%	98			50-150	Pass	
Perfluorooctanesulfonic acid (PFOS)	%	96			50-150	Pass	
Perfluorodecanesulfonic acid (PFDS)	%	66			50-150	Pass	
LCS - % Recovery							
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)							
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	%	119			50-150	Pass	
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)	%	140			50-150	Pass	
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	%	130			50-150	Pass	
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	%	95			50-150	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Duplicate									
Perfluoroalkyl carboxylic acids (PFCAs)				Result 1	Result 2	RPD			
Perfluorobutanoic acid (PFBA)	M22-Ma57523	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
Perfluoropentanoic acid (PFPeA)	M22-Ma57523	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorohexanoic acid (PFHxA)	M22-Ma57523	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluoroheptanoic acid (PFHpA)	M22-Ma57523	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorooctanoic acid (PFOA)	M22-Ma57523	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorononanoic acid (PFNA)	M22-Ma57523	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorodecanoic acid (PFDA)	M22-Ma57523	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluoroundecanoic acid (PFUnDA)	M22-Ma57523	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorododecanoic acid (PFDoDA)	M22-Ma57523	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorotridecanoic acid (PFTrDA)	M22-Ma57523	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorotetradecanoic acid (PFTeDA)	M22-Ma57523	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Duplicate									
Perfluoroalkyl sulfonamido substances				Result 1	Result 2	RPD			
Perfluorooctane sulfonamide (FOSA)	M22-Ma57523	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	M22-Ma57523	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	M22-Ma57523	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)	M22-Ma57523	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)	M22-Ma57523	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-Ma57523	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	M22-Ma57523	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
Duplicate									
Perfluoroalkyl sulfonic acids (PFSAs)				Result 1	Result 2	RPD			
Perfluorobutanesulfonic acid (PFBS)	M22-Ma57523	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorononanesulfonic acid (PFNS)	M22-Ma57523	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluoropropanesulfonic acid (PFPrS)	M22-Ma57523	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluoropentanesulfonic acid (PFPeS)	M22-Ma57523	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorohexanesulfonic acid (PFHxS)	M22-Ma57523	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluoroheptanesulfonic acid (PFHpS)	M22-Ma57523	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorooctanesulfonic acid (PFOS)	M22-Ma57523	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorodecanesulfonic acid (PFDS)	M22-Ma57523	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Duplicate									
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)				Result 1	Result 2	RPD			
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	M22-Ma57523	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)	M22-Ma57523	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	M22-Ma57523	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	M22-Ma57523	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Duplicate									
Perfluoroalkyl carboxylic acids (PFCAs)				Result 1	Result 2	RPD			
Perfluorobutanoic acid (PFBA)	M22-Ma57524	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
Perfluoropentanoic acid (PFPeA)	M22-Ma57524	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorohexanoic acid (PFHxA)	M22-Ma57524	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluoroheptanoic acid (PFHpA)	M22-Ma57524	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorooctanoic acid (PFOA)	M22-Ma57524	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorononanoic acid (PFNA)	M22-Ma57524	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorodecanoic acid (PFDA)	M22-Ma57524	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluoroundecanoic acid (PFUnDA)	M22-Ma57524	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorododecanoic acid (PFDoDA)	M22-Ma57524	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorotridecanoic acid (PFTrDA)	M22-Ma57524	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorotetradecanoic acid (PFTeDA)	M22-Ma57524	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	

Duplicate									
Perfluoroalkyl sulfonamido substances				Result 1	Result 2	RPD			
Perfluorooctane sulfonamide (FOSA)	M22-Ma57524	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	M22-Ma57524	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	M22-Ma57524	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)	M22-Ma57524	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)	M22-Ma57524	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	M22-Ma57524	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	M22-Ma57524	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
Duplicate									
Perfluoroalkyl sulfonic acids (PFSAs)				Result 1	Result 2	RPD			
Perfluorobutanesulfonic acid (PFBS)	M22-Ma57524	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorononanesulfonic acid (PFNS)	M22-Ma57524	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluoropropanesulfonic acid (PFPrS)	M22-Ma57524	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluoropentanesulfonic acid (PFPeS)	M22-Ma57524	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorohexanesulfonic acid (PFHxS)	M22-Ma57524	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluoroheptanesulfonic acid (PFHpS)	M22-Ma57524	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorooctanesulfonic acid (PFOS)	M22-Ma57524	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorodecanesulfonic acid (PFDS)	M22-Ma57524	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Duplicate									
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)				Result 1	Result 2	RPD			
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	M22-Ma57524	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)	M22-Ma57524	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	M22-Ma57524	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	M22-Ma57524	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
Mary Makarios	Senior Analyst (NSW)
Joseph Edouard	Senior Analyst (VIC)

Glenn Jackson
General Manager

Final Report – this report replaces any previously issued Report

- Indicates Not Requested

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

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

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

Attention: **David Lawson**

Report **874920-S**
Project name 20220328061259-Eurofin-8
Project ID JC0927
Received Date Mar 28, 2022

Client Sample ID			**SX_OB_20220326_20_12_SS_Primary_EUF**	**SX_OB_20220327_00_13_SS_Primary_EUF**	**SX_OB_20220327_04_00_SS_Primary_EUF**	**SX_OB_20220327_07_58_SS_Triplicate_EUF**
Sample Matrix			**Soil**	**Soil**	**Soil**	**Soil**
Eurofins Sample No.			**M22-Ma57506**	**M22-Ma57507**	**M22-Ma57508**	**M22-Ma57509**
Date Sampled			**Mar 26, 2022**	**Mar 27, 2022**	**Mar 27, 2022**	**Mar 27, 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_20220326_20_12_SS_Primary_EUF	SX_OB_20220327_00_13_SS_Primary_EUF	SX_OB_20220327_04_00_SS_Primary_EUF	SX_OB_20220327_07_58_SS_Triplicate_EUF
Sample Matrix			**Soil**	**Soil**	**Soil**	**Soil**
Eurofins Sample No.			**M22-Ma57506**	**M22-Ma57507**	**M22-Ma57508**	**M22-Ma57509**
Date Sampled			**Mar 26, 2022**	**Mar 27, 2022**	**Mar 27, 2022**	**Mar 27, 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	%	127	63	68	69
Toluene-d8 (surr.)	1	%	127	68	69	73
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_20220326_20_12_SS_Primary_EUF	SX_OB_20220327_00_13_SS_Primary_EUF	SX_OB_20220327_04_00_SS_Primary_EUF	SX_OB_20220327_07_58_SS_Triplicate_EUF
Sample Matrix			**Soil**	**Soil**	**Soil**	**Soil**
Eurofins Sample No.			**M22-Ma57506**	**M22-Ma57507**	**M22-Ma57508**	**M22-Ma57509**
Date Sampled			**Mar 26, 2022**	**Mar 27, 2022**	**Mar 27, 2022**	**Mar 27, 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	%	83	71	94	96
p-Terphenyl-d14 (surr.)	1	%	140	92	111	125
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	%	59	62	99	99
Tetrachloro-m-xylene (surr.)	1	%	122	119	122	128

Client Sample ID			SX_OB_20220326_20_12_SS_Primary_EUF	SX_OB_20220327_00_13_SS_Primary_EUF	SX_OB_20220327_04_00_SS_Primary_EUF	SX_OB_20220327_07_58_SS_Triplicate_EUF
Sample Matrix			**Soil**	**Soil**	**Soil**	**Soil**
Eurofins Sample No.			**M22-Ma57506**	**M22-Ma57507**	**M22-Ma57508**	**M22-Ma57509**
Date Sampled			**Mar 26, 2022**	**Mar 27, 2022**	**Mar 27, 2022**	**Mar 27, 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	%	59	62	99	99
Tetrachloro-m-xylene (surr.)	1	%	122	119	122	128
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	%	41	34	77	65
Total Non-Halogenated Phenol*	20	mg/kg	< 20	< 20	< 20	< 20
Chromium (hexavalent)	1	mg/kg	< 1	< 1	< 1	1.2
Cyanide (total)	5	mg/kg	< 5	< 5	< 5	< 5
Fluoride (Total)	100	mg/kg	< 100	< 100	< 100	< 100
pH (1:5 Aqueous extract at 25°C as rec.)	0.1	pH Units	8.1	8.5	8.2	8.4
% Moisture	1	%	28	28	23	30
Heavy Metals						
Arsenic	2	mg/kg	33	29	27	32
Cadmium	0.4	mg/kg	< 0.4	< 0.4	< 0.4	< 0.4
Chromium	5	mg/kg	120	110	99	110
Copper	5	mg/kg	52	48	53	58
Lead	5	mg/kg	< 5	< 5	< 5	< 5
Mercury	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1

Client Sample ID			SX_OB_20220326_20_12_SS_Primary_EUF	SX_OB_20220327_00_13_SS_Primary_EUF	SX_OB_20220327_04_00_SS_Primary_EUF	SX_OB_20220327_07_58_SS_Triplicate_EUF
Sample Matrix			**Soil**	**Soil**	**Soil**	**Soil**
Eurofins Sample No.			**M22-Ma57506**	**M22-Ma57507**	**M22-Ma57508**	**M22-Ma57509**
Date Sampled			**Mar 26, 2022**	**Mar 27, 2022**	**Mar 27, 2022**	**Mar 27, 2022**
Test/Reference	LOR	Unit				
Heavy Metals						
Molybdenum	5	mg/kg	< 5	< 5	< 5	< 5
Nickel	5	mg/kg	170	170	170	190
Selenium	2	mg/kg	< 2	< 2	< 2	< 2
Silver	2	mg/kg	< 2	< 2	< 2	< 2
Tin	10	mg/kg	< 10	< 10	< 10	< 10
Zinc	5	mg/kg	98	88	110	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	%	76	74	86	82
13C5-PFPeA (surr.)	1	%	70	73	90	80
13C5-PFHxA (surr.)	1	%	76	72	86	80
13C4-PFHpA (surr.)	1	%	82	76	87	82
13C8-PFOA (surr.)	1	%	88	100	97	101
13C5-PFNA (surr.)	1	%	57	56	71	56
13C6-PFDA (surr.)	1	%	88	85	103	83
13C2-PFUnDA (surr.)	1	%	115	112	113	118
13C2-PFDoDA (surr.)	1	%	101	107	104	115
13C2-PFTeDA (surr.)	1	%	107	97	99	99
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	96	98	89
D3-N-MeFOSA (surr.)	1	%	78	73	83	76
D5-N-EtFOSA (surr.)	1	%	79	80	86	89
D7-N-MeFOSE (surr.)	1	%	76	68	81	75
D9-N-EtFOSE (surr.)	1	%	74	74	82	83
D5-N-EtFOSAA (surr.)	1	%	91	106	94	100
D3-N-MeFOSAA (surr.)	1	%	86	87	74	96

Client Sample ID			SX_OB_20220326_20_12_SS_Primary_EUF	SX_OB_20220327_00_13_SS_Primary_EUF	SX_OB_20220327_04_00_SS_Primary_EUF	SX_OB_20220327_07_58_SS_Triplicate_EUF
Sample Matrix			**Soil**	**Soil**	**Soil**	**Soil**
Eurofins Sample No.			**M22-Ma57506**	**M22-Ma57507**	**M22-Ma57508**	**M22-Ma57509**
Date Sampled			**Mar 26, 2022**	**Mar 27, 2022**	**Mar 27, 2022**	**Mar 27, 2022**
Test/Reference	LOR	Unit				
Perfluoroalkyl sulfonic acids (PFSAs)						
Perfluorobutanesulfonic acid (PFBS)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorononanesulfonic acid (PFNS)[N15]	5	ug/kg	< 5	< 5	< 5	< 5
Perfluoropropanesulfonic acid (PFPrS)[N15]	5	ug/kg	< 5	< 5	< 5	< 5
Perfluoropentanesulfonic acid (PFPeS)[N15]	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorohexanesulfonic acid (PFHxS)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
Perfluoroheptanesulfonic acid (PFHpS)[N15]	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorooctanesulfonic acid (PFOS)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorodecanesulfonic acid (PFDS)[N15]	5	ug/kg	< 5	< 5	< 5	< 5
13C3-PFBS (surr.)	1	%	56	55	73	69
18O2-PFHxS (surr.)	1	%	69	63	93	75
13C8-PFOS (surr.)	1	%	70	71	87	77
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)						
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)[N11]	10	ug/kg	< 10	< 10	< 10	< 10
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
13C2-4:2 FTSA (surr.)	1	%	99	91	84	89
13C2-6:2 FTSA (surr.)	1	%	63	71	70	73
13C2-8:2 FTSA (surr.)	1	%	69	61	89	76
13C2-10:2 FTSA (surr.)	1	%	82	101	74	93
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_20220327_08_03_SS_Primary_EUF	SX_OB_20220327_11_44_SS_Primary_EUF	SX_OB_20220327_15_52_SS_Primary_EUF	SX_OB_20220327_15_59_SS_Duplicate_EUF
Sample Matrix			**Soil**	**Soil**	**Soil**	**Soil**
Eurofins Sample No.			**M22-Ma57510**	**M22-Ma57511**	**M22-Ma57512**	**M22-Ma57513**
Date Sampled			**Mar 27, 2022**	**Mar 27, 2022**	**Mar 27, 2022**	**Mar 27, 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	62	< 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	62	< 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_20220327_08_03_SS_Primary_EUF	SX_OB_20220327_11_44_SS_Primary_EUF	SX_OB_20220327_15_52_SS_Primary_EUF	SX_OB_20220327_15_59_SS_Duplicate_EUF
Sample Matrix			**Soil**	**Soil**	**Soil**	**Soil**
Eurofins Sample No.			**M22-Ma57510**	**M22-Ma57511**	**M22-Ma57512**	**M22-Ma57513**
Date Sampled			**Mar 27, 2022**	**Mar 27, 2022**	**Mar 27, 2022**	**Mar 27, 2022**
Test/Reference	LOR	Unit				
Total Recoverable Hydrocarbons						
TRH >C10-C16	50	mg/kg	< 50	< 50	85	< 50
TRH >C10-C16 less Naphthalene (F2)[N01]	50	mg/kg	< 50	< 50	85	< 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_20220327_08_03_SS_Primary_EUF	SX_OB_20220327_11_44_SS_Primary_EUF	SX_OB_20220327_15_52_SS_Primary_EUF	SX_OB_20220327_15_59_SS_Duplicate_EUF
Sample Matrix			**Soil**	**Soil**	**Soil**	**Soil**
Eurofins Sample No.			**M22-Ma57510**	**M22-Ma57511**	**M22-Ma57512**	**M22-Ma57513**
Date Sampled			**Mar 27, 2022**	**Mar 27, 2022**	**Mar 27, 2022**	**Mar 27, 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	%	63	61	66	50
Toluene-d8 (surr.)	1	%	60	57	66	75
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	%	76	86	143	111
p-Terphenyl-d14 (surr.)	1	%	77	127	142	88

Client Sample ID			SX_OB_20220327_08_03_SS_Primary_EUF	SX_OB_20220327_11_44_SS_Primary_EUF	SX_OB_20220327_15_52_SS_Primary_EUF	SX_OB_20220327_15_59_SS_Duplicate_EUF
Sample Matrix			**Soil**	**Soil**	**Soil**	**Soil**
Eurofins Sample No.			**M22-Ma57510**	**M22-Ma57511**	**M22-Ma57512**	**M22-Ma57513**
Date Sampled			**Mar 27, 2022**	**Mar 27, 2022**	**Mar 27, 2022**	**Mar 27, 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	%	87	62	138	128
Tetrachloro-m-xylene (surr.)	1	%	123	80	123	107
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	%	87	62	138	128
Tetrachloro-m-xylene (surr.)	1	%	123	80	123	107
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_20220327_08_03_SS_Primary_EUF	SX_OB_20220327_11_44_SS_Primary_EUF	SX_OB_20220327_15_52_SS_Primary_EUF	SX_OB_20220327_15_59_SS_Duplicate_EUF
Sample Matrix			**Soil**	**Soil**	**Soil**	**Soil**
Eurofins Sample No.			**M22-Ma57510**	**M22-Ma57511**	**M22-Ma57512**	**M22-Ma57513**
Date Sampled			**Mar 27, 2022**	**Mar 27, 2022**	**Mar 27, 2022**	**Mar 27, 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	%	35	48	127	63
Total Non-Halogenated Phenol*	20	mg/kg	< 20	< 20	< 20	< 20
Chromium (hexavalent)	1	mg/kg	< 1	< 1	1.2	1.2
Cyanide (total)	5	mg/kg	< 5	< 5	< 5	< 5
Fluoride (Total)	100	mg/kg	< 100	< 100	< 100	< 100
pH (1:5 Aqueous extract at 25°C as rec.)	0.1	pH Units	8.1	8.6	10	9.7
% Moisture	1	%	31	31	37	35
Heavy Metals						
Arsenic	2	mg/kg	59	26	21	27
Cadmium	0.4	mg/kg	< 0.4	< 0.4	< 0.4	< 0.4
Chromium	5	mg/kg	130	130	85	140
Copper	5	mg/kg	64	60	54	74
Lead	5	mg/kg	5.2	6.2	< 5	6.1
Mercury	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Molybdenum	5	mg/kg	< 5	< 5	< 5	< 5
Nickel	5	mg/kg	210	180	150	190
Selenium	2	mg/kg	< 2	2.0	< 2	2.7
Silver	2	mg/kg	< 2	< 2	< 2	< 2
Tin	10	mg/kg	< 10	< 10	< 10	< 10
Zinc	5	mg/kg	140	130	110	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	%	82	74	79	78
13C5-PFPeA (surr.)	1	%	79	82	85	82
13C5-PFHxA (surr.)	1	%	81	80	81	81

Client Sample ID			SX_OB_20220327_08_03_SS_Primary_EUF	SX_OB_20220327_11_44_SS_Primary_EUF	SX_OB_20220327_15_52_SS_Primary_EUF	SX_OB_20220327_15_59_SS_Duplicate_EUF
Sample Matrix			**Soil**	**Soil**	**Soil**	**Soil**
Eurofins Sample No.			**M22-Ma57510**	**M22-Ma57511**	**M22-Ma57512**	**M22-Ma57513**
Date Sampled			**Mar 27, 2022**	**Mar 27, 2022**	**Mar 27, 2022**	**Mar 27, 2022**
Test/Reference	LOR	Unit				
Perfluoroalkyl carboxylic acids (PFCAs)						
13C4-PFHpA (surr.)	1	%	84	78	82	82
13C8-PFOA (surr.)	1	%	103	84	89	83
13C5-PFNA (surr.)	1	%	55	53	59	52
13C6-PFDA (surr.)	1	%	82	83	99	84
13C2-PFUnDA (surr.)	1	%	120	107	124	116
13C2-PFDoDA (surr.)	1	%	115	108	118	108
13C2-PFTeDA (surr.)	1	%	109	97	134	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	%	100	93	93	97
D3-N-MeFOSA (surr.)	1	%	76	66	77	75
D5-N-EtFOSA (surr.)	1	%	86	78	91	84
D7-N-MeFOSE (surr.)	1	%	81	69	80	77
D9-N-EtFOSE (surr.)	1	%	86	76	86	78
D5-N-EtFOSAA (surr.)	1	%	126	101	125	103
D3-N-MeFOSAA (surr.)	1	%	98	89	94	90
Perfluoroalkyl sulfonic acids (PFSAs)						
Perfluorobutanesulfonic acid (PFBS)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorononanesulfonic acid (PFNS)[N15]	5	ug/kg	< 5	< 5	< 5	< 5
Perfluoropropanesulfonic acid (PFPrS)[N15]	5	ug/kg	< 5	< 5	< 5	< 5
Perfluoropentanesulfonic acid (PFPeS)[N15]	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorohexanesulfonic acid (PFHxS)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
Perfluoroheptanesulfonic acid (PFHpS)[N15]	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorooctanesulfonic acid (PFOS)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorodecanesulfonic acid (PFDS)[N15]	5	ug/kg	< 5	< 5	< 5	< 5
13C3-PFBS (surr.)	1	%	66	72	85	70
18O2-PFHxS (surr.)	1	%	64	58	71	75
13C8-PFOS (surr.)	1	%	59	69	77	73
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)						
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)[N11]	10	ug/kg	< 10	< 10	< 10	< 10
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
13C2-4:2 FTSA (surr.)	1	%	104	65	66	62
13C2-6:2 FTSA (surr.)	1	%	82	65	59	67

Client Sample ID			SX_OB_20220327_08_03_SS_Primary_EUF	SX_OB_20220327_11_44_SS_Primary_EUF	SX_OB_20220327_15_52_SS_Primary_EUF	SX_OB_20220327_15_59_SS_Duplicate_EUF
Sample Matrix			**Soil**	**Soil**	**Soil**	**Soil**
Eurofins Sample No.			**M22-Ma57510**	**M22-Ma57511**	**M22-Ma57512**	**M22-Ma57513**
Date Sampled			**Mar 27, 2022**	**Mar 27, 2022**	**Mar 27, 2022**	**Mar 27, 2022**
Test/Reference	LOR	Unit				
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)						
13C2-8:2 FTSA (surr.)	1	%	57	55	67	66
13C2-10:2 FTSA (surr.)	1	%	134	101	98	100
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_20220327_20_01_SS_Primary_EUF
Sample Matrix			**Soil**
Eurofins Sample No.			**M22-Ma57514**
Date Sampled			**Mar 27, 2022**
Test/Reference	LOR	Unit	
Total Recoverable Hydrocarbons			
TRH C6-C9	20	mg/kg	< 20
TRH C10-C14	20	mg/kg	< 20
TRH C15-C28	50	mg/kg	< 50
TRH C29-C36	50	mg/kg	< 50
TRH C10-C36 (Total)	50	mg/kg	< 50
Naphthalene[N02]	0.5	mg/kg	< 0.5
TRH C6-C10	20	mg/kg	< 20
TRH C6-C10 less BTEX (F1)[N04]	20	mg/kg	< 20
TRH >C10-C16	50	mg/kg	< 50
TRH >C10-C16 less Naphthalene (F2)[N01]	50	mg/kg	< 50
TRH >C16-C34	100	mg/kg	< 100
TRH >C34-C40	100	mg/kg	< 100
TRH >C10-C40 (total)*	100	mg/kg	< 100
Volatile Organics			
Hexachlorobutadiene	0.5	mg/kg	< 0.5
Volatile Organics			
1.1-Dichloroethane	0.5	mg/kg	< 0.5
1.2.4-Trichlorobenzene	0.5	mg/kg	< 0.5
1.1-Dichloroethene	0.5	mg/kg	< 0.5
1.1.1-Trichloroethane	0.5	mg/kg	< 0.5
1.1.1.2-Tetrachloroethane	0.5	mg/kg	< 0.5
1.1.2-Trichloroethane	0.5	mg/kg	< 0.5
1.1.2.2-Tetrachloroethane	0.5	mg/kg	< 0.5
1.2-Dibromoethane	0.5	mg/kg	< 0.5
1.2-Dichlorobenzene	0.5	mg/kg	< 0.5
1.2-Dichloroethane	0.5	mg/kg	< 0.5
1.2-Dichloropropane	0.5	mg/kg	< 0.5
1.2.3-Trichloropropane	0.5	mg/kg	< 0.5
1.2.4-Trimethylbenzene	0.5	mg/kg	< 0.5
1.3-Dichlorobenzene	0.5	mg/kg	< 0.5

Client Sample ID			SX_OB_20220327_20_01_SS_Primary_EUF
Sample Matrix			**Soil**
Eurofins Sample No.			**M22-Ma57514**
Date Sampled			**Mar 27, 2022**
Test/Reference	LOR	Unit	
Volatile Organics			
1.3-Dichloropropane	0.5	mg/kg	< 0.5
1.3.5-Trimethylbenzene	0.5	mg/kg	< 0.5
1.4-Dichlorobenzene	0.5	mg/kg	< 0.5
2-Butanone (MEK)	0.5	mg/kg	< 0.5
2-Propanone (Acetone)	0.5	mg/kg	< 0.5
4-Chlorotoluene	0.5	mg/kg	< 0.5
4-Methyl-2-pentanone (MIBK)	0.5	mg/kg	< 0.5
Allyl chloride	0.5	mg/kg	< 0.5
Benzene	0.1	mg/kg	< 0.1
Bromobenzene	0.5	mg/kg	< 0.5
Bromochloromethane	0.5	mg/kg	< 0.5
Bromodichloromethane	0.5	mg/kg	< 0.5
Bromoform	0.5	mg/kg	< 0.5
Bromomethane	0.5	mg/kg	< 0.5
Carbon disulfide	0.5	mg/kg	< 0.5
Carbon Tetrachloride	0.5	mg/kg	< 0.5
Chlorobenzene	0.5	mg/kg	< 0.5
Chloroethane	0.5	mg/kg	< 0.5
Chloroform	0.5	mg/kg	< 0.5
Chloromethane	0.5	mg/kg	< 0.5
cis-1.2-Dichloroethene	0.5	mg/kg	< 0.5
cis-1.3-Dichloropropene	0.5	mg/kg	< 0.5
Dibromochloromethane	0.5	mg/kg	< 0.5
Dibromomethane	0.5	mg/kg	< 0.5
Dichlorodifluoromethane	0.5	mg/kg	< 0.5
Ethylbenzene	0.1	mg/kg	< 0.1
Iodomethane	0.5	mg/kg	< 0.5
Isopropyl benzene (Cumene)	0.5	mg/kg	< 0.5
m&p-Xylenes	0.2	mg/kg	< 0.2
Methylene Chloride	0.5	mg/kg	< 0.5
o-Xylene	0.1	mg/kg	< 0.1
Styrene	0.5	mg/kg	< 0.5
Tetrachloroethene	0.5	mg/kg	< 0.5
Toluene	0.1	mg/kg	< 0.1
trans-1.2-Dichloroethene	0.5	mg/kg	< 0.5
trans-1.3-Dichloropropene	0.5	mg/kg	< 0.5
Trichloroethene	0.5	mg/kg	< 0.5
Trichlorofluoromethane	0.5	mg/kg	< 0.5
Vinyl chloride	0.5	mg/kg	< 0.5
Xylenes - Total*	0.3	mg/kg	< 0.3
Total MAH*	0.5	mg/kg	< 0.5
Vic EPA IWRG 621 CHC (Total)*	0.5	mg/kg	< 0.5
Vic EPA IWRG 621 Other CHC (Total)*	0.5	mg/kg	< 0.5
4-Bromofluorobenzene (surr.)	1	%	67
Toluene-d8 (surr.)	1	%	66

Client Sample ID			SX_OB_20220327_20_01_SS_Primary_EUF
Sample Matrix			**Soil**
Eurofins Sample No.			**M22-Ma57514**
Date Sampled			**Mar 27, 2022**
Test/Reference	LOR	Unit	
Polycyclic Aromatic Hydrocarbons			
Benzo(a)pyrene TEQ (lower bound) *	0.5	mg/kg	< 0.5
Benzo(a)pyrene TEQ (medium bound) *	0.5	mg/kg	0.6
Benzo(a)pyrene TEQ (upper bound) *	0.5	mg/kg	1.2
Acenaphthene	0.5	mg/kg	< 0.5
Acenaphthylene	0.5	mg/kg	< 0.5
Anthracene	0.5	mg/kg	< 0.5
Benz(a)anthracene	0.5	mg/kg	< 0.5
Benzo(a)pyrene	0.5	mg/kg	< 0.5
Benzo(b&j)fluoranthene[N07]	0.5	mg/kg	< 0.5
Benzo(g.h.i)perylene	0.5	mg/kg	< 0.5
Benzo(k)fluoranthene	0.5	mg/kg	< 0.5
Chrysene	0.5	mg/kg	< 0.5
Dibenz(a.h)anthracene	0.5	mg/kg	< 0.5
Fluoranthene	0.5	mg/kg	< 0.5
Fluorene	0.5	mg/kg	< 0.5
Indeno(1.2.3-cd)pyrene	0.5	mg/kg	< 0.5
Naphthalene	0.5	mg/kg	< 0.5
Phenanthrene	0.5	mg/kg	< 0.5
Pyrene	0.5	mg/kg	< 0.5
Total PAH*	0.5	mg/kg	< 0.5
2-Fluorobiphenyl (surr.)	1	%	88
p-Terphenyl-d14 (surr.)	1	%	127
Organochlorine Pesticides			
Chlordanes - Total	0.1	mg/kg	< 0.1
4.4'-DDD	0.05	mg/kg	< 0.05
4.4'-DDE	0.05	mg/kg	< 0.05
4.4'-DDT	0.05	mg/kg	< 0.05
a-HCH	0.05	mg/kg	< 0.05
Aldrin	0.05	mg/kg	< 0.05
b-HCH	0.05	mg/kg	< 0.05
d-HCH	0.05	mg/kg	< 0.05
Dieldrin	0.05	mg/kg	< 0.05
Endosulfan I	0.05	mg/kg	< 0.05
Endosulfan II	0.05	mg/kg	< 0.05
Endosulfan sulphate	0.05	mg/kg	< 0.05
Endrin	0.05	mg/kg	< 0.05
Endrin aldehyde	0.05	mg/kg	< 0.05
Endrin ketone	0.05	mg/kg	< 0.05
g-HCH (Lindane)	0.05	mg/kg	< 0.05
Heptachlor	0.05	mg/kg	< 0.05
Heptachlor epoxide	0.05	mg/kg	< 0.05
Hexachlorobenzene	0.05	mg/kg	< 0.05
Methoxychlor	0.05	mg/kg	< 0.05
Toxaphene	0.5	mg/kg	< 0.5
Aldrin and Dieldrin (Total)*	0.05	mg/kg	< 0.05
DDT + DDE + DDD (Total)*	0.05	mg/kg	< 0.05
Vic EPA IWRG 621 OCP (Total)*	0.1	mg/kg	< 0.1
Vic EPA IWRG 621 Other OCP (Total)*	0.1	mg/kg	< 0.1

Client Sample ID			SX_OB_20220327_20_01_SS_Primary_EUF
Sample Matrix			**Soil**
Eurofins Sample No.			**M22-Ma57514**
Date Sampled			**Mar 27, 2022**
Test/Reference	LOR	Unit	
Organochlorine Pesticides			
Dibutylchlorendate (surr.)	1	%	88
Tetrachloro-m-xylene (surr.)	1	%	128
Polychlorinated Biphenyls			
Aroclor-1016	0.1	mg/kg	< 0.1
Aroclor-1221	0.1	mg/kg	< 0.1
Aroclor-1232	0.1	mg/kg	< 0.1
Aroclor-1242	0.1	mg/kg	< 0.1
Aroclor-1248	0.1	mg/kg	< 0.1
Aroclor-1254	0.1	mg/kg	< 0.1
Aroclor-1260	0.1	mg/kg	< 0.1
Total PCB*	0.1	mg/kg	< 0.1
Dibutylchlorendate (surr.)	1	%	88
Tetrachloro-m-xylene (surr.)	1	%	128
Phenols (Halogenated)			
2-Chlorophenol	0.5	mg/kg	< 0.5
2.4-Dichlorophenol	0.5	mg/kg	< 0.5
2.4.5-Trichlorophenol	1	mg/kg	< 1
2.4.6-Trichlorophenol	1	mg/kg	< 1
2.6-Dichlorophenol	0.5	mg/kg	< 0.5
4-Chloro-3-methylphenol	1	mg/kg	< 1
Pentachlorophenol	1	mg/kg	< 1
Tetrachlorophenols - Total	10	mg/kg	< 10
Total Halogenated Phenol*	1	mg/kg	< 1
Phenols (non-Halogenated)			
2-Cyclohexyl-4.6-dinitrophenol	20	mg/kg	< 20
2-Methyl-4.6-dinitrophenol	5	mg/kg	< 5
2-Nitrophenol	1.0	mg/kg	< 1
2.4-Dimethylphenol	0.5	mg/kg	< 0.5
2.4-Dinitrophenol	5	mg/kg	< 5
2-Methylphenol (o-Cresol)	0.2	mg/kg	< 0.2
3&4-Methylphenol (m&p-Cresol)	0.4	mg/kg	< 0.4
Total cresols*	0.5	mg/kg	< 0.5
4-Nitrophenol	5	mg/kg	< 5
Dinoseb	20	mg/kg	< 20
Phenol	0.5	mg/kg	< 0.5
Phenol-d6 (surr.)	1	%	61
Total Non-Halogenated Phenol*	20	mg/kg	< 20
Chromium (hexavalent)	1	mg/kg	< 1
Cyanide (total)	5	mg/kg	< 5
Fluoride (Total)	100	mg/kg	< 100
pH (1:5 Aqueous extract at 25°C as rec.)	0.1	pH Units	9.1
% Moisture	1	%	31
Heavy Metals			
Arsenic	2	mg/kg	35
Cadmium	0.4	mg/kg	< 0.4
Chromium	5	mg/kg	110
Copper	5	mg/kg	59

Client Sample ID			SX_OB_20220327_20_01_SS_Primary_EUF
Sample Matrix			**Soil**
Eurofins Sample No.			**M22-Ma57514**
Date Sampled			**Mar 27, 2022**
Test/Reference	LOR	Unit	
Heavy Metals			
Lead	5	mg/kg	< 5
Mercury	0.1	mg/kg	< 0.1
Molybdenum	5	mg/kg	< 5
Nickel	5	mg/kg	160
Selenium	2	mg/kg	< 2
Silver	2	mg/kg	< 2
Tin	10	mg/kg	< 10
Zinc	5	mg/kg	120
Perfluoroalkyl carboxylic acids (PFCAs)			
Perfluorobutanoic acid (PFBA)[N11]	5	ug/kg	< 5
Perfluoropentanoic acid (PFPeA)[N11]	5	ug/kg	< 5
Perfluorohexanoic acid (PFHxA)[N11]	5	ug/kg	< 5
Perfluoroheptanoic acid (PFHpA)[N11]	5	ug/kg	< 5
Perfluorooctanoic acid (PFOA)[N11]	5	ug/kg	< 5
Perfluorononanoic acid (PFNA)[N11]	5	ug/kg	< 5
Perfluorodecanoic acid (PFDA)[N11]	5	ug/kg	< 5
Perfluoroundecanoic acid (PFUnDA)[N11]	5	ug/kg	< 5
Perfluorododecanoic acid (PFDoDA)[N11]	5	ug/kg	< 5
Perfluorotridecanoic acid (PFTrDA)[N15]	5	ug/kg	< 5
Perfluorotetradecanoic acid (PFTeDA)[N11]	5	ug/kg	< 5
13C4-PFBA (surr.)	1	%	80
13C5-PFPeA (surr.)	1	%	88
13C5-PFHxA (surr.)	1	%	84
13C4-PFHpA (surr.)	1	%	84
13C8-PFOA (surr.)	1	%	93
13C5-PFNA (surr.)	1	%	56
13C6-PFDA (surr.)	1	%	99
13C2-PFUnDA (surr.)	1	%	133
13C2-PFDoDA (surr.)	1	%	111
13C2-PFTeDA (surr.)	1	%	111
Perfluoroalkyl sulfonamido substances			
Perfluorooctane sulfonamide (FOSA)[N11]	5	ug/kg	< 5
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)[N11]	5	ug/kg	< 5
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)[N11]	5	ug/kg	< 5
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)[N11]	5	ug/kg	< 5
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)[N11]	5	ug/kg	< 5
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)[N11]	10	ug/kg	< 10
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)[N11]	10	ug/kg	< 10
13C8-FOSA (surr.)	1	%	88
D3-N-MeFOSA (surr.)	1	%	79
D5-N-EtFOSA (surr.)	1	%	83
D7-N-MeFOSE (surr.)	1	%	73
D9-N-EtFOSE (surr.)	1	%	82
D5-N-EtFOSAA (surr.)	1	%	102
D3-N-MeFOSAA (surr.)	1	%	91

Client Sample ID			SX_OB_20220327_20_01_SS_Primary_EUF
Sample Matrix			**Soil**
Eurofins Sample No.			**M22-Ma57514**
Date Sampled			**Mar 27, 2022**
Test/Reference	LOR	Unit	
Perfluoroalkyl sulfonic acids (PFSAs)			
Perfluorobutanesulfonic acid (PFBS)[N11]	5	ug/kg	< 5
Perfluorononanesulfonic acid (PFNS)[N15]	5	ug/kg	< 5
Perfluoropropanesulfonic acid (PFPrS)[N15]	5	ug/kg	< 5
Perfluoropentanesulfonic acid (PFPeS)[N15]	5	ug/kg	< 5
Perfluorohexanesulfonic acid (PFHxS)[N11]	5	ug/kg	< 5
Perfluoroheptanesulfonic acid (PFHpS)[N15]	5	ug/kg	< 5
Perfluorooctanesulfonic acid (PFOS)[N11]	5	ug/kg	< 5
Perfluorodecanesulfonic acid (PFDS)[N15]	5	ug/kg	< 5
13C3-PFBS (surr.)	1	%	76
18O2-PFHxS (surr.)	1	%	76
13C8-PFOS (surr.)	1	%	85
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)			
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)[N11]	5	ug/kg	< 5
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)[N11]	10	ug/kg	< 10
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)[N11]	5	ug/kg	< 5
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)[N11]	5	ug/kg	< 5
13C2-4:2 FTSA (surr.)	1	%	68
13C2-6:2 FTSA (surr.)	1	%	62
13C2-8:2 FTSA (surr.)	1	%	73
13C2-10:2 FTSA (surr.)	1	%	103
PFASs Summations			
Sum (PFHxS + PFOS)*	5	ug/kg	< 5
Sum of US EPA PFAS (PFOS + PFOA)*	5	ug/kg	< 5
Sum of enHealth PFAS (PFHxS + PFOS + PFOA)*	5	ug/kg	< 5
Sum of WA DWER PFAS (n=10)*	10	ug/kg	< 10
Sum of PFASs (n=30)*	50	ug/kg	< 50

Sample History

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

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

Description	Testing Site	Extracted	Holding Time
IWRG 621 WGTP Suite			
Total Recoverable Hydrocarbons - 1999 NEPM Fractions	Melbourne	Mar 29, 2022	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
Total Recoverable Hydrocarbons - 2013 NEPM Fractions	Melbourne	Mar 29, 2022	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
Total Recoverable Hydrocarbons - 2013 NEPM Fractions	Melbourne	Mar 29, 2022	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
Volatile Organics	Melbourne	Mar 29, 2022	7 Days
- Method: USEPA 8260 - MGT 350A Volatile Organics by GCMS			
Volatile Organics	Melbourne	Mar 29, 2022	7 Days
- Method: LTM-ORG-2150 VOCs in Soils Liquid and other Aqueous Matrices (USEPA 8260)			
Polycyclic Aromatic Hydrocarbons	Melbourne	Mar 29, 2022	14 Days
- Method: LTM-ORG-2130 PAH and Phenols in Soil and Water			
Organochlorine Pesticides	Melbourne	Mar 29, 2022	14 Days
- Method: LTM-ORG-2220 OCP & PCB in Soil and Water (USEPA 8270)			
Polychlorinated Biphenyls	Melbourne	Mar 29, 2022	28 Days
- Method: LTM-ORG-2220 OCP & PCB in Soil and Water (USEPA 8082)			
Phenols (Halogenated)	Melbourne	Mar 29, 2022	14 Days
- Method: LTM-ORG-2130 PAH and Phenols in Soil and Water			
Phenols (non-Halogenated)	Melbourne	Mar 29, 2022	14 Days
- Method: LTM-ORG-2130 PAH and Phenols in Soil and Water			
Chromium (hexavalent)	Melbourne	Mar 29, 2022	28 Days
- Method: LTM-INO-4100 Hexavalent Chromium by Spectrometric detection			
Cyanide (total)	Melbourne	Mar 31, 2022	14 Days
- Method: LTM-INO-4020 Total Free WAD Cyanide by CFA			
Fluoride (Total)	Melbourne	Mar 30, 2022	28 Days
- Method: LTM-INO-4150 Determination of Total Fluoride PART A – CIC			
- Method: LTM-INO-4150 Determination of Total Fluoride PART B – ISE			
pH (1:5 Aqueous extract at 25°C as rec.)	Melbourne	Mar 29, 2022	7 Days
- Method: LTM-GEN-7090 pH in soil by ISE			
Metals IWRG 621 : Metals M12	Melbourne	Mar 29, 2022	28 Days
- Method:			
% Moisture	Melbourne	Mar 28, 2022	14 Days
- Method: LTM-GEN-7080 Moisture			
Per- and Polyfluoroalkyl Substances (PFASs)			
Perfluoroalkyl carboxylic acids (PFCAs)	Melbourne	Mar 29, 2022	28 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			
Perfluoroalkyl sulfonamido substances	Melbourne	Mar 29, 2022	28 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			
Perfluoroalkyl sulfonic acids (PFSAs)	Melbourne	Mar 29, 2022	28 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)	Melbourne	Mar 29, 2022	28 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			
PFASs Summations	Melbourne	Mar 28, 2022	
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			

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Project Name: 20220328061259-Eurofin-8
Project ID: JC0927

Order No.:
Report #: 874920
Phone: 08 8338 1009
Fax:

Received: Mar 28, 2022 12:39 PM
Due: Apr 4, 2022
Priority: 5 Day
Contact Name: Agon Lab Reports (Spoil Project)

Eurofins Analytical Services Manager : Michael Cassidy

Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	IWRG 621 WGTP Suite
Melbourne Laboratory - NATA # 1261 Site # 1254						X	X	X	X
Sydney Laboratory - NATA # 1261 Site # 18217									
Brisbane Laboratory - NATA # 1261 Site # 20794									
Mayfield Laboratory - NATA # 1261 Site # 25079									
Perth Laboratory - NATA # 2377 Site # 2370									
External Laboratory									
No	**Sample ID**	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**				
1	SX_OB_20220326_20_12_SS_Primary_EUF	Mar 26, 2022	8:12PM	Soil	M22-Ma57506		X	X	X
2	SX_OB_20220327_00_13_SS_Primary_EUF	Mar 27, 2022	12:13AM	Soil	M22-Ma57507		X	X	X
3	SX_OB_20220327_04_00_SS_Primary_EUF	Mar 27, 2022	4:00AM	Soil	M22-Ma57508		X	X	X

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Order No.:
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Phone: 08 8338 1009
Fax:

Received: Mar 28, 2022 12:39 PM
Due: Apr 4, 2022
Priority: 5 Day
Contact Name: Agon Lab Reports (Spoil Project)

Eurofins Analytical Services Manager : Michael Cassidy

Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	IWRG 621 WGTP Suite
Melbourne Laboratory - NATA # 1261 Site # 1254						X	X	X	X
Sydney Laboratory - NATA # 1261 Site # 18217									
Brisbane Laboratory - NATA # 1261 Site # 20794									
Mayfield Laboratory - NATA # 1261 Site # 25079									
Perth Laboratory - NATA # 2377 Site # 2370									
External Laboratory									
4	SX_OB_20220327_07_58_SS_Triplicate_EUF	Mar 27, 2022	7:58AM	Soil	M22-Ma57509		X	X	X
5	SX_OB_20220327_08_03_SS_Primary_EUF	Mar 27, 2022	8:03AM	Soil	M22-Ma57510		X	X	X
6	SX_OB_20220327_11_44_SS_Primary_EUF	Mar 27, 2022	11:44AM	Soil	M22-Ma57511		X	X	X
7	SX_OB_20220327_15_52_S	Mar 27, 2022	3:52PM	Soil	M22-Ma57512		X	X	X

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Order No.:
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Phone: 08 8338 1009
Fax:

Received: Mar 28, 2022 12:39 PM
Due: Apr 4, 2022
Priority: 5 Day
Contact Name: Agon Lab Reports (Spoil Project)

Eurofins Analytical Services Manager : Michael Cassidy

Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	IWRG 621 WGTP Suite
Melbourne Laboratory - NATA # 1261 Site # 1254						X	X	X	X
Sydney Laboratory - NATA # 1261 Site # 18217									
Brisbane Laboratory - NATA # 1261 Site # 20794									
Mayfield Laboratory - NATA # 1261 Site # 25079									
Perth Laboratory - NATA # 2377 Site # 2370									
External Laboratory									
	S_Primary_EUF								
8	SX_OB_20220327_15_59_SS_Duplicate_EUF	Mar 27, 2022	3:59PM	Soil	M22-Ma57513		X	X	X
9	SX_OB_20220327_20_01_SS_Primary_EUF	Mar 27, 2022	8:01PM	Soil	M22-Ma57514		X	X	X
10	SX_OB_20220326_20_12_SS_Primary_EUF	Mar 26, 2022	8:12PM	AUS Leachate - pH 5.0	M22-Ma57515	X		X	

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Due: Apr 4, 2022
Priority: 5 Day
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Eurofins Analytical Services Manager : Michael Cassidy

Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	IWRG 621 WGTP Suite
Melbourne Laboratory - NATA # 1261 Site # 1254						X	X	X	X
Sydney Laboratory - NATA # 1261 Site # 18217									
Brisbane Laboratory - NATA # 1261 Site # 20794									
Mayfield Laboratory - NATA # 1261 Site # 25079									
Perth Laboratory - NATA # 2377 Site # 2370									
External Laboratory									
11	SX_OB_20220327_00_13_SS_Primary_EUF	Mar 27, 2022	12:13AM	AUS Leachate - pH 5.0	M22-Ma57516	X		X	
12	SX_OB_20220327_04_00_SS_Primary_EUF	Mar 27, 2022	4:00AM	AUS Leachate - pH 5.0	M22-Ma57517	X		X	
13	SX_OB_20220327_07_58_SS_Triplicate_EUF	Mar 27, 2022	7:58AM	AUS Leachate - pH 5.0	M22-Ma57518	X		X	
14	SX_OB_20220327_08_03_S	Mar 27, 2022	8:03AM	AUS Leachate - pH 5.0	M22-Ma57519	X		X	

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Project ID: JC0927

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Report #: 874920
Phone: 08 8338 1009
Fax:

Received: Mar 28, 2022 12:39 PM
Due: Apr 4, 2022
Priority: 5 Day
Contact Name: Agon Lab Reports (Spoil Project)

Eurofins Analytical Services Manager : Michael Cassidy

Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	IWRG 621 WGTP Suite
Melbourne Laboratory - NATA # 1261 Site # 1254						X	X	X	X
Sydney Laboratory - NATA # 1261 Site # 18217									
Brisbane Laboratory - NATA # 1261 Site # 20794									
Mayfield Laboratory - NATA # 1261 Site # 25079									
Perth Laboratory - NATA # 2377 Site # 2370									
External Laboratory									
	S_Primary_EUF								
15	SX_OB_20220327_11_44_SS_Primary_EUF	Mar 27, 2022	11:44AM	AUS Leachate - pH 5.0	M22-Ma57520	X		X	
16	SX_OB_20220327_15_52_SS_Primary_EUF	Mar 27, 2022	3:52PM	AUS Leachate - pH 5.0	M22-Ma57521	X		X	
17	SX_OB_20220327_15_59_SS_Duplicate_EUF	Mar 27, 2022	3:59PM	AUS Leachate - pH 5.0	M22-Ma57522	X		X	

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Project Name: 20220328061259-Eurofin-8
Project ID: JC0927

Order No.:
Report #: 874920
Phone: 08 8338 1009
Fax:

Received: Mar 28, 2022 12:39 PM
Due: Apr 4, 2022
Priority: 5 Day
Contact Name: Agon Lab Reports (Spoil Project)

Eurofins Analytical Services Manager : Michael Cassidy

Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	IWRG 621 WGTP Suite
Melbourne Laboratory - NATA # 1261 Site # 1254						X	X	X	X
Sydney Laboratory - NATA # 1261 Site # 18217									
Brisbane Laboratory - NATA # 1261 Site # 20794									
Mayfield Laboratory - NATA # 1261 Site # 25079									
Perth Laboratory - NATA # 2377 Site # 2370									
External Laboratory									
18	SX_OB_20220327_20_01_SS_Primary_EUF	Mar 27, 2022	8:01PM	AUS Leachate - pH 5.0	M22-Ma57523	X		X	
19	SX_OB_20220326_20_12_SS_Primary_EUF	Mar 26, 2022	8:12PM	AUS Leachate - Reagent Water	M22-Ma57524	X		X	
20	SX_OB_20220327_00_13_SS_Primary_EUF	Mar 27, 2022	12:13AM	AUS Leachate - Reagent Water	M22-Ma57525	X		X	
21	SX_OB_20220327_04_00_S	Mar 27, 2022	4:00AM	AUS Leachate - Reagent	M22-Ma57526	X		X	

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Project Name: 20220328061259-Eurofin-8
Project ID: JC0927

Order No.:
Report #: 874920
Phone: 08 8338 1009
Fax:

Received: Mar 28, 2022 12:39 PM
Due: Apr 4, 2022
Priority: 5 Day
Contact Name: Agon Lab Reports (Spoil Project)

Eurofins Analytical Services Manager : Michael Cassidy

Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	IWRG 621 WGTP Suite
Melbourne Laboratory - NATA # 1261 Site # 1254						X	X	X	X
Sydney Laboratory - NATA # 1261 Site # 18217									
Brisbane Laboratory - NATA # 1261 Site # 20794									
Mayfield Laboratory - NATA # 1261 Site # 25079									
Perth Laboratory - NATA # 2377 Site # 2370									
External Laboratory									
	S_Primary_EUF			Water					
22	SX_OB_20220327_07_58_SS_Triplicate_EUF	Mar 27, 2022	7:58AM	AUS Leachate - Reagent Water	M22-Ma57527	X		X	
23	SX_OB_20220327_08_03_SS_Primary_EUF	Mar 27, 2022	8:03AM	AUS Leachate - Reagent Water	M22-Ma57528	X		X	
24	SX_OB_20220327_11_44_SS_Primary_EUF	Mar 27, 2022	11:44AM	AUS Leachate - Reagent Water	M22-Ma57529	X		X	

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Brisbane Laboratory - NATA # 1261 Site # 20794									
Mayfield Laboratory - NATA # 1261 Site # 25079									
Perth Laboratory - NATA # 2377 Site # 2370									
External Laboratory									
25	SX_OB_20220327_15_52_SS_Primary_EUF	Mar 27, 2022	3:52PM	AUS Leachate - Reagent Water	M22-Ma57530	X		X	
26	SX_OB_20220327_15_59_SS_Duplicate_EUF	Mar 27, 2022	3:59PM	AUS Leachate - Reagent Water	M22-Ma57531	X		X	
27	SX_OB_20220327_20_01_SS_Primary_EUF	Mar 27, 2022	8:01PM	AUS Leachate - Reagent Water	M22-Ma57532	X		X	
Test Counts						18	9	27	9

Internal Quality Control Review and Glossary

General

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

Holding Times

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

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

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

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

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

Units

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

Terms

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

QC - Acceptance Criteria

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

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

Results <10 times the LOR: No Limit

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

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

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

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

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

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QC Data General Comments

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

Quality Control Results

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

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

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

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Zinc	mg/kg	< 5			5	Pass	
Method Blank							
Perfluoroalkyl carboxylic acids (PFCAs)							
Perfluorobutanoic acid (PFBA)	ug/kg	< 5			5	Pass	
Perfluoropentanoic acid (PFPeA)	ug/kg	< 5			5	Pass	
Perfluorohexanoic acid (PFHxA)	ug/kg	< 5			5	Pass	
Perfluoroheptanoic acid (PFHpA)	ug/kg	< 5			5	Pass	
Perfluorooctanoic acid (PFOA)	ug/kg	< 5			5	Pass	
Perfluorononanoic acid (PFNA)	ug/kg	< 5			5	Pass	
Perfluorodecanoic acid (PFDA)	ug/kg	< 5			5	Pass	
Perfluoroundecanoic acid (PFUnDA)	ug/kg	< 5			5	Pass	
Perfluorododecanoic acid (PFDoDA)	ug/kg	< 5			5	Pass	
Perfluorotridecanoic acid (PFTrDA)	ug/kg	< 5			5	Pass	
Perfluorotetradecanoic acid (PFTeDA)	ug/kg	< 5			5	Pass	
Method Blank							
Perfluoroalkyl sulfonamido substances							
Perfluorooctane sulfonamide (FOSA)	ug/kg	< 5			5	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	ug/kg	< 5			5	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	ug/kg	< 5			5	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)	ug/kg	< 5			5	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)	ug/kg	< 5			5	Pass	
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	ug/kg	< 10			10	Pass	
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	ug/kg	< 10			10	Pass	
Method Blank							
Perfluoroalkyl sulfonic acids (PFSAs)							
Perfluorobutanesulfonic acid (PFBS)	ug/kg	< 5			5	Pass	
Perfluorononanesulfonic acid (PFNS)	ug/kg	< 5			5	Pass	
Perfluoropropanesulfonic acid (PFPrS)	ug/kg	< 5			5	Pass	
Perfluoropentanesulfonic acid (PFPeS)	ug/kg	< 5			5	Pass	
Perfluorohexanesulfonic acid (PFHxS)	ug/kg	< 5			5	Pass	
Perfluoroheptanesulfonic acid (PFHpS)	ug/kg	< 5			5	Pass	
Perfluorooctanesulfonic acid (PFOS)	ug/kg	< 5			5	Pass	
Perfluorodecanesulfonic acid (PFDS)	ug/kg	< 5			5	Pass	
Method Blank							
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)							
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	ug/kg	< 5			5	Pass	
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)	ug/kg	< 10			10	Pass	
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	ug/kg	< 5			5	Pass	
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	ug/kg	< 5			5	Pass	
LCS - % Recovery							
Total Recoverable Hydrocarbons							
TRH C6-C9	%	94			70-130	Pass	
TRH C10-C14	%	104			70-130	Pass	
Naphthalene	%	83			70-130	Pass	
TRH C6-C10	%	92			70-130	Pass	
TRH >C10-C16	%	104			70-130	Pass	
LCS - % Recovery							
Volatile Organics							
1.1-Dichloroethene	%	75			70-130	Pass	
1.1.1-Trichloroethane	%	85			70-130	Pass	
1.2-Dichlorobenzene	%	106			70-130	Pass	
1.2-Dichloroethane	%	90			70-130	Pass	
Benzene	%	77			70-130	Pass	
Ethylbenzene	%	85			70-130	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
m&p-Xylenes	%	83			70-130	Pass	
Toluene	%	85			70-130	Pass	
Trichloroethene	%	78			70-130	Pass	
Xylenes - Total*	%	83			70-130	Pass	
LCS - % Recovery							
Polycyclic Aromatic Hydrocarbons							
Acenaphthene	%	128			70-130	Pass	
Acenaphthylene	%	128			70-130	Pass	
Anthracene	%	111			70-130	Pass	
Benz(a)anthracene	%	112			70-130	Pass	
Benzo(a)pyrene	%	121			70-130	Pass	
Benzo(b&j)fluoranthene	%	118			70-130	Pass	
Benzo(g.h.i)perylene	%	76			70-130	Pass	
Benzo(k)fluoranthene	%	119			70-130	Pass	
Chrysene	%	110			70-130	Pass	
Dibenz(a.h)anthracene	%	113			70-130	Pass	
Fluoranthene	%	116			70-130	Pass	
Fluorene	%	127			70-130	Pass	
Indeno(1.2.3-cd)pyrene	%	119			70-130	Pass	
Naphthalene	%	122			70-130	Pass	
Phenanthrene	%	113			70-130	Pass	
Pyrene	%	126			70-130	Pass	
LCS - % Recovery							
Organochlorine Pesticides							
Chlordanes - Total	%	95			70-130	Pass	
4.4'-DDD	%	97			70-130	Pass	
4.4'-DDE	%	83			70-130	Pass	
4.4'-DDT	%	82			70-130	Pass	
a-HCH	%	91			70-130	Pass	
Aldrin	%	88			70-130	Pass	
b-HCH	%	94			70-130	Pass	
d-HCH	%	88			70-130	Pass	
Dieldrin	%	108			70-130	Pass	
Endosulfan I	%	85			70-130	Pass	
Endosulfan II	%	86			70-130	Pass	
Endosulfan sulphate	%	83			70-130	Pass	
Endrin	%	97			70-130	Pass	
Endrin aldehyde	%	107			70-130	Pass	
Endrin ketone	%	117			70-130	Pass	
g-HCH (Lindane)	%	100			70-130	Pass	
Heptachlor	%	86			70-130	Pass	
Heptachlor epoxide	%	81			70-130	Pass	
Hexachlorobenzene	%	80			70-130	Pass	
Methoxychlor	%	71			70-130	Pass	
LCS - % Recovery							
Polychlorinated Biphenyls							
Aroclor-1260	%	109			70-130	Pass	
LCS - % Recovery							
Phenols (Halogenated)							
2-Chlorophenol	%	76			25-140	Pass	
2.4-Dichlorophenol	%	54			25-140	Pass	
2.4.5-Trichlorophenol	%	47			25-140	Pass	
2.4.6-Trichlorophenol	%	59			25-140	Pass	
2.6-Dichlorophenol	%	52			25-140	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
4-Chloro-3-methylphenol	%	59			25-140	Pass	
Pentachlorophenol	%	48			25-140	Pass	
Tetrachlorophenols - Total	%	47			25-140	Pass	
LCS - % Recovery							
Phenols (non-Halogenated)							
2-Cyclohexyl-4.6-dinitrophenol	%	74			25-140	Pass	
2-Methyl-4.6-dinitrophenol	%	38			25-140	Pass	
2-Nitrophenol	%	56			25-140	Pass	
2.4-Dimethylphenol	%	61			25-140	Pass	
2.4-Dinitrophenol	%	68			25-140	Pass	
2-Methylphenol (o-Cresol)	%	75			25-140	Pass	
3&4-Methylphenol (m&p-Cresol)	%	66			25-140	Pass	
4-Nitrophenol	%	44			25-140	Pass	
Dinoseb	%	46			25-140	Pass	
Phenol	%	78			25-140	Pass	
LCS - % Recovery							
Chromium (hexavalent)	%	103			70-130	Pass	
Cyanide (total)	%	95			70-130	Pass	
Fluoride (Total)	%	73			70-130	Pass	
LCS - % Recovery							
Heavy Metals							
Arsenic	%	113			80-120	Pass	
Cadmium	%	108			80-120	Pass	
Chromium	%	114			80-120	Pass	
Copper	%	109			80-120	Pass	
Lead	%	114			80-120	Pass	
Mercury	%	119			80-120	Pass	
Molybdenum	%	111			80-120	Pass	
Nickel	%	109			80-120	Pass	
Selenium	%	111			80-120	Pass	
Silver	%	109			80-120	Pass	
Tin	%	100			80-120	Pass	
Zinc	%	110			80-120	Pass	
LCS - % Recovery							
Perfluoroalkyl carboxylic acids (PFCAs)							
Perfluorobutanoic acid (PFBA)	%	89			50-150	Pass	
Perfluoropentanoic acid (PFPeA)	%	82			50-150	Pass	
Perfluorohexanoic acid (PFHxA)	%	92			50-150	Pass	
Perfluoroheptanoic acid (PFHpA)	%	89			50-150	Pass	
Perfluorooctanoic acid (PFOA)	%	102			50-150	Pass	
Perfluorononanoic acid (PFNA)	%	106			50-150	Pass	
Perfluorodecanoic acid (PFDA)	%	104			50-150	Pass	
Perfluoroundecanoic acid (PFUnDA)	%	95			50-150	Pass	
Perfluorododecanoic acid (PFDoDA)	%	97			50-150	Pass	
Perfluorotridecanoic acid (PFTrDA)	%	111			50-150	Pass	
Perfluorotetradecanoic acid (PFTeDA)	%	97			50-150	Pass	
LCS - % Recovery							
Perfluoroalkyl sulfonamido substances							
Perfluorooctane sulfonamide (FOSA)	%	95			50-150	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	%	89			50-150	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	%	99			50-150	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)	%	87			50-150	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)	%	91			50-150	Pass	
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	%	73			50-150	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	%	87			50-150	Pass	
LCS - % Recovery							
Perfluoroalkyl sulfonic acids (PFSAs)							
Perfluorobutanesulfonic acid (PFBS)	%	86			50-150	Pass	
Perfluorononanesulfonic acid (PFNS)	%	95			50-150	Pass	
Perfluoropropanesulfonic acid (PFPrS)	%	90			50-150	Pass	
Perfluoropentanesulfonic acid (PFPeS)	%	81			50-150	Pass	
Perfluorohexanesulfonic acid (PFHxS)	%	83			50-150	Pass	
Perfluoroheptanesulfonic acid (PFHpS)	%	119			50-150	Pass	
Perfluorooctanesulfonic acid (PFOS)	%	88			50-150	Pass	
Perfluorodecanesulfonic acid (PFDS)	%	103			50-150	Pass	
LCS - % Recovery							
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)							
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	%	96			50-150	Pass	
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)	%	95			50-150	Pass	
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	%	116			50-150	Pass	
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	%	80			50-150	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Spike - % Recovery									
Total Recoverable Hydrocarbons				Result 1					
TRH C6-C9	M22-Ma56316	NCP	%	98			70-130	Pass	
TRH C10-C14	M22-Ma56622	NCP	%	102			70-130	Pass	
Naphthalene	M22-Ma56316	NCP	%	113			70-130	Pass	
TRH C6-C10	M22-Ma56316	NCP	%	114			70-130	Pass	
TRH >C10-C16	M22-Ma56622	NCP	%	102			70-130	Pass	
Spike - % Recovery									
Volatile Organics				Result 1					
1.1-Dichloroethene	M22-Ma56316	NCP	%	78			70-130	Pass	
1.1.1-Trichloroethane	M22-Ma56316	NCP	%	79			70-130	Pass	
1.2-Dichlorobenzene	M22-Ma56316	NCP	%	103			70-130	Pass	
1.2-Dichloroethane	M22-Ma56316	NCP	%	118			70-130	Pass	
Benzene	M22-Ma56316	NCP	%	103			70-130	Pass	
Ethylbenzene	M22-Ma56316	NCP	%	116			70-130	Pass	
m&p-Xylenes	M22-Ma56316	NCP	%	113			70-130	Pass	
o-Xylene	M22-Ma56316	NCP	%	122			70-130	Pass	
Toluene	M22-Ma56316	NCP	%	120			70-130	Pass	
Trichloroethene	M22-Ma56316	NCP	%	74			70-130	Pass	
Xylenes - Total*	M22-Ma56316	NCP	%	116			70-130	Pass	
Spike - % Recovery									
Polycyclic Aromatic Hydrocarbons				Result 1					
Acenaphthene	M22-Ma59201	NCP	%	76			70-130	Pass	
Acenaphthylene	M22-Ma59201	NCP	%	73			70-130	Pass	
Anthracene	M22-Ma59201	NCP	%	80			70-130	Pass	
Benz(a)anthracene	M22-Ma59201	NCP	%	85			70-130	Pass	
Benzo(a)pyrene	M22-Ma59201	NCP	%	80			70-130	Pass	
Benzo(b&j)fluoranthene	M22-Ma59201	NCP	%	71			70-130	Pass	
Benzo(g.h.i)perylene	M22-Ma59201	NCP	%	77			70-130	Pass	
Benzo(k)fluoranthene	M22-Ma59201	NCP	%	74			70-130	Pass	
Chrysene	M22-Ma59201	NCP	%	80			70-130	Pass	
Dibenz(a.h)anthracene	M22-Ma59201	NCP	%	74			70-130	Pass	
Fluoranthene	M22-Ma59201	NCP	%	79			70-130	Pass	
Fluorene	M22-Ma59201	NCP	%	84			70-130	Pass	
Indeno(1.2.3-cd)pyrene	M22-Ma59201	NCP	%	73			70-130	Pass	
Naphthalene	M22-Ma59201	NCP	%	77			70-130	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Phenanthrene	M22-Ma59201	NCP	%	73			70-130	Pass	
Pyrene	M22-Ma59201	NCP	%	86			70-130	Pass	
Spike - % Recovery									
Phenols (Halogenated)				Result 1					
2-Chlorophenol	M22-Ma59201	NCP	%	58			30-130	Pass	
2.4-Dichlorophenol	M22-Ma59201	NCP	%	51			30-130	Pass	
2.4.5-Trichlorophenol	M22-Ma59201	NCP	%	44			30-130	Pass	
2.4.6-Trichlorophenol	M22-Ma59201	NCP	%	44			30-130	Pass	
2.6-Dichlorophenol	M22-Ma59201	NCP	%	48			30-130	Pass	
4-Chloro-3-methylphenol	M22-Ma59201	NCP	%	42			30-130	Pass	
Pentachlorophenol	M22-Ma59201	NCP	%	36			30-130	Pass	
Tetrachlorophenols - Total	M22-Ma59201	NCP	%	41			30-130	Pass	
Spike - % Recovery									
Phenols (non-Halogenated)				Result 1					
2-Cyclohexyl-4.6-dinitrophenol	M22-Ma47594	NCP	%	85			30-130	Pass	
2-Methyl-4.6-dinitrophenol	M22-Ma59201	NCP	%	38			30-130	Pass	
2-Nitrophenol	M22-Ma59201	NCP	%	40			30-130	Pass	
2.4-Dimethylphenol	M22-Ma59201	NCP	%	45			30-130	Pass	
2.4-Dinitrophenol	M22-Ma59201	NCP	%	34			30-130	Pass	
2-Methylphenol (o-Cresol)	M22-Ma59201	NCP	%	56			30-130	Pass	
3&4-Methylphenol (m&p-Cresol)	M22-Ma59201	NCP	%	43			30-130	Pass	
4-Nitrophenol	M22-Ma59201	NCP	%	51			30-130	Pass	
Dinoseb	M22-Ma59201	NCP	%	36			30-130	Pass	
Phenol	M22-Ma59201	NCP	%	49			30-130	Pass	
Spike - % Recovery									
				Result 1					
Cyanide (total)	M22-Ma60375	NCP	%	73			70-130	Pass	
Spike - % Recovery									
Heavy Metals				Result 1					
Arsenic	M22-Ma55450	NCP	%	103			75-125	Pass	
Cadmium	M22-Ma55450	NCP	%	97			75-125	Pass	
Chromium	M22-Ma55450	NCP	%	109			75-125	Pass	
Copper	M22-Ma55450	NCP	%	103			75-125	Pass	
Lead	M22-Ma55450	NCP	%	115			75-125	Pass	
Mercury	M22-Ma55450	NCP	%	125			75-125	Pass	
Molybdenum	M22-Ma55450	NCP	%	101			75-125	Pass	
Nickel	M22-Ma55450	NCP	%	102			75-125	Pass	
Selenium	M22-Ma55450	NCP	%	99			75-125	Pass	
Silver	M22-Ma55450	NCP	%	99			75-125	Pass	
Tin	M22-Ma55450	NCP	%	115			75-125	Pass	
Zinc	M22-Ma55450	NCP	%	109			75-125	Pass	
Spike - % Recovery									
Perfluoroalkyl carboxylic acids (PFCAs)				Result 1					
Perfluorobutanoic acid (PFBA)	M22-Ma53353	NCP	%	87			50-150	Pass	
Perfluoropentanoic acid (PFPeA)	M22-Ma53353	NCP	%	72			50-150	Pass	
Perfluorohexanoic acid (PFHxA)	M22-Ma53353	NCP	%	82			50-150	Pass	
Perfluoroheptanoic acid (PFHpA)	M22-Ma53353	NCP	%	85			50-150	Pass	
Perfluorooctanoic acid (PFOA)	M22-Ma53353	NCP	%	83			50-150	Pass	
Perfluorononanoic acid (PFNA)	M22-Ma53353	NCP	%	106			50-150	Pass	
Perfluorodecanoic acid (PFDA)	M22-Ma53353	NCP	%	98			50-150	Pass	
Perfluoroundecanoic acid (PFUnDA)	M22-Ma53353	NCP	%	87			50-150	Pass	
Perfluorododecanoic acid (PFDoDA)	M22-Ma53353	NCP	%	100			50-150	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Perfluorotridecanoic acid (PFTrDA)	M22-Ma53353	NCP	%	83			50-150	Pass	
Perfluorotetradecanoic acid (PFTeDA)	M22-Ma53353	NCP	%	91			50-150	Pass	
Spike - % Recovery									
Perfluoroalkyl sulfonamido substances				Result 1					
Perfluorooctane sulfonamide (FOSA)	M22-Ma53353	NCP	%	88			50-150	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	M22-Ma53353	NCP	%	79			50-150	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	M22-Ma53353	NCP	%	81			50-150	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)	M22-Ma53353	NCP	%	74			50-150	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)	M22-Ma53353	NCP	%	95			50-150	Pass	
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	M22-Ma53353	NCP	%	70			50-150	Pass	
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	M22-Ma53353	NCP	%	84			50-150	Pass	
Spike - % Recovery									
Perfluoroalkyl sulfonic acids (PFSAs)				Result 1					
Perfluorobutanesulfonic acid (PFBS)	M22-Ma53353	NCP	%	73			50-150	Pass	
Perfluorononanesulfonic acid (PFNS)	M22-Ma53353	NCP	%	94			50-150	Pass	
Perfluoropropanesulfonic acid (PFPrS)	M22-Ma53353	NCP	%	78			50-150	Pass	
Perfluoropentanesulfonic acid (PFPeS)	M22-Ma53353	NCP	%	73			50-150	Pass	
Perfluorohexanesulfonic acid (PFHxS)	M22-Ma53353	NCP	%	74			50-150	Pass	
Perfluoroheptanesulfonic acid (PFHpS)	M22-Ma53353	NCP	%	89			50-150	Pass	
Perfluorooctanesulfonic acid (PFOS)	M22-Ma53353	NCP	%	81			50-150	Pass	
Perfluorodecanesulfonic acid (PFDS)	M22-Ma53353	NCP	%	94			50-150	Pass	
Spike - % Recovery									
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)				Result 1					
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	M22-Ma53353	NCP	%	116			50-150	Pass	
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)	M22-Ma53353	NCP	%	85			50-150	Pass	
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	M22-Ma53353	NCP	%	116			50-150	Pass	
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	M22-Ma53353	NCP	%	68			50-150	Pass	
Spike - % Recovery									
				Result 1					
Fluoride (Total)	M22-Ma57507	CP	%	101			70-130	Pass	
Spike - % Recovery									
Organochlorine Pesticides				Result 1					
Chlordanes - Total	M22-Ma53211	NCP	%	103			70-130	Pass	
4.4'-DDD	M22-Ma53211	NCP	%	87			70-130	Pass	
4.4'-DDE	M22-Ma53211	NCP	%	97			70-130	Pass	
4.4'-DDT	M22-Ma53211	NCP	%	88			70-130	Pass	
a-HCH	M22-Ma53211	NCP	%	112			70-130	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Aldrin	M22-Ma53211	NCP	%	96			70-130	Pass	
b-HCH	M22-Ma53211	NCP	%	95			70-130	Pass	
d-HCH	M22-Ma53211	NCP	%	72			70-130	Pass	
Dieldrin	M22-Ma53211	NCP	%	115			70-130	Pass	
Endosulfan I	M22-Ma53211	NCP	%	109			70-130	Pass	
Endosulfan II	M22-Ma53211	NCP	%	85			70-130	Pass	
Endosulfan sulphate	M22-Ma53211	NCP	%	86			70-130	Pass	
Endrin	M22-Ma53211	NCP	%	118			70-130	Pass	
Endrin aldehyde	M22-Ma53211	NCP	%	102			70-130	Pass	
Endrin ketone	M22-Ma53211	NCP	%	86			70-130	Pass	
g-HCH (Lindane)	M22-Ma53211	NCP	%	109			70-130	Pass	
Heptachlor	M22-Ma53211	NCP	%	109			70-130	Pass	
Heptachlor epoxide	M22-Ma53211	NCP	%	91			70-130	Pass	
Hexachlorobenzene	M22-Ma53211	NCP	%	99			70-130	Pass	
Methoxychlor	M22-Ma53211	NCP	%	90			70-130	Pass	
Spike - % Recovery									
Polychlorinated Biphenyls				Result 1					
Aroclor-1016	M22-Ma42822	NCP	%	101			70-130	Pass	
Aroclor-1260	M22-Ma42822	NCP	%	108			70-130	Pass	
Spike - % Recovery									
				Result 1					
Chromium (hexavalent)	M22-Ma57514	CP	%	73			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-Ma59447	NCP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH C10-C14	M22-Ma56621	NCP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH C15-C28	M22-Ma56621	NCP	mg/kg	< 50	< 50	<1	30%	Pass	
TRH C29-C36	M22-Ma56621	NCP	mg/kg	< 50	< 50	<1	30%	Pass	
Naphthalene	M22-Ma59447	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
TRH C6-C10	M22-Ma59447	NCP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH >C10-C16	M22-Ma56621	NCP	mg/kg	< 50	< 50	<1	30%	Pass	
TRH >C16-C34	M22-Ma56621	NCP	mg/kg	< 100	< 100	<1	30%	Pass	
TRH >C34-C40	M22-Ma56621	NCP	mg/kg	< 100	< 100	<1	30%	Pass	
Duplicate									
Volatile Organics				Result 1	Result 2	RPD			
Hexachlorobutadiene	M22-Ma59447	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
Volatile Organics				Result 1	Result 2	RPD			
1.1-Dichloroethane	M22-Ma59447	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2.4-Trichlorobenzene	M22-Ma59447	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1-Dichloroethene	M22-Ma59447	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1.1-Trichloroethane	M22-Ma59447	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1.1.2-Tetrachloroethane	M22-Ma59447	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1.2-Trichloroethane	M22-Ma59447	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1.2.2-Tetrachloroethane	M22-Ma59447	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2-Dibromoethane	M22-Ma59447	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2-Dichlorobenzene	M22-Ma59447	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2-Dichloroethane	M22-Ma59447	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2-Dichloropropane	M22-Ma59447	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2.3-Trichloropropane	M22-Ma59447	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2.4-Trimethylbenzene	M22-Ma59447	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.3-Dichlorobenzene	M22-Ma59447	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.3-Dichloropropane	M22-Ma59447	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	

Duplicate									
Volatile Organics				Result 1	Result 2	RPD			
1.3.5-Trimethylbenzene	M22-Ma59447	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.4-Dichlorobenzene	M22-Ma59447	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2-Butanone (MEK)	M22-Ma59447	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2-Propanone (Acetone)	M22-Ma59447	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
4-Chlorotoluene	M22-Ma59447	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
4-Methyl-2-pentanone (MIBK)	M22-Ma59447	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Allyl chloride	M22-Ma59447	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzene	M22-Ma59447	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Bromobenzene	M22-Ma59447	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Bromochloromethane	M22-Ma59447	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Bromodichloromethane	M22-Ma59447	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Bromoform	M22-Ma59447	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Bromomethane	M22-Ma59447	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Carbon disulfide	M22-Ma59447	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Carbon Tetrachloride	M22-Ma59447	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chlorobenzene	M22-Ma59447	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chloroethane	M22-Ma59447	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chloroform	M22-Ma59447	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chloromethane	M22-Ma59447	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
cis-1.2-Dichloroethene	M22-Ma59447	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
cis-1.3-Dichloropropene	M22-Ma59447	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dibromochloromethane	M22-Ma59447	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dibromomethane	M22-Ma59447	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dichlorodifluoromethane	M22-Ma59447	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Ethylbenzene	M22-Ma59447	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Iodomethane	M22-Ma59447	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Isopropyl benzene (Cumene)	M22-Ma59447	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
m&p-Xylenes	M22-Ma59447	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Methylene Chloride	M22-Ma59447	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
o-Xylene	M22-Ma59447	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Styrene	M22-Ma59447	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Tetrachloroethene	M22-Ma59447	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Toluene	M22-Ma59447	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
trans-1.2-Dichloroethene	M22-Ma59447	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
trans-1.3-Dichloropropene	M22-Ma59447	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Trichloroethene	M22-Ma59447	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Trichlorofluoromethane	M22-Ma59447	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Vinyl chloride	M22-Ma59447	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Xylenes - Total*	M22-Ma59447	NCP	mg/kg	< 0.3	< 0.3	<1	30%	Pass	
Duplicate									
				Result 1	Result 2	RPD			
Chromium (hexavalent)	B22-Ma52235	NCP	mg/kg	1.2	1.0	29	30%	Pass	
Cyanide (total)	M22-Ma57495	NCP	mg/kg	< 5	< 5	<1	30%	Pass	
Fluoride (Total)	M22-Ma57506	CP	mg/kg	< 100	< 100	<1	30%	Pass	
Duplicate									
				Result 1	Result 2	RPD			
pH (1:5 Aqueous extract at 25°C as rec.)	M22-Ma57507	CP	pH Units	8.5	8.4	pass	30%	Pass	
Duplicate									
Organochlorine Pesticides				Result 1	Result 2	RPD			
Heptachlor epoxide	M22-Ma62950	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Duplicate									
Phenols (Halogenated)				Result 1	Result 2	RPD			
2.6-Dichlorophenol	M22-Ma62950	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	

Duplicate									
				Result 1	Result 2	RPD			
% Moisture	M22-Ma57512	CP	%	37	34	9.0	30%	Pass	
Duplicate									
Polycyclic Aromatic Hydrocarbons				Result 1	Result 2	RPD			
Acenaphthene	M22-Ma57513	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Acenaphthylene	M22-Ma57513	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Anthracene	M22-Ma57513	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benz(a)anthracene	M22-Ma57513	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(a)pyrene	M22-Ma57513	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(b&j)fluoranthene	M22-Ma57513	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(g.h.i)perylene	M22-Ma57513	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(k)fluoranthene	M22-Ma57513	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chrysene	M22-Ma57513	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dibenz(a.h)anthracene	M22-Ma57513	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Fluoranthene	M22-Ma57513	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Fluorene	M22-Ma57513	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Indeno(1.2.3-cd)pyrene	M22-Ma57513	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Naphthalene	M22-Ma57513	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Phenanthrene	M22-Ma57513	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Pyrene	M22-Ma57513	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
Organochlorine Pesticides				Result 1	Result 2	RPD			
Chlordanes - Total	M22-Ma57513	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
4.4'-DDD	M22-Ma57513	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
4.4'-DDE	M22-Ma57513	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
4.4'-DDT	M22-Ma57513	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
a-HCH	M22-Ma57513	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Aldrin	M22-Ma57513	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
b-HCH	M22-Ma57513	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
d-HCH	M22-Ma57513	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Dieldrin	M22-Ma57513	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan I	M22-Ma57513	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan II	M22-Ma57513	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan sulphate	M22-Ma57513	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin	M22-Ma57513	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin aldehyde	M22-Ma57513	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin ketone	M22-Ma57513	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
g-HCH (Lindane)	M22-Ma57513	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Heptachlor	M22-Ma57513	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Hexachlorobenzene	M22-Ma57513	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Methoxychlor	M22-Ma57513	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Toxaphene	M22-Ma57513	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
Polychlorinated Biphenyls				Result 1	Result 2	RPD			
Aroclor-1016	M22-Ma57513	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Aroclor-1221	M22-Ma57513	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Aroclor-1232	M22-Ma57513	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Aroclor-1242	M22-Ma57513	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Aroclor-1248	M22-Ma57513	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Aroclor-1254	M22-Ma57513	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Aroclor-1260	M22-Ma57513	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Total PCB*	M22-Ma57513	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	

Duplicate									
Phenols (Halogenated)				Result 1	Result 2	RPD			
2-Chlorophenol	M22-Ma57513	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2.4-Dichlorophenol	M22-Ma57513	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2.4.5-Trichlorophenol	M22-Ma57513	CP	mg/kg	< 1	< 1	<1	30%	Pass	
2.4.6-Trichlorophenol	M22-Ma57513	CP	mg/kg	< 1	< 1	<1	30%	Pass	
4-Chloro-3-methylphenol	M22-Ma57513	CP	mg/kg	< 1	< 1	<1	30%	Pass	
Pentachlorophenol	M22-Ma57513	CP	mg/kg	< 1	< 1	<1	30%	Pass	
Tetrachlorophenols - Total	M22-Ma57513	CP	mg/kg	< 10	< 10	<1	30%	Pass	
Duplicate									
Phenols (non-Halogenated)				Result 1	Result 2	RPD			
2-Cyclohexyl-4.6-dinitrophenol	M22-Ma57513	CP	mg/kg	< 20	< 20	<1	30%	Pass	
2-Methyl-4.6-dinitrophenol	M22-Ma57513	CP	mg/kg	< 5	< 5	<1	30%	Pass	
2-Nitrophenol	M22-Ma57513	CP	mg/kg	< 1	< 1	<1	30%	Pass	
2.4-Dimethylphenol	M22-Ma57513	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2.4-Dinitrophenol	M22-Ma57513	CP	mg/kg	< 5	< 5	<1	30%	Pass	
2-Methylphenol (o-Cresol)	M22-Ma57513	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
3&4-Methylphenol (m&p-Cresol)	M22-Ma57513	CP	mg/kg	< 0.4	< 0.4	<1	30%	Pass	
4-Nitrophenol	M22-Ma57513	CP	mg/kg	< 5	< 5	<1	30%	Pass	
Dinoseb	M22-Ma57513	CP	mg/kg	< 20	< 20	<1	30%	Pass	
Phenol	M22-Ma57513	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
Heavy Metals				Result 1	Result 2	RPD			
Arsenic	M22-Ma57513	CP	mg/kg	27	28	3.0	30%	Pass	
Cadmium	M22-Ma57513	CP	mg/kg	< 0.4	< 0.4	<1	30%	Pass	
Chromium	M22-Ma57513	CP	mg/kg	140	140	4.0	30%	Pass	
Copper	M22-Ma57513	CP	mg/kg	74	76	2.0	30%	Pass	
Lead	M22-Ma57513	CP	mg/kg	6.1	6.0	<1	30%	Pass	
Mercury	M22-Ma57513	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Molybdenum	M22-Ma57513	CP	mg/kg	< 5	< 5	<1	30%	Pass	
Nickel	M22-Ma57513	CP	mg/kg	190	200	2.0	30%	Pass	
Selenium	M22-Ma57513	CP	mg/kg	2.7	2.6	4.0	30%	Pass	
Silver	M22-Ma57513	CP	mg/kg	< 2	< 2	<1	30%	Pass	
Tin	M22-Ma57513	CP	mg/kg	< 10	< 10	<1	30%	Pass	
Zinc	M22-Ma57513	CP	mg/kg	150	150	2.0	30%	Pass	
Duplicate									
Perfluoroalkyl carboxylic acids (PFCAs)				Result 1	Result 2	RPD			
Perfluorobutanoic acid (PFBA)	M22-Ma57513	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluoropentanoic acid (PFPeA)	M22-Ma57513	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorohexanoic acid (PFHxA)	M22-Ma57513	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluoroheptanoic acid (PFHpA)	M22-Ma57513	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorooctanoic acid (PFOA)	M22-Ma57513	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorononanoic acid (PFNA)	M22-Ma57513	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorodecanoic acid (PFDA)	M22-Ma57513	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluoroundecanoic acid (PFUnDA)	M22-Ma57513	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorododecanoic acid (PFDoDA)	M22-Ma57513	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorotridecanoic acid (PFTrDA)	M22-Ma57513	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorotetradecanoic acid (PFTeDA)	M22-Ma57513	CP	ug/kg	< 5	< 5	<1	30%	Pass	

Duplicate									
Perfluoroalkyl sulfonamido substances				Result 1	Result 2	RPD			
Perfluorooctane sulfonamide (FOSA)	M22-Ma57513	CP	ug/kg	< 5	< 5	<1	30%	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	M22-Ma57513	CP	ug/kg	< 5	< 5	<1	30%	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	M22-Ma57513	CP	ug/kg	< 5	< 5	<1	30%	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)	M22-Ma57513	CP	ug/kg	< 5	< 5	<1	30%	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)	M22-Ma57513	CP	ug/kg	< 5	< 5	<1	30%	Pass	
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	M22-Ma57513	CP	ug/kg	< 10	< 10	<1	30%	Pass	
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	M22-Ma57513	CP	ug/kg	< 10	< 10	<1	30%	Pass	
Duplicate									
Perfluoroalkyl sulfonic acids (PFSAs)				Result 1	Result 2	RPD			
Perfluorobutanesulfonic acid (PFBS)	M22-Ma57513	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorononanesulfonic acid (PFNS)	M22-Ma57513	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluoropropanesulfonic acid (PFPrS)	M22-Ma57513	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluoropentanesulfonic acid (PFPeS)	M22-Ma57513	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorohexanesulfonic acid (PFHxS)	M22-Ma57513	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluoroheptanesulfonic acid (PFHpS)	M22-Ma57513	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorooctanesulfonic acid (PFOS)	M22-Ma57513	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorodecanesulfonic acid (PFDS)	M22-Ma57513	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Duplicate									
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)				Result 1	Result 2	RPD			
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	M22-Ma57513	CP	ug/kg	< 5	< 5	<1	30%	Pass	
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)	M22-Ma57513	CP	ug/kg	< 10	< 10	<1	30%	Pass	
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	M22-Ma57513	CP	ug/kg	< 5	< 5	<1	30%	Pass	
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	M22-Ma57513	CP	ug/kg	< 5	< 5	<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
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
Linda Chouman	Senior Analyst (NSW)
Joseph Edouard	Senior Analyst (VIC)
Vivian Wang	Senior Analyst (VIC)
Scott Beddoes	Senior Analyst (NSW)
Edward Lee	Senior Analyst (VIC)
Mary Makarios	Senior Analyst (NSW)
Caitlin Breeze	Senior Analyst (VIC)

Glenn Jackson
General Manager

Final Report – this report replaces any previously issued Report

- Indicates Not Requested

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

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

CHAIN OF CUSTODY RECORD

Eurofins | Environment Testing ABN 50 005 085 521

Unit F3 Bld.F 16 Mars Road Lane Cove West NSW 2066 | 02 9900 8400 | EnviroSampleNSW@eurofins.com
Unit 1 21 Smallwood Place Murarrie QLD 4172 | 07 3902 4600 | EnviroSampleQLD@eurofins.com
Unit 2 91 Leach Highway Kewdale WA 6105 | 08 9251 9600 | EnviroSampleWA@eurofins.com
6 Monterey Road Dandenong South VIC 3175 | 03 8564 5000 | EnviroSampleVic@eurofins.com

Company	AGON Environmental - Tunnel Spoil Testing	Project №	JC0927	Project Manager	Craig Trimbur
Address	Unit H76, 63-85 Turner St, Port Melbourne VIC 3207	Project Name	WGTP-Tunnel Ref: 20220329051117-Eurofin-14	EDD Format ESdat, EQuIS etc	Esdat
Contact Name	Craig Trimbur David Lawson				
Phone №	+61 400 826 907 (Craig) +61 490 411 004 (David)				
Special Directions	Please provide an interim lab report if finalised report has not been provided by 14 days from sample receipt. Please provide eSRN along with ater sample recipt documentation.				
Purchase Order					
Quote ID №	Agon WGTP TST				

Sampler(s)	Will & Brandon - Agon
Handed over by	
Email for Invoice	finance@agonenviro.com.au LabReports.TST@agonenviro.com.au
Email for Results	LabReports.TST@agonenviro.com.au agonenvironmental@esdat.com.au motherhublabresults1@wgtp.com.au Amrit.Kaur@agile-analytics.com.au

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

Containers — Change container type & size if necessary

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

*Surcharge will apply

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

№	Client Sample ID	Sampled Date/Time dd/mm/yy hh:mm	Matrix Solid (S) Water (W)	Spoil Sample Preparation	Suite WGTP-R1 - TRH/ PAH/ Phenols/ OCP/ PCB/ VOC/ Vinyl Chloride/ Metals (As, Cd, Cr_4, Cu, Ni, Pb, Hg, Ag, Sn, Mo, Se, Zn)/ Cr6+/ CN/ Total Fluoride/ pH	PFAS Extended Suite - 0.1- 5ug/kg	ASLP PH 5 - PFAS 0.01-0.05 ug/l	ASLP Reagent - PFAS 0.01-0.05ug/l	500mL Plastic	250mL Plastic	125mL Plastic	200mL Amber Glass	40mL VOA vial	500mL PFAS Bottle	Jar (Glass or HDPE)	Other (Asbestos AS4964, WA Guidelines)	Sample Comments / Dangerous Goods Hazard Warning
1	SX_IB_20220328_08_06_SS_Primary_EUF	28/03/22	S	X	X	X	X	X								1	
2	SX_IB_20220328_07_46_SS_Triplicate_EUF	28/03/22	S	X	X	X	X	X								1	
3	SX_IB_20220328_11_51_SS_Primary_EUF	28/03/22	S	X	X	X	X	X								1	
4	SX_IB_20220328_15_44_SS_Primary_EUF	28/03/22	S	X	X	X	X	X								1	
5	SX_IB_20220328_15_47_SS_Duplicate_EUF	28/03/22	S	X	X	X	X	X								1	
6	SX_IB_20220328_20_11_SS_Primary_EUF	28/03/22	S	X	X	X	X	X								1	
7	SX_IB_20220329_00_05_SS_Primary_EUF	29/03/22	S	X	X	X	X	X								1	
8	SX_IB_20220329_04_16_SS_Primary_EUF	29/03/22	S	X	X	X	X	X								1	
9																	
10																	
11																	
12																	
13																	
			Total Counts	8	8	8	8	8								8	

#875283
Emily Dal
29/03/22

Temp Blank 21.0
Cooler Temp -0.3
Corrected Temp 20.9

Method of Shipment: ☑ Courier ( ) ☐ Hand Delivered ☐ Postal — Name: Emily — Signature — Date: 29/3/22 — Time

Laboratory Use Only									
Received By	CANA	SYD | BNE | MEL | PER | ADL | NTL | DRW	Signature		Date	29/3/22	Time	1.48pm	Temperature 20.9
Received By		SYD | BNE | MEL | PER | ADL | NTL | DRW	Signature		Date		Time		Report №

Eurofins Environment Testing Australia Pty Ltd

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

Eurofins Environment Testing Australia Pty Ltd
ABN: 50 005 085 521
Phone: +61 3 8564 5000
e.mail: EnviroRemittances@eurofins.com

Tax Invoice

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

Purchase Order #:	Not provided
Invoice #:	683843
Date:	Apr 5, 2022
Report #:	875283
Project Name:	20220329051117-EUROFIN-14
Project ID:	JC0927
Contact:	David Lawson

Description	Quantity	Price	Total	Notes
Solid Samples				
IWRG 621 WGTP Suite	8	$145.00	$1,160.00	
Per- and Polyfluoroalkyl Substances (PFASs)	8	$105.00	$840.00	
Leachate Samples				
PFAS ASLP pH 5 and pH7	8	$229.60	$1,836.80	
Extract storage	8	$10.00	$80.00	
SAQP Method Sample Preparation - 10L bucket	8	$275.00	$2,200.00	

Notes: Quote: AGON WGTP TST	Nett Total	$6,116.80
	GST	$611.68
	Total Inc GST	$6,728.48

This invoice is subject to Eurofins General Terms of Sales. Copies available on request or at http://environment.eurofins.com.au

Please detach and return with payment to:
Postal:
Eurofins Environment Testing
6 Monterey Road
Dandenong South
Victoria, 3175

Please EFT Payments to:
Eurofins Environment Testing
BSB 063-498
Acct No: 10057019
e.mail Remittances:
EnviroRemittances@eurofins.com

Invoice Number : 683843
Amount Inc GST : $6,728.48

TERMS STRICTLY 30 DAYS

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Sample Receipt Advice

Company name:	Agon Environmental Pty Ltd - VIC
Contact name:	- ALL SPOIL REPORTS WGTP Mother Hub
Project name:	20220329051117-EUROFIN-14
Project ID:	JC0927
Turnaround time:	5 Day
Date/Time received	Mar 29, 2022 1:48 PM
Eurofins reference	875283

Sample Information

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

Notes

Contact

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

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

Results will be delivered electronically via email to - ALL SPOIL REPORTS WGTP Mother Hub - motherhublabresults1@wgtp.com.au.

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

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email: EnviroSales@eurofins.com

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

Project Name: 20220329051117-EUROFIN-14
Project ID: JC0927

Order No.:
Report #: 875283
Phone: 08 8338 1009
Fax:

Received: Mar 29, 2022 1:48 PM
Due: Apr 5, 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_20220328_08_06_SS_Primary_EUF	Mar 28, 2022		Soil	M22-Ma60484		X	X	X
2	SX_IB_20220328_07_46_SS_Triplicate_EUF	Mar 28, 2022		Soil	M22-Ma60485		X	X	X
3	SX_IB_20220328_11_51_SS_Primary_EUF	Mar 28, 2022		Soil	M22-Ma60486		X	X	X
4	SX_IB_20220328_15_44_SS	Mar 28, 2022		Soil	M22-Ma60487		X	X	X

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Company Name: Agon Environmental Pty Ltd - VIC
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Project Name: 20220329051117-EUROFIN-14
Project ID: JC0927

Order No.:
Report #: 875283
Phone: 08 8338 1009
Fax:

Received: Mar 29, 2022 1:48 PM
Due: Apr 5, 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									
	_Primary_EUF								
5	SX_IB_20220328_15_47_SS_Duplicate_EUF	Mar 28, 2022		Soil	M22-Ma60488		X	X	X
6	SX_IB_20220328_20_11_SS_Primary_EUF	Mar 28, 2022		Soil	M22-Ma60489		X	X	X
7	SX_IB_20220329_00_05_SS_Primary_EUF	Mar 29, 2022		Soil	M22-Ma60490		X	X	X
8	SX_IB_20220329_04_16_SS_Primary_EUF	Mar 29, 2022		Soil	M22-Ma60491		X	X	X

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Project ID: JC0927

Order No.:
Report #: 875283
Phone: 08 8338 1009
Fax:

Received: Mar 29, 2022 1:48 PM
Due: Apr 5, 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									
9	SX_IB_20220328_08_06_SS_Primary_EUF	Mar 28, 2022		AUS Leachate - pH 5.0	M22-Ma60492	X		X	
10	SX_IB_20220328_07_46_SS_Triplicate_EUF	Mar 28, 2022		AUS Leachate - pH 5.0	M22-Ma60493	X		X	
11	SX_IB_20220328_11_51_SS_Primary_EUF	Mar 28, 2022		AUS Leachate - pH 5.0	M22-Ma60494	X		X	
12	SX_IB_20220328_15_44_SS_Primary_EUF	Mar 28, 2022		AUS Leachate - pH 5.0	M22-Ma60495	X		X	
13	SX_IB_202203	Mar 28, 2022		AUS Leachate	M22-Ma60496	X		X	

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Company Name: Agon Environmental Pty Ltd - VIC
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Fullarton
SA 5063

Project Name: 20220329051117-EUROFIN-14
Project ID: JC0927

Order No.:
Report #: 875283
Phone: 08 8338 1009
Fax:

Received: Mar 29, 2022 1:48 PM
Due: Apr 5, 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									
	28_15_47_SS_Duplicate_EUF			- pH 5.0					
14	SX_IB_20220328_20_11_SS_Primary_EUF	Mar 28, 2022		AUS Leachate - pH 5.0	M22-Ma60497	X		X	
15	SX_IB_20220329_00_05_SS_Primary_EUF	Mar 29, 2022		AUS Leachate - pH 5.0	M22-Ma60498	X		X	
16	SX_IB_20220329_04_16_SS_Primary_EUF	Mar 29, 2022		AUS Leachate - pH 5.0	M22-Ma60499	X		X	
17	SX_IB_20220328_08_06_SS	Mar 28, 2022		AUS Leachate - Reagent	M22-Ma60500	X		X	

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Project Name: 20220329051117-EUROFIN-14
Project ID: JC0927

Order No.:
Report #: 875283
Phone: 08 8338 1009
Fax:

Received: Mar 29, 2022 1:48 PM
Due: Apr 5, 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									
	28_08_06_SS_Primary_EUF			- Reagent Water					
18	SX_IB_20220328_07_46_SS_Triplicate_EUF	Mar 28, 2022		AUS Leachate - Reagent Water	M22-Ma60501	X		X	
19	SX_IB_20220328_11_51_SS_Primary_EUF	Mar 28, 2022		AUS Leachate - Reagent Water	M22-Ma60502	X		X	
20	SX_IB_20220328_15_44_SS_Primary_EUF	Mar 28, 2022		AUS Leachate - Reagent Water	M22-Ma60503	X		X	
21	SX_IB_20220328_15_47_SS	Mar 28, 2022		AUS Leachate - Reagent	M22-Ma60504	X		X	

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Project ID: JC0927

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Report #: 875283
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Fax:

Received: Mar 29, 2022 1:48 PM
Due: Apr 5, 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									
	_Duplicate_EUF			Water					
22	SX_IB_20220328_20_11_SS_Primary_EUF	Mar 28, 2022		AUS Leachate - Reagent Water	M22-Ma60505	X		X	
23	SX_IB_20220329_00_05_SS_Primary_EUF	Mar 29, 2022		AUS Leachate - Reagent Water	M22-Ma60506	X		X	
24	SX_IB_20220329_04_16_SS_Primary_EUF	Mar 29, 2022		AUS Leachate - Reagent Water	M22-Ma60507	X		X	
Test Counts						16	8	24	8

Agon Environmental Pty Ltd - VIC
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SA 5063

Attention: **David Lawson**

Report **875283-L-V2**
Project name 20220329051117-EUROFIN-14
Project ID JC0927
Received Date Mar 29, 2022

Client Sample ID			SX_IB_20220328_08_06_SS_Primary_EUF	SX_IB_20220328_07_46_SS_Triplicate_EUF	SX_IB_20220328_11_51_SS_Primary_EUF	SX_IB_20220328_15_44_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-Ma60492	M22-Ma60493	M22-Ma60494	M22-Ma60495
Date Sampled			Mar 28, 2022	Mar 28, 2022	Mar 28, 2022	Mar 28, 2022
Test/Reference	LOR	Unit				
AUS Leaching Procedure						
Leachate Fluid[C01]		comment	1.0	1.0	1.0	1.0
pH (initial)	0.1	pH Units	N/A	N/A	N/A	N/A
pH (Leachate fluid)	0.1	pH Units	5.0	5.0	5.0	5.0
pH (off)	0.1	pH Units	5.2	5.1	5.1	5.2
Perfluoroalkyl carboxylic acids (PFCAs)						
Perfluorobutanoic acid (PFBA)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
Perfluoropentanoic acid (PFPeA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorohexanoic acid (PFHxA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoroheptanoic acid (PFHpA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorooctanoic acid (PFOA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorononanoic acid (PFNA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorodecanoic acid (PFDA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoroundecanoic acid (PFUnDA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorododecanoic acid (PFDoDA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorotridecanoic acid (PFTrDA)[N15]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorotetradecanoic acid (PFTeDA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C4-PFBA (surr.)	1	%	76	80	77	79
13C5-PFPeA (surr.)	1	%	107	106	92	99
13C5-PFHxA (surr.)	1	%	89	94	90	88
13C4-PFHpA (surr.)	1	%	81	85	82	80
13C8-PFOA (surr.)	1	%	93	93	92	85
13C5-PFNA (surr.)	1	%	84	80	79	74
13C6-PFDA (surr.)	1	%	69	72	72	65
13C2-PFUnDA (surr.)	1	%	64	62	64	53
13C2-PFDoDA (surr.)	1	%	52	54	51	56
13C2-PFTeDA (surr.)	1	%	56	19	19	18
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_20220328_08_06_SS_Primary_EUF	SX_IB_20220328_07_46_SS_Triplicate_EUF	SX_IB_20220328_11_51_SS_Primary_EUF	SX_IB_20220328_15_44_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-Ma60492**	**M22-Ma60493**	**M22-Ma60494**	**M22-Ma60495**
Date Sampled			**Mar 28, 2022**	**Mar 28, 2022**	**Mar 28, 2022**	**Mar 28, 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	%	74	80	78	66
D3-N-MeFOSA (surr.)	1	%	92	89	94	46
D5-N-EtFOSA (surr.)	1	%	95	94	99	50
D7-N-MeFOSE (surr.)	1	%	61	66	64	47
D9-N-EtFOSE (surr.)	1	%	59	61	61	47
D5-N-EtFOSAA (surr.)	1	%	18	15	21	13
D3-N-MeFOSAA (surr.)	1	%	19	21	11	14
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	%	91	92	93	93
18O2-PFHxS (surr.)	1	%	79	79	83	89
13C8-PFOS (surr.)	1	%	81	83	83	70
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)						
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C2-4:2 FTSA (surr.)	1	%	73	76	65	77
13C2-6:2 FTSA (surr.)	1	%	76	73	67	74
13C2-8:2 FTSA (surr.)	1	%	126	160	142	140
13C2-10:2 FTSA (surr.)	1	%	54	65	63	57
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_20220328_15_47_SS_Duplicate_EUF	SX_IB_20220328_20_11_SS_Primary_EUF	SX_IB_20220329_00_05_SS_Primary_EUF	SX_IB_20220329_04_16_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-Ma60496**	**M22-Ma60497**	**M22-Ma60498**	**M22-Ma60499**
Date Sampled			**Mar 28, 2022**	**Mar 28, 2022**	**Mar 29, 2022**	**Mar 29, 2022**
Test/Reference	LOR	Unit				
AUS Leaching Procedure						
Leachate Fluid[C01]		comment	1.0	1.0	1.0	1.0
pH (initial)	0.1	pH Units	N/A	N/A	N/A	N/A
pH (Leachate fluid)	0.1	pH Units	5.0	5.0	5.0	5.0
pH (off)	0.1	pH Units	5.2	5.2	5.2	5.2
Perfluoroalkyl carboxylic acids (PFCAs)						
Perfluorobutanoic acid (PFBA)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
Perfluoropentanoic acid (PFPeA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorohexanoic acid (PFHxA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoroheptanoic acid (PFHpA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorooctanoic acid (PFOA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorononanoic acid (PFNA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorodecanoic acid (PFDA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoroundecanoic acid (PFUnDA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorododecanoic acid (PFDoDA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorotridecanoic acid (PFTrDA)[N15]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorotetradecanoic acid (PFTeDA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C4-PFBA (surr.)	1	%	80	77	78	80
13C5-PFPeA (surr.)	1	%	103	102	111	97
13C5-PFHxA (surr.)	1	%	92	87	88	88
13C4-PFHpA (surr.)	1	%	82	75	80	78
13C8-PFOA (surr.)	1	%	91	82	80	78
13C5-PFNA (surr.)	1	%	79	70	71	71
13C6-PFDA (surr.)	1	%	67	58	60	52
13C2-PFUnDA (surr.)	1	%	55	49	145	42
13C2-PFDoDA (surr.)	1	%	55	47	47	40
13C2-PFTeDA (surr.)	1	%	15	13	12	11
Perfluoroalkyl sulfonamido substances						
Perfluorooctane sulfonamide (FOSA)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
13C8-FOSA (surr.)	1	%	70	56	61	53
D3-N-MeFOSA (surr.)	1	%	55	52	43	44
D5-N-EtFOSA (surr.)	1	%	59	54	47	47
D7-N-MeFOSE (surr.)	1	%	56	43	51	48
D9-N-EtFOSE (surr.)	1	%	56	43	48	45
D5-N-EtFOSAA (surr.)	1	%	15	12	15	11
D3-N-MeFOSAA (surr.)	1	%	20	17	13	20

Client Sample ID			SX_IB_20220328_15_47_SS_Duplicate_EUF	SX_IB_20220328_20_11_SS_Primary_EUF	SX_IB_20220329_00_05_SS_Primary_EUF	SX_IB_20220329_04_16_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-Ma60496**	**M22-Ma60497**	**M22-Ma60498**	**M22-Ma60499**
Date Sampled			**Mar 28, 2022**	**Mar 28, 2022**	**Mar 29, 2022**	**Mar 29, 2022**
Test/Reference	LOR	Unit				
Perfluoroalkyl sulfonic acids (PFSAs)						
Perfluorobutanesulfonic acid (PFBS)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorononanesulfonic acid (PFNS)[N15]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoropropanesulfonic acid (PFPrS)[N15]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoropentanesulfonic acid (PFPeS)[N15]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorohexanesulfonic acid (PFHxS)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoroheptanesulfonic acid (PFHpS)[N15]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorooctanesulfonic acid (PFOS)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorodecanesulfonic acid (PFDS)[N15]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C3-PFBS (surr.)	1	%	96	91	95	90
18O2-PFHxS (surr.)	1	%	79	77	74	74
13C8-PFOS (surr.)	1	%	78	68	65	62
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)						
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C2-4:2 FTSA (surr.)	1	%	78	77	79	77
13C2-6:2 FTSA (surr.)	1	%	71	68	75	60
13C2-8:2 FTSA (surr.)	1	%	134	145	149	115
13C2-10:2 FTSA (surr.)	1	%	41	39	39	37
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_20220328_08_06_SS_Primary_EUF	SX_IB_20220328_07_46_SS_Triplicate_EUF	SX_IB_20220328_11_51_SS_Primary_EUF	SX_IB_20220328_15_44_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-Ma60500**	**M22-Ma60501**	**M22-Ma60502**	**M22-Ma60503**
Date Sampled			**Mar 28, 2022**	**Mar 28, 2022**	**Mar 28, 2022**	**Mar 28, 2022**
Test/Reference	LOR	Unit				
AUS Leaching Procedure						
Leachate Fluid[C01]		comment	4.0	4.0	4.0	4.0
pH (initial)	0.1	pH Units	N/A	N/A	N/A	N/A
pH (Leachate fluid)	0.1	pH Units	6.7	6.7	6.7	6.7
pH (off)	0.1	pH Units	9.2	9.2	9.1	9.2

Client Sample ID			SX_IB_20220328_08_06_SS_Primary_EUF	SX_IB_20220328_07_46_SS_Triplicate_EUF	SX_IB_20220328_11_51_SS_Primary_EUF	SX_IB_20220328_15_44_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-Ma60500	M22-Ma60501	M22-Ma60502	M22-Ma60503
Date Sampled			Mar 28, 2022	Mar 28, 2022	Mar 28, 2022	Mar 28, 2022
Test/Reference	LOR	Unit				
Perfluoroalkyl carboxylic acids (PFCAs)						
Perfluorobutanoic acid (PFBA)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
Perfluoropentanoic acid (PFPeA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorohexanoic acid (PFHxA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoroheptanoic acid (PFHpA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorooctanoic acid (PFOA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorononanoic acid (PFNA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorodecanoic acid (PFDA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoroundecanoic acid (PFUnDA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorododecanoic acid (PFDoDA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorotridecanoic acid (PFTrDA)[N15]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorotetradecanoic acid (PFTeDA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C4-PFBA (surr.)	1	%	72	72	71	70
13C5-PFPeA (surr.)	1	%	87	98	94	101
13C5-PFHxA (surr.)	1	%	84	87	88	82
13C4-PFHpA (surr.)	1	%	76	79	80	73
13C8-PFOA (surr.)	1	%	82	82	84	79
13C5-PFNA (surr.)	1	%	78	75	74	70
13C6-PFDA (surr.)	1	%	62	69	69	61
13C2-PFUnDA (surr.)	1	%	56	59	62	56
13C2-PFDoDA (surr.)	1	%	47	48	52	47
13C2-PFTeDA (surr.)	1	%	17	16	17	16
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	%	71	69	75	64
D3-N-MeFOSA (surr.)	1	%	98	61	55	53
D5-N-EtFOSA (surr.)	1	%	92	58	55	51
D7-N-MeFOSE (surr.)	1	%	60	55	55	53
D9-N-EtFOSE (surr.)	1	%	53	48	51	48
D5-N-EtFOSAA (surr.)	1	%	17	17	17	17
D3-N-MeFOSAA (surr.)	1	%	22	18	20	17
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_20220328_08_06_SS_Primary_EUF	SX_IB_20220328_07_46_SS_Triplicate_EUF	SX_IB_20220328_11_51_SS_Primary_EUF	SX_IB_20220328_15_44_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-Ma60500	M22-Ma60501	M22-Ma60502	M22-Ma60503
Date Sampled			Mar 28, 2022	Mar 28, 2022	Mar 28, 2022	Mar 28, 2022
Test/Reference	LOR	Unit				
Perfluoroalkyl sulfonic acids (PFSAs)						
Perfluorooctanesulfonic acid (PFOS)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorodecanesulfonic acid (PFDS)[N15]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C3-PFBS (surr.)	1	%	90	97	91	87
18O2-PFHxS (surr.)	1	%	76	82	84	72
13C8-PFOS (surr.)	1	%	83	75	79	73
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)						
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 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	%	68	76	67	71
13C2-6:2 FTSA (surr.)	1	%	58	74	63	59
13C2-8:2 FTSA (surr.)	1	%	123	162	157	123
13C2-10:2 FTSA (surr.)	1	%	53	56	54	47
PFASs Summations						
Sum (PFHxS + PFOS)*	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Sum of US EPA PFAS (PFOS + PFOA)*	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Sum of enHealth PFAS (PFHxS + PFOS + PFOA)*	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Sum of WA DWER PFAS (n=10)*	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
Sum of PFASs (n=30)*	0.1	ug/L	< 0.1	< 0.1	< 0.1	< 0.1

Client Sample ID			SX_IB_20220328_15_47_SS_Duplicate_EUF	SX_IB_20220328_20_11_SS_Primary_EUF	SX_IB_20220329_00_05_SS_Primary_EUF	SX_IB_20220329_04_16_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-Ma60504	M22-Ma60505	M22-Ma60506	M22-Ma60507
Date Sampled			Mar 28, 2022	Mar 28, 2022	Mar 29, 2022	Mar 29, 2022
Test/Reference	LOR	Unit				
AUS Leaching Procedure						
Leachate Fluid[C01]		comment	4.0	4.0	4.0	4.0
pH (initial)	0.1	pH Units	N/A	N/A	N/A	N/A
pH (Leachate fluid)	0.1	pH Units	6.7	6.7	6.7	6.7
pH (off)	0.1	pH Units	9.2	9.1	9.2	9.2
Perfluoroalkyl carboxylic acids (PFCAs)						
Perfluorobutanoic acid (PFBA)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
Perfluoropentanoic acid (PFPeA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorohexanoic acid (PFHxA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoroheptanoic acid (PFHpA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorooctanoic acid (PFOA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorononanoic acid (PFNA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorodecanoic acid (PFDA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluoroundecanoic acid (PFUnDA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01

Client Sample ID			SX_IB_20220328_15_47_SS_Duplicate_EUF	SX_IB_20220328_20_11_SS_Primary_EUF	SX_IB_20220329_00_05_SS_Primary_EUF	SX_IB_20220329_04_16_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-Ma60504	M22-Ma60505	M22-Ma60506	M22-Ma60507
Date Sampled			Mar 28, 2022	Mar 28, 2022	Mar 29, 2022	Mar 29, 2022
Test/Reference	LOR	Unit				
Perfluoroalkyl carboxylic acids (PFCAs)						
Perfluorododecanoic acid (PFDoDA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorotridecanoic acid (PFTrDA)[N15]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
Perfluorotetradecanoic acid (PFTeDA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C4-PFBA (surr.)	1	%	81	75	71	73
13C5-PFPeA (surr.)	1	%	113	104	97	94
13C5-PFHxA (surr.)	1	%	100	90	87	88
13C4-PFHpA (surr.)	1	%	87	82	77	77
13C8-PFOA (surr.)	1	%	91	91	83	82
13C5-PFNA (surr.)	1	%	86	79	77	73
13C6-PFDA (surr.)	1	%	75	69	72	64
13C2-PFUnDA (surr.)	1	%	56	64	59	56
13C2-PFDoDA (surr.)	1	%	44	51	52	41
13C2-PFTeDA (surr.)	1	%	17	16	18	14
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	%	70	74	79	70
D3-N-MeFOSA (surr.)	1	%	55	81	94	76
D5-N-EtFOSA (surr.)	1	%	48	77	94	70
D7-N-MeFOSE (surr.)	1	%	55	60	62	52
D9-N-EtFOSE (surr.)	1	%	47	52	59	46
D5-N-EtFOSAA (surr.)	1	%	13	20	18	14
D3-N-MeFOSAA (surr.)	1	%	19	18	22	16
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	[N09]0.02
Perfluorodecanesulfonic acid (PFDS)[N15]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C3-PFBS (surr.)	1	%	102	92	91	87
18O2-PFHxS (surr.)	1	%	81	81	74	72
13C8-PFOS (surr.)	1	%	79	84	80	73

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Sample Matrix			**AUS Leachate - Reagent Water**	**AUS Leachate - Reagent Water**	**AUS Leachate - Reagent Water**	**AUS Leachate - Reagent Water**
Eurofins Sample No.			**M22-Ma60504**	**M22-Ma60505**	**M22-Ma60506**	**M22-Ma60507**
Date Sampled			**Mar 28, 2022**	**Mar 28, 2022**	**Mar 29, 2022**	**Mar 29, 2022**
Test/Reference	LOR	Unit				
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)						
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)[N11]	0.05	ug/L	< 0.05	< 0.05	< 0.05	< 0.05
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)[N11]	0.01	ug/L	< 0.01	< 0.01	< 0.01	< 0.01
13C2-4:2 FTSA (surr.)	1	%	91	78	75	83
13C2-6:2 FTSA (surr.)	1	%	75	66	73	79
13C2-8:2 FTSA (surr.)	1	%	177	149	181	169
13C2-10:2 FTSA (surr.)	1	%	52	60	65	54
PFASs Summations						
Sum (PFHxS + PFOS)*	0.01	ug/L	< 0.01	< 0.01	< 0.01	0.02
Sum of US EPA PFAS (PFOS + PFOA)*	0.01	ug/L	< 0.01	< 0.01	< 0.01	0.02
Sum of enHealth PFAS (PFHxS + PFOS + PFOA)*	0.01	ug/L	< 0.01	< 0.01	< 0.01	0.02
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)	Melbourne	Mar 30, 2022	0 Days
- Method: LTM-GEN-7010 Leaching Procedure for Soils & Solid Wastes			
pH (Leachate fluid)	Melbourne	Mar 30, 2022	0 Days
- Method: LTM-GEN-7010 Leaching Procedure for Soils & Solid Wastes			
pH (off)	Melbourne	Mar 30, 2022	0 Days
- Method: LTM-GEN-7010 Leaching Procedure for Soils & Solid Wastes			
Per- and Polyfluoroalkyl Substances (PFASs)			
Perfluoroalkyl carboxylic acids (PFCAs)	Melbourne	Mar 30, 2022	28 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			
Perfluoroalkyl sulfonamido substances	Melbourne	Mar 30, 2022	28 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			
Perfluoroalkyl sulfonic acids (PFSAs)	Melbourne	Mar 30, 2022	28 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)	Melbourne	Mar 30, 2022	28 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			
PFASs Summations	Melbourne	Mar 29, 2022	
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			

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Project Name: 20220329051117-EUROFIN-14
Project ID: JC0927

Order No.:
Report #: 875283
Phone: 08 8338 1009
Fax:

Received: Mar 29, 2022 1:48 PM
Due: Apr 5, 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_20220328_08_06_SS_Primary_EUF	Mar 28, 2022		Soil	M22-Ma60484		X	X	X
2	SX_IB_20220328_07_46_SS_Triplicate_EUF	Mar 28, 2022		Soil	M22-Ma60485		X	X	X
3	SX_IB_20220328_11_51_SS_Primary_EUF	Mar 28, 2022		Soil	M22-Ma60486		X	X	X
4	SX_IB_20220328_15_44_SS	Mar 28, 2022		Soil	M22-Ma60487		X	X	X

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Eurofins Analytical Services Manager : Michael Cassidy

Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	IWRG 621 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_IB_20220328_15_47_SS_Duplicate_EUF	Mar 28, 2022		Soil	M22-Ma60488		X	X	X
6	SX_IB_20220328_20_11_SS_Primary_EUF	Mar 28, 2022		Soil	M22-Ma60489		X	X	X
7	SX_IB_20220329_00_05_SS_Primary_EUF	Mar 29, 2022		Soil	M22-Ma60490		X	X	X
8	SX_IB_20220329_04_16_SS_Primary_EUF	Mar 29, 2022		Soil	M22-Ma60491		X	X	X

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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									
9	SX_IB_20220328_08_06_SS_Primary_EUF	Mar 28, 2022		AUS Leachate - pH 5.0	M22-Ma60492	X		X	
10	SX_IB_20220328_07_46_SS_Triplicate_EUF	Mar 28, 2022		AUS Leachate - pH 5.0	M22-Ma60493	X		X	
11	SX_IB_20220328_11_51_SS_Primary_EUF	Mar 28, 2022		AUS Leachate - pH 5.0	M22-Ma60494	X		X	
12	SX_IB_20220328_15_44_SS_Primary_EUF	Mar 28, 2022		AUS Leachate - pH 5.0	M22-Ma60495	X		X	
13	SX_IB_202203	Mar 28, 2022		AUS Leachate	M22-Ma60496	X		X	

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Eurofins Analytical Services Manager : Michael Cassidy

Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	IWRG 621 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									
	28_15_47_SS_Duplicate_EUF			- pH 5.0					
14	SX_IB_20220328_20_11_SS_Primary_EUF	Mar 28, 2022		AUS Leachate - pH 5.0	M22-Ma60497	X		X	
15	SX_IB_20220329_00_05_SS_Primary_EUF	Mar 29, 2022		AUS Leachate - pH 5.0	M22-Ma60498	X		X	
16	SX_IB_20220329_04_16_SS_Primary_EUF	Mar 29, 2022		AUS Leachate - pH 5.0	M22-Ma60499	X		X	
17	SX_IB_20220328_08_06_SS	Mar 28, 2022		AUS Leachate - Reagent	M22-Ma60500	X		X	

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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									
	28_08_06_SS_Primary_EUF			- Reagent Water					
18	SX_IB_20220328_07_46_SS_Triplicate_EUF	Mar 28, 2022		AUS Leachate - Reagent Water	M22-Ma60501	X		X	
19	SX_IB_20220328_11_51_SS_Primary_EUF	Mar 28, 2022		AUS Leachate - Reagent Water	M22-Ma60502	X		X	
20	SX_IB_20220328_15_44_SS_Primary_EUF	Mar 28, 2022		AUS Leachate - Reagent Water	M22-Ma60503	X		X	
21	SX_IB_20220328_15_47_SS	Mar 28, 2022		AUS Leachate - Reagent	M22-Ma60504	X		X	

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Eurofins Analytical Services Manager : Michael Cassidy

Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	IWRG 621 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									
	_Duplicate_EUF			Water					
22	SX_IB_20220328_20_11_SS_Primary_EUF	Mar 28, 2022		AUS Leachate - Reagent Water	M22-Ma60505	X		X	
23	SX_IB_20220329_00_05_SS_Primary_EUF	Mar 29, 2022		AUS Leachate - Reagent Water	M22-Ma60506	X		X	
24	SX_IB_20220329_04_16_SS_Primary_EUF	Mar 29, 2022		AUS Leachate - Reagent Water	M22-Ma60507	X		X	
Test Counts						16	8	24	8

Internal Quality Control Review and Glossary

General

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

Holding Times

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

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

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

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

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

Units

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

Terms

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

QC - Acceptance Criteria

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

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

Results <10 times the LOR: No Limit

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

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

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

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

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

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QC Data General Comments

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

Quality Control Results

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Method Blank							
Perfluoroalkyl carboxylic acids (PFCAs)							
Perfluorobutanoic acid (PFBA)	ug/L	< 0.05			0.05	Pass	
Perfluoropentanoic acid (PFPeA)	ug/L	< 0.01			0.01	Pass	
Perfluorohexanoic acid (PFHxA)	ug/L	< 0.01			0.01	Pass	
Perfluoroheptanoic acid (PFHpA)	ug/L	< 0.01			0.01	Pass	
Perfluorooctanoic acid (PFOA)	ug/L	< 0.01			0.01	Pass	
Perfluorononanoic acid (PFNA)	ug/L	< 0.01			0.01	Pass	
Perfluorodecanoic acid (PFDA)	ug/L	< 0.01			0.01	Pass	
Perfluoroundecanoic acid (PFUnDA)	ug/L	< 0.01			0.01	Pass	
Perfluorododecanoic acid (PFDoDA)	ug/L	< 0.01			0.01	Pass	
Perfluorotridecanoic acid (PFTrDA)	ug/L	< 0.01			0.01	Pass	
Perfluorotetradecanoic acid (PFTeDA)	ug/L	< 0.01			0.01	Pass	
Method Blank							
Perfluoroalkyl sulfonamido substances							
Perfluorooctane sulfonamide (FOSA)	ug/L	< 0.05			0.05	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	ug/L	< 0.05			0.05	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	ug/L	< 0.05			0.05	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)	ug/L	< 0.05			0.05	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)	ug/L	< 0.05			0.05	Pass	
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	ug/L	< 0.05			0.05	Pass	
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	ug/L	< 0.05			0.05	Pass	
Method Blank							
Perfluoroalkyl sulfonic acids (PFSAs)							
Perfluorobutanesulfonic acid (PFBS)	ug/L	< 0.01			0.01	Pass	
Perfluorononanesulfonic acid (PFNS)	ug/L	< 0.01			0.01	Pass	
Perfluoropropanesulfonic acid (PFPrS)	ug/L	< 0.01			0.01	Pass	
Perfluoropentanesulfonic acid (PFPeS)	ug/L	< 0.01			0.01	Pass	
Perfluorohexanesulfonic acid (PFHxS)	ug/L	< 0.01			0.01	Pass	
Perfluoroheptanesulfonic acid (PFHpS)	ug/L	< 0.01			0.01	Pass	
Perfluorooctanesulfonic acid (PFOS)	ug/L	< 0.01			0.01	Pass	
Perfluorodecanesulfonic acid (PFDS)	ug/L	< 0.01			0.01	Pass	
Method Blank							
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)							
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	ug/L	< 0.01			0.01	Pass	
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)	ug/L	< 0.05			0.05	Pass	
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	ug/L	< 0.01			0.01	Pass	
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	ug/L	< 0.01			0.01	Pass	
LCS - % Recovery							
Perfluoroalkyl carboxylic acids (PFCAs)							
Perfluorobutanoic acid (PFBA)	%	92			50-150	Pass	
Perfluoropentanoic acid (PFPeA)	%	116			50-150	Pass	
Perfluorohexanoic acid (PFHxA)	%	104			50-150	Pass	
Perfluoroheptanoic acid (PFHpA)	%	112			50-150	Pass	
Perfluorooctanoic acid (PFOA)	%	119			50-150	Pass	
Perfluorononanoic acid (PFNA)	%	99			50-150	Pass	
Perfluorodecanoic acid (PFDA)	%	137			50-150	Pass	
Perfluoroundecanoic acid (PFUnDA)	%	116			50-150	Pass	
Perfluorododecanoic acid (PFDoDA)	%	131			50-150	Pass	
Perfluorotridecanoic acid (PFTrDA)	%	109			50-150	Pass	
Perfluorotetradecanoic acid (PFTeDA)	%	122			50-150	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
LCS - % Recovery							
Perfluoroalkyl sulfonamido substances							
Perfluorooctane sulfonamide (FOSA)	%	106			50-150	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	%	111			50-150	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	%	120			50-150	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)	%	104			50-150	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)	%	104			50-150	Pass	
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	%	124			50-150	Pass	
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	%	110			50-150	Pass	
LCS - % Recovery							
Perfluoroalkyl sulfonic acids (PFSAs)							
Perfluorobutanesulfonic acid (PFBS)	%	99			50-150	Pass	
Perfluorononanesulfonic acid (PFNS)	%	107			50-150	Pass	
Perfluoropropanesulfonic acid (PFPrS)	%	116			50-150	Pass	
Perfluoropentanesulfonic acid (PFPeS)	%	115			50-150	Pass	
Perfluorohexanesulfonic acid (PFHxS)	%	109			50-150	Pass	
Perfluoroheptanesulfonic acid (PFHpS)	%	121			50-150	Pass	
Perfluorooctanesulfonic acid (PFOS)	%	100			50-150	Pass	
Perfluorodecanesulfonic acid (PFDS)	%	92			50-150	Pass	
LCS - % Recovery							
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)							
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	%	133			50-150	Pass	
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)	%	124			50-150	Pass	
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	%	129			50-150	Pass	
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	%	110			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-Ma60492	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
Perfluoropentanoic acid (PFPeA)	M22-Ma60492	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorohexanoic acid (PFHxA)	M22-Ma60492	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluoroheptanoic acid (PFHpA)	M22-Ma60492	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorooctanoic acid (PFOA)	M22-Ma60492	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorononanoic acid (PFNA)	M22-Ma60492	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorodecanoic acid (PFDA)	M22-Ma60492	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluoroundecanoic acid (PFUnDA)	M22-Ma60492	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorododecanoic acid (PFDoDA)	M22-Ma60492	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorotridecanoic acid (PFTrDA)	M22-Ma60492	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorotetradecanoic acid (PFTeDA)	M22-Ma60492	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Duplicate									
Perfluoroalkyl sulfonamido substances				Result 1	Result 2	RPD			
Perfluorooctane sulfonamide (FOSA)	M22-Ma60492	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	M22-Ma60492	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	M22-Ma60492	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)	M22-Ma60492	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)	M22-Ma60492	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-Ma60492	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	M22-Ma60492	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
Duplicate									
Perfluoroalkyl sulfonic acids (PFSAs)				Result 1	Result 2	RPD			
Perfluorobutanesulfonic acid (PFBS)	M22-Ma60492	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorononanesulfonic acid (PFNS)	M22-Ma60492	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluoropropanesulfonic acid (PFPrS)	M22-Ma60492	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluoropentanesulfonic acid (PFPeS)	M22-Ma60492	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorohexanesulfonic acid (PFHxS)	M22-Ma60492	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluoroheptanesulfonic acid (PFHpS)	M22-Ma60492	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorooctanesulfonic acid (PFOS)	M22-Ma60492	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorodecanesulfonic acid (PFDS)	M22-Ma60492	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Duplicate									
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)				Result 1	Result 2	RPD			
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	M22-Ma60492	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)	M22-Ma60492	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	M22-Ma60492	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	M22-Ma60492	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Duplicate									
Perfluoroalkyl carboxylic acids (PFCAs)				Result 1	Result 2	RPD			
Perfluorobutanoic acid (PFBA)	M22-Ma60507	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
Perfluoropentanoic acid (PFPeA)	M22-Ma60507	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorohexanoic acid (PFHxA)	M22-Ma60507	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluoroheptanoic acid (PFHpA)	M22-Ma60507	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorooctanoic acid (PFOA)	M22-Ma60507	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorononanoic acid (PFNA)	M22-Ma60507	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorodecanoic acid (PFDA)	M22-Ma60507	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluoroundecanoic acid (PFUnDA)	M22-Ma60507	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorododecanoic acid (PFDoDA)	M22-Ma60507	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorotridecanoic acid (PFTrDA)	M22-Ma60507	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorotetradecanoic acid (PFTeDA)	M22-Ma60507	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	

Duplicate									
Perfluoroalkyl sulfonamido substances				Result 1	Result 2	RPD			
Perfluorooctane sulfonamide (FOSA)	M22-Ma60507	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	M22-Ma60507	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	M22-Ma60507	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)	M22-Ma60507	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)	M22-Ma60507	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	M22-Ma60507	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	M22-Ma60507	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
Duplicate									
Perfluoroalkyl sulfonic acids (PFSAs)				Result 1	Result 2	RPD			
Perfluorobutanesulfonic acid (PFBS)	M22-Ma60507	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorononanesulfonic acid (PFNS)	M22-Ma60507	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluoropropanesulfonic acid (PFPrS)	M22-Ma60507	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluoropentanesulfonic acid (PFPeS)	M22-Ma60507	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorohexanesulfonic acid (PFHxS)	M22-Ma60507	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluoroheptanesulfonic acid (PFHpS)	M22-Ma60507	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorooctanesulfonic acid (PFOS)	M22-Ma60507	CP	ug/L	0.02	0.02	8.0	30%	Pass	
Perfluorodecanesulfonic acid (PFDS)	M22-Ma60507	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Duplicate									
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)				Result 1	Result 2	RPD			
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	M22-Ma60507	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)	M22-Ma60507	CP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	M22-Ma60507	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	M22-Ma60507	CP	ug/L	< 0.01	< 0.01	<1	30%	Pass	

Comments

V2: Project ID amended to "20220329051117-EUROFIN-14" from "202203290511174-EUROFIN-14 ".

Sample Integrity

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

Qualifier Codes/Comments

Code	Description
C01	Leachate Fluid Key: 1 - pH 5.0; 2 - pH 2.9; 3 - pH 9.2; 4 - Reagent (DI) water; 5 - Client sample, 6 - other
N09	Quantification of linear and branched isomers has been conducted as a single total response using the relative response factor for the corresponding linear/branched standard.
N11	Isotope dilution is used for calibration of each native compound for which an exact labelled analogue is available (Isotope Dilution Quantitation). The isotopically labelled analogues allow identification and recovery correction of the concentration of the associated native PFAS compounds.
N15	Where the native PFAS compound does not have labelled analogue then the quantification is made using the Extracted Internal Standard Analyte with the closest retention time to the analyte and no recovery correction has been made (Internal Standard Quantitation).

Authorised by:

Callum McEwan	Analytical Services Manager
Mary Makarios	Senior Analyst (NSW)
Joseph Edouard	Senior Analyst (VIC)

Glenn Jackson
General Manager

Final Report – this report replaces any previously issued Report

- Indicates Not Requested

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

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

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

Attention: **David Lawson**

Report **875283-S-V2**
Project name 20220329051117-EUROFIN-14
Project ID JC0927
Received Date Mar 29, 2022

Client Sample ID			SX_IB_20220328_08_06_SS_Primary_EUF	SX_IB_20220328_07_46_SS_Triplicate_EUF	SX_IB_20220328_11_51_SS_Primary_EUF	SX_IB_20220328_15_44_SS_Primary_EUF
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M22-Ma60484	M22-Ma60485	M22-Ma60486	M22-Ma60487
Date Sampled			Mar 28, 2022	Mar 28, 2022	Mar 28, 2022	Mar 28, 2022
Test/Reference	LOR	Unit				
Total Recoverable Hydrocarbons						
TRH C6-C9	20	mg/kg	< 20	< 20	< 20	< 20
TRH C10-C14	20	mg/kg	< 20	< 20	< 20	< 20
TRH C15-C28	50	mg/kg	< 50	< 50	< 50	< 50
TRH C29-C36	50	mg/kg	< 50	< 50	< 50	< 50
TRH C10-C36 (Total)	50	mg/kg	< 50	< 50	< 50	< 50
Naphthalene[N02]	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
TRH C6-C10	20	mg/kg	< 20	< 20	< 20	< 20
TRH C6-C10 less BTEX (F1)[N04]	20	mg/kg	< 20	< 20	< 20	< 20
TRH >C10-C16	50	mg/kg	< 50	< 50	< 50	< 50
TRH >C10-C16 less Naphthalene (F2)[N01]	50	mg/kg	< 50	< 50	< 50	< 50
TRH >C16-C34	100	mg/kg	< 100	< 100	< 100	< 100
TRH >C34-C40	100	mg/kg	< 100	< 100	< 100	< 100
TRH >C10-C40 (total)*	100	mg/kg	< 100	< 100	< 100	< 100
Volatile Organics						
Hexachlorobutadiene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Volatile Organics						
1.1-Dichloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2.4-Trichlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.1-Dichloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.1.1-Trichloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.1.1.2-Tetrachloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.1.2-Trichloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.1.2.2-Tetrachloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2-Dibromoethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2-Dichlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2-Dichloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2-Dichloropropane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2.3-Trichloropropane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2.4-Trimethylbenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.3-Dichlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.3-Dichloropropane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.3.5-Trimethylbenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.4-Dichlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2-Butanone (MEK)	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5

Client Sample ID			SX_IB_20220328_08_06_SS_Primary_EUF	SX_IB_20220328_07_46_SS_Triplicate_EUF	SX_IB_20220328_11_51_SS_Primary_EUF	SX_IB_20220328_15_44_SS_Primary_EUF
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M22-Ma60484	M22-Ma60485	M22-Ma60486	M22-Ma60487
Date Sampled			Mar 28, 2022	Mar 28, 2022	Mar 28, 2022	Mar 28, 2022
Test/Reference	LOR	Unit				
Volatile Organics						
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	59	56	53
Toluene-d8 (surr.)	1	%	72	51	61	57
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

Client Sample ID			SX_IB_20220328_08_06_SS_Primary_EUF	SX_IB_20220328_07_46_SS_Triplicate_EUF	SX_IB_20220328_11_51_SS_Primary_EUF	SX_IB_20220328_15_44_SS_Primary_EUF
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M22-Ma60484	M22-Ma60485	M22-Ma60486	M22-Ma60487
Date Sampled			Mar 28, 2022	Mar 28, 2022	Mar 28, 2022	Mar 28, 2022
Test/Reference	LOR	Unit				
Polycyclic Aromatic Hydrocarbons						
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	%	75	93	88	91
p-Terphenyl-d14 (surr.)	1	%	93	104	95	93
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	%	87	75	80	76
Tetrachloro-m-xylene (surr.)	1	%	124	137	124	126

Client Sample ID			SX_IB_20220328_08_06_SS_Primary_EUF	SX_IB_20220328_07_46_SS_Triplicate_EUF	SX_IB_20220328_11_51_SS_Primary_EUF	SX_IB_20220328_15_44_SS_Primary_EUF
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M22-Ma60484	M22-Ma60485	M22-Ma60486	M22-Ma60487
Date Sampled			Mar 28, 2022	Mar 28, 2022	Mar 28, 2022	Mar 28, 2022
Test/Reference	LOR	Unit				
Polychlorinated Biphenyls						
Aroclor-1016	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Aroclor-1221	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Aroclor-1232	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Aroclor-1242	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Aroclor-1248	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Aroclor-1254	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Aroclor-1260	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Total PCB*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Dibutylchlorendate (surr.)	1	%	87	75	80	76
Tetrachloro-m-xylene (surr.)	1	%	124	137	124	126
Phenols (Halogenated)						
2-Chlorophenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2.4-Dichlorophenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2.4.5-Trichlorophenol	1	mg/kg	< 1	< 1	< 1	< 1
2.4.6-Trichlorophenol	1	mg/kg	< 1	< 1	< 1	< 1
2.6-Dichlorophenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
4-Chloro-3-methylphenol	1	mg/kg	< 1	< 1	< 1	< 1
Pentachlorophenol	1	mg/kg	< 1	< 1	< 1	< 1
Tetrachlorophenols - Total	10	mg/kg	< 10	< 10	< 10	< 10
Total Halogenated Phenol*	1	mg/kg	< 1	< 1	< 1	< 1
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	%	77	99	95	93
Total Non-Halogenated Phenol*	20	mg/kg	< 20	< 20	< 20	< 20
Chromium (hexavalent)	1	mg/kg	< 1	< 1	< 1	< 1
Cyanide (total)	5	mg/kg	< 5	< 5	< 5	< 5
Fluoride (Total)	100	mg/kg	200	< 100	< 100	< 100
pH (1:5 Aqueous extract at 25°C as rec.)	0.1	pH Units	8.9	9.0	8.7	9.3
% Moisture	1	%	30	30	31	30
Heavy Metals						
Arsenic	2	mg/kg	24	22	31	33
Cadmium	0.4	mg/kg	< 0.4	< 0.4	< 0.4	< 0.4
Chromium	5	mg/kg	120	120	130	130
Copper	5	mg/kg	67	61	69	73
Lead	5	mg/kg	< 5	< 5	5.5	< 5
Mercury	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Molybdenum	5	mg/kg	< 5	< 5	< 5	< 5

Client Sample ID			SX_IB_20220328_08_06_SS_Primary_EUF	SX_IB_20220328_07_46_SS_Triplicate_EUF	SX_IB_20220328_11_51_SS_Primary_EUF	SX_IB_20220328_15_44_SS_Primary_EUF
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M22-Ma60484	M22-Ma60485	M22-Ma60486	M22-Ma60487
Date Sampled			Mar 28, 2022	Mar 28, 2022	Mar 28, 2022	Mar 28, 2022
Test/Reference	LOR	Unit				
Heavy Metals						
Nickel	5	mg/kg	170	170	180	190
Selenium	2	mg/kg	< 2	< 2	< 2	< 2
Silver	2	mg/kg	< 2	< 2	< 2	< 2
Tin	10	mg/kg	< 10	< 10	< 10	< 10
Zinc	5	mg/kg	120	110	120	130
Perfluoroalkyl carboxylic acids (PFCAs)						
Perfluorobutanoic acid (PFBA)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
Perfluoropentanoic acid (PFPeA)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorohexanoic acid (PFHxA)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
Perfluoroheptanoic acid (PFHpA)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorooctanoic acid (PFOA)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorononanoic acid (PFNA)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorodecanoic acid (PFDA)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
Perfluoroundecanoic acid (PFUnDA)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorododecanoic acid (PFDoDA)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorotridecanoic acid (PFTrDA)[N15]	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorotetradecanoic acid (PFTeDA)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
13C4-PFBA (surr.)	1	%	84	81	82	81
13C5-PFPeA (surr.)	1	%	94	87	87	89
13C5-PFHxA (surr.)	1	%	91	85	92	93
13C4-PFHpA (surr.)	1	%	90	89	91	91
13C8-PFOA (surr.)	1	%	86	77	90	86
13C5-PFNA (surr.)	1	%	60	56	60	61
13C6-PFDA (surr.)	1	%	70	63	70	69
13C2-PFUnDA (surr.)	1	%	106	119	109	117
13C2-PFDoDA (surr.)	1	%	95	99	95	94
13C2-PFTeDA (surr.)	1	%	68	64	62	62
Perfluoroalkyl sulfonamido substances						
Perfluorooctane sulfonamide (FOSA)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)[N11]	10	ug/kg	< 10	< 10	< 10	< 10
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)[N11]	10	ug/kg	< 10	< 10	< 10	< 10
13C8-FOSA (surr.)	1	%	93	95	87	91
D3-N-MeFOSA (surr.)	1	%	81	77	83	80
D5-N-EtFOSA (surr.)	1	%	83	82	81	83
D7-N-MeFOSE (surr.)	1	%	85	84	84	84
D9-N-EtFOSE (surr.)	1	%	75	71	72	72
D5-N-EtFOSAA (surr.)	1	%	120	106	99	114
D3-N-MeFOSAA (surr.)	1	%	140	125	132	136

Client Sample ID			SX_IB_20220328_08_06_SS_Primary_EUF	SX_IB_20220328_07_46_SS_Triplicate_EUF	SX_IB_20220328_11_51_SS_Primary_EUF	SX_IB_20220328_15_44_SS_Primary_EUF
Sample Matrix			**Soil**	**Soil**	**Soil**	**Soil**
Eurofins Sample No.			**M22-Ma60484**	**M22-Ma60485**	**M22-Ma60486**	**M22-Ma60487**
Date Sampled			**Mar 28, 2022**	**Mar 28, 2022**	**Mar 28, 2022**	**Mar 28, 2022**
Test/Reference	LOR	Unit				
Perfluoroalkyl sulfonic acids (PFSAs)						
Perfluorobutanesulfonic acid (PFBS)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorononanesulfonic acid (PFNS)[N15]	5	ug/kg	< 5	< 5	< 5	< 5
Perfluoropropanesulfonic acid (PFPrS)[N15]	5	ug/kg	< 5	< 5	< 5	< 5
Perfluoropentanesulfonic acid (PFPeS)[N15]	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorohexanesulfonic acid (PFHxS)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
Perfluoroheptanesulfonic acid (PFHpS)[N15]	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorooctanesulfonic acid (PFOS)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorodecanesulfonic acid (PFDS)[N15]	5	ug/kg	< 5	< 5	< 5	< 5
13C3-PFBS (surr.)	1	%	82	78	82	76
18O2-PFHxS (surr.)	1	%	80	65	69	75
13C8-PFOS (surr.)	1	%	63	60	64	62
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)						
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)[N11]	10	ug/kg	< 10	< 10	< 10	< 10
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
13C2-4:2 FTSA (surr.)	1	%	68	73	68	73
13C2-6:2 FTSA (surr.)	1	%	87	80	77	75
13C2-8:2 FTSA (surr.)	1	%	105	99	103	103
13C2-10:2 FTSA (surr.)	1	%	130	125	125	115
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_20220328_15_47_SS_Duplicate_EUF	SX_IB_20220328_20_11_SS_Primary_EUF	SX_IB_20220329_00_05_SS_Primary_EUF	SX_IB_20220329_04_16_SS_Primary_EUF
Sample Matrix			**Soil**	**Soil**	**Soil**	**Soil**
Eurofins Sample No.			**M22-Ma60488**	**M22-Ma60489**	**M22-Ma60490**	**M22-Ma60491**
Date Sampled			**Mar 28, 2022**	**Mar 28, 2022**	**Mar 29, 2022**	**Mar 29, 2022**
Test/Reference	LOR	Unit				
Total Recoverable Hydrocarbons						
TRH C6-C9	20	mg/kg	< 20	< 20	< 20	< 20
TRH C10-C14	20	mg/kg	< 20	35	29	31
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	53	< 50	< 50
TRH >C10-C16 less Naphthalene (F2)[N01]	50	mg/kg	< 50	53	< 50	< 50

Client Sample ID			SX_IB_20220328_15_47_SS_Duplicate_EUF	SX_IB_20220328_20_11_SS_Primary_EUF	SX_IB_20220329_00_05_SS_Primary_EUF	SX_IB_20220329_04_16_SS_Primary_EUF
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M22-Ma60488	M22-Ma60489	M22-Ma60490	M22-Ma60491
Date Sampled			Mar 28, 2022	Mar 28, 2022	Mar 29, 2022	Mar 29, 2022
Test/Reference	LOR	Unit				
Total Recoverable Hydrocarbons						
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
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

Client Sample ID			SX_IB_20220328_15_47_SS_Duplicate_EUF	SX_IB_20220328_20_11_SS_Primary_EUF	SX_IB_20220329_00_05_SS_Primary_EUF	SX_IB_20220329_04_16_SS_Primary_EUF
Sample Matrix			**Soil**	**Soil**	**Soil**	**Soil**
Eurofins Sample No.			**M22-Ma60488**	**M22-Ma60489**	**M22-Ma60490**	**M22-Ma60491**
Date Sampled			**Mar 28, 2022**	**Mar 28, 2022**	**Mar 29, 2022**	**Mar 29, 2022**
Test/Reference	LOR	Unit				
Volatile Organics						
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	%	83	52	52	64
Toluene-d8 (surr.)	1	%	84	51	52	52
Polycyclic Aromatic Hydrocarbons						
Benzo(a)pyrene TEQ (lower bound) *	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene TEQ (medium bound) *	0.5	mg/kg	0.6	0.6	0.6	0.6
Benzo(a)pyrene TEQ (upper bound) *	0.5	mg/kg	1.2	1.2	1.2	1.2
Acenaphthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Acenaphthylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benz(a)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(b&j)fluoranthene[N07]	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(g.h.i)perylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(k)fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chrysene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Dibenz(a.h)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Fluorene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Indeno(1.2.3-cd)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Naphthalene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Phenanthrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Total PAH*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2-Fluorobiphenyl (surr.)	1	%	88	61	86	94
p-Terphenyl-d14 (surr.)	1	%	94	83	101	95
Organochlorine Pesticides						
Chlordanes - Total	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
4.4'-DDD	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
4.4'-DDE	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
4.4'-DDT	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
a-HCH	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Aldrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
b-HCH	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05

Client Sample ID			SX_IB_20220328_15_47_SS_Duplicate_EUF	SX_IB_20220328_20_11_SS_Primary_EUF	SX_IB_20220329_00_05_SS_Primary_EUF	SX_IB_20220329_04_16_SS_Primary_EUF
Sample Matrix			**Soil**	**Soil**	**Soil**	**Soil**
Eurofins Sample No.			**M22-Ma60488**	**M22-Ma60489**	**M22-Ma60490**	**M22-Ma60491**
Date Sampled			**Mar 28, 2022**	**Mar 28, 2022**	**Mar 29, 2022**	**Mar 29, 2022**
Test/Reference	LOR	Unit				
Organochlorine Pesticides						
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	%	87	59	75	66
Tetrachloro-m-xylene (surr.)	1	%	119	90	115	105
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	%	87	59	75	66
Tetrachloro-m-xylene (surr.)	1	%	119	90	115	105
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

Client Sample ID			SX_IB_20220328_15_47_SS_Duplicate_EUF	SX_IB_20220328_20_11_SS_Primary_EUF	SX_IB_20220329_00_05_SS_Primary_EUF	SX_IB_20220329_04_16_SS_Primary_EUF
Sample Matrix			**Soil**	**Soil**	**Soil**	**Soil**
Eurofins Sample No.			**M22-Ma60488**	**M22-Ma60489**	**M22-Ma60490**	**M22-Ma60491**
Date Sampled			**Mar 28, 2022**	**Mar 28, 2022**	**Mar 29, 2022**	**Mar 29, 2022**
Test/Reference	LOR	Unit				
Phenols (non-Halogenated)						
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	%	98	46	44	70
Total Non-Halogenated Phenol*	20	mg/kg	< 20	< 20	< 20	< 20
Chromium (hexavalent)	1	mg/kg	< 1	< 1	1.1	< 1
Cyanide (total)	5	mg/kg	< 5	< 5	< 5	< 5
Fluoride (Total)	100	mg/kg	< 100	< 100	< 100	< 100
pH (1:5 Aqueous extract at 25°C as rec.)	0.1	pH Units	8.6	8.8	9.0	9.2
% Moisture	1	%	29	30	27	27
Heavy Metals						
Arsenic	2	mg/kg	20	28	25	33
Cadmium	0.4	mg/kg	< 0.4	< 0.4	< 0.4	< 0.4
Chromium	5	mg/kg	120	130	110	120
Copper	5	mg/kg	62	73	59	66
Lead	5	mg/kg	< 5	< 5	< 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	160	180	160	180
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	130	110	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	%	83	78	76	74
13C5-PFPeA (surr.)	1	%	95	79	84	82
13C5-PFHxA (surr.)	1	%	93	85	82	78
13C4-PFHpA (surr.)	1	%	94	82	82	76
13C8-PFOA (surr.)	1	%	90	75	68	72
13C5-PFNA (surr.)	1	%	63	51	88	51
13C6-PFDA (surr.)	1	%	59	56	63	57
13C2-PFUnDA (surr.)	1	%	115	99	95	98
13C2-PFDoDA (surr.)	1	%	95	91	76	85
13C2-PFTeDA (surr.)	1	%	64	60	58	56

Client Sample ID			SX_IB_20220328_15_47_SS_Duplicate_EUF	SX_IB_20220328_20_11_SS_Primary_EUF	SX_IB_20220329_00_05_SS_Primary_EUF	SX_IB_20220329_04_16_SS_Primary_EUF
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			M22-Ma60488	M22-Ma60489	M22-Ma60490	M22-Ma60491
Date Sampled			Mar 28, 2022	Mar 28, 2022	Mar 29, 2022	Mar 29, 2022
Test/Reference	LOR	Unit				
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	%	93	86	82	79
D3-N-MeFOSA (surr.)	1	%	79	73	70	72
D5-N-EtFOSA (surr.)	1	%	83	78	73	75
D7-N-MeFOSE (surr.)	1	%	81	73	74	74
D9-N-EtFOSE (surr.)	1	%	74	68	65	66
D5-N-EtFOSAA (surr.)	1	%	99	104	85	90
D3-N-MeFOSAA (surr.)	1	%	131	123	93	123
Perfluoroalkyl sulfonic acids (PFSAs)						
Perfluorobutanesulfonic acid (PFBS)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorononanesulfonic acid (PFNS)[N15]	5	ug/kg	< 5	< 5	< 5	< 5
Perfluoropropanesulfonic acid (PFPrS)[N15]	5	ug/kg	< 5	< 5	< 5	< 5
Perfluoropentanesulfonic acid (PFPeS)[N15]	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorohexanesulfonic acid (PFHxS)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
Perfluoroheptanesulfonic acid (PFHpS)[N15]	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorooctanesulfonic acid (PFOS)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorodecanesulfonic acid (PFDS)[N15]	5	ug/kg	< 5	< 5	< 5	< 5
13C3-PFBS (surr.)	1	%	84	81	74	75
18O2-PFHxS (surr.)	1	%	74	60	84	60
13C8-PFOS (surr.)	1	%	70	65	57	61
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)						
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)[N11]	10	ug/kg	< 10	< 10	< 10	< 10
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
13C2-4:2 FTSA (surr.)	1	%	74	69	62	66
13C2-6:2 FTSA (surr.)	1	%	74	74	60	72
13C2-8:2 FTSA (surr.)	1	%	101	88	107	86
13C2-10:2 FTSA (surr.)	1	%	122	110	80	116
PFASs Summations						
Sum (PFHxS + PFOS)*	5	ug/kg	< 5	< 5	< 5	< 5
Sum of US EPA PFAS (PFOS + PFOA)*	5	ug/kg	< 5	< 5	< 5	< 5
Sum of enHealth PFAS (PFHxS + PFOS + PFOA)*	5	ug/kg	< 5	< 5	< 5	< 5
Sum of WA DWER PFAS (n=10)*	10	ug/kg	< 10	< 10	< 10	< 10
Sum of PFASs (n=30)*	50	ug/kg	< 50	< 50	< 50	< 50

Sample History

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

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

Description	Testing Site	Extracted	Holding Time
IWRG 621 WGTP Suite			
Total Recoverable Hydrocarbons - 1999 NEPM Fractions	Melbourne	Mar 30, 2022	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
Total Recoverable Hydrocarbons - 2013 NEPM Fractions	Melbourne	Mar 30, 2022	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
Total Recoverable Hydrocarbons - 2013 NEPM Fractions	Melbourne	Mar 30, 2022	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
Volatile Organics	Melbourne	Mar 30, 2022	7 Days
- Method: USEPA 8260 - MGT 350A Volatile Organics by GCMS			
Volatile Organics	Melbourne	Mar 30, 2022	7 Days
- Method: LTM-ORG-2150 VOCs in Soils Liquid and other Aqueous Matrices (USEPA 8260)			
Polycyclic Aromatic Hydrocarbons	Melbourne	Mar 30, 2022	14 Days
- Method: LTM-ORG-2130 PAH and Phenols in Soil and Water			
Organochlorine Pesticides	Melbourne	Mar 30, 2022	14 Days
- Method: LTM-ORG-2220 OCP & PCB in Soil and Water (USEPA 8270)			
Polychlorinated Biphenyls	Melbourne	Mar 30, 2022	28 Days
- Method: LTM-ORG-2220 OCP & PCB in Soil and Water (USEPA 8082)			
Phenols (Halogenated)	Melbourne	Mar 30, 2022	14 Days
- Method: LTM-ORG-2130 PAH and Phenols in Soil and Water			
Phenols (non-Halogenated)	Melbourne	Mar 30, 2022	14 Days
- Method: LTM-ORG-2130 PAH and Phenols in Soil and Water			
Chromium (hexavalent)	Melbourne	Mar 30, 2022	28 Days
- Method: LTM-INO-4100 Hexavalent Chromium by Spectrometric detection			
Cyanide (total)	Melbourne	Mar 31, 2022	14 Days
- Method: LTM-INO-4020 Total Free WAD Cyanide by CFA			
Fluoride (Total)	Melbourne	Mar 31, 2022	28 Days
- Method: LTM-INO-4150 Determination of Total Fluoride PART B – ISE			
- Method: LTM-INO-4150 Determination of Total Fluoride PART A – CIC			
pH (1:5 Aqueous extract at 25°C as rec.)	Melbourne	Mar 30, 2022	7 Days
- Method: LTM-GEN-7090 pH in soil by ISE			
Metals IWRG 621 : Metals M12	Melbourne	Mar 30, 2022	28 Days
- Method: LTM-MET-3040 Metals in Waters, Soils & Sediments by ICP-MS			
% Moisture	Melbourne	Mar 29, 2022	14 Days
- Method: LTM-GEN-7080 Moisture			
Per- and Polyfluoroalkyl Substances (PFASs)			
Perfluoroalkyl carboxylic acids (PFCAs)	Melbourne	Mar 30, 2022	28 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			
Perfluoroalkyl sulfonamido substances	Melbourne	Mar 30, 2022	28 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			
Perfluoroalkyl sulfonic acids (PFSAs)	Melbourne	Mar 30, 2022	28 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)	Melbourne	Mar 30, 2022	28 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			
PFASs Summations	Melbourne	Mar 29, 2022	
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			

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Company Name: Agon Environmental Pty Ltd - VIC
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Project Name: 20220329051117-EUROFIN-14
Project ID: JC0927

Order No.:
Report #: 875283
Phone: 08 8338 1009
Fax:

Received: Mar 29, 2022 1:48 PM
Due: Apr 5, 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_20220328_08_06_SS_Primary_EUF	Mar 28, 2022		Soil	M22-Ma60484		X	X	X
2	SX_IB_20220328_07_46_SS_Triplicate_EUF	Mar 28, 2022		Soil	M22-Ma60485		X	X	X
3	SX_IB_20220328_11_51_SS_Primary_EUF	Mar 28, 2022		Soil	M22-Ma60486		X	X	X
4	SX_IB_20220328_15_44_SS	Mar 28, 2022		Soil	M22-Ma60487		X	X	X

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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_IB_20220328_15_47_SS_Duplicate_EUF	Mar 28, 2022		Soil	M22-Ma60488		X	X	X
6	SX_IB_20220328_20_11_SS_Primary_EUF	Mar 28, 2022		Soil	M22-Ma60489		X	X	X
7	SX_IB_20220329_00_05_SS_Primary_EUF	Mar 29, 2022		Soil	M22-Ma60490		X	X	X
8	SX_IB_20220329_04_16_SS_Primary_EUF	Mar 29, 2022		Soil	M22-Ma60491		X	X	X

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Melbourne Laboratory - NATA # 1261 Site # 1254						X	X	X	X
Sydney Laboratory - NATA # 1261 Site # 18217									
Brisbane Laboratory - NATA # 1261 Site # 20794									
Mayfield Laboratory - NATA # 1261 Site # 25079									
Perth Laboratory - NATA # 2377 Site # 2370									
External Laboratory									
9	SX_IB_20220328_08_06_SS_Primary_EUF	Mar 28, 2022		AUS Leachate - pH 5.0	M22-Ma60492	X		X	
10	SX_IB_20220328_07_46_SS_Triplicate_EUF	Mar 28, 2022		AUS Leachate - pH 5.0	M22-Ma60493	X		X	
11	SX_IB_20220328_11_51_SS_Primary_EUF	Mar 28, 2022		AUS Leachate - pH 5.0	M22-Ma60494	X		X	
12	SX_IB_20220328_15_44_SS_Primary_EUF	Mar 28, 2022		AUS Leachate - pH 5.0	M22-Ma60495	X		X	
13	SX_IB_202203	Mar 28, 2022		AUS Leachate	M22-Ma60496	X		X	

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Sample Detail						AUS Leaching Procedure	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)	IWRG 621 WGTP Suite
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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									
	28_15_47_SS_Duplicate_EUF			- pH 5.0					
14	SX_IB_20220328_20_11_SS_Primary_EUF	Mar 28, 2022		AUS Leachate - pH 5.0	M22-Ma60497	X		X	
15	SX_IB_20220329_00_05_SS_Primary_EUF	Mar 29, 2022		AUS Leachate - pH 5.0	M22-Ma60498	X		X	
16	SX_IB_20220329_04_16_SS_Primary_EUF	Mar 29, 2022		AUS Leachate - pH 5.0	M22-Ma60499	X		X	
17	SX_IB_20220328_08_06_SS	Mar 28, 2022		AUS Leachate - Reagent	M22-Ma60500	X		X	

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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									
	28_08_06_SS_Primary_EUF			- Reagent Water					
18	SX_IB_20220328_07_46_SS_Triplicate_EUF	Mar 28, 2022		AUS Leachate - Reagent Water	M22-Ma60501	X		X	
19	SX_IB_20220328_11_51_SS_Primary_EUF	Mar 28, 2022		AUS Leachate - Reagent Water	M22-Ma60502	X		X	
20	SX_IB_20220328_15_44_SS_Primary_EUF	Mar 28, 2022		AUS Leachate - Reagent Water	M22-Ma60503	X		X	
21	SX_IB_20220328_15_47_SS	Mar 28, 2022		AUS Leachate - Reagent	M22-Ma60504	X		X	

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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									
	_Duplicate_EUF			Water					
22	SX_IB_20220328_20_11_SS_Primary_EUF	Mar 28, 2022		AUS Leachate - Reagent Water	M22-Ma60505	X		X	
23	SX_IB_20220329_00_05_SS_Primary_EUF	Mar 29, 2022		AUS Leachate - Reagent Water	M22-Ma60506	X		X	
24	SX_IB_20220329_04_16_SS_Primary_EUF	Mar 29, 2022		AUS Leachate - Reagent Water	M22-Ma60507	X		X	
Test Counts						16	8	24	8

Internal Quality Control Review and Glossary

General

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

Holding Times

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

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

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

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

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

Units

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

Terms

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

QC - Acceptance Criteria

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

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

Results <10 times the LOR: No Limit

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

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

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

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

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

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QC Data General Comments

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

Quality Control Results

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

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

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

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Zinc	mg/kg	< 5			5	Pass	
Method Blank							
Perfluoroalkyl carboxylic acids (PFCAs)							
Perfluorobutanoic acid (PFBA)	ug/kg	< 5			5	Pass	
Perfluoropentanoic acid (PFPeA)	ug/kg	< 5			5	Pass	
Perfluorohexanoic acid (PFHxA)	ug/kg	< 5			5	Pass	
Perfluoroheptanoic acid (PFHpA)	ug/kg	< 5			5	Pass	
Perfluorooctanoic acid (PFOA)	ug/kg	< 5			5	Pass	
Perfluorononanoic acid (PFNA)	ug/kg	< 5			5	Pass	
Perfluorodecanoic acid (PFDA)	ug/kg	< 5			5	Pass	
Perfluoroundecanoic acid (PFUnDA)	ug/kg	< 5			5	Pass	
Perfluorododecanoic acid (PFDoDA)	ug/kg	< 5			5	Pass	
Perfluorotridecanoic acid (PFTrDA)	ug/kg	< 5			5	Pass	
Perfluorotetradecanoic acid (PFTeDA)	ug/kg	< 5			5	Pass	
Method Blank							
Perfluoroalkyl sulfonamido substances							
Perfluorooctane sulfonamide (FOSA)	ug/kg	< 5			5	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	ug/kg	< 5			5	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	ug/kg	< 5			5	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)	ug/kg	< 5			5	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)	ug/kg	< 5			5	Pass	
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	ug/kg	< 10			10	Pass	
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	ug/kg	< 10			10	Pass	
Method Blank							
Perfluoroalkyl sulfonic acids (PFSAs)							
Perfluorobutanesulfonic acid (PFBS)	ug/kg	< 5			5	Pass	
Perfluorononanesulfonic acid (PFNS)	ug/kg	< 5			5	Pass	
Perfluoropropanesulfonic acid (PFPrS)	ug/kg	< 5			5	Pass	
Perfluoropentanesulfonic acid (PFPeS)	ug/kg	< 5			5	Pass	
Perfluorohexanesulfonic acid (PFHxS)	ug/kg	< 5			5	Pass	
Perfluoroheptanesulfonic acid (PFHpS)	ug/kg	< 5			5	Pass	
Perfluorooctanesulfonic acid (PFOS)	ug/kg	< 5			5	Pass	
Perfluorodecanesulfonic acid (PFDS)	ug/kg	< 5			5	Pass	
Method Blank							
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)							
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	ug/kg	< 5			5	Pass	
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)	ug/kg	< 10			10	Pass	
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	ug/kg	< 5			5	Pass	
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	ug/kg	< 5			5	Pass	
LCS - % Recovery							
Total Recoverable Hydrocarbons							
TRH C6-C9	%	90			70-130	Pass	
TRH C10-C14	%	106			70-130	Pass	
Naphthalene	%	101			70-130	Pass	
TRH C6-C10	%	86			70-130	Pass	
TRH >C10-C16	%	104			70-130	Pass	
LCS - % Recovery							
Volatile Organics							
1.1-Dichloroethene	%	80			70-130	Pass	
1.1.1-Trichloroethane	%	94			70-130	Pass	
1.2-Dichlorobenzene	%	109			70-130	Pass	
1.2-Dichloroethane	%	86			70-130	Pass	
Benzene	%	76			70-130	Pass	
Ethylbenzene	%	85			70-130	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
m&p-Xylenes	%	80			70-130	Pass	
Toluene	%	83			70-130	Pass	
Trichloroethene	%	83			70-130	Pass	
Xylenes - Total*	%	81			70-130	Pass	
LCS - % Recovery							
Polycyclic Aromatic Hydrocarbons							
Acenaphthene	%	94			70-130	Pass	
Acenaphthylene	%	95			70-130	Pass	
Anthracene	%	87			70-130	Pass	
Benz(a)anthracene	%	82			70-130	Pass	
Benzo(a)pyrene	%	84			70-130	Pass	
Benzo(b&j)fluoranthene	%	82			70-130	Pass	
Benzo(g.h.i)perylene	%	81			70-130	Pass	
Benzo(k)fluoranthene	%	86			70-130	Pass	
Chrysene	%	81			70-130	Pass	
Dibenz(a.h)anthracene	%	86			70-130	Pass	
Fluoranthene	%	95			70-130	Pass	
Fluorene	%	94			70-130	Pass	
Indeno(1.2.3-cd)pyrene	%	86			70-130	Pass	
Naphthalene	%	87			70-130	Pass	
Phenanthrene	%	89			70-130	Pass	
Pyrene	%	96			70-130	Pass	
LCS - % Recovery							
Organochlorine Pesticides							
Chlordanes - Total	%	88			70-130	Pass	
4.4'-DDD	%	84			70-130	Pass	
4.4'-DDE	%	92			70-130	Pass	
4.4'-DDT	%	89			70-130	Pass	
a-HCH	%	122			70-130	Pass	
Aldrin	%	87			70-130	Pass	
b-HCH	%	95			70-130	Pass	
d-HCH	%	101			70-130	Pass	
Dieldrin	%	89			70-130	Pass	
Endosulfan I	%	87			70-130	Pass	
Endosulfan II	%	83			70-130	Pass	
Endosulfan sulphate	%	87			70-130	Pass	
Endrin	%	91			70-130	Pass	
Endrin aldehyde	%	82			70-130	Pass	
Endrin ketone	%	92			70-130	Pass	
g-HCH (Lindane)	%	86			70-130	Pass	
Heptachlor	%	99			70-130	Pass	
Heptachlor epoxide	%	87			70-130	Pass	
Hexachlorobenzene	%	87			70-130	Pass	
Methoxychlor	%	90			70-130	Pass	
LCS - % Recovery							
Polychlorinated Biphenyls							
Aroclor-1260	%	116			70-130	Pass	
LCS - % Recovery							
Phenols (Halogenated)							
2-Chlorophenol	%	85			25-140	Pass	
2.4-Dichlorophenol	%	98			25-140	Pass	
2.4.5-Trichlorophenol	%	81			25-140	Pass	
2.4.6-Trichlorophenol	%	85			25-140	Pass	
2.6-Dichlorophenol	%	84			25-140	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
4-Chloro-3-methylphenol	%	89			25-140	Pass	
Pentachlorophenol	%	83			25-140	Pass	
Tetrachlorophenols - Total	%	100			25-140	Pass	
LCS - % Recovery							
Phenols (non-Halogenated)							
2-Cyclohexyl-4.6-dinitrophenol	%	48			25-140	Pass	
2-Methyl-4.6-dinitrophenol	%	69			25-140	Pass	
2-Nitrophenol	%	90			25-140	Pass	
2.4-Dimethylphenol	%	83			25-140	Pass	
2.4-Dinitrophenol	%	46			25-140	Pass	
2-Methylphenol (o-Cresol)	%	73			25-140	Pass	
3&4-Methylphenol (m&p-Cresol)	%	93			25-140	Pass	
4-Nitrophenol	%	82			25-140	Pass	
Dinoseb	%	78			25-140	Pass	
Phenol	%	87			25-140	Pass	
LCS - % Recovery							
Chromium (hexavalent)	%	100			70-130	Pass	
Cyanide (total)	%	105			70-130	Pass	
Fluoride (Total)	%	78			70-130	Pass	
LCS - % Recovery							
Heavy Metals							
Arsenic	%	113			80-120	Pass	
Cadmium	%	110			80-120	Pass	
Chromium	%	120			80-120	Pass	
Copper	%	117			80-120	Pass	
Lead	%	116			80-120	Pass	
Mercury	%	110			80-120	Pass	
Molybdenum	%	114			80-120	Pass	
Nickel	%	113			80-120	Pass	
Selenium	%	114			80-120	Pass	
Silver	%	117			80-120	Pass	
Tin	%	110			80-120	Pass	
Zinc	%	114			80-120	Pass	
LCS - % Recovery							
Perfluoroalkyl carboxylic acids (PFCAs)							
Perfluorobutanoic acid (PFBA)	%	98			50-150	Pass	
Perfluoropentanoic acid (PFPeA)	%	86			50-150	Pass	
Perfluorohexanoic acid (PFHxA)	%	86			50-150	Pass	
Perfluoroheptanoic acid (PFHpA)	%	86			50-150	Pass	
Perfluorooctanoic acid (PFOA)	%	99			50-150	Pass	
Perfluorononanoic acid (PFNA)	%	112			50-150	Pass	
Perfluorodecanoic acid (PFDA)	%	108			50-150	Pass	
Perfluoroundecanoic acid (PFUnDA)	%	90			50-150	Pass	
Perfluorododecanoic acid (PFDoDA)	%	95			50-150	Pass	
Perfluorotridecanoic acid (PFTrDA)	%	87			50-150	Pass	
Perfluorotetradecanoic acid (PFTeDA)	%	99			50-150	Pass	
LCS - % Recovery							
Perfluoroalkyl sulfonamido substances							
Perfluorooctane sulfonamide (FOSA)	%	96			50-150	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	%	91			50-150	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	%	94			50-150	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)	%	89			50-150	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)	%	91			50-150	Pass	
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	%	71			50-150	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	%	90			50-150	Pass	
LCS - % Recovery							
Perfluoroalkyl sulfonic acids (PFSAs)							
Perfluorobutanesulfonic acid (PFBS)	%	88			50-150	Pass	
Perfluorononanesulfonic acid (PFNS)	%	105			50-150	Pass	
Perfluoropropanesulfonic acid (PFPrS)	%	90			50-150	Pass	
Perfluoropentanesulfonic acid (PFPeS)	%	93			50-150	Pass	
Perfluorohexanesulfonic acid (PFHxS)	%	88			50-150	Pass	
Perfluoroheptanesulfonic acid (PFHpS)	%	58			50-150	Pass	
Perfluorooctanesulfonic acid (PFOS)	%	90			50-150	Pass	
Perfluorodecanesulfonic acid (PFDS)	%	115			50-150	Pass	
LCS - % Recovery							
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)							
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	%	99			50-150	Pass	
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)	%	83			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)	%	88			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-Ma61793	NCP	%	105			70-130	Pass	
TRH >C10-C16	M22-Ma61793	NCP	%	102			70-130	Pass	
Spike - % Recovery									
				Result 1					
Chromium (hexavalent)	M22-Ma63502	NCP	%	122			70-130	Pass	
Spike - % Recovery									
Heavy Metals				Result 1					
Arsenic	M22-Ma64215	NCP	%	93			75-125	Pass	
Cadmium	M22-Ma64215	NCP	%	91			75-125	Pass	
Chromium	M22-Ma64215	NCP	%	92			75-125	Pass	
Copper	M22-Ma64215	NCP	%	95			75-125	Pass	
Lead	M22-Ma64215	NCP	%	125			75-125	Pass	
Mercury	M22-Ma64215	NCP	%	104			75-125	Pass	
Molybdenum	M22-Ma64215	NCP	%	104			75-125	Pass	
Nickel	M22-Ma64215	NCP	%	98			75-125	Pass	
Selenium	M22-Ma64215	NCP	%	94			75-125	Pass	
Silver	M22-Ma64215	NCP	%	96			75-125	Pass	
Tin	M22-Ma64215	NCP	%	98			75-125	Pass	
Zinc	M22-Ma64215	NCP	%	90			75-125	Pass	
Spike - % Recovery									
Perfluoroalkyl carboxylic acids (PFCAs)				Result 1					
Perfluorobutanoic acid (PFBA)	M22-Ma60375	NCP	%	91			50-150	Pass	
Perfluoropentanoic acid (PFPeA)	M22-Ma60375	NCP	%	88			50-150	Pass	
Perfluorohexanoic acid (PFHxA)	M22-Ma60375	NCP	%	86			50-150	Pass	
Perfluoroheptanoic acid (PFHpA)	M22-Ma60375	NCP	%	86			50-150	Pass	
Perfluorooctanoic acid (PFOA)	M22-Ma60375	NCP	%	91			50-150	Pass	
Perfluorononanoic acid (PFNA)	M22-Ma60375	NCP	%	105			50-150	Pass	
Perfluorodecanoic acid (PFDA)	M22-Ma60375	NCP	%	103			50-150	Pass	
Perfluoroundecanoic acid (PFUnDA)	M22-Ma60375	NCP	%	88			50-150	Pass	
Perfluorododecanoic acid (PFDoDA)	M22-Ma60375	NCP	%	97			50-150	Pass	
Perfluorotridecanoic acid (PFTrDA)	M22-Ma60375	NCP	%	97			50-150	Pass	
Perfluorotetradecanoic acid (PFTeDA)	M22-Ma60375	NCP	%	94			50-150	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Spike - % Recovery									
Perfluoroalkyl sulfonamido substances				Result 1					
Perfluorooctane sulfonamide (FOSA)	M22-Ma60375	NCP	%	92			50-150	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	M22-Ma60375	NCP	%	91			50-150	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	M22-Ma60375	NCP	%	93			50-150	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)	M22-Ma60375	NCP	%	80			50-150	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)	M22-Ma60375	NCP	%	89			50-150	Pass	
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	M22-Ma60375	NCP	%	77			50-150	Pass	
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	M22-Ma60375	NCP	%	90			50-150	Pass	
Spike - % Recovery									
Perfluoroalkyl sulfonic acids (PFSAs)				Result 1					
Perfluorobutanesulfonic acid (PFBS)	M22-Ma60375	NCP	%	83			50-150	Pass	
Perfluorononanesulfonic acid (PFNS)	M22-Ma60375	NCP	%	113			50-150	Pass	
Perfluoropropanesulfonic acid (PFPrS)	M22-Ma60375	NCP	%	83			50-150	Pass	
Perfluoropentanesulfonic acid (PFPeS)	M22-Ma60375	NCP	%	110			50-150	Pass	
Perfluorohexanesulfonic acid (PFHxS)	M22-Ma60375	NCP	%	90			50-150	Pass	
Perfluoroheptanesulfonic acid (PFHpS)	M22-Ma60375	NCP	%	130			50-150	Pass	
Perfluorooctanesulfonic acid (PFOS)	M22-Ma60375	NCP	%	87			50-150	Pass	
Perfluorodecanesulfonic acid (PFDS)	M22-Ma60375	NCP	%	121			50-150	Pass	
Spike - % Recovery									
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)				Result 1					
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	M22-Ma60375	NCP	%	103			50-150	Pass	
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)	M22-Ma60375	NCP	%	92			50-150	Pass	
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	M22-Ma60375	NCP	%	115			50-150	Pass	
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	M22-Ma60375	NCP	%	80			50-150	Pass	
Spike - % Recovery									
Polycyclic Aromatic Hydrocarbons				Result 1					
Acenaphthene	M22-Ma60486	CP	%	99			70-130	Pass	
Acenaphthylene	M22-Ma60486	CP	%	99			70-130	Pass	
Anthracene	M22-Ma60486	CP	%	91			70-130	Pass	
Benz(a)anthracene	M22-Ma60486	CP	%	88			70-130	Pass	
Benzo(a)pyrene	M22-Ma60486	CP	%	91			70-130	Pass	
Benzo(b&j)fluoranthene	M22-Ma60486	CP	%	77			70-130	Pass	
Benzo(k)fluoranthene	M22-Ma60486	CP	%	97			70-130	Pass	
Chrysene	M22-Ma60486	CP	%	87			70-130	Pass	
Dibenz(a.h)anthracene	M22-Ma60486	CP	%	85			70-130	Pass	
Fluoranthene	M22-Ma60486	CP	%	95			70-130	Pass	
Fluorene	M22-Ma60486	CP	%	98			70-130	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Indeno(1.2.3-cd)pyrene	M22-Ma60486	CP	%	83			70-130	Pass	
Naphthalene	M22-Ma60486	CP	%	90			70-130	Pass	
Phenanthrene	M22-Ma60486	CP	%	89			70-130	Pass	
Pyrene	M22-Ma60486	CP	%	96			70-130	Pass	
Spike - % Recovery									
Phenols (Halogenated)				Result 1					
2-Chlorophenol	M22-Ma60486	CP	%	88			30-130	Pass	
2.4-Dichlorophenol	M22-Ma60486	CP	%	101			30-130	Pass	
2.4.5-Trichlorophenol	M22-Ma60486	CP	%	92			30-130	Pass	
2.4.6-Trichlorophenol	M22-Ma60486	CP	%	92			30-130	Pass	
2.6-Dichlorophenol	M22-Ma60486	CP	%	94			30-130	Pass	
4-Chloro-3-methylphenol	M22-Ma60486	CP	%	96			30-130	Pass	
Pentachlorophenol	M22-Ma60486	CP	%	79			30-130	Pass	
Spike - % Recovery									
Phenols (non-Halogenated)				Result 1					
2-Methyl-4.6-dinitrophenol	M22-Ma60486	CP	%	93			30-130	Pass	
2-Nitrophenol	M22-Ma60486	CP	%	93			30-130	Pass	
2.4-Dimethylphenol	M22-Ma60486	CP	%	113			30-130	Pass	
2-Methylphenol (o-Cresol)	M22-Ma60486	CP	%	78			30-130	Pass	
3&4-Methylphenol (m&p-Cresol)	M22-Ma60486	CP	%	100			30-130	Pass	
4-Nitrophenol	M22-Ma60486	CP	%	116			30-130	Pass	
Dinoseb	M22-Ma60486	CP	%	101			30-130	Pass	
Phenol	M22-Ma60486	CP	%	91			30-130	Pass	
Spike - % Recovery									
				Result 1					
Fluoride (Total)	M22-Ma60487	CP	%	85			70-130	Pass	
Spike - % Recovery									
Total Recoverable Hydrocarbons				Result 1					
TRH C6-C9	M22-Ma60488	CP	%	104			70-130	Pass	
Naphthalene	M22-Ma60488	CP	%	99			70-130	Pass	
TRH C6-C10	M22-Ma60488	CP	%	99			70-130	Pass	
Spike - % Recovery									
Volatile Organics				Result 1					
1.1-Dichloroethene	M22-Ma60488	CP	%	82			70-130	Pass	
1.1.1-Trichloroethane	M22-Ma60488	CP	%	80			70-130	Pass	
1.2-Dichlorobenzene	M22-Ma60488	CP	%	118			70-130	Pass	
1.2-Dichloroethane	M22-Ma60488	CP	%	79			70-130	Pass	
Benzene	M22-Ma60488	CP	%	72			70-130	Pass	
Ethylbenzene	M22-Ma60488	CP	%	97			70-130	Pass	
m&p-Xylenes	M22-Ma60488	CP	%	93			70-130	Pass	
o-Xylene	M22-Ma60488	CP	%	93			70-130	Pass	
Toluene	M22-Ma60488	CP	%	88			70-130	Pass	
Trichloroethene	M22-Ma60488	CP	%	75			70-130	Pass	
Xylenes - Total*	M22-Ma60488	CP	%	93			70-130	Pass	
Spike - % Recovery									
Organochlorine Pesticides				Result 1					
Chlordanes - Total	M22-Ma60488	CP	%	79			70-130	Pass	
4.4'-DDD	M22-Ma60488	CP	%	87			70-130	Pass	
4.4'-DDE	M22-Ma60488	CP	%	78			70-130	Pass	
4.4'-DDT	M22-Ma60488	CP	%	87			70-130	Pass	
a-HCH	M22-Ma60488	CP	%	76			70-130	Pass	
Aldrin	M22-Ma60488	CP	%	78			70-130	Pass	
b-HCH	M22-Ma60488	CP	%	75			70-130	Pass	
d-HCH	M22-Ma60488	CP	%	78			70-130	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Dieldrin	M22-Ma60488	CP	%	78			70-130	Pass	
Endosulfan I	M22-Ma60488	CP	%	77			70-130	Pass	
Endosulfan II	M22-Ma60488	CP	%	75			70-130	Pass	
Endosulfan sulphate	M22-Ma60488	CP	%	74			70-130	Pass	
Endrin	M22-Ma60488	CP	%	89			70-130	Pass	
Endrin aldehyde	M22-Ma60488	CP	%	87			70-130	Pass	
Endrin ketone	M22-Ma60488	CP	%	88			70-130	Pass	
g-HCH (Lindane)	M22-Ma60488	CP	%	93			70-130	Pass	
Heptachlor	M22-Ma60488	CP	%	75			70-130	Pass	
Heptachlor epoxide	M22-Ma60488	CP	%	73			70-130	Pass	
Hexachlorobenzene	M22-Ma60488	CP	%	79			70-130	Pass	
Methoxychlor	M22-Ma60488	CP	%	74			70-130	Pass	
Spike - % Recovery									
				Result 1					
Cyanide (total)	M22-Ma60488	CP	%	90			70-130	Pass	
Spike - % Recovery									
Polycyclic Aromatic Hydrocarbons				Result 1					
Benzo(g.h.i)perylene	M22-Ma61793	NCP	%	86			70-130	Pass	
Spike - % Recovery									
Phenols (Halogenated)				Result 1					
Tetrachlorophenols - Total	M22-Ma61793	NCP	%	60			30-130	Pass	
Spike - % Recovery									
Phenols (non-Halogenated)				Result 1					
2-Cyclohexyl-4.6-dinitrophenol	M22-Ma61793	NCP	%	45			30-130	Pass	
2.4-Dinitrophenol	M22-Ma61793	NCP	%	53			30-130	Pass	
Test	**Lab Sample ID**	**QA Source**	**Units**	**Result 1**			**Acceptance Limits**	**Pass Limits**	**Qualifying Code**
Duplicate									
Total Recoverable Hydrocarbons				Result 1	Result 2	RPD			
TRH C10-C14	M22-Ma60484	CP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH C15-C28	M22-Ma60484	CP	mg/kg	< 50	< 50	<1	30%	Pass	
TRH C29-C36	M22-Ma60484	CP	mg/kg	< 50	< 50	<1	30%	Pass	
TRH >C10-C16	M22-Ma60484	CP	mg/kg	< 50	< 50	<1	30%	Pass	
TRH >C16-C34	M22-Ma60484	CP	mg/kg	< 100	< 100	<1	30%	Pass	
TRH >C34-C40	M22-Ma60484	CP	mg/kg	< 100	< 100	<1	30%	Pass	
Duplicate									
Polycyclic Aromatic Hydrocarbons				Result 1	Result 2	RPD			
Acenaphthene	M22-Ma60484	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Acenaphthylene	M22-Ma60484	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Anthracene	M22-Ma60484	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benz(a)anthracene	M22-Ma60484	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(a)pyrene	M22-Ma60484	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(b&j)fluoranthene	M22-Ma60484	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(g.h.i)perylene	M22-Ma60484	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(k)fluoranthene	M22-Ma60484	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chrysene	M22-Ma60484	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dibenz(a.h)anthracene	M22-Ma60484	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Fluoranthene	M22-Ma60484	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Fluorene	M22-Ma60484	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Indeno(1.2.3-cd)pyrene	M22-Ma60484	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Naphthalene	M22-Ma60484	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Phenanthrene	M22-Ma60484	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Pyrene	M22-Ma60484	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	

Duplicate									
Organochlorine Pesticides				Result 1	Result 2	RPD			
Chlordanes - Total	M22-Ma60484	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
4.4'-DDD	M22-Ma60484	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
4.4'-DDE	M22-Ma60484	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
4.4'-DDT	M22-Ma60484	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
a-HCH	M22-Ma60484	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Aldrin	M22-Ma60484	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
b-HCH	M22-Ma60484	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
d-HCH	M22-Ma60484	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Dieldrin	M22-Ma60484	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan I	M22-Ma60484	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan II	M22-Ma60484	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan sulphate	M22-Ma60484	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin	M22-Ma60484	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin aldehyde	M22-Ma60484	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin ketone	M22-Ma60484	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
g-HCH (Lindane)	M22-Ma60484	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Heptachlor	M22-Ma60484	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Hexachlorobenzene	M22-Ma60484	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Methoxychlor	M22-Ma60484	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Toxaphene	M22-Ma60484	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
Polychlorinated Biphenyls				Result 1	Result 2	RPD			
Aroclor-1016	M22-Ma60484	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Aroclor-1221	M22-Ma60484	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Aroclor-1232	M22-Ma60484	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Aroclor-1242	M22-Ma60484	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Aroclor-1248	M22-Ma60484	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Aroclor-1254	M22-Ma60484	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Aroclor-1260	M22-Ma60484	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Total PCB*	M22-Ma60484	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Duplicate									
Phenols (Halogenated)				Result 1	Result 2	RPD			
2-Chlorophenol	M22-Ma60484	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2.4-Dichlorophenol	M22-Ma60484	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2.4.5-Trichlorophenol	M22-Ma60484	CP	mg/kg	< 1	< 1	<1	30%	Pass	
2.4.6-Trichlorophenol	M22-Ma60484	CP	mg/kg	< 1	< 1	<1	30%	Pass	
4-Chloro-3-methylphenol	M22-Ma60484	CP	mg/kg	< 1	< 1	<1	30%	Pass	
Pentachlorophenol	M22-Ma60484	CP	mg/kg	< 1	< 1	<1	30%	Pass	
Tetrachlorophenols - Total	M22-Ma60484	CP	mg/kg	< 10	< 10	<1	30%	Pass	
Duplicate									
Phenols (non-Halogenated)				Result 1	Result 2	RPD			
2-Cyclohexyl-4.6-dinitrophenol	M22-Ma60484	CP	mg/kg	< 20	< 20	<1	30%	Pass	
2-Methyl-4.6-dinitrophenol	M22-Ma60484	CP	mg/kg	< 5	< 5	<1	30%	Pass	
2-Nitrophenol	M22-Ma60484	CP	mg/kg	< 1	< 1	<1	30%	Pass	
2.4-Dimethylphenol	M22-Ma60484	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2.4-Dinitrophenol	M22-Ma60484	CP	mg/kg	< 5	< 5	<1	30%	Pass	
2-Methylphenol (o-Cresol)	M22-Ma60484	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
3&4-Methylphenol (m&p-Cresol)	M22-Ma60484	CP	mg/kg	< 0.4	< 0.4	<1	30%	Pass	
4-Nitrophenol	M22-Ma60484	CP	mg/kg	< 5	< 5	<1	30%	Pass	
Dinoseb	M22-Ma60484	CP	mg/kg	< 20	< 20	<1	30%	Pass	
Phenol	M22-Ma60484	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
				Result 1	Result 2	RPD			
Cyanide (total)	M22-Ma61023	NCP	mg/kg	< 5	< 5	<1	30%	Pass	
Fluoride (Total)	M22-Ma62520	NCP	mg/kg	170	140	20	30%	Pass	

Duplicate									
Heavy Metals				Result 1	Result 2	RPD			
Arsenic	M22-Ma60152	NCP	mg/kg	3.3	3.3	<1	30%	Pass	
Cadmium	M22-Ma60152	NCP	mg/kg	< 0.4	< 0.4	<1	30%	Pass	
Chromium	M22-Ma60152	NCP	mg/kg	24	27	9.0	30%	Pass	
Copper	M22-Ma60152	NCP	mg/kg	15	17	18	30%	Pass	
Lead	M22-Ma60152	NCP	mg/kg	21	20	3.0	30%	Pass	
Mercury	M22-Ma60152	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Molybdenum	M22-Ma60152	NCP	mg/kg	< 5	< 5	<1	30%	Pass	
Nickel	M22-Ma60152	NCP	mg/kg	31	27	13	30%	Pass	
Selenium	M22-Ma60152	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Silver	M22-Ma60152	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Tin	M22-Ma60152	NCP	mg/kg	< 10	< 10	<1	30%	Pass	
Zinc	M22-Ma60152	NCP	mg/kg	50	48	4.0	30%	Pass	
Duplicate									
				Result 1	Result 2	RPD			
Chromium (hexavalent)	M22-Ma60486	CP	mg/kg	< 1	< 1	<1	30%	Pass	
pH (1:5 Aqueous extract at 25°C as rec.)	M22-Ma60486	CP	pH Units	8.7	8.8	pass	30%	Pass	
% Moisture	M22-Ma60486	CP	%	31	28	9.0	30%	Pass	
Duplicate									
Perfluoroalkyl carboxylic acids (PFCAs)				Result 1	Result 2	RPD			
Perfluorobutanoic acid (PFBA)	M22-Ma60486	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluoropentanoic acid (PFPeA)	M22-Ma60486	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorohexanoic acid (PFHxA)	M22-Ma60486	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluoroheptanoic acid (PFHpA)	M22-Ma60486	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorooctanoic acid (PFOA)	M22-Ma60486	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorononanoic acid (PFNA)	M22-Ma60486	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorodecanoic acid (PFDA)	M22-Ma60486	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluoroundecanoic acid (PFUnDA)	M22-Ma60486	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorododecanoic acid (PFDoDA)	M22-Ma60486	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorotridecanoic acid (PFTrDA)	M22-Ma60486	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorotetradecanoic acid (PFTeDA)	M22-Ma60486	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Duplicate									
Perfluoroalkyl sulfonamido substances				Result 1	Result 2	RPD			
Perfluorooctane sulfonamide (FOSA)	M22-Ma60486	CP	ug/kg	< 5	< 5	<1	30%	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	M22-Ma60486	CP	ug/kg	< 5	< 5	<1	30%	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	M22-Ma60486	CP	ug/kg	< 5	< 5	<1	30%	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)	M22-Ma60486	CP	ug/kg	< 5	< 5	<1	30%	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)	M22-Ma60486	CP	ug/kg	< 5	< 5	<1	30%	Pass	
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	M22-Ma60486	CP	ug/kg	< 10	< 10	<1	30%	Pass	
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	M22-Ma60486	CP	ug/kg	< 10	< 10	<1	30%	Pass	

Duplicate									
Perfluoroalkyl sulfonic acids (PFSAs)				Result 1	Result 2	RPD			
Perfluorobutanesulfonic acid (PFBS)	M22-Ma60486	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorononanesulfonic acid (PFNS)	M22-Ma60486	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluoropropanesulfonic acid (PFPrS)	M22-Ma60486	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluoropentanesulfonic acid (PFPeS)	M22-Ma60486	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorohexanesulfonic acid (PFHxS)	M22-Ma60486	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluoroheptanesulfonic acid (PFHpS)	M22-Ma60486	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorooctanesulfonic acid (PFOS)	M22-Ma60486	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorodecanesulfonic acid (PFDS)	M22-Ma60486	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Duplicate									
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)				Result 1	Result 2	RPD			
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	M22-Ma60486	CP	ug/kg	< 5	< 5	<1	30%	Pass	
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)	M22-Ma60486	CP	ug/kg	< 10	< 10	<1	30%	Pass	
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	M22-Ma60486	CP	ug/kg	< 5	< 5	<1	30%	Pass	
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	M22-Ma60486	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Duplicate									
Total Recoverable Hydrocarbons				Result 1	Result 2	RPD			
TRH C10-C14	M22-Ma60487	CP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH C15-C28	M22-Ma60487	CP	mg/kg	< 50	< 50	<1	30%	Pass	
TRH C29-C36	M22-Ma60487	CP	mg/kg	< 50	< 50	<1	30%	Pass	
TRH >C10-C16	M22-Ma60487	CP	mg/kg	< 50	< 50	<1	30%	Pass	
TRH >C16-C34	M22-Ma60487	CP	mg/kg	< 100	< 100	<1	30%	Pass	
TRH >C34-C40	M22-Ma60487	CP	mg/kg	< 100	< 100	<1	30%	Pass	
Duplicate									
Polycyclic Aromatic Hydrocarbons				Result 1	Result 2	RPD			
Acenaphthene	M22-Ma60487	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Acenaphthylene	M22-Ma60487	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Anthracene	M22-Ma60487	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benz(a)anthracene	M22-Ma60487	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(a)pyrene	M22-Ma60487	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(b&j)fluoranthene	M22-Ma60487	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(g.h.i)perylene	M22-Ma60487	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(k)fluoranthene	M22-Ma60487	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chrysene	M22-Ma60487	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dibenz(a.h)anthracene	M22-Ma60487	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Fluoranthene	M22-Ma60487	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Fluorene	M22-Ma60487	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Indeno(1.2.3-cd)pyrene	M22-Ma60487	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Naphthalene	M22-Ma60487	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Phenanthrene	M22-Ma60487	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Pyrene	M22-Ma60487	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	

Duplicate									
Organochlorine Pesticides				Result 1	Result 2	RPD			
Chlordanes - Total	M22-Ma60487	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
4.4'-DDD	M22-Ma60487	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
4.4'-DDE	M22-Ma60487	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
4.4'-DDT	M22-Ma60487	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
a-HCH	M22-Ma60487	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Aldrin	M22-Ma60487	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
b-HCH	M22-Ma60487	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
d-HCH	M22-Ma60487	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Dieldrin	M22-Ma60487	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan I	M22-Ma60487	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan II	M22-Ma60487	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan sulphate	M22-Ma60487	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin	M22-Ma60487	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin aldehyde	M22-Ma60487	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin ketone	M22-Ma60487	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
g-HCH (Lindane)	M22-Ma60487	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Heptachlor	M22-Ma60487	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Hexachlorobenzene	M22-Ma60487	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Methoxychlor	M22-Ma60487	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Toxaphene	M22-Ma60487	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
Polychlorinated Biphenyls				Result 1	Result 2	RPD			
Aroclor-1016	M22-Ma60487	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Aroclor-1221	M22-Ma60487	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Aroclor-1232	M22-Ma60487	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Aroclor-1242	M22-Ma60487	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Aroclor-1248	M22-Ma60487	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Aroclor-1254	M22-Ma60487	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Aroclor-1260	M22-Ma60487	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Total PCB*	M22-Ma60487	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Duplicate									
Phenols (Halogenated)				Result 1	Result 2	RPD			
2-Chlorophenol	M22-Ma60487	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2.4-Dichlorophenol	M22-Ma60487	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2.4.5-Trichlorophenol	M22-Ma60487	CP	mg/kg	< 1	< 1	<1	30%	Pass	
2.4.6-Trichlorophenol	M22-Ma60487	CP	mg/kg	< 1	< 1	<1	30%	Pass	
4-Chloro-3-methylphenol	M22-Ma60487	CP	mg/kg	< 1	< 1	<1	30%	Pass	
Pentachlorophenol	M22-Ma60487	CP	mg/kg	< 1	< 1	<1	30%	Pass	
Tetrachlorophenols - Total	M22-Ma60487	CP	mg/kg	< 10	< 10	<1	30%	Pass	
Duplicate									
Phenols (non-Halogenated)				Result 1	Result 2	RPD			
2-Cyclohexyl-4.6-dinitrophenol	M22-Ma60487	CP	mg/kg	< 20	< 20	<1	30%	Pass	
2-Methyl-4.6-dinitrophenol	M22-Ma60487	CP	mg/kg	< 5	< 5	<1	30%	Pass	
2-Nitrophenol	M22-Ma60487	CP	mg/kg	< 1	< 1	<1	30%	Pass	
2.4-Dimethylphenol	M22-Ma60487	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2.4-Dinitrophenol	M22-Ma60487	CP	mg/kg	< 5	< 5	<1	30%	Pass	
2-Methylphenol (o-Cresol)	M22-Ma60487	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
3&4-Methylphenol (m&p-Cresol)	M22-Ma60487	CP	mg/kg	< 0.4	< 0.4	<1	30%	Pass	
4-Nitrophenol	M22-Ma60487	CP	mg/kg	< 5	< 5	<1	30%	Pass	
Dinoseb	M22-Ma60487	CP	mg/kg	< 20	< 20	<1	30%	Pass	
Phenol	M22-Ma60487	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	

Duplicate									
Total Recoverable Hydrocarbons				Result 1	Result 2	RPD			
TRH C10-C14	M22-Ma60488	CP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH C15-C28	M22-Ma60488	CP	mg/kg	< 50	< 50	<1	30%	Pass	
TRH C29-C36	M22-Ma60488	CP	mg/kg	< 50	< 50	<1	30%	Pass	
TRH >C10-C16	M22-Ma60488	CP	mg/kg	< 50	< 50	<1	30%	Pass	
TRH >C16-C34	M22-Ma60488	CP	mg/kg	< 100	< 100	<1	30%	Pass	
TRH >C34-C40	M22-Ma60488	CP	mg/kg	< 100	< 100	<1	30%	Pass	
Duplicate									
Polycyclic Aromatic Hydrocarbons				Result 1	Result 2	RPD			
Acenaphthene	M22-Ma60488	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Acenaphthylene	M22-Ma60488	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Anthracene	M22-Ma60488	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benz(a)anthracene	M22-Ma60488	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(a)pyrene	M22-Ma60488	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(b&j)fluoranthene	M22-Ma60488	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(g.h.i)perylene	M22-Ma60488	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(k)fluoranthene	M22-Ma60488	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chrysene	M22-Ma60488	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dibenz(a.h)anthracene	M22-Ma60488	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Fluoranthene	M22-Ma60488	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Fluorene	M22-Ma60488	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Indeno(1.2.3-cd)pyrene	M22-Ma60488	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Naphthalene	M22-Ma60488	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Phenanthrene	M22-Ma60488	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Pyrene	M22-Ma60488	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
Organochlorine Pesticides				Result 1	Result 2	RPD			
Chlordanes - Total	M22-Ma60488	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
4.4'-DDD	M22-Ma60488	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
4.4'-DDE	M22-Ma60488	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
4.4'-DDT	M22-Ma60488	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
a-HCH	M22-Ma60488	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Aldrin	M22-Ma60488	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
b-HCH	M22-Ma60488	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
d-HCH	M22-Ma60488	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Dieldrin	M22-Ma60488	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan I	M22-Ma60488	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan II	M22-Ma60488	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan sulphate	M22-Ma60488	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin	M22-Ma60488	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin aldehyde	M22-Ma60488	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin ketone	M22-Ma60488	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
g-HCH (Lindane)	M22-Ma60488	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Heptachlor	M22-Ma60488	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Hexachlorobenzene	M22-Ma60488	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Methoxychlor	M22-Ma60488	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Toxaphene	M22-Ma60488	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
Polychlorinated Biphenyls				Result 1	Result 2	RPD			
Aroclor-1016	M22-Ma60488	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Aroclor-1221	M22-Ma60488	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Aroclor-1232	M22-Ma60488	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Aroclor-1242	M22-Ma60488	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Aroclor-1248	M22-Ma60488	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Aroclor-1254	M22-Ma60488	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	

Duplicate									
Polychlorinated Biphenyls				Result 1	Result 2	RPD			
Aroclor-1260	M22-Ma60488	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Total PCB*	M22-Ma60488	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Duplicate									
Phenols (Halogenated)				Result 1	Result 2	RPD			
2-Chlorophenol	M22-Ma60488	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2.4-Dichlorophenol	M22-Ma60488	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2.4.5-Trichlorophenol	M22-Ma60488	CP	mg/kg	< 1	< 1	<1	30%	Pass	
2.4.6-Trichlorophenol	M22-Ma60488	CP	mg/kg	< 1	< 1	<1	30%	Pass	
4-Chloro-3-methylphenol	M22-Ma60488	CP	mg/kg	< 1	< 1	<1	30%	Pass	
Pentachlorophenol	M22-Ma60488	CP	mg/kg	< 1	< 1	<1	30%	Pass	
Tetrachlorophenols - Total	M22-Ma60488	CP	mg/kg	< 10	< 10	<1	30%	Pass	
Duplicate									
Phenols (non-Halogenated)				Result 1	Result 2	RPD			
2-Cyclohexyl-4.6-dinitrophenol	M22-Ma60488	CP	mg/kg	< 20	< 20	<1	30%	Pass	
2-Methyl-4.6-dinitrophenol	M22-Ma60488	CP	mg/kg	< 5	< 5	<1	30%	Pass	
2-Nitrophenol	M22-Ma60488	CP	mg/kg	< 1	< 1	<1	30%	Pass	
2.4-Dimethylphenol	M22-Ma60488	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2.4-Dinitrophenol	M22-Ma60488	CP	mg/kg	< 5	< 5	<1	30%	Pass	
2-Methylphenol (o-Cresol)	M22-Ma60488	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
3&4-Methylphenol (m&p-Cresol)	M22-Ma60488	CP	mg/kg	< 0.4	< 0.4	<1	30%	Pass	
4-Nitrophenol	M22-Ma60488	CP	mg/kg	< 5	< 5	<1	30%	Pass	
Dinoseb	M22-Ma60488	CP	mg/kg	< 20	< 20	<1	30%	Pass	
Phenol	M22-Ma60488	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
Organochlorine Pesticides				Result 1	Result 2	RPD			
Heptachlor epoxide	M22-Ma60157	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Duplicate									
Phenols (Halogenated)				Result 1	Result 2	RPD			
2.6-Dichlorophenol	M22-Ma60157	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
				Result 1	Result 2	RPD			
Chromium (hexavalent)	M22-Ma60489	CP	mg/kg	< 1	< 1	<1	30%	Pass	

Comments

V2: Project ID amended to "20220329051117-EUROFIN-14" from "202203290511174-EUROFIN-14 ".

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:

Callum McEwan	Analytical Services Manager
Mary Makarios	Senior Analyst (NSW)
Joseph Edouard	Senior Analyst (VIC)
Caitlin Breeze	Senior Analyst (VIC)
Edward Lee	Senior Analyst (VIC)
Vivian Wang	Senior Analyst (VIC)

Glenn Jackson
General Manager

Final Report – this report replaces any previously issued Report

- Indicates Not Requested

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

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

ALS Melbourne: 4 Westall Rd, Springvale, VIC 3171 Phone (03) 8549 9600; Facsimile (03) 8549 9601. Email Samples.Melbourne@alsenviro.com

CHAIN OF CUSTODY DOCUMENTATION

Australian Laboratory Services Pty Ltd

CLIENT: Agon Evironmental	SAMPLER: Emma - EP Risk + TB - Agon
ADDRESS / OFFICE: Melbourne	MOBILE 1: +61 400 826 907 (Craig Trimbur)
PROJECT MANAGER (PM): Craig Trimbur	MOBILE 2: +61 490 411 004 (David Lawson)
PROJECT ID: JC0927	EMAIL REPORT TO: Labreports.TST@agonenviro.com.au agonenvironmental@esdat.com.au motherhublabresults1@wgtp.com.au
SITE: P.O. NO.:	
RESULTS REQUIRED (Date): 5 days QUOTE NO.: ME-150-19 WGTP	EMAIL INVOICE TO: (if different to report) Labreports.TST@agonenviro.com.au agonenvironmental@esdat.com.au

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

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

COMMENTS / SPECIAL HANDLING / STORAGE OR DIPOSAL:

Notes: Draft! Site reference TBC.

ALS ID	SAMPLE ID	MATRIX	DATE	Time	CONTAINER INFORMATION Type / Code	Total bottles	Spoil Sample Prep	P16 plus Cr	PFAS 28 Extended suite	ASLP PFAS - Extended Suite (Lab to determine pH)	DI Leachate PFAS - Extended Suite
1	SX_IB_20220316_08_17_SS_Primary_ALS	S	16/03/2022	08:17	Bucket	1	x	x	x	x	x
2	SX_IB_20220316_08_20_SS_Duplicate_ALS	S	16/03/2022	08:20	Bucket	1	x	x	x	x	x
3	SX_IB_20220316_12_25_SS_Primary_ALS	S	16/03/2022	12:25	Bucket	1	x	x	x	x	x
4	SX_IB_20220316_16_16_SS_Triplicate_ALS	S	16/03/2022	16:16	Bucket	1	x	x	x	x	x
5	SX_IB_20220316_16_22_SS_Primary_ALS	S	16/03/2022	16:22	Bucket	1	x	x	x	x	x
6	SX_IB_20220316_19_52_SS_Primary_ALS	S	16/03/2022	19:52	Bucket	1	x	x	x	x	x
7	SX_IB_20220317_00_11_SS_Primary_ALS	S	17/03/2022	00:11	Bucket	1	x	x	x	x	x
8	SX_IB_20220317_04_08_SS_Primary_ALS	S	17/03/2022	04:08	Bucket	1	x	x	x	x	x
		S				1					
		S				1					
		S				1					

Environmental Division
Melbourne
Work Order Reference
EM2204736

Telephone : + 61-3-8549 9600

Received: 17/3 Carrier: —
C/note:
Temp: 23.8°C Seal: Y/N
Ice / Icebricks N/A

RELINQUISHED BY		RECEIVED BY		METHOD OF SHIPMENT
Name:	Date:	Name:	Date:	Con' Note No:
Of:	Time:	Of:	Time:	
Name:	Date:	Name:	Date:	Transport Co:
Of:	Time:	Of:	Time:	

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

ALS Melbourne: 4 Westall Rd, Springvale, VIC 3171 Phone (03) 8549 9600; Facsimile (03) 8549 9601. Email Samples.Melbourne@alsenviro.com

CHAIN OF CUSTODY DOCUMENTATION

CLIENT: Agon Evironmental	SAMPLER: Emma - EP Risk + TB - Agon
ADDRESS / OFFICE: Melbourne	MOBILE 1: +61 400 826 907 (Craig Trimbur)
PROJECT MANAGER (PM): Craig Trimbur	MOBILE 2: +61 490 411 004 (David Lawson)
PROJECT ID: JC0927	EMAIL REPORT TO: Labreports.TST@agonenviro.com.au agonenvironmental@
SITE: 20220317140530-ALS-22 P.O. NO.:	motherhublabresults1@wgtp.com.au
RESULTS REQUIRED (**Date**): 5 days QUOTE NO.: ME-150-19 WGTP	EMAIL INVOICE TO: (if different to report) Labreports.TST@agonenviro.com.au

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

COMMENTS / SPECIAL HANDLING / STORAGE OR DIPOSAL:

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

SAMPLE INFORMATION (note: S = Soil, W=Water)					CONTAINER INFORMATION		Spoil Sample Prep	P16 plus Cr	PFAS 28 Extended suite	ASLP PFAS - Extended Suite (Lab to determine pH)	DI Leachate PFAS - Extended Suite										Note
ALS ID	SAMPLE ID	MATRIX	DATE	Time	Type / Code	Total bottles															
1	SX_IB_20220316_08_17_SS_Primary_ALS	S	16/03/2022	08:17	Bucket	1	x	x	x	x	x										
2	SX_IB_20220316_08_20_SS_Duplicate_ALS	S	16/03/2022	08:20	Bucket	1	x	x	x	x	x										
3	SX_IB_20220316_12_25_SS_Primary_ALS	S	16/03/2022	12:25	Bucket	1	x	x	x	x	x										
4	SX_IB_20220316_16_16_SS_Triplicate_ALS	S	16/03/2022	16:16	Bucket	1	x	x	x	x	x										
5	SX_IB_20220316_16_22_SS_Primary_ALS	S	16/03/2022	16:22	Bucket	1	x	x	x	x	x										
6	SX_IB_20220316_19_52_SS_Primary_ALS	S	16/03/2022	19:52	Bucket	1	x	x	x	x	x										
7	SX_IB_20220317_00_11_SS_Primary_ALS	S	17/03/2022	00:11	Bucket	1	x	x	x	x	x										
8	SX_IB_20220317_04_08_SS_Primary_ALS	S	17/03/2022	04:08	Bucket	1	x	x	x	x	x										

RELINQUISHED BY:		RECEIVED BY		
Name:	Date:	Name:	Date:	Con
Of:	Time:	Of:	Time:	

ALS Melbourne: 4 Westall Rd, Springvale, VIC 3171 Phone (03) 8549 9600; Facsimile (03) 8549 9601. Email Samples.Melbourne@alsenviro.com

Name:	Date:	Name:	Date:	Trar
Of:	Time:	Of:	Time:	

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

AUSTRALIAN LABORATORY SERVICES P/L

Ranil Weerakkody

From: Josh Alexander
Sent: Thursday, 17 March 2022 3:50 PM
To: COC Melbourne
Subject: AGOENV - JC0927 - Orange sticker #45
Attachments: 20220317140530-ALS-22.xlsx

Please find attached a COC for Agon WGTP spoil received today 17/3

right solutions. right partner.

Joshua Alexander
Project Manager - Environmental
Springvale, Victoria

M: 0436 924 166
josh.alexander@alsglobal.com

2-4 Westall Road, Springvale VIC 3171

alsglobal.com

ALS Environmental

CERTIFICATE OF ANALYSIS

Work Order	: **EM2204736**	Page	: 1 of 27
Client	: **AGON ENVIRONMENTAL PTY LTD**	Laboratory	: Environmental Division Melbourne
Contact	: CRAIG TRIMBUR	Contact	: Bronwyn Sheen
Address	: D1.1 63-85 TURNER STREET PORT MELBOURNE 3207	Address	: 4 Westall Rd Springvale VIC Australia 3171
Telephone	: ----	Telephone	: +6138549 9600
Project	: JC0927	Date Samples Received	: 17-Mar-2022 10:20
Order number	: ----	Date Analysis Commenced	: 18-Mar-2022
C-O-C number	: 20220317140530-ALS-22	Issue Date	: 25-Mar-2022 15:11
Sampler	: Emma - EP Risk + TB - Agon		
Site	: 20220317140530-ALS-22		
Quote number	: EN/150/19 -WGTP -Bulk Sample Quote		
No. of samples received	: 16		
No. of samples analysed	: 16		

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

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

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results
- Surrogate Control Limits

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

Signatories

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

Signatories	*Position*	*Accreditation Category*
Dilani Fernando	Laboratory Coordinator	Melbourne Inorganics, Springvale, VIC
Eric Chau	Metals Team Leader	Melbourne Inorganics, Springvale, VIC
Xing Lin	Senior Organic Chemist	Melbourne Organics, Springvale, VIC

General Comments

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

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

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

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

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

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

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

- EG048G: EM2204681 #1 poor matrix spike recovery for hexavalent chromium due to matrix effects. Confirmed by re-analysis.
- Benzo(a)pyrene Toxicity Equivalent Quotient (TEQ) per the NEPM (2013) is the sum total of the concentration of the eight carcinogenic PAHs multiplied by their Toxicity Equivalence Factor (TEF) relative to Benzo(a)pyrene. TEF values are provided in brackets as follows: Benz(a)anthracene (0.1), Chrysene (0.01), Benzo(b+j) & Benzo(k)fluoranthene (0.1), Benzo(a)pyrene (1.0), Indeno(1.2.3.cd)pyrene (0.1), Dibenz(a.h)anthracene (1.0), Benzo(g.h.i)perylene (0.01). Less than LOR results for 'TEQ Zero' are treated as zero, for 'TEQ 1/2LOR' are treated as half the reported LOR, and for 'TEQ LOR' are treated as being equal to the reported LOR. Note: TEQ 1/2LOR and TEQ LOR will calculate as 0.6mg/Kg and 1.2mg/Kg respectively for samples with non-detects for all of the eight TEQ PAHs.
- EP231X - Per- and Polyfluoroalkyl Substances (PFAS): Samples received in 20ml or 125ml bottles have been tested in accordance with the QSM5.3 compliant, NATA accredited method. 60mL or 250mL bottles have been tested to the legacy QSM 5.1 aligned, NATA accredited method.
- EP074-UT: Where reported, Total Xylenes is the sum of the reported concentrations of m&p-Xylene and o-Xylene at or above the LOR.
- EP074-WF: Where reported, Sum of trichlorobenzenes is the sum of the reported concentrations of 1,2,3-Trichlorobenzene and 1,2,4-Trichlorobenzene, and 1,3,5-Trichlorobenzene at or above the LOR.
- EG005-T : EM2204744 #6 Poor duplicate precision for total Lead due to sample matrix. Confirmed by re-digestion and re-analysis.
- EP231X: Poor matrix spike recovery for sample EM2204736-010 due to sample matrix interference. Confirmed by re-analysis.
- EP071-EM: EM2204598_059 Poor matrix spike recovery due to matrix effects.
- EP231: Stable isotope enriched internal standards are added to samples prior to extraction. Target compounds have a direct analogous internal standard with the exception of PFPeS, PFHpA, PFDS, PFTrDA and 10:2 FTS. These compounds use an internal standard that is chemically related and has a retention time close to that of the target compound. The DQO for internal standard response is 50-150% of that established at initial calibration. PFOS is quantified using a certified, traceable standard consisting of linear and branched PFOS isomers. These practices are in line with recommendations in the National Environmental Management Plan for PFAS (Australian HEPA) and also conform to QSM 5.3 (US DoD) requirements.
- EN60: Where leachable PFAS analysis is requested, centrifugation rather than pressure filtration is used as the default approach for removal of particulates, in line with AS 4439.3.
- EN60-DI: Where leachable PFAS analysis is requested, centrifugation rather than pressure filtration is used as the default approach for removal of particulates, in line with AS 4439.3.

Analytical Results

Sub-Matrix: **ASLP LEACHATE** (Matrix: **WATER**)

Compound	CAS Number	LOR	Unit	Sample ID	SX_IB_20220316_08_17_SS_Primary_ALS	SX_IB_20220316_08_20_SS_Duplicate_ALS	SX_IB_20220316_12_25_SS_Primary_ALS	SX_IB_20220316_16_16_SS_Triplicate_ALS	SX_IB_20220316_16_22_SS_Primary_ALS
				Sampling date / time	16-Mar-2022 08:17	16-Mar-2022 08:20	16-Mar-2022 12:25	16-Mar-2022 16:16	16-Mar-2022 16:22
					EM2204736-001	EM2204736-002	EM2204736-003	EM2204736-004	EM2204736-005
					Result	Result	Result	Result	Result
EP231A: Perfluoroalkyl Sulfonic Acids									
Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	<0.02
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L		<0.01	<0.01	<0.01	<0.01	<0.01
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L		<0.01	<0.01	<0.01	<0.01	<0.01
Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	<0.02
EP231B: Perfluoroalkyl Carboxylic Acids									
Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L		<0.1	<0.1	<0.1	<0.1	<0.1
Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	<0.02
Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L		<0.01	<0.01	<0.01	<0.01	<0.01
Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	<0.02
Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L		<0.05	<0.05	<0.05	<0.05	<0.05
EP231C: Perfluoroalkyl Sulfonamides									
Perfluorooctane sulfonamide (FOSA)	754-91-6	0.05	µg/L		<0.05	<0.05	<0.05	<0.05	<0.05
N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L		<0.05	<0.05	<0.05	<0.05	<0.05
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**)

Compound	CAS Number	LOR	Unit	Sample ID	SX_IB_20220316_08_17_SS_Primary_ALS	SX_IB_20220316_08_20_SS_Duplicate_ALS	SX_IB_20220316_12_25_SS_Primary_ALS	SX_IB_20220316_16_16_SS_Triplicate_ALS	SX_IB_20220316_16_22_SS_Primary_ALS
				Sampling date / time	16-Mar-2022 08:17	16-Mar-2022 08:20	16-Mar-2022 12:25	16-Mar-2022 16:16	16-Mar-2022 16:22
					EM2204736-001	EM2204736-002	EM2204736-003	EM2204736-004	EM2204736-005
					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	%		**92.0**	**94.6**	**85.3**	**84.1**	**84.4**
13C8-PFOA	----	0.02	%		**106**	**104**	**103**	**102**	**104**

Analytical Results

Sub-Matrix: ASLP LEACHATE (Matrix: WATER)				Sample ID	SX_IB_20220316_19_52_SS_Primary_ALS	SX_IB_20220317_00_11_SS_Primary_ALS	SX_IB_20220317_04_08_SS_Primary_ALS	----	----
				Sampling date / time	16-Mar-2022 19:52	17-Mar-2022 00:11	17-Mar-2022 04:08	----	----
Compound	CAS Number	LOR	Unit		EM2204736-006	EM2204736-007	EM2204736-008	--------	--------
					Result	Result	Result	----	----
EP231A: Perfluoroalkyl Sulfonic Acids									
Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L		<0.02	<0.02	<0.02	----	----
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L		<0.02	<0.02	<0.02	----	----
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L		<0.01	<0.01	<0.01	----	----
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L		<0.02	<0.02	<0.02	----	----
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L		<0.01	<0.01	<0.01	----	----
Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L		<0.02	<0.02	<0.02	----	----
EP231B: Perfluoroalkyl Carboxylic Acids									
Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L		<0.1	<0.1	<0.1	----	----
Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L		<0.02	<0.02	<0.02	----	----
Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L		<0.02	<0.02	<0.02	----	----
Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L		<0.02	<0.02	<0.02	----	----
Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L		<0.01	<0.01	<0.01	----	----
Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L		<0.02	<0.02	<0.02	----	----
Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L		<0.02	<0.02	<0.02	----	----
Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L		<0.02	<0.02	<0.02	----	----
Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L		<0.02	<0.02	<0.02	----	----
Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L		<0.02	<0.02	<0.02	----	----
Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L		<0.05	<0.05	<0.05	----	----
EP231C: Perfluoroalkyl Sulfonamides									
Perfluorooctane sulfonamide (FOSA)	754-91-6	0.05	µg/L		<0.05	<0.05	<0.05	----	----
N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L		<0.05	<0.05	<0.05	----	----
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	µg/L		<0.05	<0.05	<0.05	----	----

Analytical Results

Sub-Matrix: ASLP LEACHATE (Matrix: WATER)			Sample ID	SX_IB_20220316_19_52_SS_Primary_ALS	SX_IB_20220317_00_11_SS_Primary_ALS	SX_IB_20220317_04_08_SS_Primary_ALS	----	----
			Sampling date / time	16-Mar-2022 19:52	17-Mar-2022 00:11	17-Mar-2022 04:08	----	----
Compound	CAS Number	LOR	Unit	EM2204736-006	EM2204736-007	EM2204736-008	--------	--------
				Result	Result	Result	----	----
EP231C: Perfluoroalkyl Sulfonamides - Continued								
N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L	<0.05	<0.05	<0.05	----	----
N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L	<0.05	<0.05	<0.05	----	----
N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.05	µg/L	<0.05	<0.05	<0.05	----	----
N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.05	µg/L	<0.05	<0.05	<0.05	----	----
EP231D: (n:2) Fluorotelomer Sulfonic Acids								
4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L	<0.05	<0.05	<0.05	----	----
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.05	µg/L	<0.05	<0.05	<0.05	----	----
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.05	µg/L	<0.05	<0.05	<0.05	----	----
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.05	µg/L	<0.05	<0.05	<0.05	----	----
EP231P: PFAS Sums								
Sum of PFAS	----	0.10	µg/L	<0.10	<0.10	<0.10	----	----
Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L	<0.01	<0.01	<0.01	----	----
Sum of PFAS (WA DER List)	----	0.05	µg/L	<0.05	<0.05	<0.05	----	----
EP231S: PFAS Surrogate								
13C4-PFOS	----	0.02	%	**93.1**	**99.9**	**93.3**	----	----
13C8-PFOA	----	0.02	%	**105**	**106**	**102**	----	----

Analytical Results

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

Compound	CAS Number	LOR	Unit	Sample ID	SX_IB_20220316_08_17_SS_Primary_ALS	SX_IB_20220316_08_20_SS_Duplicate_ALS	SX_IB_20220316_12_25_SS_Primary_ALS	SX_IB_20220316_16_16_SS_Triplicate_ALS	SX_IB_20220316_16_22_SS_Primary_ALS
				Sampling date / time	16-Mar-2022 08:17	16-Mar-2022 08:20	16-Mar-2022 12:25	16-Mar-2022 16:16	16-Mar-2022 16:22
					EM2204736-009	EM2204736-010	EM2204736-011	EM2204736-012	EM2204736-013
					Result	Result	Result	Result	Result
EP231A: Perfluoroalkyl Sulfonic Acids									
Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	<0.02
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L		<0.01	<0.01	<0.01	<0.01	<0.01
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L		<0.01	<0.01	<0.01	<0.01	<0.01
Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	<0.02
EP231B: Perfluoroalkyl Carboxylic Acids									
Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L		<0.1	<0.1	<0.1	<0.1	<0.1
Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	<0.02
Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L		<0.01	<0.01	<0.01	<0.01	<0.01
Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	<0.02
Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L		<0.05	<0.05	<0.05	<0.05	<0.05
EP231C: Perfluoroalkyl Sulfonamides									
Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	<0.02
N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L		<0.05	<0.05	<0.05	<0.05	<0.05
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_20220316_08_17_SS_Primary_ALS	SX_IB_20220316_08_20_SS_Duplicate_ALS	SX_IB_20220316_12_25_SS_Primary_ALS	SX_IB_20220316_16_16_SS_Triplicate_ALS	SX_IB_20220316_16_22_SS_Primary_ALS
				Sampling date / time	16-Mar-2022 08:17	16-Mar-2022 08:20	16-Mar-2022 12:25	16-Mar-2022 16:16	16-Mar-2022 16:22
Compound	CAS Number	LOR	Unit		EM2204736-009	EM2204736-010	EM2204736-011	EM2204736-012	EM2204736-013
					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	0.02	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	%		**78.9**	**87.4**	**85.7**	**90.1**	**95.9**
13C8-PFOA	----	0.02	%		**99.9**	**105**	**101**	**105**	**103**

Analytical Results

Sub-Matrix: DI WATER LEACHATE (Matrix: WATER)				Sample ID	SX_IB_20220316_19_52_SS_Primary_ALS	SX_IB_20220317_00_11_SS_Primary_ALS	SX_IB_20220317_04_08_SS_Primary_ALS	----	----
				Sampling date / time	16-Mar-2022 19:52	17-Mar-2022 00:11	17-Mar-2022 04:08	----	----
Compound	CAS Number	LOR	Unit		EM2204736-014	EM2204736-015	EM2204736-016	--------	--------
					Result	Result	Result	----	----
EP231A: Perfluoroalkyl Sulfonic Acids									
Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L		<0.02	<0.02	<0.02	----	----
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L		<0.02	<0.02	<0.02	----	----
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L		<0.01	<0.01	<0.01	----	----
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L		<0.02	<0.02	<0.02	----	----
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L		<0.01	<0.01	<0.01	----	----
Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L		<0.02	<0.02	<0.02	----	----
EP231B: Perfluoroalkyl Carboxylic Acids									
Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L		<0.1	<0.1	<0.1	----	----
Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L		<0.02	<0.02	<0.02	----	----
Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L		<0.02	<0.02	<0.02	----	----
Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L		<0.02	<0.02	<0.02	----	----
Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L		<0.01	<0.01	<0.01	----	----
Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L		<0.02	<0.02	<0.02	----	----
Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L		<0.02	<0.02	<0.02	----	----
Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L		<0.02	<0.02	<0.02	----	----
Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L		<0.02	<0.02	<0.02	----	----
Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L		<0.02	<0.02	<0.02	----	----
Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L		<0.05	<0.05	<0.05	----	----
EP231C: Perfluoroalkyl Sulfonamides									
Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	µg/L		<0.02	<0.02	<0.02	----	----
N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L		<0.05	<0.05	<0.05	----	----
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	µg/L		<0.05	<0.05	<0.05	----	----

Analytical Results

Sub-Matrix: DI WATER LEACHATE (Matrix: WATER)				Sample ID	SX_IB_20220316_19_52_SS_Primary_ALS	SX_IB_20220317_00_11_SS_Primary_ALS	SX_IB_20220317_04_08_SS_Primary_ALS	----	----
				Sampling date / time	16-Mar-2022 19:52	17-Mar-2022 00:11	17-Mar-2022 04:08	----	----
Compound	CAS Number	LOR	Unit		EM2204736-014	EM2204736-015	EM2204736-016	--------	--------
					Result	Result	Result	----	----
EP231C: Perfluoroalkyl Sulfonamides - Continued									
N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L		<0.05	<0.05	<0.05	----	----
N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L		<0.05	<0.05	<0.05	----	----
N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.02	µg/L		<0.02	<0.02	<0.02	----	----
N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.02	µg/L		<0.02	<0.02	<0.02	----	----
EP231D: (n:2) Fluorotelomer Sulfonic Acids									
4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L		<0.05	<0.05	<0.05	----	----
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.05	µg/L		<0.05	<0.05	<0.05	----	----
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.05	µg/L		<0.05	<0.05	<0.05	----	----
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.05	µg/L		<0.05	<0.05	<0.05	----	----
EP231P: PFAS Sums									
Sum of PFAS	----	0.01	µg/L		<0.01	<0.01	<0.01	----	----
Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L		<0.01	<0.01	<0.01	----	----
Sum of PFAS (WA DER List)	----	0.01	µg/L		<0.01	<0.01	<0.01	----	----
EP231S: PFAS Surrogate									
13C4-PFOS	----	0.02	%		**86.0**	**83.3**	**91.0**	----	----
13C8-PFOA	----	0.02	%		**102**	**106**	**105**	----	----

Analytical Results

Sub-Matrix: SOIL
(Matrix: SOIL)

Compound	CAS Number	LOR	Unit	Sample ID	SX_IB_20220316_08_17_SS_Primary_ALS	SX_IB_20220316_08_20_SS_Duplicate_ALS	SX_IB_20220316_12_25_SS_Primary_ALS	SX_IB_20220316_16_16_SS_Triplicate_ALS	SX_IB_20220316_16_22_SS_Primary_ALS
				Sampling date / time	16-Mar-2022 08:17	16-Mar-2022 08:20	16-Mar-2022 12:25	16-Mar-2022 16:16	16-Mar-2022 16:22
					EM2204736-001	EM2204736-002	EM2204736-003	EM2204736-004	EM2204736-005
					Result	Result	Result	Result	Result
EA001: pH in soil using 0.01M CaCl extract									
pH (CaCl2)	----	0.1	pH Unit		7.8	7.8	7.8	7.8	7.8
EA055: Moisture Content (Dried @ 105-110°C)									
Moisture Content	----	1.0	%		30.7	34.4	34.5	33.1	34.3
EG005(ED093)T: Total Metals by ICP-AES									
Arsenic	7440-38-2	5	mg/kg		18	17	17	18	15
Cadmium	7440-43-9	1	mg/kg		<1	<1	<1	<1	<1
Chromium	7440-47-3	5	mg/kg		82	89	96	88	64
Copper	7440-50-8	5	mg/kg		47	63	57	55	46
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		117	129	140	143	114
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		75	88	91	90	68
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		250	250	180	210	230
EN60: ASLP Leaching Procedure - Inorganics/PFAS (Plastic Vessel)									
Initial pH	----	0.1	pH Unit		8.9	8.7	8.9	8.8	8.8
After HCl pH	----	0.1	pH Unit		1.6	1.5	1.6	1.5	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	5.1	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**)

Compound	CAS Number	LOR	Unit	Sample ID	SX_IB_20220316_08_17_SS_Primary_ALS	SX_IB_20220316_08_20_SS_Duplicate_ALS	SX_IB_20220316_12_25_SS_Primary_ALS	SX_IB_20220316_16_16_SS_Triplicate_ALS	SX_IB_20220316_16_22_SS_Primary_ALS
				Sampling date / time	16-Mar-2022 08:17	16-Mar-2022 08:20	16-Mar-2022 12:25	16-Mar-2022 16:16	16-Mar-2022 16:22
					EM2204736-001	EM2204736-002	EM2204736-003	EM2204736-004	EM2204736-005
					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	<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**)

Compound	CAS Number	LOR	Unit	Sample ID	SX_IB_20220316_08_17_SS_Primary_ALS	SX_IB_20220316_08_20_SS_Duplicate_ALS	SX_IB_20220316_12_25_SS_Primary_ALS	SX_IB_20220316_16_16_SS_Triplicate_ALS	SX_IB_20220316_16_22_SS_Primary_ALS
				Sampling date / time	16-Mar-2022 08:17	16-Mar-2022 08:20	16-Mar-2022 12:25	16-Mar-2022 16:16	16-Mar-2022 16:22
					EM2204736-001	EM2204736-002	EM2204736-003	EM2204736-004	EM2204736-005
					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**)

Compound	CAS Number	LOR	Unit	Sample ID	SX_IB_20220316_08_17_SS_Primary_ALS	SX_IB_20220316_08_20_SS_Duplicate_ALS	SX_IB_20220316_12_25_SS_Primary_ALS	SX_IB_20220316_16_16_SS_Triplicate_ALS	SX_IB_20220316_16_22_SS_Primary_ALS
				Sampling date / time	16-Mar-2022 08:17	16-Mar-2022 08:20	16-Mar-2022 12:25	16-Mar-2022 16:16	16-Mar-2022 16:22
					EM2204736-001	EM2204736-002	EM2204736-003	EM2204736-004	EM2204736-005
					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	72-54-8/72-55-9/50-2	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

Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

Compound	CAS Number	LOR	Unit	Sample ID	SX_IB_20220316_08_17_SS_Primary_ALS	SX_IB_20220316_08_20_SS_Duplicate_ALS	SX_IB_20220316_12_25_SS_Primary_ALS	SX_IB_20220316_16_16_SS_Triplicate_ALS	SX_IB_20220316_16_22_SS_Primary_ALS
				Sampling date / time	16-Mar-2022 08:17	16-Mar-2022 08:20	16-Mar-2022 12:25	16-Mar-2022 16:16	16-Mar-2022 16:22
					EM2204736-001	EM2204736-002	EM2204736-003	EM2204736-004	EM2204736-005
					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	<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
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

Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

Compound	CAS Number	LOR	Unit	Sample ID	SX_IB_20220316_08_17_SS_Primary_ALS	SX_IB_20220316_08_20_SS_Duplicate_ALS	SX_IB_20220316_12_25_SS_Primary_ALS	SX_IB_20220316_16_16_SS_Triplicate_ALS	SX_IB_20220316_16_22_SS_Primary_ALS
				Sampling date / time	16-Mar-2022 08:17	16-Mar-2022 08:20	16-Mar-2022 12:25	16-Mar-2022 16:16	16-Mar-2022 16:22
					EM2204736-001	EM2204736-002	EM2204736-003	EM2204736-004	EM2204736-005
					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_20220316_08_17_SS_Primary_ALS	SX_IB_20220316_08_20_SS_Duplicate_ALS	SX_IB_20220316_12_25_SS_Primary_ALS	SX_IB_20220316_16_16_SS_Triplicate_ALS	SX_IB_20220316_16_22_SS_Primary_ALS
				Sampling date / time	16-Mar-2022 08:17	16-Mar-2022 08:20	16-Mar-2022 12:25	16-Mar-2022 16:16	16-Mar-2022 16:22
Compound	CAS Number	LOR	Unit		EM2204736-001	EM2204736-002	EM2204736-003	EM2204736-004	EM2204736-005
					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	%		83.0	94.2	85.2	83.5	83.0
EP074S: VOC Surrogates (Ultra-Trace)									
1.2-Dichloroethane-D4	17060-07-0	0.1	%		95.6	96.0	100	95.9	99.8
Toluene-D8	2037-26-5	0.1	%		95.2	95.7	102	95.0	100
4-Bromofluorobenzene	460-00-4	0.1	%		109	112	120	114	118
EP075S: Acid Extractable Surrogates (Waste Classification)									
Phenol-d6	13127-88-3	0.025	%		82.9	99.3	87.3	85.6	81.8
2-Chlorophenol-D4	93951-73-6	0.025	%		82.4	85.0	75.4	83.0	78.7
2.4.6-Tribromophenol	118-79-6	0.025	%		79.1	87.1	77.8	77.6	73.9
EP075T: Base/Neutral Extractable Surrogates (Waste Classification)									
Nitrobenzene-D5	4165-60-0	0.025	%		84.8	102	90.5	87.3	82.9
1.2-Dichlorobenzene-D4	2199-69-1	0.025	%		81.5	98.3	87.0	82.3	79.2
2-Fluorobiphenyl	321-60-8	0.025	%		83.2	98.1	88.7	84.7	87.1
Anthracene-d10	1719-06-8	0.025	%		82.6	98.2	87.9	85.1	86.8
4-Terphenyl-d14	1718-51-0	0.025	%		80.5	97.4	86.8	83.9	85.3
EP231S: PFAS Surrogate									
13C4-PFOS	----	0.0002	%		94.7	93.6	88.2	95.0	96.8
13C8-PFOA	----	0.0002	%		107	109	103	110	105

Analytical Results

Sub-Matrix: SOIL
(Matrix: SOIL)

Compound	CAS Number	LOR	Unit	Sample ID	SX_IB_20220316_19_52_SS_Primary_ALS	SX_IB_20220317_00_11_SS_Primary_ALS	SX_IB_20220317_04_08_SS_Primary_ALS	SX_IB_20220316_08_17_SS_Primary_ALS	SX_IB_20220316_08_20_SS_Duplicate_ALS
				Sampling date / time	16-Mar-2022 19:52	17-Mar-2022 00:11	17-Mar-2022 04:08	16-Mar-2022 08:17	16-Mar-2022 08:20
					EM2204736-006	EM2204736-007	EM2204736-008	EM2204736-009	EM2204736-010
					Result	Result	Result	Result	Result
EA001: pH in soil using 0.01M CaCl extract									
pH (CaCl2)	----	0.1	pH Unit		7.7	7.8	7.8	----	----
EA055: Moisture Content (Dried @ 105-110°C)									
Moisture Content	----	1.0	%		32.0	33.1	31.5	----	----
EG005(ED093)T: Total Metals by ICP-AES									
Arsenic	7440-38-2	5	mg/kg		17	21	21	----	----
Cadmium	7440-43-9	1	mg/kg		<1	<1	<1	----	----
Chromium	7440-47-3	5	mg/kg		94	96	83	----	----
Copper	7440-50-8	5	mg/kg		52	66	56	----	----
Lead	7439-92-1	5	mg/kg		<5	<5	<5	----	----
Molybdenum	7439-98-7	5	mg/kg		<5	<5	<5	----	----
Nickel	7440-02-0	5	mg/kg		137	181	137	----	----
Selenium	7782-49-2	5	mg/kg		<5	<5	<5	----	----
Silver	7440-22-4	2	mg/kg		<2	<2	<2	----	----
Tin	7440-31-5	10	mg/kg		<10	<10	<10	----	----
Zinc	7440-66-6	5	mg/kg		83	116	82	----	----
EG035T: Total Recoverable Mercury by FIMS									
Mercury	7439-97-6	0.1	mg/kg		<0.1	<0.1	<0.1	----	----
EG048: Hexavalent Chromium (Alkaline Digest)									
Hexavalent Chromium	18540-29-9	1.0	mg/kg		<1.0	<1.0	<1.0	----	----
EK026SF: Total CN by Segmented Flow Analyser									
Total Cyanide	57-12-5	5	mg/kg		<5	<5	<5	----	----
EK040T: Fluoride Total									
Fluoride	16984-48-8	100	mg/kg		210	240	200	----	----
EN60: ASLP Leaching Procedure - Inorganics/PFAS (Plastic Vessel)									
Initial pH	----	0.1	pH Unit		8.9	8.9	9.1	----	----
After HCl pH	----	0.1	pH Unit		1.4	1.5	1.5	----	----
Extraction Fluid pH	----	0.1	pH Unit		5.0	5.0	5.0	----	----
Final pH	----	0.1	pH Unit		5.0	5.0	5.1	----	----
EN60-DI: Bottle Leaching Procedure - Inorganics/PFAS (Plastic Vessel)									
Final pH	----	0.1	pH Unit		----	----	----	9.3	9.2
EP066: Polychlorinated Biphenyls (PCB)									
Total Polychlorinated biphenyls	----	0.1	mg/kg		<0.1	<0.1	<0.1	----	----
EP074A: Monocyclic Aromatic Hydrocarbons									

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	SX_IB_20220316_19_52_SS_Primary_ALS	SX_IB_20220317_00_11_SS_Primary_ALS	SX_IB_20220317_04_08_SS_Primary_ALS	SX_IB_20220316_08_17_SS_Primary_ALS	SX_IB_20220316_08_20_SS_Duplicate_ALS
				Sampling date / time	16-Mar-2022 19:52	17-Mar-2022 00:11	17-Mar-2022 04:08	16-Mar-2022 08:17	16-Mar-2022 08:20
Compound	CAS Number	LOR	Unit		EM2204736-006	EM2204736-007	EM2204736-008	EM2204736-009	EM2204736-010
					Result	Result	Result	Result	Result
EP074A: Monocyclic Aromatic Hydrocarbons - Continued									
Benzene	71-43-2	0.2	mg/kg		<0.2	<0.2	<0.2	----	----
Toluene	108-88-3	0.5	mg/kg		<0.5	<0.5	<0.5	----	----
Ethylbenzene	100-41-4	0.5	mg/kg		<0.5	<0.5	<0.5	----	----
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg		<0.5	<0.5	<0.5	----	----
Styrene	100-42-5	0.5	mg/kg		<0.5	<0.5	<0.5	----	----
ortho-Xylene	95-47-6	0.5	mg/kg		<0.5	<0.5	<0.5	----	----
^ Sum of monocyclic aromatic hydrocarbons	----	0.5	mg/kg		<0.5	<0.5	<0.5	----	----
^ Total Xylenes	----	0.5	mg/kg		<0.5	<0.5	<0.5	----	----
EP074H: Naphthalene									
Naphthalene	91-20-3	1	mg/kg		<1	<1	<1	----	----
EP074I: Volatile Halogenated Compounds									
Vinyl chloride	75-01-4	0.50	mg/kg		<0.50	<0.50	<0.50	----	----
1.1-Dichloroethene	75-35-4	0.50	mg/kg		<0.50	<0.50	<0.50	----	----
Methylene chloride	75-09-2	0.5	mg/kg		<0.5	<0.5	<0.5	----	----
trans-1.2-Dichloroethene	156-60-5	0.50	mg/kg		<0.50	<0.50	<0.50	----	----
cis-1.2-Dichloroethene	156-59-2	0.50	mg/kg		<0.50	<0.50	<0.50	----	----
Chloroform	67-66-3	0.50	mg/kg		<0.50	<0.50	<0.50	----	----
1.1.1-Trichloroethane	71-55-6	0.50	mg/kg		<0.50	<0.50	<0.50	----	----
Carbon Tetrachloride	56-23-5	0.50	mg/kg		<0.50	<0.50	<0.50	----	----
1.2-Dichloroethane	107-06-2	0.50	mg/kg		<0.50	<0.50	<0.50	----	----
Trichloroethene	79-01-6	0.50	mg/kg		<0.50	<0.50	<0.50	----	----
1.1.2-Trichloroethane	79-00-5	0.50	mg/kg		<0.50	<0.50	<0.50	----	----
Tetrachloroethene	127-18-4	0.50	mg/kg		<0.50	<0.50	<0.50	----	----
1.1.1.2-Tetrachloroethane	630-20-6	0.50	mg/kg		<0.50	<0.50	<0.50	----	----
1.1.2.2-Tetrachloroethane	79-34-5	0.50	mg/kg		<0.50	<0.50	<0.50	----	----
Hexachlorobutadiene	87-68-3	0.50	mg/kg		<0.50	<0.50	<0.50	----	----
Chlorobenzene	108-90-7	0.50	mg/kg		<0.50	<0.50	<0.50	----	----
1.4-Dichlorobenzene	106-46-7	0.50	mg/kg		<0.50	<0.50	<0.50	----	----
1.2-Dichlorobenzene	95-50-1	0.50	mg/kg		<0.50	<0.50	<0.50	----	----
1.2.4-Trichlorobenzene	120-82-1	0.50	mg/kg		<0.50	<0.50	<0.50	----	----
^ Sum of volatile chlorinated hydrocarbons	----	0.50	mg/kg		<0.50	<0.50	<0.50	----	----
^ Sum of other chlorinated hydrocarbons	----	0.50	mg/kg		<0.50	<0.50	<0.50	----	----
EP075A: Phenolic Compounds (Halogenated)									

Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

Compound	CAS Number	LOR	Unit	Sample ID	SX_IB_20220316_19_52_SS_Primary_ALS	SX_IB_20220317_00_11_SS_Primary_ALS	SX_IB_20220317_04_08_SS_Primary_ALS	SX_IB_20220316_08_17_SS_Primary_ALS	SX_IB_20220316_08_20_SS_Duplicate_ALS
				Sampling date / time	16-Mar-2022 19:52	17-Mar-2022 00:11	17-Mar-2022 04:08	16-Mar-2022 08:17	16-Mar-2022 08:20
					EM2204736-006	EM2204736-007	EM2204736-008	EM2204736-009	EM2204736-010
					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	----	----
2.4-Dichlorophenol	120-83-2	0.50	mg/kg		<0.50	<0.50	<0.50	----	----
2.6-Dichlorophenol	87-65-0	0.50	mg/kg		<0.50	<0.50	<0.50	----	----
4-Chloro-3-methylphenol	59-50-7	1.00	mg/kg		<1.00	<1.00	<1.00	----	----
2.4.5-Trichlorophenol	95-95-4	1.00	mg/kg		<1.00	<1.00	<1.00	----	----
2.4.6-Trichlorophenol	88-06-2	1.00	mg/kg		<1.00	<1.00	<1.00	----	----
2.3.5.6-Tetrachlorophenol	935-95-5	0.03	mg/kg		<0.03	<0.03	<0.03	----	----
2.3.4.5 & 2.3.4.6-Tetrachlorophenol	4901-51-3/58-90-2	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
Pentachlorophenol	87-86-5	1.0	mg/kg		<1.0	<1.0	<1.0	----	----
^ Sum of Phenols (halogenated)	----	1.00	mg/kg		<1.00	<1.00	<1.00	----	----
EP075A: Phenolic Compounds (Non-halogenated)									
Phenol	108-95-2	1	mg/kg		<1	<1	<1	----	----
2-Methylphenol	95-48-7	1	mg/kg		<1	<1	<1	----	----
3- & 4-Methylphenol	1319-77-3	1	mg/kg		<1	<1	<1	----	----
2-Nitrophenol	88-75-5	1	mg/kg		<1	<1	<1	----	----
2.4-Dimethylphenol	105-67-9	1	mg/kg		<1	<1	<1	----	----
2.4-Dinitrophenol	51-28-5	5	mg/kg		<5	<5	<5	----	----
4-Nitrophenol	100-02-7	5	mg/kg		<5	<5	<5	----	----
2-Methyl-4.6-dinitrophenol	8071-51-0	5	mg/kg		<5	<5	<5	----	----
Dinoseb	88-85-7	20	mg/kg		<20	<20	<20	----	----
2-Cyclohexyl-4.6-Dinitrophenol	131-89-5	20	mg/kg		<20	<20	<20	----	----
^ Sum of Phenols (non-halogenated)	----	20	mg/kg		<20	<20	<20	----	----
EP075B: Polynuclear Aromatic Hydrocarbons									
Naphthalene	91-20-3	0.5	mg/kg		<0.5	<0.5	<0.5	----	----
Acenaphthene	83-32-9	0.5	mg/kg		<0.5	<0.5	<0.5	----	----
Acenaphthylene	208-96-8	0.5	mg/kg		<0.5	<0.5	<0.5	----	----
Fluorene	86-73-7	0.5	mg/kg		<0.5	<0.5	<0.5	----	----
Phenanthrene	85-01-8	0.5	mg/kg		<0.5	<0.5	<0.5	----	----
Anthracene	120-12-7	0.5	mg/kg		<0.5	<0.5	<0.5	----	----
Fluoranthene	206-44-0	0.5	mg/kg		<0.5	<0.5	<0.5	----	----
Pyrene	129-00-0	0.5	mg/kg		<0.5	<0.5	<0.5	----	----
Benz(a)anthracene	56-55-3	0.5	mg/kg		<0.5	<0.5	<0.5	----	----
Chrysene	218-01-9	0.5	mg/kg		<0.5	<0.5	<0.5	----	----

Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

Compound	CAS Number	LOR	Unit	Sample ID	SX_IB_20220316_19_52_SS_Primary_ALS	SX_IB_20220317_00_11_SS_Primary_ALS	SX_IB_20220317_04_08_SS_Primary_ALS	SX_IB_20220316_08_17_SS_Primary_ALS	SX_IB_20220316_08_20_SS_Duplicate_ALS
				Sampling date / time	16-Mar-2022 19:52	17-Mar-2022 00:11	17-Mar-2022 04:08	16-Mar-2022 08:17	16-Mar-2022 08:20
					EM2204736-006	EM2204736-007	EM2204736-008	EM2204736-009	EM2204736-010
					Result	Result	Result	Result	Result
EP075B: Polynuclear Aromatic Hydrocarbons - Continued									
Benzo(b+j) & Benzo(k)fluoranthene	205-99-2 207-08-9	1.0	mg/kg		<1.0	<1.0	<1.0	----	----
Benzo(a)pyrene	50-32-8	0.5	mg/kg		<0.5	<0.5	<0.5	----	----
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg		<0.5	<0.5	<0.5	----	----
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg		<0.5	<0.5	<0.5	----	----
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg		<0.5	<0.5	<0.5	----	----
^ **Sum of polycyclic aromatic hydrocarbons**	----	0.5	mg/kg		<0.5	<0.5	<0.5	----	----
^ **Benzo(a)pyrene TEQ (zero)**	----	0.5	mg/kg		<0.5	<0.5	<0.5	----	----
^ **Benzo(a)pyrene TEQ (half LOR)**	----	0.5	mg/kg		**0.6**	**0.6**	**0.6**	----	----
^ **Benzo(a)pyrene TEQ (LOR)**	----	0.5	mg/kg		**1.2**	**1.2**	**1.2**	----	----
EP075I: Organochlorine Pesticides									
alpha-BHC	319-84-6	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
beta-BHC	319-85-7	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
gamma-BHC	58-89-9	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
delta-BHC	319-86-8	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
Heptachlor	76-44-8	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
Aldrin	309-00-2	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
Heptachlor epoxide	1024-57-3	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
cis-Chlordane	5103-71-9	0.03	mg/kg		<0.03	<0.03	<0.03	----	----
trans-Chlordane	5103-74-2	0.03	mg/kg		<0.03	<0.03	<0.03	----	----
Endosulfan 1	959-98-8	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
4.4`-DDE	72-55-9	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
Dieldrin	60-57-1	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
Endrin aldehyde	7421-93-4	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
Endrin	72-20-8	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
Endosulfan 2	33213-65-9	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
4.4`-DDD	72-54-8	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
Endosulfan sulfate	1031-07-8	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
4.4`-DDT	50-29-3	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
Methoxychlor	72-43-5	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
^ **Sum of organochlorine pesticides**	----	0.10	mg/kg		<0.10	<0.10	<0.10	----	----
^ **Sum of Aldrin + Dieldrin**	309-00-2/60-57-1	0.30	mg/kg		<0.30	<0.30	<0.30	----	----

Analytical Results

Sub-Matrix: SOIL
(Matrix: SOIL)

Compound	CAS Number	LOR	Unit	Sample ID	SX_IB_20220316_19_52_SS_Primary_ALS	SX_IB_20220317_00_11_SS_Primary_ALS	SX_IB_20220317_04_08_SS_Primary_ALS	SX_IB_20220316_08_17_SS_Primary_ALS	SX_IB_20220316_08_20_SS_Duplicate_ALS
				Sampling date / time	16-Mar-2022 19:52	17-Mar-2022 00:11	17-Mar-2022 04:08	16-Mar-2022 08:17	16-Mar-2022 08:20
					EM2204736-006	EM2204736-007	EM2204736-008	EM2204736-009	EM2204736-010
					Result	Result	Result	Result	Result
EP075I: Organochlorine Pesticides - Continued									
^ **Sum of DDD + DDE + DDT**	72-54-8/72-55-9/50-2	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
^ **Chlordane**	57-74-9	0.10	mg/kg		<0.10	<0.10	<0.10	----	----
^ **Sum of other organochlorine pesticides**	----	0.03	mg/kg		<0.03	<0.03	<0.03	----	----
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	----	20	mg/kg		<20	<20	<20	----	----
C10 - C14 Fraction	----	50	mg/kg		<50	<50	<50	----	----
C6 - C10 Fraction	C6_C10	20	mg/kg		<20	<20	<20	----	----
C15 - C28 Fraction	----	100	mg/kg		<100	<100	<100	----	----
C29 - C36 Fraction	----	100	mg/kg		<100	<100	<100	----	----
^ **C10 - C36 Fraction (sum)**	----	50	mg/kg		<50	<50	<50	----	----
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
>C10 - C16 Fraction	----	50	mg/kg		<50	<50	<50	----	----
>C16 - C34 Fraction	----	100	mg/kg		<100	<100	<100	----	----
>C34 - C40 Fraction	----	100	mg/kg		<100	<100	<100	----	----
^ **>C10 - C40 Fraction (sum)**	----	50	mg/kg		<50	<50	<50	----	----
>C10 - C16 Fraction minus Naphthalene (F2)	----	50	mg/kg		<50	<50	<50	----	----
C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	20	mg/kg		<20	<20	<20	----	----
EP231A: Perfluoroalkyl Sulfonic Acids									
Perfluorobutane sulfonic acid (PFBS)	375-73-5	5.0	µg/kg		<5.0	<5.0	<5.0	----	----
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	5.0	µg/kg		<5.0	<5.0	<5.0	----	----
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	5.0	µg/kg		<5.0	<5.0	<5.0	----	----
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	5.0	µg/kg		<5.0	<5.0	<5.0	----	----
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	5.0	µg/kg		<5.0	<5.0	<5.0	----	----
Perfluorodecane sulfonic acid (PFDS)	335-77-3	5.0	µg/kg		<5.0	<5.0	<5.0	----	----
EP231B: Perfluoroalkyl Carboxylic Acids									
Perfluorobutanoic acid (PFBA)	375-22-4	5	µg/kg		<5	<5	<5	----	----

Analytical Results

Sub-Matrix: SOIL
(Matrix: SOIL)

Compound	CAS Number	LOR	Unit	Sample ID	SX_IB_20220316_19_52_SS_Primary_ALS	SX_IB_20220317_00_11_SS_Primary_ALS	SX_IB_20220317_04_08_SS_Primary_ALS	SX_IB_20220316_08_17_SS_Primary_ALS	SX_IB_20220316_08_20_SS_Duplicate_ALS
				Sampling date / time	16-Mar-2022 19:52	17-Mar-2022 00:11	17-Mar-2022 04:08	16-Mar-2022 08:17	16-Mar-2022 08:20
					EM2204736-006	EM2204736-007	EM2204736-008	EM2204736-009	EM2204736-010
					Result	Result	Result	Result	Result
EP231B: Perfluoroalkyl Carboxylic Acids - Continued									
Perfluoropentanoic acid (PFPeA)	2706-90-3	5.0	µg/kg		<5.0	<5.0	<5.0	----	----
Perfluorohexanoic acid (PFHxA)	307-24-4	5.0	µg/kg		<5.0	<5.0	<5.0	----	----
Perfluoroheptanoic acid (PFHpA)	375-85-9	5.0	µg/kg		<5.0	<5.0	<5.0	----	----
Perfluorooctanoic acid (PFOA)	335-67-1	5.0	µg/kg		<5.0	<5.0	<5.0	----	----
Perfluorononanoic acid (PFNA)	375-95-1	5.0	µg/kg		<5.0	<5.0	<5.0	----	----
Perfluorodecanoic acid (PFDA)	335-76-2	5.0	µg/kg		<5.0	<5.0	<5.0	----	----
Perfluoroundecanoic acid (PFUnDA)	2058-94-8	5.0	µg/kg		<5.0	<5.0	<5.0	----	----
Perfluorododecanoic acid (PFDoDA)	307-55-1	5.0	µg/kg		<5.0	<5.0	<5.0	----	----
Perfluorotridecanoic acid (PFTrDA)	72629-94-8	5.0	µg/kg		<5.0	<5.0	<5.0	----	----
Perfluorotetradecanoic acid (PFTeDA)	376-06-7	5.0	µg/kg		<5.0	<5.0	<5.0	----	----
EP231C: Perfluoroalkyl Sulfonamides									
Perfluorooctane sulfonamide (FOSA)	754-91-6	5.0	µg/kg		<5.0	<5.0	<5.0	----	----
N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	5.0	µg/kg		<5.0	<5.0	<5.0	----	----
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	5.0	µg/kg		<5.0	<5.0	<5.0	----	----
N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	5.0	µg/kg		<5.0	<5.0	<5.0	----	----
N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	5.0	µg/kg		<5.0	<5.0	<5.0	----	----
N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	10.0	µg/kg		<10.0	<10.0	<10.0	----	----
N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	10.0	µg/kg		<10.0	<10.0	<10.0	----	----
EP231D: (n:2) Fluorotelomer Sulfonic Acids									
4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	5.0	µg/kg		<5.0	<5.0	<5.0	----	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	SX_IB_20220316_19_52_SS_Primary_ALS	SX_IB_20220317_00_11_SS_Primary_ALS	SX_IB_20220317_04_08_SS_Primary_ALS	SX_IB_20220316_08_17_SS_Primary_ALS	SX_IB_20220316_08_20_SS_Duplicate_ALS
				Sampling date / time	16-Mar-2022 19:52	17-Mar-2022 00:11	17-Mar-2022 04:08	16-Mar-2022 08:17	16-Mar-2022 08:20
Compound	CAS Number	LOR	Unit		EM2204736-006	EM2204736-007	EM2204736-008	EM2204736-009	EM2204736-010
					Result	Result	Result	Result	Result
EP231D: (n:2) Fluorotelomer Sulfonic Acids - Continued									
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	10.0	µg/kg		<10.0	<10.0	<10.0	----	----
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	5.0	µg/kg		<5.0	<5.0	<5.0	----	----
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	5.0	µg/kg		<5.0	<5.0	<5.0	----	----
EP231P: PFAS Sums									
Sum of PFAS	----	50.0	µg/kg		<50.0	<50.0	<50.0	----	----
Sum of PFHxS and PFOS	355-46-4/1763-23-1	5.0	µg/kg		<5.0	<5.0	<5.0	----	----
Sum of PFAS (WA DER List)	----	10.0	µg/kg		<10.0	<10.0	<10.0	----	----
EP066S: PCB Surrogate									
Decachlorobiphenyl	2051-24-3	0.1	%		**81.3**	**97.6**	**83.2**	----	----
EP074S: VOC Surrogates (Ultra-Trace)									
1.2-Dichloroethane-D4	17060-07-0	0.1	%		**99.5**	**98.6**	**92.9**	----	----
Toluene-D8	2037-26-5	0.1	%		**99.2**	**96.5**	**91.4**	----	----
4-Bromofluorobenzene	460-00-4	0.1	%		**115**	**114**	**110**	----	----
EP075S: Acid Extractable Surrogates (Waste Classification)									
Phenol-d6	13127-88-3	0.025	%		**78.7**	**95.1**	**90.9**	----	----
2-Chlorophenol-D4	93951-73-6	0.025	%		**74.6**	**72.7**	**86.8**	----	----
2.4.6-Tribromophenol	118-79-6	0.025	%		**70.6**	**82.5**	**74.7**	----	----
EP075T: Base/Neutral Extractable Surrogates (Waste Classification)									
Nitrobenzene-D5	4165-60-0	0.025	%		**79.0**	**81.0**	**92.7**	----	----
1.2-Dichlorobenzene-D4	2199-69-1	0.025	%		**79.6**	**68.8**	**88.0**	----	----
2-Fluorobiphenyl	321-60-8	0.025	%		**83.3**	**81.1**	**88.8**	----	----
Anthracene-d10	1719-06-8	0.025	%		**84.5**	**103**	**87.8**	----	----
4-Terphenyl-d14	1718-51-0	0.025	%		**83.1**	**102**	**87.4**	----	----
EP231S: PFAS Surrogate									
13C4-PFOS	----	0.0002	%		**96.0**	**85.2**	**94.6**	----	----
13C8-PFOA	----	0.0002	%		**102**	**111**	**108**	----	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	SX_IB_20220316_12_25_SS_Primary_ALS	SX_IB_20220316_16_16_SS_Triplicate_ALS	SX_IB_20220316_16_22_SS_Primary_ALS	SX_IB_20220316_19_52_SS_Primary_ALS	SX_IB_20220317_00_11_SS_Primary_ALS
			Sampling date / time	16-Mar-2022 12:25	16-Mar-2022 16:16	16-Mar-2022 16:22	16-Mar-2022 19:52	17-Mar-2022 00:11
Compound	CAS Number	LOR	Unit	EM2204736-011	EM2204736-012	EM2204736-013	EM2204736-014	EM2204736-015
				Result	Result	Result	Result	Result
EN60-DI: Bottle Leaching Procedure - Inorganics/PFAS (Plastic Vessel)								
Final pH	----	0.1	pH Unit	**9.4**	**9.4**	**9.4**	**9.4**	**9.7**

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	SX_IB_20220317_04_08_SS_Primary_ALS	----	----	----	----
			Sampling date / time	17-Mar-2022 04:08	----	----	----	----
Compound	CAS Number	LOR	Unit	EM2204736-016	--------	--------	--------	--------
				Result	----	----	----	----
EN60-DI: Bottle Leaching Procedure - Inorganics/PFAS (Plastic Vessel)								
Final pH	----	0.1	pH Unit	**9.6**	**----**	**----**	**----**	**----**

Surrogate Control Limits

Sub-Matrix: ASLP LEACHATE		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

ALS Environmental

QUALITY CONTROL REPORT

Work Order	: **EM2204736**	Page	: 1 of 26
Client	: **AGON ENVIRONMENTAL PTY LTD**	Laboratory	: Environmental Division Melbourne
Contact	: CRAIG TRIMBUR	Contact	: Bronwyn Sheen
Address	: D1.1 63-85 TURNER STREET PORT MELBOURNE 3207	Address	: 4 Westall Rd Springvale VIC Australia 3171
Telephone	: ----	Telephone	: +6138549 9600
Project	: JC0927	Date Samples Received	: 17-Mar-2022
Order number	: ----	Date Analysis Commenced	: 18-Mar-2022
C-O-C number	: 20220317140530-ALS-22	Issue Date	: 25-Mar-2022
Sampler	: Emma - EP Risk + TB - Agon		
Site	: 20220317140530-ALS-22		
Quote number	: EN/150/19 -WGTP -Bulk Sample Quote		
No. of samples received	: 16		
No. of samples analysed	: 16		

ilac-MRA NATA

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

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

This Quality Control Report contains the following information:

- Laboratory Duplicate (DUP) Report; Relative Percentage Difference (RPD) and Acceptance Limits
- Method Blank (MB) and Laboratory Control Spike (LCS) Report; Recovery and Acceptance Limits
- Matrix Spike (MS) Report; Recovery and Acceptance Limits

Signatories

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

Signatories	*Position*	*Accreditation Category*
Dilani Fernando	Laboratory Coordinator	Melbourne Inorganics, Springvale, VIC
Eric Chau	Metals Team Leader	Melbourne Inorganics, Springvale, VIC
Xing Lin	Senior Organic Chemist	Melbourne 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: 4241190)									
EM2204598-042	Anonymous	EG005T: Cadmium	7440-43-9	1	mg/kg	3	3	0.0	No Limit
		EG005T: Chromium	7440-47-3	2	mg/kg	<2	<2	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	<2	<2	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	<5	<5	0.0	No Limit
		EG005T: Copper	7440-50-8	5	mg/kg	<5	<5	0.0	No Limit
		EG005T: Lead	7439-92-1	5	mg/kg	21	19	7.8	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	6	<5	0.0	No Limit
EM2204598-051	Anonymous	EG005T: Cadmium	7440-43-9	1	mg/kg	<1	<1	0.0	No Limit
		EG005T: Chromium	7440-47-3	2	mg/kg	60	61	2.1	0% - 20%
		EG005T: Molybdenum	7439-98-7	2	mg/kg	4	5	0.0	No Limit
		EG005T: Nickel	7440-02-0	2	mg/kg	70	81	14.1	0% - 20%
		EG005T: Silver	7440-22-4	2	mg/kg	<2	<2	0.0	No Limit
		EG005T: Arsenic	7440-38-2	5	mg/kg	7	10	39.6	No Limit
		EG005T: Copper	7440-50-8	5	mg/kg	138	139	0.8	0% - 20%
		EG005T: Lead	7439-92-1	5	mg/kg	62	44	34.8	0% - 50%
		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	622	621	0.0	0% - 20%
EG005(ED093)T: Total Metals by ICP-AES (QC Lot: 4241193)									
EM2204744-006	Anonymous	EG005T: Nickel	7440-02-0	2	mg/kg	86	81	6.0	0% - 20%

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Acceptable RPD (%)*
EG005(ED093)T: Total Metals by ICP-AES (QC Lot: 4241193) - continued									
EM2204744-006	Anonymous	EG005T: Copper	7440-50-8	5	mg/kg	47	47	0.0	No Limit
		EG005T: Lead	7439-92-1	5	mg/kg	372	# 223	49.9	0% - 20%
		EG005T: Zinc	7440-66-6	5	mg/kg	392	428	8.6	0% - 20%
EM2204736-005	SX_IB_20220316_16_22_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	64	95	38.5	0% - 50%
		EG005T: Molybdenum	7439-98-7	2	mg/kg	<5	<5	0.0	No Limit
		EG005T: Nickel	7440-02-0	2	mg/kg	114	121	6.5	0% - 20%
		EG005T: Silver	7440-22-4	2	mg/kg	<2	<2	0.0	No Limit
		EG005T: Arsenic	7440-38-2	5	mg/kg	15	19	20.2	No Limit
		EG005T: Copper	7440-50-8	5	mg/kg	46	54	15.2	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	68	84	20.5	0% - 50%
EM2204744-006	Anonymous	EG005T: Cadmium	7440-43-9	1	mg/kg	2	<1	0.0	No Limit
		EG005T: Chromium	7440-47-3	2	mg/kg	30	20	41.5	0% - 50%
		EG005T: Molybdenum	7439-98-7	2	mg/kg	<2	<2	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	21	10	68.4	No Limit
		EG005T: Selenium	7782-49-2	5	mg/kg	<5	<5	0.0	No Limit
		EG005T: Tin	7440-31-5	5	mg/kg	75	90	17.9	0% - 50%
EA001: pH in soil using 0.01M CaCl extract (QC Lot: 4243866)									
EM2204736-001	SX_IB_20220316_08_17_SS_Primary_ALS	EA001: pH (CaCl2)	----	0.1	pH Unit	7.8	8.0	1.8	0% - 20%
EM2204744-008	Anonymous	EA001: pH (CaCl2)	----	0.1	pH Unit	7.7	7.7	0.0	0% - 20%
EA055: Moisture Content (Dried @ 105-110°C) (QC Lot: 4241330)									
EM2204736-001	SX_IB_20220316_08_17_SS_Primary_ALS	EA055: Moisture Content	----	0.1	%	30.7	33.0	7.2	0% - 20%
EG035T: Total Recoverable Mercury by FIMS (QC Lot: 4241191)									
EM2204598-042	Anonymous	EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	0.0	No Limit
EM2204598-051	Anonymous	EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	0.0	No Limit
EG035T: Total Recoverable Mercury by FIMS (QC Lot: 4241192)									
EM2204736-005	SX_IB_20220316_16_22_SS_Primary_ALS	EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	0.0	No Limit
EM2204744-006	Anonymous	EG035T: Mercury	7439-97-6	0.1	mg/kg	1.0	0.7	35.3	0% - 50%
EG048: Hexavalent Chromium (Alkaline Digest) (QC Lot: 4242117)									
EM2204651-002	Anonymous	EG048G: Hexavalent Chromium	18540-29-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
EM2204736-008	SX_IB_20220317_04_08_SS_Primary_ALS	EG048G: Hexavalent Chromium	18540-29-9	0.5	mg/kg	<1.0	<1.0	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 (%)*
EK026SF: Total CN by Segmented Flow Analyser (QC Lot: 4242138)									
EM2204534-001	Anonymous	EK026SF: Total Cyanide	57-12-5	1	mg/kg	<1	<1	0.0	No Limit
EM2204681-001	Anonymous	EK026SF: Total Cyanide	57-12-5	1	mg/kg	<1	<1	0.0	No Limit
EK026SF: Total CN by Segmented Flow Analyser (QC Lot: 4242141)									
EM2204736-005	SX_IB_20220316_16_22_SS_Primary_ALS	EK026SF: Total Cyanide	57-12-5	1	mg/kg	<5	<5	0.0	No Limit
EM2204852-009	Anonymous	EK026SF: Total Cyanide	57-12-5	1	mg/kg	<1	<1	0.0	No Limit
EK040T: Fluoride Total (QC Lot: 4241653)									
EM2204613-001	Anonymous	EK040T: Fluoride	16984-48-8	40	mg/kg	470	520	10.5	0% - 50%
EM2204736-006	SX_IB_20220316_19_52_SS_Primary_ALS	EK040T: Fluoride	16984-48-8	40	mg/kg	210	200	0.0	No Limit
EP066: Polychlorinated Biphenyls (PCB) (QC Lot: 4238942)									
EM2204598-057	Anonymous	EP066-EM: Total Polychlorinated biphenyls	----	0.1	mg/kg	<4.8	<4.8	0.0	No Limit
EM2204736-003	SX_IB_20220316_12_25_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: 4236233)									
EM2204736-001	SX_IB_20220316_08_17_SS_Primary_ALS	EP074-UT: Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	0.0	No Limit
		EP074-UT: Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074-UT: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074-UT: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074-UT: Styrene	100-42-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074-UT: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
EP074H: Naphthalene (QC Lot: 4236233)									
EM2204736-001	SX_IB_20220316_08_17_SS_Primary_ALS	EP074-UT: Naphthalene	91-20-3	1	mg/kg	<1	<1	0.0	No Limit
EP074I: Volatile Halogenated Compounds (QC Lot: 4236233)									
EM2204736-001	SX_IB_20220316_08_17_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

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: 4236233) - continued									
EM2204736-001	SX_IB_20220316_08_17_SS_Primary_ALS	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: 4238938)									
EM2204598-057	Anonymous	EP075-EM: 2-Chlorophenol	95-57-8	0.03	mg/kg	<7.50	<7.50	0.0	No Limit
		EP075-EM: 2.4-Dichlorophenol	120-83-2	0.03	mg/kg	<7.50	<7.50	0.0	No Limit
		EP075-EM: 2.6-Dichlorophenol	87-65-0	0.03	mg/kg	<7.50	<7.50	0.0	No Limit
		EP075-EM: 4-Chloro-3-methylphenol	59-50-7	0.03	mg/kg	<7.50	<7.50	0.0	No Limit
		EP075-EM: 2.3.5.6-Tetrachlorophenol	935-95-5	0.03	mg/kg	<7.50	<7.50	0.0	No Limit
		EP075-EM: 2.4.5-Trichlorophenol	95-95-4	0.05	mg/kg	<7.50	<7.50	0.0	No Limit
		EP075-EM: 2.4.6-Trichlorophenol	88-06-2	0.05	mg/kg	<7.50	<7.50	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	<7.50	<7.50	0.0	No Limit
		EP075-EM: Pentachlorophenol	87-86-5	0.2	mg/kg	<15.0	<15.0	0.0	No Limit
EM2204736-003	SX_IB_20220316_12_25_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: 4238938)									
EM2204598-057	Anonymous	EP075-EM: Phenol	108-95-2	1	mg/kg	<8	<8	0.0	No Limit
		EP075-EM: 2-Methylphenol	95-48-7	1	mg/kg	<8	<8	0.0	No Limit
		EP075-EM: 3- & 4-Methylphenol	1319-77-3	1	mg/kg	<15	<15	0.0	No Limit
		EP075-EM: 2-Nitrophenol	88-75-5	1	mg/kg	<8	<8	0.0	No Limit
		EP075-EM: 2.4-Dimethylphenol	105-67-9	1	mg/kg	<8	<8	0.0	No Limit
		EP075-EM: 2.4-Dinitrophenol	51-28-5	5	mg/kg	<300	<300	0.0	No Limit
		EP075-EM: 4-Nitrophenol	100-02-7	5	mg/kg	<300	<300	0.0	No Limit
		EP075-EM: 2-Methyl-4.6-dinitrophenol	8071-51-0	5	mg/kg	<300	<300	0.0	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Acceptable RPD (%)*
EP075A: Phenolic Compounds (Non-halogenated) (QC Lot: 4238938) - continued									
EM2204598-057	Anonymous	EP075-EM: Dinoseb	88-85-7	5	mg/kg	<300	<300	0.0	No Limit
		EP075-EM: 2-Cyclohexyl-4.6-Dinitrophenol	131-89-5	5	mg/kg	<300	<300	0.0	No Limit
EM2204736-003	SX_IB_20220316_12_25_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: 4238938)									
EM2204598-057	Anonymous	EP075-EM: Naphthalene	91-20-3	0.5	mg/kg	<7.5	<7.5	0.0	No Limit
		EP075-EM: Acenaphthene	83-32-9	0.5	mg/kg	<7.5	<7.5	0.0	No Limit
		EP075-EM: Acenaphthylene	208-96-8	0.5	mg/kg	<7.5	<7.5	0.0	No Limit
		EP075-EM: Fluorene	86-73-7	0.5	mg/kg	<7.5	<7.5	0.0	No Limit
		EP075-EM: Phenanthrene	85-01-8	0.5	mg/kg	<7.5	<7.5	0.0	No Limit
		EP075-EM: Anthracene	120-12-7	0.5	mg/kg	<7.5	<7.5	0.0	No Limit
		EP075-EM: Fluoranthene	206-44-0	0.5	mg/kg	<7.5	<7.5	0.0	No Limit
		EP075-EM: Pyrene	129-00-0	0.5	mg/kg	7.8	7.6	2.8	No Limit
		EP075-EM: Benz(a)anthracene	56-55-3	0.5	mg/kg	<15.0	<15.0	0.0	No Limit
		EP075-EM: Chrysene	218-01-9	0.5	mg/kg	<15.0	<15.0	0.0	No Limit
		EP075-EM: Benzo(a)pyrene	50-32-8	0.5	mg/kg	<7.5	<7.5	0.0	No Limit
		EP075-EM: Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<7.5	<7.5	0.0	No Limit
		EP075-EM: Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<7.5	<7.5	0.0	No Limit
		EP075-EM: Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<7.5	<7.5	0.0	No Limit
		EP075-EM: Benzo(b+j) & Benzo(k)fluoranthene	205-99-2 207-08-9	1	mg/kg	<15.0	<15.0	0.0	No Limit
EM2204736-003	SX_IB_20220316_12_25_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

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: 4238938) - continued									
EM2204736-003	SX_IB_20220316_12_25_SS_Primary_ALS	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: 4238938)									
EM2204598-057	Anonymous	EP075-EM: alpha-BHC	319-84-6	0.03	mg/kg	<7.50	<7.50	0.0	No Limit
		EP075-EM: Hexachlorobenzene (HCB)	118-74-1	0.03	mg/kg	<7.50	<7.50	0.0	No Limit
		EP075-EM: beta-BHC	319-85-7	0.03	mg/kg	<7.50	<7.50	0.0	No Limit
		EP075-EM: gamma-BHC	58-89-9	0.03	mg/kg	<7.50	<7.50	0.0	No Limit
		EP075-EM: delta-BHC	319-86-8	0.03	mg/kg	<7.50	<7.50	0.0	No Limit
		EP075-EM: Heptachlor	76-44-8	0.03	mg/kg	<7.50	<7.50	0.0	No Limit
		EP075-EM: Aldrin	309-00-2	0.03	mg/kg	<7.50	<7.50	0.0	No Limit
		EP075-EM: Heptachlor epoxide	1024-57-3	0.03	mg/kg	<7.50	<7.50	0.0	No Limit
		EP075-EM: cis-Chlordane	5103-71-9	0.03	mg/kg	<7.50	<7.50	0.0	No Limit
		EP075-EM: trans-Chlordane	5103-74-2	0.03	mg/kg	<7.50	<7.50	0.0	No Limit
		EP075-EM: Endosulfan 1	959-98-8	0.03	mg/kg	<7.50	<7.50	0.0	No Limit
		EP075-EM: Dieldrin	60-57-1	0.03	mg/kg	<7.50	<7.50	0.0	No Limit
		EP075-EM: Endrin aldehyde	7421-93-4	0.03	mg/kg	<7.50	<7.50	0.0	No Limit
		EP075-EM: Endrin	72-20-8	0.03	mg/kg	<7.50	<7.50	0.0	No Limit
		EP075-EM: Endosulfan 2	33213-65-9	0.03	mg/kg	<7.50	<7.50	0.0	No Limit
		EP075-EM: Endosulfan sulfate	1031-07-8	0.03	mg/kg	<7.50	<7.50	0.0	No Limit
		EP075-EM: Methoxychlor	72-43-5	0.03	mg/kg	<7.50	<7.50	0.0	No Limit
		EP075-EM: 4.4`-DDE	72-55-9	0.05	mg/kg	<7.50	<7.50	0.0	No Limit
		EP075-EM: 4.4`-DDD	72-54-8	0.05	mg/kg	<7.50	<7.50	0.0	No Limit
		EP075-EM: 4.4`-DDT	50-29-3	0.05	mg/kg	<7.50	<7.50	0.0	No Limit
EM2204736-003	SX_IB_20220316_12_25_SS_Primary_ALS	EP075-EM: alpha-BHC	319-84-6	0.03	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: Hexachlorobenzene (HCB)	118-74-1	0.03	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: beta-BHC	319-85-7	0.03	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: gamma-BHC	58-89-9	0.03	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: delta-BHC	319-86-8	0.03	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: Heptachlor	76-44-8	0.03	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: Aldrin	309-00-2	0.03	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: Heptachlor epoxide	1024-57-3	0.03	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: cis-Chlordane	5103-71-9	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: trans-Chlordane	5103-74-2	0.03	mg/kg	<0.03	<0.03	0.0	No Limit

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: 4238938) - continued									
EM2204736-003	SX_IB_20220316_12_25_SS_Primary_ALS	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: 4236233)									
EM2204736-001	SX_IB_20220316_08_17_SS_Primary_ALS	EP074-UT: C6 - C9 Fraction	----	10	mg/kg	<20	<20	0.0	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 4238940)									
EM2204598-057	Anonymous	EP071-EM: C15 - C28 Fraction	----	100	mg/kg	53100	55500	4.5	0% - 20%
		EP071-EM: C29 - C36 Fraction	----	100	mg/kg	22600	23200	2.7	0% - 20%
		EP071-EM: C10 - C14 Fraction	----	50	mg/kg	7380	7160	3.0	0% - 20%
		EP071-EM: C10 - C36 Fraction (sum)	----	50	mg/kg	83100	85900	3.3	0% - 20%
EM2204736-003	SX_IB_20220316_12_25_SS_Primary_ALS	EP071-EM: C15 - C28 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071-EM: C29 - C36 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071-EM: C10 - C14 Fraction	----	50	mg/kg	<50	<50	0.0	No Limit
		EP071-EM: C10 - C36 Fraction (sum)	----	50	mg/kg	<50	<50	0.0	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 4236233)									
EM2204736-001	SX_IB_20220316_08_17_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: 4238940)									
EM2204598-057	Anonymous	EP071-EM: >C16 - C34 Fraction	----	100	mg/kg	59000	61600	4.2	0% - 20%
		EP071-EM: >C34 - C40 Fraction	----	100	mg/kg	35800	35100	2.0	0% - 20%
		EP071-EM: >C10 - C16 Fraction	----	50	mg/kg	15200	15400	0.8	0% - 20%
		EP071-EM: >C10 - C40 Fraction (sum)	----	50	mg/kg	110000	112000	1.9	0% - 20%
EM2204736-003	SX_IB_20220316_12_25_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: 4238852)									

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Acceptable RPD (%)*
EP231A: Perfluoroalkyl Sulfonic Acids (QC Lot: 4238852) - continued									
EM2204736-001	SX_IB_20220316_08_17_SS_Primary_ALS	EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.0002	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.0002	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.0002	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.0002	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.0002	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.0002	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
EM2204860-004	Anonymous	EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
EP231B: Perfluoroalkyl Carboxylic Acids (QC Lot: 4238852)									
EM2204736-001	SX_IB_20220316_08_17_SS_Primary_ALS	EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.0002	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.0002	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.0002	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.0002	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.0002	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.0002	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.0002	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.0002	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: Perfluorotridecanoic acid (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
EM2204860-004	Anonymous	EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.001	mg/kg	<0.001	<0.001	0.0	No Limit
EP231C: Perfluoroalkyl Sulfonamides (QC Lot: 4238852)									
EM2204736-001	SX_IB_20220316_08_17_SS_Primary_ALS	EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.0002	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit

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: 4238852) - continued									
EM2204736-001	SX_IB_20220316_08_17_SS_Primary_ALS	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
EM2204860-004	Anonymous	EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QC Lot: 4238852)									
EM2204736-001	SX_IB_20220316_08_17_SS_Primary_ALS	EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.0005	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.0005	mg/kg	<10.0 µg/kg	<0.0100	0.0	No Limit
		EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.0005	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.0005	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
EM2204860-004	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

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 (%)
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QC Lot: 4238852) - continued									
EM2204860-004	Anonymous	EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
EP231P: PFAS Sums (QC Lot: 4238852)									
EM2204736-001	SX_IB_20220316_08_17_SS_Primary_ALS	EP231X: Sum of PFAS	----	0.0002	mg/kg	<50.0 µg/kg	<0.0500	0.0	No Limit
		EP231X: Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.0002	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: Sum of PFAS (WA DER List)	----	0.0002	mg/kg	<10.0 µg/kg	<0.0100	0.0	No Limit
EM2204860-004	Anonymous	EP231X: Sum of PFAS	----	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Sum of PFAS (WA DER List)	----	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit

Sub-Matrix: **WATER**

Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Laboratory Duplicate (DUP) Report					
				LOR	Unit	Original Result	Duplicate Result	RPD (%)	Acceptable RPD (%)
EP231A: Perfluoroalkyl Sulfonic Acids (QC Lot: 4247220)									
EM2204736-001	SX_IB_20220316_08_17_SS_Primary_ALS	EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L	<0.02	<0.02	0.0	No Limit
EP231A: Perfluoroalkyl Sulfonic Acids (QC Lot: 4247231)									
EM2204736-009	SX_IB_20220316_08_17_SS_Primary_ALS	EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L	<0.02	<0.02	0.0	No Limit
EP231B: Perfluoroalkyl Carboxylic Acids (QC Lot: 4247220)									
EM2204736-001	SX_IB_20220316_08_17_SS_Primary_ALS	EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L	<0.02	<0.02	0.0	No Limit

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: 4247220) - continued									
EM2204736-001	SX_IB_20220316_08_17_SS_Primary_ALS	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: 4247231)									
EM2204736-009	SX_IB_20220316_08_17_SS_Primary_ALS	EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L	<0.1	<0.1	0.0	No Limit
EP231C: Perfluoroalkyl Sulfonamides (QC Lot: 4247220)									
EM2204736-001	SX_IB_20220316_08_17_SS_Primary_ALS	EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.02	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.02	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L	<0.05	<0.05	0.0	No Limit
EP231C: Perfluoroalkyl Sulfonamides (QC Lot: 4247231)									
EM2204736-009	SX_IB_20220316_08_17_SS_Primary_ALS	EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.02	µg/L	<0.02	<0.02	0.0	No Limit

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: 4247231) - continued									
EM2204736-009	SX_IB_20220316_08_17_SS_Primary_ALS	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: 4247220)									
EM2204736-001	SX_IB_20220316_08_17_SS_Primary_ALS	EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.05	µg/L	<0.05	<0.05	0.0	No Limit
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QC Lot: 4247231)									
EM2204736-009	SX_IB_20220316_08_17_SS_Primary_ALS	EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.05	µg/L	<0.05	<0.05	0.0	No Limit
EP231P: PFAS Sums (QC Lot: 4247220)									
EM2204736-001	SX_IB_20220316_08_17_SS_Primary_ALS	EP231X: Sum of PFAS	----	0.01	µg/L	<0.10	<0.10	0.0	No Limit
		EP231X: Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Sum of PFAS (WA DER List)	----	0.01	µg/L	<0.05	<0.05	0.0	No Limit
EP231P: PFAS Sums (QC Lot: 4247231)									
EM2204736-009	SX_IB_20220316_08_17_SS_Primary_ALS	EP231X: Sum of PFAS	----	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Sum of PFAS (WA DER List)	----	0.01	µg/L	<0.01	<0.01	0.0	No Limit

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

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

Sub-Matrix: **SOIL**

				Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Acceptable Limits (%)	
Method: Compound	CAS Number	LOR	Unit	Result	Concentration	LCS	Low	High
EG005(ED093)T: Total Metals by ICP-AES (QCLot: 4241190)								
EG005T: Arsenic	7440-38-2	5	mg/kg	<5	123 mg/kg	87.6	70.0	130
EG005T: Cadmium	7440-43-9	1	mg/kg	<1	1.23 mg/kg	54.8	50.0	130
EG005T: Chromium	7440-47-3	2	mg/kg	<2	20.2 mg/kg	80.8	70.0	130
EG005T: Copper	7440-50-8	5	mg/kg	<5	55.9 mg/kg	83.3	70.0	130
EG005T: Lead	7439-92-1	5	mg/kg	<5	62.4 mg/kg	83.0	70.0	130
EG005T: Molybdenum	7439-98-7	2	mg/kg	<2	2.19 mg/kg	79.4	70.0	130
EG005T: Nickel	7440-02-0	2	mg/kg	<2	15.4 mg/kg	79.9	70.0	130
EG005T: Selenium	7782-49-2	5	mg/kg	<5	----	----	----	----
EG005T: Silver	7440-22-4	2	mg/kg	<2	2.9 mg/kg	73.2	70.0	130
EG005T: Tin	7440-31-5	5	mg/kg	<5	5.33 mg/kg	87.0	70.0	130
EG005T: Zinc	7440-66-6	5	mg/kg	<5	162 mg/kg	75.8	70.0	130
EG005(ED093)T: Total Metals by ICP-AES (QCLot: 4241193)								
EG005T: Arsenic	7440-38-2	5	mg/kg	<5	123 mg/kg	87.3	70.0	130
EG005T: Cadmium	7440-43-9	1	mg/kg	<1	1.23 mg/kg	52.8	50.0	130
EG005T: Chromium	7440-47-3	2	mg/kg	<2	20.2 mg/kg	82.4	70.0	130
EG005T: Copper	7440-50-8	5	mg/kg	<5	55.9 mg/kg	81.6	70.0	130
EG005T: Lead	7439-92-1	5	mg/kg	<5	62.4 mg/kg	82.9	70.0	130
EG005T: Molybdenum	7439-98-7	2	mg/kg	<2	2.19 mg/kg	79.8	70.0	130
EG005T: Nickel	7440-02-0	2	mg/kg	<2	15.4 mg/kg	81.6	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	75.6	70.0	130
EG005T: Tin	7440-31-5	5	mg/kg	<5	5.33 mg/kg	86.3	70.0	130
EG005T: Zinc	7440-66-6	5	mg/kg	<5	162 mg/kg	72.5	70.0	130
EN60-DI: Bottle Leaching Procedure - Inorganics/PFAS (Plastic Vessel) (QCLot: 4241695)								
EN60-DIa-P: Final pH	----	0.1	pH Unit	6.7	----	----	----	----
EA001: pH in soil using 0.01M CaCl extract (QCLot: 4243866)								
EA001: pH (CaCl2)	----	----	pH Unit	----	4 pH Unit	100	98.8	101
				----	7 pH Unit	101	99.3	101
EG035T: Total Recoverable Mercury by FIMS (QCLot: 4241191)								
EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	0.64 mg/kg	84.4	70.0	130
EG035T: Total Recoverable Mercury by FIMS (QCLot: 4241192)								
EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	0.64 mg/kg	91.4	70.0	130
EG048: Hexavalent Chromium (Alkaline Digest) (QCLot: 4242117)								
EG048G: Hexavalent Chromium	18540-29-9	0.5	mg/kg	<0.5	20 mg/kg	70.0	70.0	130

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Acceptable Limits (%)	
				Result	Concentration	LCS	Low	High
EK026SF: Total CN by Segmented Flow Analyser (QCLot: 4242138)								
EK026SF: Total Cyanide	57-12-5	1	mg/kg	<1	20 mg/kg	82.1	70.0	130
EK026SF: Total CN by Segmented Flow Analyser (QCLot: 4242141)								
EK026SF: Total Cyanide	57-12-5	1	mg/kg	<1	20 mg/kg	106	70.0	130
EK040T: Fluoride Total (QCLot: 4241653)								
EK040T: Fluoride	16984-48-8	40	mg/kg	<40	400 mg/kg	76.0	75.2	110
EP066: Polychlorinated Biphenyls (PCB) (QCLot: 4238942)								
EP066-EM: Total Polychlorinated biphenyls	----	0.1	mg/kg	<0.1	1 mg/kg	116	67.4	136
EP074A: Monocyclic Aromatic Hydrocarbons (QCLot: 4236233)								
EP074-UT: Benzene	71-43-2	0.2	mg/kg	<0.2	2.1 mg/kg	99.1	69.2	116
EP074-UT: Toluene	108-88-3	0.5	mg/kg	<0.5	2.1 mg/kg	95.8	67.7	116
EP074-UT: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	2.1 mg/kg	96.4	66.6	115
EP074-UT: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	4.2 mg/kg	94.4	65.2	112
EP074-UT: Styrene	100-42-5	0.5	mg/kg	<0.5	2.1 mg/kg	95.6	69.4	111
EP074-UT: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	2.1 mg/kg	94.7	68.4	110
EP074H: Naphthalene (QCLot: 4236233)								
EP074-UT: Naphthalene	91-20-3	1	mg/kg	<1	0.6 mg/kg	109	72.3	114
EP074I: Volatile Halogenated Compounds (QCLot: 4236233)								
EP074-UT: Vinyl chloride	75-01-4	0.02	mg/kg	<0.02	0.1 mg/kg	69.4	47.0	138
EP074-UT: 1.1-Dichloroethene	75-35-4	0.01	mg/kg	<0.01	0.1 mg/kg	91.6	57.6	125
EP074-UT: Methylene chloride	75-09-2	0.4	mg/kg	<0.4	2.1 mg/kg	98.2	72.3	115
EP074-UT: trans-1.2-Dichloroethene	156-60-5	0.02	mg/kg	<0.02	0.1 mg/kg	97.5	60.5	122
EP074-UT: cis-1.2-Dichloroethene	156-59-2	0.01	mg/kg	<0.01	0.1 mg/kg	98.2	70.3	112
EP074-UT: Chloroform	67-66-3	0.02	mg/kg	<0.02	0.1 mg/kg	99.0	66.6	115
EP074-UT: 1.1.1-Trichloroethane	71-55-6	0.01	mg/kg	<0.01	0.1 mg/kg	96.6	64.4	122
EP074-UT: Carbon Tetrachloride	56-23-5	0.01	mg/kg	<0.01	0.1 mg/kg	92.6	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	97.6	64.7	115
EP074-UT: 1.1.2-Trichloroethane	79-00-5	0.04	mg/kg	<0.04	0.1 mg/kg	102	72.6	116
EP074-UT: Tetrachloroethene	127-18-4	0.02	mg/kg	<0.02	0.1 mg/kg	95.4	60.0	119
EP074-UT: 1.1.1.2-Tetrachloroethane	630-20-6	0.01	mg/kg	<0.01	0.1 mg/kg	94.2	71.8	116
EP074-UT: 1.1.2.2-Tetrachloroethane	79-34-5	0.02	mg/kg	<0.02	0.1 mg/kg	106	66.1	116
EP074-UT: Hexachlorobutadiene	87-68-3	0.02	mg/kg	<0.02	0.1 mg/kg	107	39.8	128
EP074-UT: Chlorobenzene	108-90-7	0.02	mg/kg	<0.02	0.1 mg/kg	100	70.3	113
EP074-UT: 1.4-Dichlorobenzene	106-46-7	0.02	mg/kg	<0.02	0.1 mg/kg	100	62.6	113
EP074-UT: 1.2-Dichlorobenzene	95-50-1	0.02	mg/kg	<0.02	0.1 mg/kg	102	70.8	110
EP074-UT: 1.2.4-Trichlorobenzene	120-82-1	0.01	mg/kg	<0.01	0.1 mg/kg	110	48.4	120
EP075A: Phenolic Compounds (Halogenated) (QCLot: 4238938)								

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Acceptable Limits (%)	
				Result	Concentration	LCS	Low	High
EP075A: Phenolic Compounds (Halogenated) (QCLot: 4238938) - continued								
EP075-EM: 2-Chlorophenol	95-57-8	0.03	mg/kg	<0.03	2 mg/kg	94.6	74.5	126
EP075-EM: 2.4-Dichlorophenol	120-83-2	0.03	mg/kg	<0.03	2 mg/kg	103	72.7	126
EP075-EM: 2.6-Dichlorophenol	87-65-0	0.03	mg/kg	<0.03	2 mg/kg	106	73.5	132
EP075-EM: 4-Chloro-3-methylphenol	59-50-7	0.03	mg/kg	<0.03	2 mg/kg	106	72.8	128
EP075-EM: 2.4.5-Trichlorophenol	95-95-4	0.05	mg/kg	<0.05	2 mg/kg	90.4	73.3	134
EP075-EM: 2.4.6-Trichlorophenol	88-06-2	0.05	mg/kg	<0.05	2 mg/kg	90.0	72.4	128
EP075-EM: 2.3.5.6-Tetrachlorophenol	935-95-5	0.03	mg/kg	<0.03	2 mg/kg	97.8	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	101	71.9	128
EP075-EM: Pentachlorophenol	87-86-5	0.2	mg/kg	<0.2	4 mg/kg	92.7	54.4	135
EP075A: Phenolic Compounds (Non-halogenated) (QCLot: 4238938)								
EP075-EM: Phenol	108-95-2	1	mg/kg	<1	2 mg/kg	104	71.5	130
EP075-EM: 2-Methylphenol	95-48-7	1	mg/kg	<1	2 mg/kg	100	73.4	129
EP075-EM: 3- & 4-Methylphenol	1319-77-3	1	mg/kg	<1	4 mg/kg	103	74.3	129
EP075-EM: 2-Nitrophenol	88-75-5	1	mg/kg	<1	2 mg/kg	111	70.9	133
EP075-EM: 2.4-Dimethylphenol	105-67-9	1	mg/kg	<1	2 mg/kg	111	71.8	132
EP075-EM: 2.4-Dinitrophenol	51-28-5	5	mg/kg	<5	10 mg/kg	69.6	41.0	156
EP075-EM: 4-Nitrophenol	100-02-7	5	mg/kg	<5	10 mg/kg	110	65.3	134
EP075-EM: 2-Methyl-4.6-dinitrophenol	8071-51-0	5	mg/kg	<5	10 mg/kg	95.0	43.6	128
EP075-EM: Dinoseb	88-85-7	5	mg/kg	<5	10 mg/kg	97.4	62.0	128
EP075-EM: 2-Cyclohexyl-4.6-Dinitrophenol	131-89-5	5	mg/kg	<5	10 mg/kg	81.5	34.5	137
EP075B: Polynuclear Aromatic Hydrocarbons (QCLot: 4238938)								
EP075-EM: Naphthalene	91-20-3	0.5	mg/kg	<0.5	2 mg/kg	102	73.0	131
EP075-EM: Acenaphthene	83-32-9	0.5	mg/kg	<0.5	2 mg/kg	98.7	76.3	130
EP075-EM: Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	2 mg/kg	102	72.0	135
EP075-EM: Fluorene	86-73-7	0.5	mg/kg	<0.5	2 mg/kg	104	74.4	131
EP075-EM: Phenanthrene	85-01-8	0.5	mg/kg	<0.5	2 mg/kg	104	73.3	130
EP075-EM: Anthracene	120-12-7	0.5	mg/kg	<0.5	2 mg/kg	105	78.4	127
EP075-EM: Fluoranthene	206-44-0	0.5	mg/kg	<0.5	2 mg/kg	101	75.3	132
EP075-EM: Pyrene	129-00-0	0.5	mg/kg	<0.5	2 mg/kg	105	75.4	130
EP075-EM: Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	2 mg/kg	105	69.6	133
EP075-EM: Chrysene	218-01-9	0.5	mg/kg	<0.5	2 mg/kg	106	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	107	75.8	133
EP075-EM: Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	2 mg/kg	107	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	104	71.3	134
EP075I: Organochlorine Pesticides (QCLot: 4238938)								

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Acceptable Limits (%)	
				Result	Concentration	LCS	Low	High
EP075I: Organochlorine Pesticides (QCLot: 4238938) - continued								
EP075-EM: alpha-BHC	319-84-6	0.03	mg/kg	<0.03	2 mg/kg	101	71.0	129
EP075-EM: Hexachlorobenzene (HCB)	118-74-1	0.03	mg/kg	<0.03	2 mg/kg	101	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	105	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	98.5	73.6	130
EP075-EM: cis-Chlordane	5103-71-9	0.03	mg/kg	<0.03	2 mg/kg	104	75.0	133
EP075-EM: trans-Chlordane	5103-74-2	0.03	mg/kg	<0.03	2 mg/kg	103	75.3	131
EP075-EM: Endosulfan 1	959-98-8	0.03	mg/kg	<0.03	2 mg/kg	107	69.4	134
EP075-EM: 4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	2 mg/kg	103	71.0	132
EP075-EM: Dieldrin	60-57-1	0.03	mg/kg	<0.03	2 mg/kg	104	78.0	133
EP075-EM: Endrin aldehyde	7421-93-4	0.03	mg/kg	<0.03	2 mg/kg	94.6	69.0	143
EP075-EM: Endrin	72-20-8	0.03	mg/kg	<0.03	2 mg/kg	105	55.7	145
EP075-EM: Endosulfan 2	33213-65-9	0.03	mg/kg	<0.03	2 mg/kg	105	71.4	135
EP075-EM: 4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	2 mg/kg	106	74.8	134
EP075-EM: Endosulfan sulfate	1031-07-8	0.03	mg/kg	<0.03	2 mg/kg	105	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	104	63.6	135
EP080/071: Total Petroleum Hydrocarbons (QCLot: 4236233)								
EP074-UT: C6 - C9 Fraction	----	10	mg/kg	<10	39.6 mg/kg	103	61.1	119
EP080/071: Total Petroleum Hydrocarbons (QCLot: 4238940)								
EP071-EM: C10 - C14 Fraction	----	50	mg/kg	<50	760 mg/kg	74.8	74.4	129
EP071-EM: C15 - C28 Fraction	----	100	mg/kg	<100	3270 mg/kg	90.5	81.0	123
EP071-EM: C29 - C36 Fraction	----	100	mg/kg	<100	1550 mg/kg	91.1	81.8	121
EP071-EM: C10 - C36 Fraction (sum)	----	50	mg/kg	<50	5580 mg/kg	88.5	70.0	130
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 4236233)								
EP074-UT: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	48.9 mg/kg	102	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: 4238940)								
EP071-EM: >C10 - C16 Fraction	----	50	mg/kg	<50	1110 mg/kg	89.0	75.4	132
EP071-EM: >C16 - C34 Fraction	----	100	mg/kg	<100	4180 mg/kg	91.7	80.8	120
EP071-EM: >C34 - C40 Fraction	----	100	mg/kg	<100	290 mg/kg	83.9	73.3	136
EP071-EM: >C10 - C40 Fraction (sum)	----	50	mg/kg	<50	5580 mg/kg	90.7	70.0	130
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 4238852)								
EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.0002	mg/kg	<0.0002	0.00111 mg/kg	104	72.0	128

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Acceptable Limits (%)	
				Result	Concentration	LCS	Low	High
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 4238852) - continued								
EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.0002	mg/kg	<0.0002	0.00118 mg/kg	109	73.0	123
EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.0002	mg/kg	<0.0002	0.0014 mg/kg	76.8	67.0	130
EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.0002	mg/kg	<0.0002	0.00119 mg/kg	79.6	70.0	132
EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.0002	mg/kg	<0.0002	0.00116 mg/kg	80.1	68.0	136
EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.0002	mg/kg	<0.0002	0.00121 mg/kg	86.1	59.0	134
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4238852)								
EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.001	mg/kg	<0.001	0.00625 mg/kg	80.0	71.0	135
EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.0002	mg/kg	<0.0002	0.00125 mg/kg	89.1	69.0	132
EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.0002	mg/kg	<0.0002	0.00125 mg/kg	87.9	70.0	132
EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.0002	mg/kg	<0.0002	0.00125 mg/kg	102	71.0	131
EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.0002	mg/kg	<0.0002	0.00125 mg/kg	101	69.0	133
EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.0002	mg/kg	<0.0002	0.00125 mg/kg	111	72.0	129
EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.0002	mg/kg	<0.0002	0.00125 mg/kg	90.3	69.0	133
EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.0002	mg/kg	<0.0002	0.00125 mg/kg	91.0	64.0	136
EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.0002	mg/kg	<0.0002	0.00125 mg/kg	101	69.0	135
EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.0002	mg/kg	<0.0002	0.00125 mg/kg	93.9	66.0	139
EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.0005	mg/kg	<0.0005	0.00312 mg/kg	118	69.0	133
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 4238852)								
EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.0002	mg/kg	<0.0002	0.00125 mg/kg	86.4	67.0	137
EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.0005	mg/kg	<0.0005	0.00312 mg/kg	106	70.0	130
EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.0005	mg/kg	<0.0005	0.00312 mg/kg	104	70.0	130
EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.0005	mg/kg	<0.0005	0.00312 mg/kg	116	70.0	130
EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.0005	mg/kg	<0.0005	0.00312 mg/kg	111	70.0	130
EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.0002	mg/kg	<0.0002	0.00125 mg/kg	99.4	63.0	144
EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.0002	mg/kg	<0.0002	0.00125 mg/kg	124	61.0	139
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 4238852)								
EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.0005	mg/kg	<0.0005	0.00117 mg/kg	112	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	104	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	92.1	65.0	137
EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.0005	mg/kg	<0.0005	0.00121 mg/kg	99.4	70.0	130
EP231P: PFAS Sums (QCLot: 4238852)								
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	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Acceptable Limits (%)	
				Result	Concentration	LCS	Low	High
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 4247220)								
EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	0.222 µg/L	106	72.0	130
EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	<0.02	0.235 µg/L	102	71.0	127
EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	<0.01	0.228 µg/L	100	68.0	131
EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	<0.02	0.25 µg/L	98.8	69.0	134
EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	<0.01	0.232 µg/L	102	65.0	140
EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L	<0.02	0.241 µg/L	98.8	53.0	142
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 4247231)								
EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	0.222 µg/L	99.8	72.0	130
EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	<0.02	0.235 µg/L	103	71.0	127
EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	<0.01	0.228 µg/L	98.1	68.0	131
EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	<0.02	0.25 µg/L	93.9	69.0	134
EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	<0.01	0.232 µg/L	92.3	65.0	140
EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L	<0.02	0.241 µg/L	91.8	53.0	142
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4247220)								
EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L	<0.1	1.25 µg/L	103	73.0	129
EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	<0.02	0.25 µg/L	104	72.0	129
EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	<0.02	0.25 µg/L	106	72.0	129
EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	<0.02	0.25 µg/L	104	72.0	130
EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	<0.01	0.25 µg/L	103	71.0	133
EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L	<0.02	0.25 µg/L	110	69.0	130
EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L	<0.02	0.25 µg/L	108	71.0	129
EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L	<0.02	0.25 µg/L	105	69.0	133
EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L	<0.02	0.25 µg/L	107	72.0	134
EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L	<0.02	0.25 µg/L	106	65.0	144
EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L	<0.05	0.625 µg/L	106	71.0	132
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4247231)								
EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L	<0.1	1.25 µg/L	99.7	73.0	129
EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	<0.02	0.25 µg/L	100.0	72.0	129
EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	<0.02	0.25 µg/L	105	72.0	129
EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	<0.02	0.25 µg/L	105	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	110	69.0	130
EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L	<0.02	0.25 µg/L	105	71.0	129
EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L	<0.02	0.25 µg/L	102	69.0	133
EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L	<0.02	0.25 µg/L	106	72.0	134
EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L	<0.02	0.25 µg/L	105	65.0	144
EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L	<0.05	0.625 µg/L	102	71.0	132
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 4247220)								

Sub-Matrix: **WATER**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Acceptable Limits (%)	
				Result	Concentration	LCS	Low	High
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 4247220) - continued								
EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	µg/L	<0.02	0.25 µg/L	104	67.0	137
EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L	<0.05	0.625 µg/L	138	68.0	141
EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	µg/L	<0.05	0.625 µg/L	127	70.0	130
EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L	<0.05	0.625 µg/L	98.9	70.0	130
EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L	<0.05	0.625 µg/L	113	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	111	61.0	135
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 4247231)								
EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	µg/L	<0.02	0.25 µg/L	108	67.0	137
EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L	<0.05	0.625 µg/L	140	68.0	141
EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	µg/L	<0.05	0.625 µg/L	127	70.0	130
EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L	<0.05	0.625 µg/L	101	70.0	130
EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L	<0.05	0.625 µg/L	115	70.0	130
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	114	61.0	135
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 4247220)								
EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L	<0.05	0.234 µg/L	105	63.0	143
EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.05	µg/L	<0.05	0.238 µg/L	96.4	64.0	140
EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.05	µg/L	<0.05	0.24 µg/L	92.8	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	83.4	70.0	130
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 4247231)								
EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L	<0.05	0.234 µg/L	106	63.0	143
EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.05	µg/L	<0.05	0.238 µg/L	94.7	64.0	140
EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.05	µg/L	<0.05	0.24 µg/L	102	67.0	138
EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.05	µg/L	<0.05	0.242 µg/L	85.3	70.0	130
EP231P: PFAS Sums (QCLot: 4247220)								
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: 4247231)								

Sub-Matrix: **WATER**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report: Result	Laboratory Control Spike (LCS) Report: Spike Concentration	LCS: Spike Recovery (%)	Acceptable Limits (%): Low	Acceptable Limits (%): High
EP231P: PFAS Sums (QCLot: 4247231) - continued								
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	SpikeRecovery(%): MS	Acceptable Limits (%): Low	Acceptable Limits (%): High
EG005(ED093)T: Total Metals by ICP-AES (QCLot: 4241190)							
EM2204598-043	Anonymous	EG005T: Arsenic	7440-38-2	50 mg/kg	101	78.0	124
		EG005T: Cadmium	7440-43-9	50 mg/kg	90.2	79.7	116
		EG005T: Chromium	7440-47-3	50 mg/kg	89.2	79.0	121
		EG005T: Copper	7440-50-8	250 mg/kg	96.3	80.0	120
		EG005T: Lead	7439-92-1	250 mg/kg	91.9	80.0	120
		EG005T: Nickel	7440-02-0	50 mg/kg	79.6	78.0	120
		EG005T: Zinc	7440-66-6	250 mg/kg	89.7	80.0	120
EG005(ED093)T: Total Metals by ICP-AES (QCLot: 4241193)							
EM2204736-006	SX_IB_20220316_19_52_SS_Primary_ALS	EG005T: Arsenic	7440-38-2	50 mg/kg	101	78.0	124
		EG005T: Cadmium	7440-43-9	50 mg/kg	82.1	79.7	116
		EG005T: Chromium	7440-47-3	50 mg/kg	97.7	79.0	121
		EG005T: Copper	7440-50-8	250 mg/kg	87.1	80.0	120
		EG005T: Lead	7439-92-1	250 mg/kg	84.6	80.0	120
		EG005T: Nickel	7440-02-0	50 mg/kg	95.2	78.0	120
		EG005T: Zinc	7440-66-6	250 mg/kg	81.2	80.0	120
EG035T: Total Recoverable Mercury by FIMS (QCLot: 4241191)							
EM2204598-043	Anonymous	EG035T: Mercury	7439-97-6	0.5 mg/kg	95.2	76.0	116
EG035T: Total Recoverable Mercury by FIMS (QCLot: 4241192)							
EM2204736-006	SX_IB_20220316_19_52_SS_Primary_ALS	EG035T: Mercury	7439-97-6	0.5 mg/kg	102	76.0	116
EG048: Hexavalent Chromium (Alkaline Digest) (QCLot: 4242117)							
EM2204681-001	Anonymous	EG048G: Hexavalent Chromium	18540-29-9	20 mg/kg	69.6	58.0	114
EM2204681-001	Anonymous	EG048G: Hexavalent Chromium	18540-29-9	20 mg/kg	# 38.6	58.0	114
EK026SF: Total CN by Segmented Flow Analyser (QCLot: 4242138)							
EM2204534-002	Anonymous	EK026SF: Total Cyanide	57-12-5	20 mg/kg	103	70.0	130

Sub-Matrix: **SOIL**

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Acceptable Limits (%)	
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Concentration	MS	Low	High
EK026SF: Total CN by Segmented Flow Analyser (QCLot: 4242141)							
EM2204736-006	SX_IB_20220316_19_52_SS_Primary_ALS	EK026SF: Total Cyanide	57-12-5	20 mg/kg	113	70.0	130
EK040T: Fluoride Total (QCLot: 4241653)							
EM2204613-004	Anonymous	EK040T: Fluoride	16984-48-8	400 mg/kg	87.0	70.0	130
EP066: Polychlorinated Biphenyls (PCB) (QCLot: 4238942)							
EM2204613-001	Anonymous	EP066-EM: Total Polychlorinated biphenyls	----	1 mg/kg	124	59.6	152
EP074A: Monocyclic Aromatic Hydrocarbons (QCLot: 4236233)							
EM2204736-002	SX_IB_20220316_08_20_SS_Duplicate_ALS	EP074-UT: Benzene	71-43-2	2 mg/kg	76.3	53.7	130
		EP074-UT: Toluene	108-88-3	2 mg/kg	75.7	55.1	124
EP074I: Volatile Halogenated Compounds (QCLot: 4236233)							
EM2204736-002	SX_IB_20220316_08_20_SS_Duplicate_ALS	EP074-UT: 1.1-Dichloroethene	75-35-4	2 mg/kg	66.7	38.4	145
		EP074-UT: Trichloroethene	79-01-6	2 mg/kg	70.4	48.1	128
		EP074-UT: Chlorobenzene	108-90-7	2 mg/kg	72.8	55.5	122
EP075A: Phenolic Compounds (Halogenated) (QCLot: 4238938)							
EM2204598-058	Anonymous	EP075-EM: 2-Chlorophenol	95-57-8	3 mg/kg	81.6	44.0	143
		EP075-EM: 4-Chloro-3-methylphenol	59-50-7	3 mg/kg	80.7	41.5	139
		EP075-EM: Pentachlorophenol	87-86-5	3 mg/kg	76.3	10.0	144
EP075A: Phenolic Compounds (Non-halogenated) (QCLot: 4238938)							
EM2204598-058	Anonymous	EP075-EM: Phenol	108-95-2	3 mg/kg	81.9	44.2	134
		EP075-EM: 2-Nitrophenol	88-75-5	3 mg/kg	87.8	34.2	129
EP075B: Polynuclear Aromatic Hydrocarbons (QCLot: 4238938)							
EM2204598-058	Anonymous	EP075-EM: Acenaphthene	83-32-9	3 mg/kg	62.5	42.6	138
		EP075-EM: Pyrene	129-00-0	3 mg/kg	39.4	37.8	152
EP080/071: Total Petroleum Hydrocarbons (QCLot: 4236233)							
EM2204736-002	SX_IB_20220316_08_20_SS_Duplicate_ALS	EP074-UT: C6 - C9 Fraction	----	28 mg/kg	84.9	42.3	111
EP080/071: Total Petroleum Hydrocarbons (QCLot: 4238940)							
EM2204598-059	Anonymous	EP071-EM: C10 - C14 Fraction	----	760 mg/kg	73.2	71.3	126
		EP071-EM: C15 - C28 Fraction	----	3270 mg/kg	# Not Determined	75.1	123
		EP071-EM: C29 - C36 Fraction	----	1550 mg/kg	# Not Determined	78.1	120
		EP071-EM: C10 - C36 Fraction (sum)	----	5580 mg/kg	# Not Determined	70.0	130
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 4236233)							
EM2204736-002	SX_IB_20220316_08_20_SS_Duplicate_ALS	EP074-UT: C6 - C10 Fraction	C6_C10	33 mg/kg	87.0	39.9	109
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 4238940)							

Sub-Matrix: **SOIL**

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Acceptable Limits (%)	
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Concentration	MS	Low	High
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 4238940) - continued							
EM2204598-059	Anonymous	EP071-EM: >C10 - C16 Fraction	----	1110 mg/kg	# 68.9	71.5	130
		EP071-EM: >C16 - C34 Fraction	----	4180 mg/kg	# Not Determined	76.9	119
		EP071-EM: >C34 - C40 Fraction	----	290 mg/kg	# Not Determined	65.3	139
		EP071-EM: >C10 - C40 Fraction (sum)	----	5580 mg/kg	# Not Determined	70.0	130
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 4238852)							
EM2204736-002	SX_IB_20220316_08_20_SS_Duplicate_ALS	EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.00111 mg/kg	115	72.0	128
		EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.00118 mg/kg	118	73.0	123
		EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.00114 mg/kg	106	67.0	130
		EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.00119 mg/kg	90.6	70.0	132
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.00116 mg/kg	79.6	68.0	136
		EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.00121 mg/kg	89.8	59.0	134
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4238852)							
EM2204736-002	SX_IB_20220316_08_20_SS_Duplicate_ALS	EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.00625 mg/kg	80.4	71.0	135
		EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.00125 mg/kg	88.5	69.0	132
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.00125 mg/kg	87.3	70.0	132
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.00125 mg/kg	103	71.0	131
		EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.00125 mg/kg	105	69.0	133
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.00125 mg/kg	104	72.0	129
		EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.00125 mg/kg	98.0	69.0	133
		EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.00125 mg/kg	82.8	64.0	136
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.00125 mg/kg	101	69.0	135
		EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.00125 mg/kg	90.5	66.0	139
		EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.00312 mg/kg	118	69.0	133
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 4238852)							
EM2204736-002	SX_IB_20220316_08_20_SS_Duplicate_ALS	EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.00125 mg/kg	83.4	67.0	137
		EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.00312 mg/kg	105	70.0	130
		EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.00312 mg/kg	102	70.0	130
		EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.00312 mg/kg	112	70.0	130
		EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.00312 mg/kg	118	70.0	130
		EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.00125 mg/kg	122	63.0	144
		EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.00125 mg/kg	135	61.0	139

Sub-Matrix: **SOIL**

Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Matrix Spike (MS) Report: Spike Concentration	Matrix Spike (MS) Report: SpikeRecovery(%) MS	Acceptable Limits (%) Low	Acceptable Limits (%) High
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 4238852)							
EM2204736-002	SX_IB_20220316_08_20_SS_Duplicate_ALS	EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.00117 mg/kg	100	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	104	65.0	137
		EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.00121 mg/kg	95.4	70.0	130

Sub-Matrix: **WATER**

Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Matrix Spike (MS) Report: Spike Concentration	Matrix Spike (MS) Report: SpikeRecovery(%) MS	Acceptable Limits (%) Low	Acceptable Limits (%) High
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 4247220)							
EM2204736-002	SX_IB_20220316_08_20_SS_Duplicate_ALS	EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.222 µg/L	106	72.0	130
		EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.235 µg/L	102	71.0	127
		EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.228 µg/L	104	68.0	131
		EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.238 µg/L	106	69.0	134
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.232 µg/L	90.8	65.0	140
		EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.241 µg/L	95.0	53.0	142
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 4247231)							
EM2204736-010	SX_IB_20220316_08_20_SS_Duplicate_ALS	EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.222 µg/L	96.5	72.0	130
		EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.235 µg/L	110	71.0	127
		EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.228 µg/L	105	68.0	131
		EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.238 µg/L	98.2	69.0	134
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.232 µg/L	86.8	65.0	140
		EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.241 µg/L	72.8	53.0	142
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4247220)							
EM2204736-002	SX_IB_20220316_08_20_SS_Duplicate_ALS	EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	1.25 µg/L	94.4	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	105	72.0	129
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.25 µg/L	106	72.0	130
		EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.25 µg/L	104	71.0	133
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.25 µg/L	115	69.0	130
		EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.25 µg/L	105	71.0	129
		EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.25 µg/L	109	69.0	133
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.25 µg/L	109	72.0	134
		EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.25 µg/L	110	65.0	144
		EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.625 µg/L	100	71.0	132
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4247231)							
EM2204736-010	SX_IB_20220316_08_20_SS_Duplicate_ALS	EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	1.25 µg/L	98.2	73.0	129
		EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.25 µg/L	103	72.0	129
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.25 µg/L	101	72.0	129
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.25 µg/L	105	72.0	130

Sub-Matrix: **WATER**

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Acceptable Limits (%)	
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Concentration	MS	Low	High
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4247231) - continued							
EM2204736-010	SX_IB_20220316_08_20_SS_Duplicate_ALS	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	113	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	104	69.0	133
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.25 µg/L	93.1	72.0	134
		EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.25 µg/L	# 63.4	65.0	144
		EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.625 µg/L	84.1	71.0	132
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 4247220)							
EM2204736-002	SX_IB_20220316_08_20_SS_Duplicate_ALS	EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.25 µg/L	112	67.0	137
		EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.625 µg/L	129	68.0	141
		EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.625 µg/L	110	70.0	130
		EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.625 µg/L	111	70.0	130
		EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.625 µg/L	123	70.0	130
		EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.25 µg/L	107	65.0	136
		EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.25 µg/L	123	61.0	135
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 4247231)							
EM2204736-010	SX_IB_20220316_08_20_SS_Duplicate_ALS	EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.25 µg/L	105	67.0	137
		EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.625 µg/L	136	68.0	141
		EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.625 µg/L	111	70.0	130
		EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.625 µg/L	119	70.0	130
		EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.625 µg/L	91.2	70.0	130
		EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.25 µg/L	104	65.0	136
		EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.25 µg/L	108	61.0	135
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 4247220)							
EM2204736-002	SX_IB_20220316_08_20_SS_Duplicate_ALS	EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.234 µg/L	114	63.0	143
		EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.238 µg/L	93.6	64.0	140
		EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.24 µg/L	100	67.0	138
		EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.242 µg/L	103	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*
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 4247231)							
EM2204736-010	SX_IB_20220316_08_20_SS_Duplicate_ALS	EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.234 µg/L	99.4	63.0	143
		EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.238 µg/L	96.2	64.0	140
		EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.24 µg/L	98.0	67.0	138
		EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.242 µg/L	# 45.7	70.0	130

QA/QC Compliance Assessment to assist with Quality Review

Work Order	: **EM2204736**	Page	: 1 of 13
Client	: **AGON ENVIRONMENTAL PTY LTD**	Laboratory	: Environmental Division Melbourne
Contact	: CRAIG TRIMBUR	Telephone	: +6138549 9600
Project	: JC0927	Date Samples Received	: 17-Mar-2022
Site	: 20220317140530-ALS-22	Issue Date	: 25-Mar-2022
Sampler	: Emma - EP Risk + TB - Agon	No. of samples received	: 16
Order number	: ----	No. of samples analysed	: 16

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

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

Summary of Outliers

Outliers : Quality Control Samples

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

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

Outliers : Analysis Holding Time Compliance

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

Outliers : Frequency of Quality Control Samples

- **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
Duplicate (DUP) RPDs							
EG005(ED093)T: Total Metals by ICP-AES	EM2204744--006	Anonymous	**Lead**	7439-92-1	49.9 %	0% - 20%	**RPD exceeds LOR based limits**
Matrix Spike (MS) Recoveries							
EG048: Hexavalent Chromium (Alkaline Digest)	EM2204681--001	Anonymous	**Hexavalent Chromium**	18540-29-9	38.6 %	58.0-114%	**Recovery less than lower data quality objective**
EP080/071: Total Petroleum Hydrocarbons	EM2204598--059	Anonymous	**C15 - C28 Fraction**	----	Not Determined	----	**MS recovery not determined, background level greater than or equal to 4x spike level.**
EP080/071: Total Petroleum Hydrocarbons	EM2204598--059	Anonymous	**C29 - C36 Fraction**	----	Not Determined	----	**MS recovery not determined, background level greater than or equal to 4x spike level.**
EP080/071: Total Petroleum Hydrocarbons	EM2204598--059	Anonymous	**C10 - C36 Fraction (sum)**	----	Not Determined	----	**MS recovery not determined, background level greater than or equal to 4x spike level.**
EP080/071: Total Recoverable Hydrocarbons - NEPM 2	EM2204598--059	Anonymous	**>C10 - C16 Fraction**	----	68.9 %	71.5-130%	**Recovery less than lower data quality objective**
EP080/071: Total Recoverable Hydrocarbons - NEPM 2	EM2204598--059	Anonymous	**>C16 - C34 Fraction**	----	Not Determined	----	**MS recovery not determined, background level greater than or equal to 4x spike level.**
EP080/071: Total Recoverable Hydrocarbons - NEPM 2	EM2204598--059	Anonymous	**>C34 - C40 Fraction**	----	Not Determined	----	**MS recovery not determined, background level greater than or equal to 4x spike level.**
EP080/071: Total Recoverable Hydrocarbons - NEPM 2	EM2204598--059	Anonymous	**>C10 - C40 Fraction (sum)**	----	Not Determined	----	**MS recovery not determined, background level greater than or equal to 4x spike level.**

Matrix: **WATER**

Compound Group Name	Laboratory Sample ID	Client Sample ID	Analyte	CAS Number	Data	Limits	Comment
Matrix Spike (MS) Recoveries							
EP231B: Perfluoroalkyl Carboxylic Acids	EM2204736--010	SX_IB_20220316_08_20_SS_	**Perfluorotridecanoic acid (PFTrDA)**	72629-94-8	63.4 %	65.0-144%	**Recovery less than lower data quality objective**
EP231D: (n:2) Fluorotelomer Sulfonic Acids	EM2204736--010	SX_IB_20220316_08_20_SS_	**10:2 Fluorotelomer sulfonic acid (10:2 FTS)**	120226-60-0	45.7 %	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_20220316_08_17_SS_Primary_ALS, SX_IB_20220316_08_20_SS_Duplicate_ALS, SX_IB_20220316_12_25_SS_Primary_ALS, SX_IB_20220316_16_16_SS_Triplicate_ALS, SX_IB_20220316_16_22_SS_Primary_ALS, SX_IB_20220316_19_52_SS_Primary_ALS	**16-Mar-2022**	**23-Mar-2022**	23-Mar-2022	✓	**23-Mar-2022**	23-Mar-2022	✓
Soil Glass Jar - Unpreserved (EA001)							
SX_IB_20220317_00_11_SS_Primary_ALS, SX_IB_20220317_04_08_SS_Primary_ALS	**17-Mar-2022**	**23-Mar-2022**	24-Mar-2022	✓	**23-Mar-2022**	23-Mar-2022	✓
EA055: Moisture Content (Dried @ 105-110°C)							
Soil Glass Jar - Unpreserved (EA055)							
SX_IB_20220316_08_17_SS_Primary_ALS, SX_IB_20220316_08_20_SS_Duplicate_ALS, SX_IB_20220316_12_25_SS_Primary_ALS, SX_IB_20220316_16_16_SS_Triplicate_ALS, SX_IB_20220316_16_22_SS_Primary_ALS, SX_IB_20220316_19_52_SS_Primary_ALS	**16-Mar-2022**	**----**	----	----	**22-Mar-2022**	30-Mar-2022	✓
Soil Glass Jar - Unpreserved (EA055)							
SX_IB_20220317_00_11_SS_Primary_ALS, SX_IB_20220317_04_08_SS_Primary_ALS	**17-Mar-2022**	**----**	----	----	**22-Mar-2022**	31-Mar-2022	✓
EG005(ED093)T: Total Metals by ICP-AES							
Soil Glass Jar - Unpreserved (EG005T)							
SX_IB_20220316_08_17_SS_Primary_ALS, SX_IB_20220316_08_20_SS_Duplicate_ALS, SX_IB_20220316_12_25_SS_Primary_ALS, SX_IB_20220316_16_16_SS_Triplicate_ALS, SX_IB_20220316_16_22_SS_Primary_ALS, SX_IB_20220316_19_52_SS_Primary_ALS	**16-Mar-2022**	**23-Mar-2022**	12-Sep-2022	✓	**23-Mar-2022**	12-Sep-2022	✓
Soil Glass Jar - Unpreserved (EG005T)							
SX_IB_20220317_00_11_SS_Primary_ALS, SX_IB_20220317_04_08_SS_Primary_ALS	**17-Mar-2022**	**23-Mar-2022**	13-Sep-2022	✓	**23-Mar-2022**	13-Sep-2022	✓
EG035T: Total Recoverable Mercury by FIMS							
Soil Glass Jar - Unpreserved (EG035T)							
SX_IB_20220316_08_17_SS_Primary_ALS, SX_IB_20220316_08_20_SS_Duplicate_ALS, SX_IB_20220316_12_25_SS_Primary_ALS, SX_IB_20220316_16_16_SS_Triplicate_ALS, SX_IB_20220316_16_22_SS_Primary_ALS, SX_IB_20220316_19_52_SS_Primary_ALS	**16-Mar-2022**	**23-Mar-2022**	13-Apr-2022	✓	**23-Mar-2022**	13-Apr-2022	✓
Soil Glass Jar - Unpreserved (EG035T)							
SX_IB_20220317_00_11_SS_Primary_ALS, SX_IB_20220317_04_08_SS_Primary_ALS	**17-Mar-2022**	**23-Mar-2022**	14-Apr-2022	✓	**23-Mar-2022**	14-Apr-2022	✓

Matrix: **SOIL**

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

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EG048: Hexavalent Chromium (Alkaline Digest)							
Soil Glass Jar - Unpreserved (EG048G)							
SX_IB_20220316_08_17_SS_Primary_ALS, SX_IB_20220316_08_20_SS_Duplicate_ALS, SX_IB_20220316_12_25_SS_Primary_ALS, SX_IB_20220316_16_16_SS_Triplicate_ALS, SX_IB_20220316_16_22_SS_Primary_ALS, SX_IB_20220316_19_52_SS_Primary_ALS	**16-Mar-2022**	**22-Mar-2022**	13-Apr-2022	✓	**23-Mar-2022**	29-Mar-2022	✓
Soil Glass Jar - Unpreserved (EG048G)							
SX_IB_20220317_00_11_SS_Primary_ALS, SX_IB_20220317_04_08_SS_Primary_ALS	**17-Mar-2022**	**22-Mar-2022**	14-Apr-2022	✓	**23-Mar-2022**	29-Mar-2022	✓
EK026SF: Total CN by Segmented Flow Analyser							
Soil Glass Jar - Unpreserved (EK026SF)							
SX_IB_20220316_08_17_SS_Primary_ALS, SX_IB_20220316_08_20_SS_Duplicate_ALS, SX_IB_20220316_12_25_SS_Primary_ALS, SX_IB_20220316_16_16_SS_Triplicate_ALS, SX_IB_20220316_16_22_SS_Primary_ALS, SX_IB_20220316_19_52_SS_Primary_ALS	**16-Mar-2022**	**22-Mar-2022**	30-Mar-2022	✓	**23-Mar-2022**	05-Apr-2022	✓
Soil Glass Jar - Unpreserved (EK026SF)							
SX_IB_20220317_00_11_SS_Primary_ALS, SX_IB_20220317_04_08_SS_Primary_ALS	**17-Mar-2022**	**22-Mar-2022**	31-Mar-2022	✓	**23-Mar-2022**	05-Apr-2022	✓
EK040T: Fluoride Total							
Soil Glass Jar - Unpreserved (EK040T)							
SX_IB_20220316_08_17_SS_Primary_ALS, SX_IB_20220316_08_20_SS_Duplicate_ALS, SX_IB_20220316_12_25_SS_Primary_ALS, SX_IB_20220316_16_16_SS_Triplicate_ALS, SX_IB_20220316_16_22_SS_Primary_ALS, SX_IB_20220316_19_52_SS_Primary_ALS	**16-Mar-2022**	**22-Mar-2022**	13-Apr-2022	✓	**24-Mar-2022**	13-Apr-2022	✓
Soil Glass Jar - Unpreserved (EK040T)							
SX_IB_20220317_00_11_SS_Primary_ALS, SX_IB_20220317_04_08_SS_Primary_ALS	**17-Mar-2022**	**22-Mar-2022**	14-Apr-2022	✓	**24-Mar-2022**	14-Apr-2022	✓
EN60: ASLP Leaching Procedure - Inorganics/PFAS (Plastic Vessel)							
Non-Volatile Leach: 180 day HT (e.g. PFAS, metals ex.Hg) (EN60a-P)							
SX_IB_20220316_08_17_SS_Primary_ALS, SX_IB_20220316_08_20_SS_Duplicate_ALS, SX_IB_20220316_12_25_SS_Primary_ALS, SX_IB_20220316_16_16_SS_Triplicate_ALS, SX_IB_20220316_16_22_SS_Primary_ALS, SX_IB_20220316_19_52_SS_Primary_ALS	**16-Mar-2022**	**22-Mar-2022**	12-Sep-2022	✓	**----**	----	----
Non-Volatile Leach: 180 day HT (e.g. PFAS, metals ex.Hg) (EN60a-P)							
SX_IB_20220317_00_11_SS_Primary_ALS, SX_IB_20220317_04_08_SS_Primary_ALS	**17-Mar-2022**	**22-Mar-2022**	13-Sep-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_20220316_08_17_SS_Primary_ALS, SX_IB_20220316_08_20_SS_Duplicate_ALS, SX_IB_20220316_12_25_SS_Primary_ALS, SX_IB_20220316_16_16_SS_Triplicate_ALS, SX_IB_20220316_16_22_SS_Primary_ALS, SX_IB_20220316_19_52_SS_Primary_ALS	**16-Mar-2022**	**22-Mar-2022**	12-Sep-2022	✓	**----**	----	----
Non-Volatile Leach: 180 day HT (e.g. PFAS, metals ex.Hg) (EN60-DIa-P)							
SX_IB_20220317_00_11_SS_Primary_ALS, SX_IB_20220317_04_08_SS_Primary_ALS	**17-Mar-2022**	**22-Mar-2022**	13-Sep-2022	✓	**----**	----	----
EP066: Polychlorinated Biphenyls (PCB)							
Soil Glass Jar - Unpreserved (EP066-EM)							
SX_IB_20220316_08_17_SS_Primary_ALS, SX_IB_20220316_08_20_SS_Duplicate_ALS, SX_IB_20220316_12_25_SS_Primary_ALS, SX_IB_20220316_16_16_SS_Triplicate_ALS, SX_IB_20220316_16_22_SS_Primary_ALS, SX_IB_20220316_19_52_SS_Primary_ALS	**16-Mar-2022**	**22-Mar-2022**	30-Mar-2022	✓	**22-Mar-2022**	01-May-2022	✓
Soil Glass Jar - Unpreserved (EP066-EM)							
SX_IB_20220317_00_11_SS_Primary_ALS, SX_IB_20220317_04_08_SS_Primary_ALS	**17-Mar-2022**	**22-Mar-2022**	31-Mar-2022	✓	**22-Mar-2022**	01-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
EP074A: Monocyclic Aromatic Hydrocarbons							
Soil Glass Jar - Unpreserved (EP074-UT)							
SX_IB_20220316_08_17_SS_Primary_ALS, SX_IB_20220316_08_20_SS_Duplicate_ALS, SX_IB_20220316_12_25_SS_Primary_ALS, SX_IB_20220316_16_16_SS_Triplicate_ALS, SX_IB_20220316_16_22_SS_Primary_ALS, SX_IB_20220316_19_52_SS_Primary_ALS	**16-Mar-2022**	**18-Mar-2022**	23-Mar-2022	✓	**19-Mar-2022**	23-Mar-2022	✓
Soil Glass Jar - Unpreserved (EP074-UT)							
SX_IB_20220317_00_11_SS_Primary_ALS, SX_IB_20220317_04_08_SS_Primary_ALS	**17-Mar-2022**	**18-Mar-2022**	24-Mar-2022	✓	**19-Mar-2022**	24-Mar-2022	✓
EP074H: Naphthalene							
Soil Glass Jar - Unpreserved (EP074-UT)							
SX_IB_20220316_08_17_SS_Primary_ALS, SX_IB_20220316_08_20_SS_Duplicate_ALS, SX_IB_20220316_12_25_SS_Primary_ALS, SX_IB_20220316_16_16_SS_Triplicate_ALS, SX_IB_20220316_16_22_SS_Primary_ALS, SX_IB_20220316_19_52_SS_Primary_ALS	**16-Mar-2022**	**18-Mar-2022**	23-Mar-2022	✓	**19-Mar-2022**	23-Mar-2022	✓
Soil Glass Jar - Unpreserved (EP074-UT)							
SX_IB_20220317_00_11_SS_Primary_ALS, SX_IB_20220317_04_08_SS_Primary_ALS	**17-Mar-2022**	**18-Mar-2022**	24-Mar-2022	✓	**19-Mar-2022**	24-Mar-2022	✓
EP074I: Volatile Halogenated Compounds							
Soil Glass Jar - Unpreserved (EP074-UT)							
SX_IB_20220316_08_17_SS_Primary_ALS, SX_IB_20220316_08_20_SS_Duplicate_ALS, SX_IB_20220316_12_25_SS_Primary_ALS, SX_IB_20220316_16_16_SS_Triplicate_ALS, SX_IB_20220316_16_22_SS_Primary_ALS, SX_IB_20220316_19_52_SS_Primary_ALS	**16-Mar-2022**	**18-Mar-2022**	23-Mar-2022	✓	**19-Mar-2022**	23-Mar-2022	✓
Soil Glass Jar - Unpreserved (EP074-UT)							
SX_IB_20220317_00_11_SS_Primary_ALS, SX_IB_20220317_04_08_SS_Primary_ALS	**17-Mar-2022**	**18-Mar-2022**	24-Mar-2022	✓	**19-Mar-2022**	24-Mar-2022	✓
EP075A: Phenolic Compounds (Halogenated)							
Soil Glass Jar - Unpreserved (EP075-EM)							
SX_IB_20220316_08_17_SS_Primary_ALS, SX_IB_20220316_08_20_SS_Duplicate_ALS, SX_IB_20220316_12_25_SS_Primary_ALS, SX_IB_20220316_16_16_SS_Triplicate_ALS, SX_IB_20220316_16_22_SS_Primary_ALS, SX_IB_20220316_19_52_SS_Primary_ALS	**16-Mar-2022**	**22-Mar-2022**	30-Mar-2022	✓	**22-Mar-2022**	01-May-2022	✓
Soil Glass Jar - Unpreserved (EP075-EM)							
SX_IB_20220317_00_11_SS_Primary_ALS, SX_IB_20220317_04_08_SS_Primary_ALS	**17-Mar-2022**	**22-Mar-2022**	31-Mar-2022	✓	**22-Mar-2022**	01-May-2022	✓
EP075A: Phenolic Compounds (Non-halogenated)							
Soil Glass Jar - Unpreserved (EP075-EM)							
SX_IB_20220316_08_17_SS_Primary_ALS, SX_IB_20220316_08_20_SS_Duplicate_ALS, SX_IB_20220316_12_25_SS_Primary_ALS, SX_IB_20220316_16_16_SS_Triplicate_ALS, SX_IB_20220316_16_22_SS_Primary_ALS, SX_IB_20220316_19_52_SS_Primary_ALS	**16-Mar-2022**	**22-Mar-2022**	30-Mar-2022	✓	**22-Mar-2022**	01-May-2022	✓
Soil Glass Jar - Unpreserved (EP075-EM)							
SX_IB_20220317_00_11_SS_Primary_ALS, SX_IB_20220317_04_08_SS_Primary_ALS	**17-Mar-2022**	**22-Mar-2022**	31-Mar-2022	✓	**22-Mar-2022**	01-May-2022	✓
EP075B: Polynuclear Aromatic Hydrocarbons							
Soil Glass Jar - Unpreserved (EP075-EM)							
SX_IB_20220316_08_17_SS_Primary_ALS, SX_IB_20220316_08_20_SS_Duplicate_ALS, SX_IB_20220316_12_25_SS_Primary_ALS, SX_IB_20220316_16_16_SS_Triplicate_ALS, SX_IB_20220316_16_22_SS_Primary_ALS, SX_IB_20220316_19_52_SS_Primary_ALS	**16-Mar-2022**	**22-Mar-2022**	30-Mar-2022	✓	**22-Mar-2022**	01-May-2022	✓
Soil Glass Jar - Unpreserved (EP075-EM)							
SX_IB_20220317_00_11_SS_Primary_ALS, SX_IB_20220317_04_08_SS_Primary_ALS	**17-Mar-2022**	**22-Mar-2022**	31-Mar-2022	✓	**22-Mar-2022**	01-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
EP075l: Organochlorine Pesticides							
Soil Glass Jar - Unpreserved (EP075-EM)							
SX_IB_20220316_08_17_SS_Primary_ALS, SX_IB_20220316_08_20_SS_Duplicate_ALS, SX_IB_20220316_12_25_SS_Primary_ALS, SX_IB_20220316_16_16_SS_Triplicate_ALS, SX_IB_20220316_16_22_SS_Primary_ALS, SX_IB_20220316_19_52_SS_Primary_ALS	**16-Mar-2022**	**22-Mar-2022**	30-Mar-2022	✓	**22-Mar-2022**	01-May-2022	✓
Soil Glass Jar - Unpreserved (EP075-EM)							
SX_IB_20220317_00_11_SS_Primary_ALS, SX_IB_20220317_04_08_SS_Primary_ALS	**17-Mar-2022**	**22-Mar-2022**	31-Mar-2022	✓	**22-Mar-2022**	01-May-2022	✓
EP080/071: Total Petroleum Hydrocarbons							
Soil Glass Jar - Unpreserved (EP074-UT)							
SX_IB_20220316_08_17_SS_Primary_ALS, SX_IB_20220316_08_20_SS_Duplicate_ALS, SX_IB_20220316_12_25_SS_Primary_ALS, SX_IB_20220316_16_16_SS_Triplicate_ALS, SX_IB_20220316_16_22_SS_Primary_ALS, SX_IB_20220316_19_52_SS_Primary_ALS	**16-Mar-2022**	**18-Mar-2022**	23-Mar-2022	✓	**19-Mar-2022**	23-Mar-2022	✓
Soil Glass Jar - Unpreserved (EP071-EM)							
SX_IB_20220316_08_17_SS_Primary_ALS, SX_IB_20220316_08_20_SS_Duplicate_ALS, SX_IB_20220316_12_25_SS_Primary_ALS, SX_IB_20220316_16_16_SS_Triplicate_ALS, SX_IB_20220316_16_22_SS_Primary_ALS, SX_IB_20220316_19_52_SS_Primary_ALS	**16-Mar-2022**	**22-Mar-2022**	30-Mar-2022	✓	**22-Mar-2022**	01-May-2022	✓
Soil Glass Jar - Unpreserved (EP074-UT)							
SX_IB_20220317_00_11_SS_Primary_ALS, SX_IB_20220317_04_08_SS_Primary_ALS	**17-Mar-2022**	**18-Mar-2022**	24-Mar-2022	✓	**19-Mar-2022**	24-Mar-2022	✓
Soil Glass Jar - Unpreserved (EP071-EM)							
SX_IB_20220317_00_11_SS_Primary_ALS, SX_IB_20220317_04_08_SS_Primary_ALS	**17-Mar-2022**	**22-Mar-2022**	31-Mar-2022	✓	**22-Mar-2022**	01-May-2022	✓
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions							
Soil Glass Jar - Unpreserved (EP074-UT)							
SX_IB_20220316_08_17_SS_Primary_ALS, SX_IB_20220316_08_20_SS_Duplicate_ALS, SX_IB_20220316_12_25_SS_Primary_ALS, SX_IB_20220316_16_16_SS_Triplicate_ALS, SX_IB_20220316_16_22_SS_Primary_ALS, SX_IB_20220316_19_52_SS_Primary_ALS	**16-Mar-2022**	**18-Mar-2022**	23-Mar-2022	✓	**19-Mar-2022**	23-Mar-2022	✓
Soil Glass Jar - Unpreserved (EP071-EM)							
SX_IB_20220316_08_17_SS_Primary_ALS, SX_IB_20220316_08_20_SS_Duplicate_ALS, SX_IB_20220316_12_25_SS_Primary_ALS, SX_IB_20220316_16_16_SS_Triplicate_ALS, SX_IB_20220316_16_22_SS_Primary_ALS, SX_IB_20220316_19_52_SS_Primary_ALS	**16-Mar-2022**	**22-Mar-2022**	30-Mar-2022	✓	**22-Mar-2022**	01-May-2022	✓
Soil Glass Jar - Unpreserved (EP074-UT)							
SX_IB_20220317_00_11_SS_Primary_ALS, SX_IB_20220317_04_08_SS_Primary_ALS	**17-Mar-2022**	**18-Mar-2022**	24-Mar-2022	✓	**19-Mar-2022**	24-Mar-2022	✓
Soil Glass Jar - Unpreserved (EP071-EM)							
SX_IB_20220317_00_11_SS_Primary_ALS, SX_IB_20220317_04_08_SS_Primary_ALS	**17-Mar-2022**	**22-Mar-2022**	31-Mar-2022	✓	**22-Mar-2022**	01-May-2022	✓
EP231A: Perfluoroalkyl Sulfonic Acids							
HDPE Soil Jar (EP231X)							
SX_IB_20220316_08_17_SS_Primary_ALS, SX_IB_20220316_08_20_SS_Duplicate_ALS, SX_IB_20220316_12_25_SS_Primary_ALS, SX_IB_20220316_16_16_SS_Triplicate_ALS, SX_IB_20220316_16_22_SS_Primary_ALS, SX_IB_20220316_19_52_SS_Primary_ALS	**16-Mar-2022**	**21-Mar-2022**	12-Sep-2022	✓	**21-Mar-2022**	30-Apr-2022	✓
HDPE Soil Jar (EP231X)							
SX_IB_20220317_00_11_SS_Primary_ALS, SX_IB_20220317_04_08_SS_Primary_ALS	**17-Mar-2022**	**21-Mar-2022**	13-Sep-2022	✓	**21-Mar-2022**	30-Apr-2022	✓

Matrix: **SOIL**

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

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP231B: Perfluoroalkyl Carboxylic Acids							
HDPE Soil Jar (EP231X)							
SX_IB_20220316_08_17_SS_Primary_ALS, SX_IB_20220316_08_20_SS_Duplicate_ALS, SX_IB_20220316_12_25_SS_Primary_ALS, SX_IB_20220316_16_16_SS_Triplicate_ALS, SX_IB_20220316_16_22_SS_Primary_ALS, SX_IB_20220316_19_52_SS_Primary_ALS	**16-Mar-2022**	**21-Mar-2022**	12-Sep-2022	✓	**21-Mar-2022**	30-Apr-2022	✓
HDPE Soil Jar (EP231X)							
SX_IB_20220317_00_11_SS_Primary_ALS, SX_IB_20220317_04_08_SS_Primary_ALS	**17-Mar-2022**	**21-Mar-2022**	13-Sep-2022	✓	**21-Mar-2022**	30-Apr-2022	✓
EP231C: Perfluoroalkyl Sulfonamides							
HDPE Soil Jar (EP231X)							
SX_IB_20220316_08_17_SS_Primary_ALS, SX_IB_20220316_08_20_SS_Duplicate_ALS, SX_IB_20220316_12_25_SS_Primary_ALS, SX_IB_20220316_16_16_SS_Triplicate_ALS, SX_IB_20220316_16_22_SS_Primary_ALS, SX_IB_20220316_19_52_SS_Primary_ALS	**16-Mar-2022**	**21-Mar-2022**	12-Sep-2022	✓	**21-Mar-2022**	30-Apr-2022	✓
HDPE Soil Jar (EP231X)							
SX_IB_20220317_00_11_SS_Primary_ALS, SX_IB_20220317_04_08_SS_Primary_ALS	**17-Mar-2022**	**21-Mar-2022**	13-Sep-2022	✓	**21-Mar-2022**	30-Apr-2022	✓
EP231D: (n:2) Fluorotelomer Sulfonic Acids							
HDPE Soil Jar (EP231X)							
SX_IB_20220316_08_17_SS_Primary_ALS, SX_IB_20220316_08_20_SS_Duplicate_ALS, SX_IB_20220316_12_25_SS_Primary_ALS, SX_IB_20220316_16_16_SS_Triplicate_ALS, SX_IB_20220316_16_22_SS_Primary_ALS, SX_IB_20220316_19_52_SS_Primary_ALS	**16-Mar-2022**	**21-Mar-2022**	12-Sep-2022	✓	**21-Mar-2022**	30-Apr-2022	✓
HDPE Soil Jar (EP231X)							
SX_IB_20220317_00_11_SS_Primary_ALS, SX_IB_20220317_04_08_SS_Primary_ALS	**17-Mar-2022**	**21-Mar-2022**	13-Sep-2022	✓	**21-Mar-2022**	30-Apr-2022	✓
EP231P: PFAS Sums							
HDPE Soil Jar (EP231X)							
SX_IB_20220316_08_17_SS_Primary_ALS, SX_IB_20220316_08_20_SS_Duplicate_ALS, SX_IB_20220316_12_25_SS_Primary_ALS, SX_IB_20220316_16_16_SS_Triplicate_ALS, SX_IB_20220316_16_22_SS_Primary_ALS, SX_IB_20220316_19_52_SS_Primary_ALS	**16-Mar-2022**	**21-Mar-2022**	12-Sep-2022	✓	**21-Mar-2022**	30-Apr-2022	✓
HDPE Soil Jar (EP231X)							
SX_IB_20220317_00_11_SS_Primary_ALS, SX_IB_20220317_04_08_SS_Primary_ALS	**17-Mar-2022**	**21-Mar-2022**	13-Sep-2022	✓	**21-Mar-2022**	30-Apr-2022	✓

Matrix: **WATER**

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

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP231A: Perfluoroalkyl Sulfonic Acids							
HDPE (no PTFE) (EP231X)							
SX_IB_20220316_08_17_SS_Primary_ALS, SX_IB_20220316_08_20_SS_Duplicate_ALS, SX_IB_20220316_12_25_SS_Primary_ALS, SX_IB_20220316_16_16_SS_Triplicate_ALS, SX_IB_20220316_16_22_SS_Primary_ALS, SX_IB_20220316_19_52_SS_Primary_ALS, SX_IB_20220317_00_11_SS_Primary_ALS, SX_IB_20220317_04_08_SS_Primary_ALS, SX_IB_20220316_08_17_SS_Primary_ALS, SX_IB_20220316_08_20_SS_Duplicate_ALS, SX_IB_20220316_12_25_SS_Primary_ALS, SX_IB_20220316_16_16_SS_Triplicate_ALS, SX_IB_20220316_16_22_SS_Primary_ALS, SX_IB_20220316_19_52_SS_Primary_ALS, SX_IB_20220317_00_11_SS_Primary_ALS, SX_IB_20220317_04_08_SS_Primary_ALS	**22-Mar-2022**	**25-Mar-2022**	18-Sep-2022	✓	**25-Mar-2022**	18-Sep-2022	✓

Matrix: **WATER**

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

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP231B: Perfluoroalkyl Carboxylic Acids							
HDPE (no PTFE) (EP231X)							
SX_IB_20220316_08_17_SS_Primary_ALS, SX_IB_20220316_08_20_SS_Duplicate_ALS, SX_IB_20220316_12_25_SS_Primary_ALS, SX_IB_20220316_16_16_SS_Triplicate_ALS, SX_IB_20220316_16_22_SS_Primary_ALS, SX_IB_20220316_19_52_SS_Primary_ALS, SX_IB_20220317_00_11_SS_Primary_ALS, SX_IB_20220317_04_08_SS_Primary_ALS, SX_IB_20220316_08_17_SS_Primary_ALS, SX_IB_20220316_08_20_SS_Duplicate_ALS, SX_IB_20220316_12_25_SS_Primary_ALS, SX_IB_20220316_16_16_SS_Triplicate_ALS, SX_IB_20220316_16_22_SS_Primary_ALS, SX_IB_20220316_19_52_SS_Primary_ALS, SX_IB_20220317_00_11_SS_Primary_ALS, SX_IB_20220317_04_08_SS_Primary_ALS	**22-Mar-2022**	**25-Mar-2022**	18-Sep-2022	✓	**25-Mar-2022**	18-Sep-2022	✓
EP231C: Perfluoroalkyl Sulfonamides							
HDPE (no PTFE) (EP231X)							
SX_IB_20220316_08_17_SS_Primary_ALS, SX_IB_20220316_08_20_SS_Duplicate_ALS, SX_IB_20220316_12_25_SS_Primary_ALS, SX_IB_20220316_16_16_SS_Triplicate_ALS, SX_IB_20220316_16_22_SS_Primary_ALS, SX_IB_20220316_19_52_SS_Primary_ALS, SX_IB_20220317_00_11_SS_Primary_ALS, SX_IB_20220317_04_08_SS_Primary_ALS, SX_IB_20220316_08_17_SS_Primary_ALS, SX_IB_20220316_08_20_SS_Duplicate_ALS, SX_IB_20220316_12_25_SS_Primary_ALS, SX_IB_20220316_16_16_SS_Triplicate_ALS, SX_IB_20220316_16_22_SS_Primary_ALS, SX_IB_20220316_19_52_SS_Primary_ALS, SX_IB_20220317_00_11_SS_Primary_ALS, SX_IB_20220317_04_08_SS_Primary_ALS	**22-Mar-2022**	**25-Mar-2022**	18-Sep-2022	✓	**25-Mar-2022**	18-Sep-2022	✓
EP231D: (n:2) Fluorotelomer Sulfonic Acids							
HDPE (no PTFE) (EP231X)							
SX_IB_20220316_08_17_SS_Primary_ALS, SX_IB_20220316_08_20_SS_Duplicate_ALS, SX_IB_20220316_12_25_SS_Primary_ALS, SX_IB_20220316_16_16_SS_Triplicate_ALS, SX_IB_20220316_16_22_SS_Primary_ALS, SX_IB_20220316_19_52_SS_Primary_ALS, SX_IB_20220317_00_11_SS_Primary_ALS, SX_IB_20220317_04_08_SS_Primary_ALS, SX_IB_20220316_08_17_SS_Primary_ALS, SX_IB_20220316_08_20_SS_Duplicate_ALS, SX_IB_20220316_12_25_SS_Primary_ALS, SX_IB_20220316_16_16_SS_Triplicate_ALS, SX_IB_20220316_16_22_SS_Primary_ALS, SX_IB_20220316_19_52_SS_Primary_ALS, SX_IB_20220317_00_11_SS_Primary_ALS, SX_IB_20220317_04_08_SS_Primary_ALS	**22-Mar-2022**	**25-Mar-2022**	18-Sep-2022	✓	**25-Mar-2022**	18-Sep-2022	✓
EP231P: PFAS Sums							
HDPE (no PTFE) (EP231X)							
SX_IB_20220316_08_17_SS_Primary_ALS, SX_IB_20220316_08_20_SS_Duplicate_ALS, SX_IB_20220316_12_25_SS_Primary_ALS, SX_IB_20220316_16_16_SS_Triplicate_ALS, SX_IB_20220316_16_22_SS_Primary_ALS, SX_IB_20220316_19_52_SS_Primary_ALS, SX_IB_20220317_00_11_SS_Primary_ALS, SX_IB_20220317_04_08_SS_Primary_ALS, SX_IB_20220316_08_17_SS_Primary_ALS, SX_IB_20220316_08_20_SS_Duplicate_ALS, SX_IB_20220316_12_25_SS_Primary_ALS, SX_IB_20220316_16_16_SS_Triplicate_ALS, SX_IB_20220316_16_22_SS_Primary_ALS, SX_IB_20220316_19_52_SS_Primary_ALS, SX_IB_20220317_00_11_SS_Primary_ALS, SX_IB_20220317_04_08_SS_Primary_ALS	**22-Mar-2022**	**25-Mar-2022**	18-Sep-2022	✓	**25-Mar-2022**	18-Sep-2022	✓

Quality Control Parameter Frequency Compliance

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

Matrix: **SOIL**

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

Quality Control Sample Type		Count		Rate (%)			Quality Control Specification
Analytical Methods	*Method*	*QC*	*Regular*	***Actual***	***Expected***	*Evaluation*	
Laboratory Duplicates (DUP)							
Hexavalent Chromium by Alkaline Digestion and DA Finish	EG048G	2	20	**10.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Moisture Content	EA055	1	8	**12.50**	**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	32	**12.50**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Fluoride	EK040T	2	20	**10.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	4	40	**10.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	5	40	**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	1	8	**12.50**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Laboratory Control Samples (LCS)							
Hexavalent Chromium by Alkaline Digestion and DA Finish	EG048G	2	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	32	**6.25**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Fluoride	EK040T	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	2	40	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	2	40	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071-EM	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Volatile Organic Compounds - Ultra-trace	EP074-UT	1	8	**12.50**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Method Blanks (MB)							
Deionised Water Leach - Plastic Leaching Vessel	EN60-Dla-P	1	8	**12.50**	**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	32	**6.25**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Fluoride	EK040T	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	2	40	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	2	40	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071-EM	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Volatile Organic Compounds - Ultra-trace	EP074-UT	1	8	**12.50**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard

Matrix: **SOIL**

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

Quality Control Sample Type		Count		Rate (%)			Quality Control Specification
Analytical Methods	*Method*	*QC*	*Regular*	***Actual***	***Expected***	*Evaluation*	
Matrix Spikes (MS)							
Hexavalent Chromium by Alkaline Digestion and DA Finish	EG048G	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	32	**6.25**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Fluoride	EK040T	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	2	40	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	2	40	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071-EM	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Volatile Organic Compounds - Ultra-trace	EP074-UT	1	8	**12.50**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard

Matrix: **WATER**

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

Quality Control Sample Type		Count		Rate (%)			Quality Control Specification
Analytical Methods	*Method*	*QC*	*Regular*	***Actual***	***Expected***	*Evaluation*	
Laboratory Duplicates (DUP)							
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	2	16	**12.50**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Laboratory Control Samples (LCS)							
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	2	16	**12.50**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Method Blanks (MB)							
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	2	16	**12.50**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Matrix Spikes (MS)							
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	2	16	**12.50**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard

Brief Method Summaries

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

Analytical Methods	Method	Matrix	Method Descriptions
pH in soil using a 0.01M CaCl2 extract	EA001	SOIL	In house: Referenced to Rayment and Lyons 4B3 (mod.) or 4B4 (mod.) 10 g of soil is mixed with 50 mL of 0.01M CaCl2 and tumbled end over end for 1 hour. pH is measured from the continuous suspension. This method is compliant with NEPM Schedule B(3).
Moisture Content	EA055	SOIL	In house: A gravimetric procedure based on weight loss over a 12 hour drying period at 105-110 degrees C. This method is compliant with NEPM Schedule B(3).
Total Metals by ICP-AES	EG005T	SOIL	In house: Referenced to APHA 3120; USEPA SW 846 - 6010. Metals are determined following an appropriate acid digestion of the soil. The ICPAES technique ionises samples in a plasma, emitting a characteristic spectrum based on metals present. Intensities at selected wavelengths are compared against those of matrix matched standards. This method is compliant with NEPM Schedule B(3)
Total Mercury by FIMS	EG035T	SOIL	In house: Referenced to APHA 3112 Hg - B (Flow-injection (SnCl2) (Cold Vapour generation) AAS) FIM-AAS is an automated flameless atomic absorption technique. Mercury in solids are determined following an appropriate acid digestion. Ionic mercury is reduced online to atomic mercury vapour by SnCl2 which is then purged into a heated quartz cell. Quantification is by comparing absorbance against a calibration curve. This method is compliant with NEPM Schedule B(3)
Hexavalent Chromium by Alkaline Digestion and DA Finish	EG048G	SOIL	In house: Referenced to USEPA SW846, Method 3060. Hexavalent chromium is extracted by alkaline digestion. The digest is determined by photometrically by automatic discrete analyser, following pH adjustment. The instrument uses colour development using dephenylcarbazide. Each run of samples is measured against a five-point calibration curve. This method is compliant with NEPM Schedule B(3)
Total Cyanide by Segmented Flow Analyser	EK026SF	SOIL	In house: Referenced to APHA 4500-CN C / ASTM D7511 / ISO 14403. Caustic leachates of soil samples are introduced into an automated segmented flow analyser. Complex bound cyanide is decomposed in a continuously flowing stream, at a pH of 3.8, by the effect of UV light. A UV-B lamp (312 nm) and a decomposition spiral of borosilicate glass are used to filter out UV light with a wavelength of less than 290 nm thus preventing the conversion of thiocyanate into cyanide. The hydrogen cyanide present at a pH of 3.8 is separated by gas dialysis. The hydrogen cyanide is then determined photometrically, based on the reaction of cyanide with chloramine-T to form cyanogen chloride. This then reacts with 4-pyridine carboxylic acid and 1,3-dimethylbarbituric acid to give a red colour which is measured at 600 nm. This method is compliant with NEPM Schedule B(3).
Total Fluoride	EK040T	SOIL	(In-house) Total fluoride is determined by ion specific electrode (ISE) in a solution obtained after a Sodium Carbonate / Potassium Carbonate fusion dissolution.
PCB - VIC EPA 448.3 Screen	EP066-EM	SOIL	In house: Referenced to USEPA SW 846 - 8270 Extracts are analysed by Capillary GC/MS and quantification is by comparison against an established 5 point calibration curve. This method is compliant with NEPM Schedule B(3).
TRH - Semivolatile Fraction	EP071-EM	SOIL	In house: Referenced to USEPA SW 846 - 8015A Sample extracts are analysed by Capillary GC/FID and quantified against alkane standards over the range C10 - C40.
Volatile Organic Compounds - Ultra-trace	EP074-UT	SOIL	In house: Referenced to USEPA SW 846 - 8260 Extracts are analysed by Purge and Trap, Capillary GC/MS in partial SIM/Scan mode. Quantification is by comparison against an established multi-point calibration curves. This method is compliant with NEPM Schedule B(3).

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

Preparation Methods	Method	Matrix	Method Descriptions
NaOH leach for CN in Soils	CN-PR	SOIL	In house: APHA 4500 CN. Samples are extracted by end-over-end tumbling with NaOH.
pH in soil using a 0.01M CaCl2 extract	EA001-PR	SOIL	In house: Referenced to Rayment and Lyons 4B1, 10 g of soil is mixed with 50 mL of 0.01M CaCl2 and tumbled end over end for 1 hour. pH is measured from the continuous suspension. This method is compliant with NEPM Schedule B(3).
Alkaline digestion for Hexavalent Chromium	EG048PR	SOIL	In house: Referenced to USEPA SW846, Method 3060A.
Total Fluoride	EK040T-PR	SOIL	In house: Samples are fused with Sodium Carbonate / Potassium Carbonate flux.
ASLP for Non & Semivolatile Analytes - Plastic Leaching Vessel	EN60a-P	SOIL	In house QWI-EN/60 referenced to AS4439.3 Preparation of Leachates.
Deionised Water Leach - Plastic Leaching Vessel	EN60-DIa-P	SOIL	In house QWI-EN/60 referenced to AS4439.3 Preparation of Leachates
Hot Block Digest for metals in soils sediments and sludges	EN69	SOIL	In house: Referenced to USEPA 200.2. Hot Block Acid Digestion 1.0g of sample is heated with Nitric and Hydrochloric acids, then cooled. Peroxide is added and samples heated and cooled again before being filtered and bulked to volume for analysis. Digest is appropriate for determination of selected metals in sludge, sediments, and soils. This method is compliant with NEPM Schedule B(3).
Methanolic Extraction of Soils - Ultra-trace.	ORG16-UT	SOIL	In house: Referenced to USEPA SW 846 - 5030A. 5g of solid is shaken with surrogate and 10mL methanol prior to analysis by Purge and Trap - GC/MS.
Tumbler Extraction of Solids - VIC EPA Screen	ORG17-EM	SOIL	In house: Mechanical agitation (tumbler). 10g of sample, Na2SO4 and surrogate are extracted with 30mL 1:1 DCM/Acetone by end over end tumble. The solvent is decanted, dehydrated and concentrated (by KD) to the desired volume for analysis.
QuECheRS Extraction of Solids	ORG71	SOIL	In house: Sequential extractions with Acetonitrile/Methanol by shaking. Extraction efficiency aided by the addition of salts under acidic conditions. Where relevant, interferences from co-extracted organics are removed with dispersive clean-up media (dSPE). The extract is either diluted or concentrated and exchanged into the analytical solvent.

Preparation Methods	Method	Matrix	Method Descriptions
Solid Phase Extraction (SPE) for PFAS in water	ORG72	SOIL	In-house: Isotopically labelled analogues of target analytes used as internal standards and surrogates are added to the sample container. The entire contents are transferred to a solid phase extraction (SPE) cartridge. The sample container is successively rinsed with aliquots of the elution solvent. The eluted extract is combined with an equal volume of reagent water and a portion is filtered for analysis. Method procedures conform to US DoD QSM 5.3, table B-15 requirements.

ALS Melbourne: 4 Westall Rd, Springvale, VIC 3171 Phone (03) 8549 9600; Facsimile (03) 8549 9601. Email Samples.Melbourne@alsenviro.com

CHAIN OF CUSTODY DOCUMENTATION

Australian Laboratory Services Pty Ltd

CLIENT: Agon Environmental
ADDRESS / OFFICE: Melbourne
PROJECT MANAGER (PM): Craig Trimbur
PROJECT ID: JC0927
SITE: 20220318042901-ALS-12 P.O. NO.:
RESULTS REQUIRED (Date): 5 days QUOTE NO.: ME-150-19 WGTP

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

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

FOR LABORATORY USE ONLY
SAMPLE TEMPERATURE
CHILLED: Yes No

COMMENTS / SPECIAL HANDLING / STORAGE OR DISPOSAL:

	SAMPLE INFORMATION (note: S = Soil, W=Water)				CONTAINER INFORMATION		Spoil Sample Prep	P16 plus Cr	PFAS 28 Extended suite	ASLP PFAS - Extended Suite (Lab to determine pH)	DI Leachate PFAS - Extended Suite									Notes
ALS ID	SAMPLE ID	MATRIX	DATE	Time	Type / Code	Total bottles														
1	SX_IB_20220317_07_53_SS_Primary_ALS	S	17.03.2022	7:53	Bucket	1	X	X	X	X	X									
2	SX_IB_20220317_07_53_SS_Duplicate_ALS	S	17.03.2022	7:53	Bucket	1	X	X	X	X	X									
3	SX_IB_20220317_08_34_SR_Rinsate_ALS	W	17.03.2022	8:34	Bottle	1			X											
4	SX_IB_20220317_08_36_SB_Blank_ALS	W	17.03.2022	8:36	Bottle	1			X											
5	SX_OB_20220317_12_04_SS_Primary_ALS	S	17.03.2022	12:04	Bucket	1	X	X	X	X	X									
6	SX_OB_20220317_15_54_SS_Primary_ALS	S	17.03.2022	15:54	Bucket	1	X	X	X	X	X									
7	SX_OB_20220317_16_03_SS_Triplicate_ALS	S	17.03.2022	16:03	Bucket	1	X	X	X	X	X									
8	SX_OB_20220317_19_57_SS_Primary_ALS	S	17.03.2022	19:57	Bucket	1	x	x	x	x	x									
9	SX_OB_20220318_00_02_SS_Primary_ALS	S	18.03.2022	0:02	Bucket	1	x	x	x	x	x									
10	SX_OB_20220318_04_02_SS_Primary_ALS	S	18.03.2022	4:02	Bucket	1	x	x	x	x	x									

Environmental Division
Melbourne
Work Order Reference
EM2204843

Telephone : +61-3-8549 9600

Received: 18/3, 1140 Carrier: courier
C/note:
Temp: 5-6 °C Seal: Y / N
Ice / Icebricks / NA
Trm

RELINQUISHED BY:		RECEIVED BY		METHOD OF SHIPMENT
Name: Brandon	Date: 18.3.2022	Name:	Date:	Con' Note No:
Of: Agon Enviro	Time:	Of:	Time:	
Name:	Date:	Name:	Date:	Transport Co:
Of:	Time:	Of:	Time:	

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

AUSTRALIAN LABORATORY SERVICES P/L

ALS Environmental

CERTIFICATE OF ANALYSIS

Work Order	: **EM2204843**	Page	: 1 of 29
Client	: **AGON ENVIRONMENTAL PTY LTD**	Laboratory	: Environmental Division Melbourne
Contact	: CRAIG TRIMBUR	Contact	: Bronwyn Sheen
Address	: D1.1 63-85 TURNER STREET PORT MELBOURNE 3207	Address	: 4 Westall Rd Springvale VIC Australia 3171
Telephone	: ----	Telephone	: +6138549 9600
Project	: JC0927	Date Samples Received	: 18-Mar-2022 11:40
Order number	: ----	Date Analysis Commenced	: 21-Mar-2022
C-O-C number	: 20220318042901-ALS-12	Issue Date	: 25-Mar-2022 16:50
Sampler	: ----		
Site	: 20220318042901-ALS-12		
Quote number	: EN/150/19 -WGTP -Bulk Sample Quote		
No. of samples received	: 18		
No. of samples analysed	: 18		

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

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

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results
- Surrogate Control Limits

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

Signatories

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

Signatories	*Position*	*Accreditation Category*
Dilani Fernando	Laboratory Coordinator	Melbourne Inorganics, Springvale, VIC
Nikki Stepniewski	Senior Inorganic Instrument 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 Contact for details.

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

- EP231X: Poor matrix spike recovery for sample EM2204488-009 due to sample matrix interference.
- Benzo(a)pyrene Toxicity Equivalent Quotient (TEQ) per the NEPM (2013) is the sum total of the concentration of the eight carcinogenic PAHs multiplied by their Toxicity Equivalence Factor (TEF) relative to Benzo(a)pyrene. TEF values are provided in brackets as follows: Benz(a)anthracene (0.1), Chrysene (0.01), Benzo(b+j) & Benzo(k)fluoranthene (0.1), Benzo(a)pyrene (1.0), Indeno(1.2.3.cd)pyrene (0.1), Dibenz(a.h)anthracene (1.0), Benzo(g.h.i)perylene (0.01). Less than LOR results for 'TEQ Zero' are treated as zero, for 'TEQ 1/2LOR' are treated as half the reported LOR, and for 'TEQ LOR' are treated as being equal to the reported LOR. Note: TEQ 1/2LOR and TEQ LOR will calculate as 0.6mg/Kg and 1.2mg/Kg respectively for samples with non-detects for all of the eight TEQ PAHs.
- EP231X - Per- and Polyfluoroalkyl Substances (PFAS): Samples received in 20ml or 125ml bottles have been tested in accordance with the QSM5.3 compliant, NATA accredited method. 60mL or 250mL bottles have been tested to the legacy QSM 5.1 aligned, NATA accredited method.
- EP074-UT: Where reported, Total Xylenes is the sum of the reported concentrations of m&p-Xylene and o-Xylene at or above the LOR.
- EP074-WF: Where reported, Sum of trichlorobenzenes is the sum of the reported concentrations of 1,2,3-Trichlorobenzene and 1,2,4-Trichlorobenzene, and 1,3,5-Trichlorobenzene at or above the LOR.
- EP231: Stable isotope enriched internal standards are added to samples prior to extraction. Target compounds have a direct analogous internal standard with the exception of PFPeS, PFHpA, PFDS, PFTrDA and 10:2 FTS. These compounds use an internal standard that is chemically related and has a retention time close to that of the target compound. The DQO for internal standard response is 50-150% of that established at initial calibration. PFOS is quantified using a certified, traceable standard consisting of linear and branched PFOS isomers. These practices are in line with recommendations in the National Environmental Management Plan for PFAS (Australian HEPA) and also conform to QSM 5.3 (US DoD) requirements.
- EN60: Where leachable PFAS analysis is requested, centrifugation rather than pressure filtration is used as the default approach for removal of particulates, in line with AS 4439.3.
- EN60-DI: Where leachable PFAS analysis is requested, centrifugation rather than pressure filtration is used as the default approach for removal of particulates, in line with AS 4439.3.
- 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**)

Compound	CAS Number	LOR	Unit	Sample ID	SX_IB_20220317_07_53_SS_Primary_ALS	SX_IB_20220317_07_53_SS_Duplicate_ALS	SX_OB_20220317_12_04_SS_Primary_ALS	SX_OB_20220317_15_54_SS_Primary_ALS	SX_OB_20220317_16_03_SS_Triplicate_ALS
				Sampling date / time	17-Mar-2022 07:53	17-Mar-2022 07:53	17-Mar-2022 12:04	17-Mar-2022 15:54	17-Mar-2022 16:03
					EM2204843-001	EM2204843-002	EM2204843-005	EM2204843-006	EM2204843-007
					Result	Result	Result	Result	Result
EP231A: Perfluoroalkyl Sulfonic Acids									
Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	<0.02
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L		<0.01	<0.01	<0.01	<0.01	<0.01
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L		<0.01	<0.01	<0.01	<0.01	<0.01
Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	<0.02
EP231B: Perfluoroalkyl Carboxylic Acids									
Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L		<0.1	<0.1	<0.1	<0.1	<0.1
Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	<0.02
Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L		<0.01	<0.01	<0.01	<0.01	<0.01
Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	<0.02
Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L		<0.05	<0.05	<0.05	<0.05	<0.05
EP231C: Perfluoroalkyl Sulfonamides									
Perfluorooctane sulfonamide (FOSA)	754-91-6	0.05	µg/L		<0.05	<0.05	<0.05	<0.05	<0.05
N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L		<0.05	<0.05	<0.05	<0.05	<0.05

Analytical Results

Sub-Matrix: **ASLP LEACHATE** (Matrix: **WATER**)

Compound	CAS Number	LOR	Unit	Sample ID	SX_IB_20220317_07_53_SS_Primary_ALS	SX_IB_20220317_07_53_SS_Duplicate_ALS	SX_OB_20220317_12_04_SS_Primary_ALS	SX_OB_20220317_15_54_SS_Primary_ALS	SX_OB_20220317_16_03_SS_Triplicate_ALS
				Sampling date / time	17-Mar-2022 07:53	17-Mar-2022 07:53	17-Mar-2022 12:04	17-Mar-2022 15:54	17-Mar-2022 16:03
					EM2204843-001	EM2204843-002	EM2204843-005	EM2204843-006	EM2204843-007
					Result	Result	Result	Result	Result
EP231C: Perfluoroalkyl Sulfonamides - Continued									
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	µg/L		<0.05	<0.05	<0.05	<0.05	<0.05
N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L		<0.05	<0.05	<0.05	<0.05	<0.05
N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L		<0.05	<0.05	<0.05	<0.05	<0.05
N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.05	µg/L		<0.05	<0.05	<0.05	<0.05	<0.05
N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.05	µg/L		<0.05	<0.05	<0.05	<0.05	<0.05
EP231D: (n:2) Fluorotelomer Sulfonic Acids									
4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L		<0.05	<0.05	<0.05	<0.05	<0.05
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.05	µg/L		<0.05	<0.05	<0.05	<0.05	<0.05
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.05	µg/L		<0.05	<0.05	<0.05	<0.05	<0.05
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.05	µg/L		<0.05	<0.05	<0.05	<0.05	<0.05
EP231P: PFAS Sums									
Sum of PFAS	----	0.10	µg/L		<0.10	<0.10	<0.10	<0.10	<0.10
Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L		<0.01	<0.01	<0.01	<0.01	<0.01
Sum of PFAS (WA DER List)	----	0.05	µg/L		<0.05	<0.05	<0.05	<0.05	<0.05
EP231S: PFAS Surrogate									
13C4-PFOS	----	0.02	%		**98.3**	**92.7**	**108**	**94.3**	**92.4**
13C8-PFOA	----	0.02	%		**103**	**102**	**101**	**105**	**100**

Analytical Results

Sub-Matrix: **ASLP LEACHATE** (Matrix: **WATER**)

Compound	CAS Number	LOR	Unit	Sample ID	SX_OB_20220317_19_57_SS_Primary_ALS	SX_OB_20220318_00_02_SS_Primary_ALS	SX_OB_20220318_04_02_SS_Primary_ALS	----	----
				Sampling date / time	17-Mar-2022 19:57	18-Mar-2022 00:02	18-Mar-2022 16:02	----	----
					EM2204843-008	EM2204843-009	EM2204843-010	--------	--------
					Result	Result	Result	----	----
EP231A: Perfluoroalkyl Sulfonic Acids									
Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L		<0.02	<0.02	<0.02	----	----
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L		<0.02	<0.02	<0.02	----	----
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L		<0.01	<0.01	<0.01	----	----
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L		<0.02	<0.02	<0.02	----	----
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L		<0.01	<0.01	<0.01	----	----
Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L		<0.02	<0.02	<0.02	----	----
EP231B: Perfluoroalkyl Carboxylic Acids									
Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L		<0.1	<0.1	<0.1	----	----
Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L		<0.02	<0.02	<0.02	----	----
Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L		<0.02	<0.02	<0.02	----	----
Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L		<0.02	<0.02	<0.02	----	----
Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L		<0.01	<0.01	<0.01	----	----
Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L		<0.02	<0.02	<0.02	----	----
Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L		<0.02	<0.02	<0.02	----	----
Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L		<0.02	<0.02	<0.02	----	----
Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L		<0.02	<0.02	<0.02	----	----
Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L		<0.02	<0.02	<0.02	----	----
Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L		<0.05	<0.05	<0.05	----	----
EP231C: Perfluoroalkyl Sulfonamides									
Perfluorooctane sulfonamide (FOSA)	754-91-6	0.05	µg/L		<0.05	<0.05	<0.05	----	----
N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L		<0.05	<0.05	<0.05	----	----
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	µg/L		<0.05	<0.05	<0.05	----	----

Analytical Results

Sub-Matrix: **ASLP LEACHATE** (Matrix: **WATER**)

Compound	CAS Number	LOR	Unit	Sample ID	SX_OB_20220317_19_57_SS_Primary_ALS	SX_OB_20220318_00_02_SS_Primary_ALS	SX_OB_20220318_04_02_SS_Primary_ALS	----	----
				Sampling date / time	17-Mar-2022 19:57	18-Mar-2022 00:02	18-Mar-2022 16:02	----	----
					EM2204843-008	**EM2204843-009**	**EM2204843-010**	**--------**	**--------**
					Result	Result	Result	----	----
EP231C: Perfluoroalkyl Sulfonamides - Continued									
N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L		<0.05	<0.05	<0.05	**----**	**----**
N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L		<0.05	<0.05	<0.05	**----**	**----**
N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.05	µg/L		<0.05	<0.05	<0.05	**----**	**----**
N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.05	µg/L		<0.05	<0.05	<0.05	**----**	**----**
EP231D: (n:2) Fluorotelomer Sulfonic Acids									
4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L		<0.05	<0.05	<0.05	**----**	**----**
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.05	µg/L		<0.05	<0.05	<0.05	**----**	**----**
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.05	µg/L		<0.05	<0.05	<0.05	**----**	**----**
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.05	µg/L		<0.05	<0.05	<0.05	**----**	**----**
EP231P: PFAS Sums									
Sum of PFAS	----	0.10	µg/L		<0.10	<0.10	<0.10	**----**	**----**
Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L		<0.01	<0.01	<0.01	**----**	**----**
Sum of PFAS (WA DER List)	----	0.05	µg/L		<0.05	<0.05	<0.05	**----**	**----**
EP231S: PFAS Surrogate									
13C4-PFOS	----	0.02	%		**98.5**	**95.4**	**96.8**	**----**	**----**
13C8-PFOA	----	0.02	%		**105**	**109**	**104**	**----**	**----**

Analytical Results

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

Compound	CAS Number	LOR	Unit	Sample ID	SX_IB_20220317_07_53_SS_Primary_ALS	SX_IB_20220317_07_53_SS_Duplicate_ALS	SX_OB_20220317_12_04_SS_Primary_ALS	SX_OB_20220317_15_54_SS_Primary_ALS	SX_OB_20220317_16_03_SS_Triplicate_ALS
				Sampling date / time	17-Mar-2022 07:53	17-Mar-2022 07:53	17-Mar-2022 12:04	17-Mar-2022 15:54	17-Mar-2022 16:03
					EM2204843-011	EM2204843-012	EM2204843-013	EM2204843-014	EM2204843-015
					Result	Result	Result	Result	Result
EP231A: Perfluoroalkyl Sulfonic Acids									
Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	<0.02
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L		<0.01	<0.01	<0.01	<0.01	<0.01
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L		<0.01	<0.01	<0.01	<0.01	<0.01
Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	<0.02
EP231B: Perfluoroalkyl Carboxylic Acids									
Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L		<0.1	<0.1	<0.1	<0.1	<0.1
Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	<0.02
Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L		<0.01	<0.01	<0.01	<0.01	<0.01
Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	<0.02
Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L		<0.05	<0.05	<0.05	<0.05	<0.05
EP231C: Perfluoroalkyl Sulfonamides									
Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	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**)

Compound	CAS Number	LOR	Unit	Sample ID	SX_IB_20220317_07_53_SS_Primary_ALS	SX_IB_20220317_07_53_SS_Duplicate_ALS	SX_OB_20220317_12_04_SS_Primary_ALS	SX_OB_20220317_15_54_SS_Primary_ALS	SX_OB_20220317_16_03_SS_Triplicate_ALS
				Sampling date / time	17-Mar-2022 07:53	17-Mar-2022 07:53	17-Mar-2022 12:04	17-Mar-2022 15:54	17-Mar-2022 16:03
					EM2204843-011	EM2204843-012	EM2204843-013	EM2204843-014	EM2204843-015
					Result	Result	Result	Result	Result
EP231C: Perfluoroalkyl Sulfonamides - Continued									
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	µg/L		<0.05	<0.05	<0.05	<0.05	<0.05
N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L		<0.05	<0.05	<0.05	<0.05	<0.05
N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L		<0.05	<0.05	<0.05	<0.05	<0.05
N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.02	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	%		**94.5**	**96.2**	**85.9**	**81.5**	**85.3**
13C8-PFOA	----	0.02	%		**104**	**106**	**106**	**98.4**	**105**

Analytical Results

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

Compound	CAS Number	LOR	Unit	Sample ID	SX_OB_20220317_19_57_SS_Primary_ALS	SX_OB_20220318_00_02_SS_Primary_ALS	SX_OB_20220318_04_02_SS_Primary_ALS	----	----
				Sampling date / time	17-Mar-2022 19:57	18-Mar-2022 00:02	18-Mar-2022 04:02	----	----
					EM2204843-016	EM2204843-017	EM2204843-018	--------	--------
					Result	Result	Result	----	----
EP231A: Perfluoroalkyl Sulfonic Acids									
Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L		<0.02	<0.02	<0.02	----	----
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L		<0.02	<0.02	<0.02	----	----
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L		<0.01	<0.01	<0.01	----	----
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L		<0.02	<0.02	<0.02	----	----
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L		<0.01	<0.01	<0.01	----	----
Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L		<0.02	<0.02	<0.02	----	----
EP231B: Perfluoroalkyl Carboxylic Acids									
Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L		<0.1	<0.1	<0.1	----	----
Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L		<0.02	<0.02	<0.02	----	----
Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L		<0.02	<0.02	<0.02	----	----
Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L		<0.02	<0.02	<0.02	----	----
Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L		<0.01	<0.01	<0.01	----	----
Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L		<0.02	<0.02	<0.02	----	----
Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L		<0.02	<0.02	<0.02	----	----
Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L		<0.02	<0.02	<0.02	----	----
Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L		<0.02	<0.02	<0.02	----	----
Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L		<0.02	<0.02	<0.02	----	----
Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L		<0.05	<0.05	<0.05	----	----
EP231C: Perfluoroalkyl Sulfonamides									
Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	µg/L		<0.02	<0.02	<0.02	----	----
N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L		<0.05	<0.05	<0.05	----	----
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	µg/L		<0.05	<0.05	<0.05	----	----

Analytical Results

Sub-Matrix: DI WATER LEACHATE (Matrix: WATER)				Sample ID	SX_OB_20220317_19_57_SS_Primary_ALS	SX_OB_20220318_00_02_SS_Primary_ALS	SX_OB_20220318_04_02_SS_Primary_ALS	----	----
				Sampling date / time	17-Mar-2022 19:57	18-Mar-2022 00:02	18-Mar-2022 04:02	----	----
Compound	CAS Number	LOR	Unit		EM2204843-016	EM2204843-017	EM2204843-018	--------	--------
					Result	Result	Result	----	----
EP231C: Perfluoroalkyl Sulfonamides - Continued									
N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L		<0.05	<0.05	<0.05	----	----
N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L		<0.05	<0.05	<0.05	----	----
N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.02	µg/L		<0.02	<0.02	<0.02	----	----
N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.02	µg/L		<0.02	<0.02	<0.02	----	----
EP231D: (n:2) Fluorotelomer Sulfonic Acids									
4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L		<0.05	<0.05	<0.05	----	----
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.05	µg/L		<0.05	<0.05	<0.05	----	----
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.05	µg/L		<0.05	<0.05	<0.05	----	----
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.05	µg/L		<0.05	<0.05	<0.05	----	----
EP231P: PFAS Sums									
Sum of PFAS	----	0.01	µg/L		<0.01	<0.01	<0.01	----	----
Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L		<0.01	<0.01	<0.01	----	----
Sum of PFAS (WA DER List)	----	0.01	µg/L		<0.01	<0.01	<0.01	----	----
EP231S: PFAS Surrogate									
13C4-PFOS	----	0.02	%		**86.3**	**85.2**	**87.6**	----	----
13C8-PFOA	----	0.02	%		**109**	**105**	**102**	----	----

Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

Compound	CAS Number	LOR	Unit	Sample ID	SX_IB_20220317_07_53_SS_Primary_ALS	SX_IB_20220317_07_53_SS_Duplicate_ALS	SX_OB_20220317_12_04_SS_Primary_ALS	SX_OB_20220317_15_54_SS_Primary_ALS	SX_OB_20220317_16_03_SS_Triplicate_ALS
				Sampling date / time	17-Mar-2022 07:53	17-Mar-2022 07:53	17-Mar-2022 12:04	17-Mar-2022 15:54	17-Mar-2022 16:03
					EM2204843-001	EM2204843-002	EM2204843-005	EM2204843-006	EM2204843-007
					Result	Result	Result	Result	Result
EA001: pH in soil using 0.01M CaCl extract									
pH (CaCl2)	----	0.1	pH Unit		**7.8**	**7.8**	**8.7**	**8.8**	**8.7**
EA055: Moisture Content (Dried @ 105-110°C)									
Moisture Content	----	1.0	%		**32.3**	**31.7**	**35.4**	**34.0**	**28.6**
EG005(ED093)T: Total Metals by ICP-AES									
Arsenic	7440-38-2	5	mg/kg		**18**	**17**	**22**	**24**	**28**
Cadmium	7440-43-9	1	mg/kg		<1	<1	<1	<1	<1
Chromium	7440-47-3	5	mg/kg		**83**	**81**	**58**	**71**	**66**
Copper	7440-50-8	5	mg/kg		**48**	**43**	**31**	**29**	**38**
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		**132**	**118**	**83**	**79**	**119**
Selenium	7782-49-2	5	mg/kg		<5	<5	<5	<5	<5
Silver	7440-22-4	2	mg/kg		<2	<2	<2	<2	<2
Tin	7440-31-5	10	mg/kg		<10	<10	<10	<10	<10
Zinc	7440-66-6	5	mg/kg		**82**	**72**	**50**	**44**	**74**
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		**310**	**190**	<100	**120**	**180**
EN60: ASLP Leaching Procedure - Inorganics/PFAS (Plastic Vessel)									
Initial pH	----	0.1	pH Unit		**9.4**	**9.3**	**9.3**	**9.3**	**9.9**
After HCl pH	----	0.1	pH Unit		**1.6**	**1.6**	**1.6**	**1.6**	**1.7**
Extraction Fluid pH	----	0.1	pH Unit		**5.0**	**5.0**	**5.0**	**5.0**	**5.0**
Final pH	----	0.1	pH Unit		**5.1**	**5.1**	**5.1**	**5.1**	**5.1**
EP066: Polychlorinated Biphenyls (PCB)									
Total Polychlorinated biphenyls	----	0.1	mg/kg		<0.1	<0.1	<0.1	<0.1	<0.1
EP074A: Monocyclic Aromatic Hydrocarbons									
Benzene	71-43-2	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2

Analytical Results

Sub-Matrix: SOIL
(Matrix: SOIL)

Compound	CAS Number	LOR	Unit	Sample ID	SX_IB_20220317_07_53_SS_Primary_ALS	SX_IB_20220317_07_53_SS_Duplicate_ALS	SX_OB_20220317_12_04_SS_Primary_ALS	SX_OB_20220317_15_54_SS_Primary_ALS	SX_OB_20220317_16_03_SS_Triplicate_ALS
				Sampling date / time	17-Mar-2022 07:53	17-Mar-2022 07:53	17-Mar-2022 12:04	17-Mar-2022 15:54	17-Mar-2022 16:03
					EM2204843-001	EM2204843-002	EM2204843-005	EM2204843-006	EM2204843-007
					Result	Result	Result	Result	Result
EP074A: Monocyclic Aromatic Hydrocarbons - Continued									
Toluene	108-88-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	100-41-4	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Styrene	100-42-5	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
ortho-Xylene	95-47-6	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Sum of monocyclic aromatic hydrocarbons	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Total Xylenes	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
EP074H: Naphthalene									
Naphthalene	91-20-3	1	mg/kg		<1	<1	<1	<1	<1
EP074I: Volatile Halogenated Compounds									
Vinyl chloride	75-01-4	0.50	mg/kg		<0.50	<0.50	<0.50	<0.50	<0.50
1.1-Dichloroethene	75-35-4	0.50	mg/kg		<0.50	<0.50	<0.50	<0.50	<0.50
Methylene chloride	75-09-2	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
trans-1.2-Dichloroethene	156-60-5	0.50	mg/kg		<0.50	<0.50	<0.50	<0.50	<0.50
cis-1.2-Dichloroethene	156-59-2	0.50	mg/kg		<0.50	<0.50	<0.50	<0.50	<0.50
Chloroform	67-66-3	0.50	mg/kg		<0.50	<0.50	<0.50	<0.50	<0.50
1.1.1-Trichloroethane	71-55-6	0.50	mg/kg		<0.50	<0.50	<0.50	<0.50	<0.50
Carbon Tetrachloride	56-23-5	0.50	mg/kg		<0.50	<0.50	<0.50	<0.50	<0.50
1.2-Dichloroethane	107-06-2	0.50	mg/kg		<0.50	<0.50	<0.50	<0.50	<0.50
Trichloroethene	79-01-6	0.50	mg/kg		<0.50	<0.50	<0.50	<0.50	<0.50
1.1.2-Trichloroethane	79-00-5	0.50	mg/kg		<0.50	<0.50	<0.50	<0.50	<0.50
Tetrachloroethene	127-18-4	0.50	mg/kg		<0.50	<0.50	<0.50	<0.50	<0.50
1.1.1.2-Tetrachloroethane	630-20-6	0.50	mg/kg		<0.50	<0.50	<0.50	<0.50	<0.50
1.1.2.2-Tetrachloroethane	79-34-5	0.50	mg/kg		<0.50	<0.50	<0.50	<0.50	<0.50
Hexachlorobutadiene	87-68-3	0.50	mg/kg		<0.50	<0.50	<0.50	<0.50	<0.50
Chlorobenzene	108-90-7	0.50	mg/kg		<0.50	<0.50	<0.50	<0.50	<0.50
1.4-Dichlorobenzene	106-46-7	0.50	mg/kg		<0.50	<0.50	<0.50	<0.50	<0.50
1.2-Dichlorobenzene	95-50-1	0.50	mg/kg		<0.50	<0.50	<0.50	<0.50	<0.50
1.2.4-Trichlorobenzene	120-82-1	0.50	mg/kg		<0.50	<0.50	<0.50	<0.50	<0.50
^ Sum of volatile chlorinated hydrocarbons	----	0.50	mg/kg		<0.50	<0.50	<0.50	<0.50	<0.50
^ Sum of other chlorinated hydrocarbons	----	0.50	mg/kg		<0.50	<0.50	<0.50	<0.50	<0.50
EP075A: Phenolic Compounds (Halogenated)									

Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

Compound	CAS Number	LOR	Unit	Sample ID	SX_IB_20220317_07_53_SS_Primary_ALS	SX_IB_20220317_07_53_SS_Duplicate_ALS	SX_OB_20220317_12_04_SS_Primary_ALS	SX_OB_20220317_15_54_SS_Primary_ALS	SX_OB_20220317_16_03_SS_Triplicate_ALS
				Sampling date / time	17-Mar-2022 07:53	17-Mar-2022 07:53	17-Mar-2022 12:04	17-Mar-2022 15:54	17-Mar-2022 16:03
					EM2204843-001	EM2204843-002	EM2204843-005	EM2204843-006	EM2204843-007
					Result	Result	Result	Result	Result
EP075A: Phenolic Compounds (Halogenated) - Continued									
2-Chlorophenol	95-57-8	0.50	mg/kg		<0.50	<0.50	<0.50	<0.50	<0.50
2.4-Dichlorophenol	120-83-2	0.50	mg/kg		<0.50	<0.50	<0.50	<0.50	<0.50
2.6-Dichlorophenol	87-65-0	0.50	mg/kg		<0.50	<0.50	<0.50	<0.50	<0.50
4-Chloro-3-methylphenol	59-50-7	1.00	mg/kg		<1.00	<1.00	<1.00	<1.00	<1.00
2.4.5-Trichlorophenol	95-95-4	1.00	mg/kg		<1.00	<1.00	<1.00	<1.00	<1.00
2.4.6-Trichlorophenol	88-06-2	1.00	mg/kg		<1.00	<1.00	<1.00	<1.00	<1.00
2.3.5.6-Tetrachlorophenol	935-95-5	0.03	mg/kg		<0.03	<0.03	<0.03	<0.03	<0.03
2.3.4.5 & 2.3.4.6-Tetrachlorophenol	4901-51-3/58-90-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Pentachlorophenol	87-86-5	1.0	mg/kg		<1.0	<1.0	<1.0	<1.0	<1.0
^ **Sum of Phenols (halogenated)**	----	1.00	mg/kg		<1.00	<1.00	<1.00	<1.00	<1.00
EP075A: Phenolic Compounds (Non-halogenated)									
Phenol	108-95-2	1	mg/kg		<1	<1	<1	<1	<1
2-Methylphenol	95-48-7	1	mg/kg		<1	<1	<1	<1	<1
3- & 4-Methylphenol	1319-77-3	1	mg/kg		<1	<1	<1	<1	<1
2-Nitrophenol	88-75-5	1	mg/kg		<1	<1	<1	<1	<1
2.4-Dimethylphenol	105-67-9	1	mg/kg		<1	<1	<1	<1	<1
2.4-Dinitrophenol	51-28-5	5	mg/kg		<5	<5	<5	<5	<5
4-Nitrophenol	100-02-7	5	mg/kg		<5	<5	<5	<5	<5
2-Methyl-4.6-dinitrophenol	8071-51-0	5	mg/kg		<5	<5	<5	<5	<5
Dinoseb	88-85-7	20	mg/kg		<20	<20	<20	<20	<20
2-Cyclohexyl-4.6-Dinitrophenol	131-89-5	20	mg/kg		<20	<20	<20	<20	<20
^ **Sum of Phenols (non-halogenated)**	----	20	mg/kg		<20	<20	<20	<20	<20
EP075B: Polynuclear Aromatic Hydrocarbons									
Naphthalene	91-20-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthene	83-32-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthylene	208-96-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Fluorene	86-73-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Phenanthrene	85-01-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Anthracene	120-12-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Fluoranthene	206-44-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Pyrene	129-00-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benz(a)anthracene	56-55-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5

Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

Compound	CAS Number	LOR	Unit	Sample ID	SX_IB_20220317_07_53_SS_Primary_ALS	SX_IB_20220317_07_53_SS_Duplicate_ALS	SX_OB_20220317_12_04_SS_Primary_ALS	SX_OB_20220317_15_54_SS_Primary_ALS	SX_OB_20220317_16_03_SS_Triplicate_ALS
				Sampling date / time	17-Mar-2022 07:53	17-Mar-2022 07:53	17-Mar-2022 12:04	17-Mar-2022 15:54	17-Mar-2022 16:03
					EM2204843-001	EM2204843-002	EM2204843-005	EM2204843-006	EM2204843-007
					Result	Result	Result	Result	Result
EP075B: Polynuclear Aromatic Hydrocarbons - Continued									
Chrysene	218-01-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(b+j) & Benzo(k)fluoranthene	205-99-2 207-08-9	1.0	mg/kg		<1.0	<1.0	<1.0	<1.0	<1.0
Benzo(a)pyrene	50-32-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ **Sum of polycyclic aromatic hydrocarbons**	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ **Benzo(a)pyrene TEQ (zero)**	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ **Benzo(a)pyrene TEQ (half LOR)**	----	0.5	mg/kg		**0.6**	**0.6**	**0.6**	**0.6**	**0.6**
^ **Benzo(a)pyrene TEQ (LOR)**	----	0.5	mg/kg		**1.2**	**1.2**	**1.2**	**1.2**	**1.2**
EP075I: Organochlorine Pesticides									
alpha-BHC	319-84-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
beta-BHC	319-85-7	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
gamma-BHC	58-89-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
delta-BHC	319-86-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Heptachlor	76-44-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Aldrin	309-00-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Heptachlor epoxide	1024-57-3	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
cis-Chlordane	5103-71-9	0.03	mg/kg		<0.03	<0.03	<0.03	<0.03	<0.03
trans-Chlordane	5103-74-2	0.03	mg/kg		<0.03	<0.03	<0.03	<0.03	<0.03
Endosulfan 1	959-98-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDE	72-55-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Dieldrin	60-57-1	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Endrin aldehyde	7421-93-4	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Endrin	72-20-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Endosulfan 2	33213-65-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDD	72-54-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Endosulfan sulfate	1031-07-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDT	50-29-3	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Methoxychlor	72-43-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
^ **Sum of organochlorine pesticides**	----	0.10	mg/kg		<0.10	<0.10	<0.10	<0.10	<0.10

Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

Compound	CAS Number	LOR	Unit	Sample ID	SX_IB_20220317_07_53_SS_Primary_ALS	SX_IB_20220317_07_53_SS_Duplicate_ALS	SX_OB_20220317_12_04_SS_Primary_ALS	SX_OB_20220317_15_54_SS_Primary_ALS	SX_OB_20220317_16_03_SS_Triplicate_ALS
				Sampling date / time	17-Mar-2022 07:53	17-Mar-2022 07:53	17-Mar-2022 12:04	17-Mar-2022 15:54	17-Mar-2022 16:03
					EM2204843-001	EM2204843-002	EM2204843-005	EM2204843-006	EM2204843-007
					Result	Result	Result	Result	Result
EP075I: Organochlorine Pesticides - Continued									
^ **Sum of Aldrin + Dieldrin**	309-00-2/60-57-1	0.30	mg/kg		<0.30	<0.30	<0.30	<0.30	<0.30
^ **Sum of DDD + DDE + DDT**	72-54-8/72-55-9/50-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
^ **Chlordane**	57-74-9	0.10	mg/kg		<0.10	<0.10	<0.10	<0.10	<0.10
^ **Sum of other organochlorine pesticides**	----	0.03	mg/kg		<0.03	<0.03	<0.03	<0.03	<0.03
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	----	20	mg/kg		<20	<20	<20	<20	<20
C10 - C14 Fraction	----	50	mg/kg		<50	<50	<50	<50	<50
C6 - C10 Fraction	C6_C10	20	mg/kg		<20	<20	<20	<20	<20
C15 - C28 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
C29 - C36 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
^ **C10 - C36 Fraction (sum)**	----	50	mg/kg		<50	<50	<50	<50	<50
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
>C10 - C16 Fraction	----	50	mg/kg		<50	<50	<50	<50	<50
>C16 - C34 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
>C34 - C40 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
^ **>C10 - C40 Fraction (sum)**	----	50	mg/kg		<50	<50	<50	<50	<50
>C10 - C16 Fraction minus Naphthalene (F2)	----	50	mg/kg		<50	<50	<50	<50	<50
C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	20	mg/kg		<20	<20	<20	<20	<20
EP231A: Perfluoroalkyl Sulfonic Acids									
Perfluorobutane sulfonic acid (PFBS)	375-73-5	5.0	µg/kg		<5.0	<5.0	<5.0	<5.0	<5.0
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	5.0	µg/kg		<5.0	<5.0	<5.0	<5.0	<5.0
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	5.0	µg/kg		<5.0	<5.0	<5.0	<5.0	<5.0
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	5.0	µg/kg		<5.0	<5.0	<5.0	<5.0	<5.0
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	5.0	µg/kg		<5.0	<5.0	<5.0	<5.0	<5.0
Perfluorodecane sulfonic acid (PFDS)	335-77-3	5.0	µg/kg		<5.0	<5.0	<5.0	<5.0	<5.0

Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

Compound	CAS Number	LOR	Unit	Sample ID	SX_IB_20220317_07_53_SS_Primary_ALS	SX_IB_20220317_07_53_SS_Duplicate_ALS	SX_OB_20220317_12_04_SS_Primary_ALS	SX_OB_20220317_15_54_SS_Primary_ALS	SX_OB_20220317_16_03_SS_Triplicate_ALS
				Sampling date / time	17-Mar-2022 07:53	17-Mar-2022 07:53	17-Mar-2022 12:04	17-Mar-2022 15:54	17-Mar-2022 16:03
					EM2204843-001	EM2204843-002	EM2204843-005	EM2204843-006	EM2204843-007
					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**)

Compound	CAS Number	LOR	Unit	Sample ID	SX_IB_20220317_07_53_SS_Primary_ALS	SX_IB_20220317_07_53_SS_Duplicate_ALS	SX_OB_20220317_12_04_SS_Primary_ALS	SX_OB_20220317_15_54_SS_Primary_ALS	SX_OB_20220317_16_03_SS_Triplicate_ALS
				Sampling date / time	17-Mar-2022 07:53	17-Mar-2022 07:53	17-Mar-2022 12:04	17-Mar-2022 15:54	17-Mar-2022 16:03
					EM2204843-001	EM2204843-002	EM2204843-005	EM2204843-006	EM2204843-007
					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	%		**98.4**	**93.1**	**98.0**	**102**	**94.0**
EP074S: VOC Surrogates (Ultra-Trace)									
1.2-Dichloroethane-D4	17060-07-0	0.1	%		**82.3**	**88.3**	**94.3**	**86.2**	**90.8**
Toluene-D8	2037-26-5	0.1	%		**79.4**	**87.4**	**92.7**	**84.7**	**91.0**
4-Bromofluorobenzene	460-00-4	0.1	%		**89.0**	**99.4**	**100**	**94.9**	**99.3**
EP075S: Acid Extractable Surrogates (Waste Classification)									
Phenol-d6	13127-88-3	0.025	%		**95.6**	**87.2**	**94.5**	**104**	**92.0**
2-Chlorophenol-D4	93951-73-6	0.025	%		**114**	**106**	**115**	**123**	**110**
2.4.6-Tribromophenol	118-79-6	0.025	%		**93.9**	**82.4**	**86.2**	**90.8**	**79.8**
EP075T: Base/Neutral Extractable Surrogates (Waste Classification)									
Nitrobenzene-D5	4165-60-0	0.025	%		**101**	**93.2**	**101**	**107**	**97.9**
1.2-Dichlorobenzene-D4	2199-69-1	0.025	%		**96.1**	**89.7**	**98.1**	**106**	**93.6**
2-Fluorobiphenyl	321-60-8	0.025	%		**99.1**	**95.2**	**102**	**103**	**101**
Anthracene-d10	1719-06-8	0.025	%		**95.4**	**93.2**	**95.0**	**105**	**95.3**
4-Terphenyl-d14	1718-51-0	0.025	%		**100**	**94.7**	**97.2**	**116**	**103**
EP231S: PFAS Surrogate									
13C4-PFOS	----	0.0002	%		**84.6**	**123**	**118**	**96.6**	**95.6**
13C8-PFOA	----	0.0002	%		**103**	**112**	**112**	**112**	**117**

Analytical Results

Sub-Matrix: SOIL
(Matrix: SOIL)

Compound	CAS Number	LOR	Unit	Sample ID	SX_OB_20220317_19_57_SS_Primary_ALS	SX_OB_20220318_00_02_SS_Primary_ALS	SX_OB_20220318_04_02_SS_Primary_ALS	SX_IB_20220317_07_53_SS_Primary_ALS	SX_IB_20220317_07_53_SS_Duplicate_ALS
				Sampling date / time	17-Mar-2022 19:57	18-Mar-2022 00:02	18-Mar-2022 16:02	17-Mar-2022 07:53	17-Mar-2022 07:53
					EM2204843-008	EM2204843-009	EM2204843-010	EM2204843-011	EM2204843-012
					Result	Result	Result	Result	Result
EA001: pH in soil using 0.01M CaCl extract									
pH (CaCl2)	----	0.1	pH Unit		8.8	8.9	8.8	----	----
EA055: Moisture Content (Dried @ 105-110°C)									
Moisture Content	----	1.0	%		28.4	36.2	33.6	----	----
EG005(ED093)T: Total Metals by ICP-AES									
Arsenic	7440-38-2	5	mg/kg		21	41	42	----	----
Cadmium	7440-43-9	1	mg/kg		<1	<1	<1	----	----
Chromium	7440-47-3	5	mg/kg		100	98	90	----	----
Copper	7440-50-8	5	mg/kg		61	56	52	----	----
Lead	7439-92-1	5	mg/kg		<5	<5	<5	----	----
Molybdenum	7439-98-7	5	mg/kg		<5	<5	<5	----	----
Nickel	7440-02-0	5	mg/kg		189	156	129	----	----
Selenium	7782-49-2	5	mg/kg		<5	<5	<5	----	----
Silver	7440-22-4	2	mg/kg		<2	<2	<2	----	----
Tin	7440-31-5	10	mg/kg		<10	<10	<10	----	----
Zinc	7440-66-6	5	mg/kg		105	94	91	----	----
EG035T: Total Recoverable Mercury by FIMS									
Mercury	7439-97-6	0.1	mg/kg		<0.1	<0.1	<0.1	----	----
EG048: Hexavalent Chromium (Alkaline Digest)									
Hexavalent Chromium	18540-29-9	1.0	mg/kg		<1.0	<1.0	<1.0	----	----
EK026SF: Total CN by Segmented Flow Analyser									
Total Cyanide	57-12-5	5	mg/kg		<5	<5	<5	----	----
EK040T: Fluoride Total									
Fluoride	16984-48-8	100	mg/kg		180	170	110	----	----
EN60: ASLP Leaching Procedure - Inorganics/PFAS (Plastic Vessel)									
Initial pH	----	0.1	pH Unit		9.7	9.9	9.7	----	----
After HCl pH	----	0.1	pH Unit		1.7	1.6	1.7	----	----
Extraction Fluid pH	----	0.1	pH Unit		5.0	5.0	5.0	----	----
Final pH	----	0.1	pH Unit		5.1	5.1	5.1	----	----
EN60-DI: Bottle Leaching Procedure - Inorganics/PFAS (Plastic Vessel)									
Final pH	----	0.1	pH Unit		----	----	----	9.4	9.4
EP066: Polychlorinated Biphenyls (PCB)									
Total Polychlorinated biphenyls	----	0.1	mg/kg		<0.1	<0.1	<0.1	----	----
EP074A: Monocyclic Aromatic Hydrocarbons									

Analytical Results

Sub-Matrix: SOIL
(Matrix: SOIL)

Compound	CAS Number	LOR	Unit	Sample ID	SX_OB_20220317_19_57_SS_Primary_ALS	SX_OB_20220318_00_02_SS_Primary_ALS	SX_OB_20220318_04_02_SS_Primary_ALS	SX_IB_20220317_07_53_SS_Primary_ALS	SX_IB_20220317_07_53_SS_Duplicate_ALS
				Sampling date / time	17-Mar-2022 19:57	18-Mar-2022 00:02	18-Mar-2022 16:02	17-Mar-2022 07:53	17-Mar-2022 07:53
					EM2204843-008	EM2204843-009	EM2204843-010	EM2204843-011	EM2204843-012
					Result	Result	Result	Result	Result
EP074A: Monocyclic Aromatic Hydrocarbons - Continued									
Benzene	71-43-2	0.2	mg/kg		<0.2	<0.2	<0.2	----	----
Toluene	108-88-3	0.5	mg/kg		<0.5	<0.5	<0.5	----	----
Ethylbenzene	100-41-4	0.5	mg/kg		<0.5	<0.5	<0.5	----	----
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg		<0.5	<0.5	<0.5	----	----
Styrene	100-42-5	0.5	mg/kg		<0.5	<0.5	<0.5	----	----
ortho-Xylene	95-47-6	0.5	mg/kg		<0.5	<0.5	<0.5	----	----
^ Sum of monocyclic aromatic hydrocarbons	----	0.5	mg/kg		<0.5	<0.5	<0.5	----	----
^ Total Xylenes	----	0.5	mg/kg		<0.5	<0.5	<0.5	----	----
EP074H: Naphthalene									
Naphthalene	91-20-3	1	mg/kg		<1	<1	<1	----	----
EP074I: Volatile Halogenated Compounds									
Vinyl chloride	75-01-4	0.50	mg/kg		<0.50	<0.50	<0.50	----	----
1.1-Dichloroethene	75-35-4	0.50	mg/kg		<0.50	<0.50	<0.50	----	----
Methylene chloride	75-09-2	0.5	mg/kg		<0.5	<0.5	<0.5	----	----
trans-1.2-Dichloroethene	156-60-5	0.50	mg/kg		<0.50	<0.50	<0.50	----	----
cis-1.2-Dichloroethene	156-59-2	0.50	mg/kg		<0.50	<0.50	<0.50	----	----
Chloroform	67-66-3	0.50	mg/kg		<0.50	<0.50	<0.50	----	----
1.1.1-Trichloroethane	71-55-6	0.50	mg/kg		<0.50	<0.50	<0.50	----	----
Carbon Tetrachloride	56-23-5	0.50	mg/kg		<0.50	<0.50	<0.50	----	----
1.2-Dichloroethane	107-06-2	0.50	mg/kg		<0.50	<0.50	<0.50	----	----
Trichloroethene	79-01-6	0.50	mg/kg		<0.50	<0.50	<0.50	----	----
1.1.2-Trichloroethane	79-00-5	0.50	mg/kg		<0.50	<0.50	<0.50	----	----
Tetrachloroethene	127-18-4	0.50	mg/kg		<0.50	<0.50	<0.50	----	----
1.1.1.2-Tetrachloroethane	630-20-6	0.50	mg/kg		<0.50	<0.50	<0.50	----	----
1.1.2.2-Tetrachloroethane	79-34-5	0.50	mg/kg		<0.50	<0.50	<0.50	----	----
Hexachlorobutadiene	87-68-3	0.50	mg/kg		<0.50	<0.50	<0.50	----	----
Chlorobenzene	108-90-7	0.50	mg/kg		<0.50	<0.50	<0.50	----	----
1.4-Dichlorobenzene	106-46-7	0.50	mg/kg		<0.50	<0.50	<0.50	----	----
1.2-Dichlorobenzene	95-50-1	0.50	mg/kg		<0.50	<0.50	<0.50	----	----
1.2.4-Trichlorobenzene	120-82-1	0.50	mg/kg		<0.50	<0.50	<0.50	----	----
^ Sum of volatile chlorinated hydrocarbons	----	0.50	mg/kg		<0.50	<0.50	<0.50	----	----
^ Sum of other chlorinated hydrocarbons	----	0.50	mg/kg		<0.50	<0.50	<0.50	----	----
EP075A: Phenolic Compounds (Halogenated)									

Analytical Results

Sub-Matrix: SOIL
(Matrix: SOIL)

Compound	CAS Number	LOR	Unit	Sample ID	SX_OB_20220317_19_57_SS_Primary_ALS	SX_OB_20220318_00_02_SS_Primary_ALS	SX_OB_20220318_04_02_SS_Primary_ALS	SX_IB_20220317_07_53_SS_Primary_ALS	SX_IB_20220317_07_53_SS_Duplicate_ALS
				Sampling date / time	17-Mar-2022 19:57	18-Mar-2022 00:02	18-Mar-2022 16:02	17-Mar-2022 07:53	17-Mar-2022 07:53
					EM2204843-008	EM2204843-009	EM2204843-010	EM2204843-011	EM2204843-012
					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	----	----
2.4-Dichlorophenol	120-83-2	0.50	mg/kg		<0.50	<0.50	<0.50	----	----
2.6-Dichlorophenol	87-65-0	0.50	mg/kg		<0.50	<0.50	<0.50	----	----
4-Chloro-3-methylphenol	59-50-7	1.00	mg/kg		<1.00	<1.00	<1.00	----	----
2.4.5-Trichlorophenol	95-95-4	1.00	mg/kg		<1.00	<1.00	<1.00	----	----
2.4.6-Trichlorophenol	88-06-2	1.00	mg/kg		<1.00	<1.00	<1.00	----	----
2.3.5.6-Tetrachlorophenol	935-95-5	0.03	mg/kg		<0.03	<0.03	<0.03	----	----
2.3.4.5 & 2.3.4.6-Tetrachlorophenol	4901-51-3/58-90-2	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
Pentachlorophenol	87-86-5	1.0	mg/kg		<1.0	<1.0	<1.0	----	----
^ Sum of Phenols (halogenated)	----	1.00	mg/kg		<1.00	<1.00	<1.00	----	----
EP075A: Phenolic Compounds (Non-halogenated)									
Phenol	108-95-2	1	mg/kg		<1	<1	<1	----	----
2-Methylphenol	95-48-7	1	mg/kg		<1	<1	<1	----	----
3- & 4-Methylphenol	1319-77-3	1	mg/kg		<1	<1	<1	----	----
2-Nitrophenol	88-75-5	1	mg/kg		<1	<1	<1	----	----
2.4-Dimethylphenol	105-67-9	1	mg/kg		<1	<1	<1	----	----
2.4-Dinitrophenol	51-28-5	5	mg/kg		<5	<5	<5	----	----
4-Nitrophenol	100-02-7	5	mg/kg		<5	<5	<5	----	----
2-Methyl-4.6-dinitrophenol	8071-51-0	5	mg/kg		<5	<5	<5	----	----
Dinoseb	88-85-7	20	mg/kg		<20	<20	<20	----	----
2-Cyclohexyl-4.6-Dinitrophenol	131-89-5	20	mg/kg		<20	<20	<20	----	----
^ Sum of Phenols (non-halogenated)	----	20	mg/kg		<20	<20	<20	----	----
EP075B: Polynuclear Aromatic Hydrocarbons									
Naphthalene	91-20-3	0.5	mg/kg		<0.5	<0.5	<0.5	----	----
Acenaphthene	83-32-9	0.5	mg/kg		<0.5	<0.5	<0.5	----	----
Acenaphthylene	208-96-8	0.5	mg/kg		<0.5	<0.5	<0.5	----	----
Fluorene	86-73-7	0.5	mg/kg		<0.5	<0.5	<0.5	----	----
Phenanthrene	85-01-8	0.5	mg/kg		<0.5	<0.5	<0.5	----	----
Anthracene	120-12-7	0.5	mg/kg		<0.5	<0.5	<0.5	----	----
Fluoranthene	206-44-0	0.5	mg/kg		<0.5	<0.5	<0.5	----	----
Pyrene	129-00-0	0.5	mg/kg		<0.5	<0.5	<0.5	----	----
Benz(a)anthracene	56-55-3	0.5	mg/kg		<0.5	<0.5	<0.5	----	----
Chrysene	218-01-9	0.5	mg/kg		<0.5	<0.5	<0.5	----	----

Analytical Results

Sub-Matrix: SOIL
(Matrix: SOIL)

Compound	CAS Number	LOR	Unit	Sample ID	SX_OB_20220317_19_57_SS_Primary_ALS	SX_OB_20220318_00_02_SS_Primary_ALS	SX_OB_20220318_04_02_SS_Primary_ALS	SX_IB_20220317_07_53_SS_Primary_ALS	SX_IB_20220317_07_53_SS_Duplicate_ALS
				Sampling date / time	17-Mar-2022 19:57	18-Mar-2022 00:02	18-Mar-2022 16:02	17-Mar-2022 07:53	17-Mar-2022 07:53
					EM2204843-008	EM2204843-009	EM2204843-010	EM2204843-011	EM2204843-012
					Result	Result	Result	Result	Result
EP075B: Polynuclear Aromatic Hydrocarbons - Continued									
Benzo(b+j) & Benzo(k)fluoranthene	205-99-2 207-08-9	1.0	mg/kg		<1.0	<1.0	<1.0	----	----
Benzo(a)pyrene	50-32-8	0.5	mg/kg		<0.5	<0.5	<0.5	----	----
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg		<0.5	<0.5	<0.5	----	----
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg		<0.5	<0.5	<0.5	----	----
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg		<0.5	<0.5	<0.5	----	----
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg		<0.5	<0.5	<0.5	----	----
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg		<0.5	<0.5	<0.5	----	----
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg		**0.6**	**0.6**	**0.6**	----	----
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg		**1.2**	**1.2**	**1.2**	----	----
EP075I: Organochlorine Pesticides									
alpha-BHC	319-84-6	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
beta-BHC	319-85-7	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
gamma-BHC	58-89-9	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
delta-BHC	319-86-8	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
Heptachlor	76-44-8	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
Aldrin	309-00-2	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
Heptachlor epoxide	1024-57-3	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
cis-Chlordane	5103-71-9	0.03	mg/kg		<0.03	<0.03	<0.03	----	----
trans-Chlordane	5103-74-2	0.03	mg/kg		<0.03	<0.03	<0.03	----	----
Endosulfan 1	959-98-8	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
4.4`-DDE	72-55-9	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
Dieldrin	60-57-1	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
Endrin aldehyde	7421-93-4	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
Endrin	72-20-8	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
Endosulfan 2	33213-65-9	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
4.4`-DDD	72-54-8	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
Endosulfan sulfate	1031-07-8	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
4.4`-DDT	50-29-3	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
Methoxychlor	72-43-5	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
^ Sum of organochlorine pesticides	----	0.10	mg/kg		<0.10	<0.10	<0.10	----	----
^ Sum of Aldrin + Dieldrin	309-00-2/60-57-1	0.30	mg/kg		<0.30	<0.30	<0.30	----	----

Analytical Results

Sub-Matrix: SOIL
(Matrix: SOIL)

Compound	CAS Number	LOR	Unit	Sample ID	SX_OB_20220317_19_57_SS_Primary_ALS	SX_OB_20220318_00_02_SS_Primary_ALS	SX_OB_20220318_04_02_SS_Primary_ALS	SX_IB_20220317_07_53_SS_Primary_ALS	SX_IB_20220317_07_53_SS_Duplicate_ALS
				Sampling date / time	17-Mar-2022 19:57	18-Mar-2022 00:02	18-Mar-2022 16:02	17-Mar-2022 07:53	17-Mar-2022 07:53
					EM2204843-008	EM2204843-009	EM2204843-010	EM2204843-011	EM2204843-012
					Result	Result	Result	Result	Result
EP075I: Organochlorine Pesticides - Continued									
^ Sum of DDD + DDE + DDT	72-54-8/72-55-9/50-2	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
^ Chlordane	57-74-9	0.10	mg/kg		<0.10	<0.10	<0.10	----	----
^ Sum of other organochlorine pesticides	----	0.03	mg/kg		<0.03	<0.03	<0.03	----	----
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	----	20	mg/kg		<20	<20	<20	----	----
C10 - C14 Fraction	----	50	mg/kg		<50	<50	<50	----	----
C6 - C10 Fraction	C6_C10	20	mg/kg		<20	<20	<20	----	----
C15 - C28 Fraction	----	100	mg/kg		<100	<100	<100	----	----
C29 - C36 Fraction	----	100	mg/kg		<100	<100	<100	----	----
^ C10 - C36 Fraction (sum)	----	50	mg/kg		<50	<50	<50	----	----
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
>C10 - C16 Fraction	----	50	mg/kg		<50	<50	<50	----	----
>C16 - C34 Fraction	----	100	mg/kg		<100	<100	<100	----	----
>C34 - C40 Fraction	----	100	mg/kg		<100	<100	<100	----	----
^ >C10 - C40 Fraction (sum)	----	50	mg/kg		<50	<50	<50	----	----
>C10 - C16 Fraction minus Naphthalene (F2)	----	50	mg/kg		<50	<50	<50	----	----
C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	20	mg/kg		<20	<20	<20	----	----
EP231A: Perfluoroalkyl Sulfonic Acids									
Perfluorobutane sulfonic acid (PFBS)	375-73-5	5.0	µg/kg		<5.0	<5.0	<5.0	----	----
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	5.0	µg/kg		<5.0	<5.0	<5.0	----	----
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	5.0	µg/kg		<5.0	<5.0	<5.0	----	----
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	5.0	µg/kg		<5.0	<5.0	<5.0	----	----
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	5.0	µg/kg		<5.0	<5.0	<5.0	----	----
Perfluorodecane sulfonic acid (PFDS)	335-77-3	5.0	µg/kg		<5.0	<5.0	<5.0	----	----
EP231B: Perfluoroalkyl Carboxylic Acids									
Perfluorobutanoic acid (PFBA)	375-22-4	5	µg/kg		<5	<5	<5	----	----

Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

Compound	CAS Number	LOR	Unit	Sample ID	SX_OB_20220317_19_57_SS_Primary_ALS	SX_OB_20220318_00_02_SS_Primary_ALS	SX_OB_20220318_04_02_SS_Primary_ALS	SX_IB_20220317_07_53_SS_Primary_ALS	SX_IB_20220317_07_53_SS_Duplicate_ALS
				Sampling date / time	17-Mar-2022 19:57	18-Mar-2022 00:02	18-Mar-2022 16:02	17-Mar-2022 07:53	17-Mar-2022 07:53
					EM2204843-008	EM2204843-009	EM2204843-010	EM2204843-011	EM2204843-012
					Result	Result	Result	Result	Result
EP231B: Perfluoroalkyl Carboxylic Acids - Continued									
Perfluoropentanoic acid (PFPeA)	2706-90-3	5.0	µg/kg		<5.0	<5.0	<5.0	----	----
Perfluorohexanoic acid (PFHxA)	307-24-4	5.0	µg/kg		<5.0	<5.0	<5.0	----	----
Perfluoroheptanoic acid (PFHpA)	375-85-9	5.0	µg/kg		<5.0	<5.0	<5.0	----	----
Perfluorooctanoic acid (PFOA)	335-67-1	5.0	µg/kg		<5.0	<5.0	<5.0	----	----
Perfluorononanoic acid (PFNA)	375-95-1	5.0	µg/kg		<5.0	<5.0	<5.0	----	----
Perfluorodecanoic acid (PFDA)	335-76-2	5.0	µg/kg		<5.0	<5.0	<5.0	----	----
Perfluoroundecanoic acid (PFUnDA)	2058-94-8	5.0	µg/kg		<5.0	<5.0	<5.0	----	----
Perfluorododecanoic acid (PFDoDA)	307-55-1	5.0	µg/kg		<5.0	<5.0	<5.0	----	----
Perfluorotridecanoic acid (PFTrDA)	72629-94-8	5.0	µg/kg		<5.0	<5.0	<5.0	----	----
Perfluorotetradecanoic acid (PFTeDA)	376-06-7	5.0	µg/kg		<5.0	<5.0	<5.0	----	----
EP231C: Perfluoroalkyl Sulfonamides									
Perfluorooctane sulfonamide (FOSA)	754-91-6	5.0	µg/kg		<5.0	<5.0	<5.0	----	----
N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	5.0	µg/kg		<5.0	<5.0	<5.0	----	----
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	5.0	µg/kg		<5.0	<5.0	<5.0	----	----
N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	5.0	µg/kg		<5.0	<5.0	<5.0	----	----
N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	5.0	µg/kg		<5.0	<5.0	<5.0	----	----
N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	10.0	µg/kg		<10.0	<10.0	<10.0	----	----
N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	10.0	µg/kg		<10.0	<10.0	<10.0	----	----
EP231D: (n:2) Fluorotelomer Sulfonic Acids									
4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	5.0	µg/kg		<5.0	<5.0	<5.0	----	----

Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

Compound	CAS Number	LOR	Unit	Sample ID	SX_OB_20220317_19_57_SS_Primary_ALS	SX_OB_20220318_00_02_SS_Primary_ALS	SX_OB_20220318_04_02_SS_Primary_ALS	SX_IB_20220317_07_53_SS_Primary_ALS	SX_IB_20220317_07_53_SS_Duplicate_ALS
				Sampling date / time	17-Mar-2022 19:57	18-Mar-2022 00:02	18-Mar-2022 16:02	17-Mar-2022 07:53	17-Mar-2022 07:53
					EM2204843-008	EM2204843-009	EM2204843-010	EM2204843-011	EM2204843-012
					Result	Result	Result	Result	Result
EP231D: (n:2) Fluorotelomer Sulfonic Acids - Continued									
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	10.0	µg/kg		<10.0	<10.0	<10.0	----	----
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	5.0	µg/kg		<5.0	<5.0	<5.0	----	----
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	5.0	µg/kg		<5.0	<5.0	<5.0	----	----
EP231P: PFAS Sums									
Sum of PFAS	----	50.0	µg/kg		<50.0	<50.0	<50.0	----	----
Sum of PFHxS and PFOS	355-46-4/1763-23-1	5.0	µg/kg		<5.0	<5.0	<5.0	----	----
Sum of PFAS (WA DER List)	----	10.0	µg/kg		<10.0	<10.0	<10.0	----	----
EP066S: PCB Surrogate									
Decachlorobiphenyl	2051-24-3	0.1	%		**100**	**98.0**	**100**	----	----
EP074S: VOC Surrogates (Ultra-Trace)									
1.2-Dichloroethane-D4	17060-07-0	0.1	%		**96.7**	**88.5**	**91.5**	----	----
Toluene-D8	2037-26-5	0.1	%		**95.6**	**84.1**	**94.5**	----	----
4-Bromofluorobenzene	460-00-4	0.1	%		**104**	**90.2**	**102**	----	----
EP075S: Acid Extractable Surrogates (Waste Classification)									
Phenol-d6	13127-88-3	0.025	%		**97.9**	**102**	**104**	----	----
2-Chlorophenol-D4	93951-73-6	0.025	%		**116**	**122**	**125**	----	----
2.4.6-Tribromophenol	118-79-6	0.025	%		**93.7**	**89.1**	**93.3**	----	----
EP075T: Base/Neutral Extractable Surrogates (Waste Classification)									
Nitrobenzene-D5	4165-60-0	0.025	%		**99.8**	**105**	**107**	----	----
1.2-Dichlorobenzene-D4	2199-69-1	0.025	%		**98.9**	**103**	**106**	----	----
2-Fluorobiphenyl	321-60-8	0.025	%		**103**	**100**	**105**	----	----
Anthracene-d10	1719-06-8	0.025	%		**102**	**98.8**	**107**	----	----
4-Terphenyl-d14	1718-51-0	0.025	%		**109**	**99.1**	**108**	----	----
EP231S: PFAS Surrogate									
13C4-PFOS	----	0.0002	%		**102**	**114**	**114**	----	----
13C8-PFOA	----	0.0002	%		**113**	**117**	**111**	----	----

Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

Compound	CAS Number	LOR	Unit	Sample ID	SX_OB_20220317_12_04_SS_Primary_ALS	SX_OB_20220317_15_54_SS_Primary_ALS	SX_OB_20220317_16_03_SS_Triplicate_ALS	SX_OB_20220317_19_57_SS_Primary_ALS	SX_OB_20220318_00_02_SS_Primary_ALS
				Sampling date / time	17-Mar-2022 12:04	17-Mar-2022 15:54	17-Mar-2022 16:03	17-Mar-2022 19:57	18-Mar-2022 00:02
					EM2204843-013	**EM2204843-014**	**EM2204843-015**	**EM2204843-016**	**EM2204843-017**
					Result	Result	Result	Result	Result
EN60-DI: Bottle Leaching Procedure - Inorganics/PFAS (Plastic Vessel)									
Final pH	----	0.1	pH Unit		**10.0**	**10.1**	**10.0**	**10.0**	**10.1**

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	SX_OB_20220318_04_02_SS_Primary_ALS	----	----	----	----
				Sampling date / time	18-Mar-2022 04:02	----	----	----	----
Compound	CAS Number	LOR	Unit		EM2204843-018	--------	--------	--------	--------
					Result	----	----	----	----
EN60-DI: Bottle Leaching Procedure - Inorganics/PFAS (Plastic Vessel)									
Final pH	----	0.1	pH Unit		**10.0**	**----**	**----**	**----**	**----**

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	SX_IB_20220317_08_34_SR_Rinsate_ALS	SX_IB_20220317_08_36_SB_Blank_ALS	----	----	----
				Sampling date / time	17-Mar-2022 08:34	17-Mar-2022 08:36	----	----	----
Compound	CAS Number	LOR	Unit		EM2204843-003	EM2204843-004	--------	--------	--------
					Result	Result	----	----	----
EP231A: Perfluoroalkyl Sulfonic Acids									
Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L		<0.02	<0.02	----	----	----
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L		<0.02	<0.02	----	----	----
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L		<0.01	<0.01	----	----	----
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L		<0.02	<0.02	----	----	----
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L		<0.01	<0.01	----	----	----
Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L		<0.02	<0.02	----	----	----
EP231B: Perfluoroalkyl Carboxylic Acids									
Perfluorobutanoic acid (PFBA)	375-22-4	0.10	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	0.02	µg/L		<0.02	<0.02	----	----	----
N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L		<0.05	<0.05	----	----	----
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	µg/L		<0.05	<0.05	----	----	----

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	SX_IB_20220317_08_34_SR_Rinsate_ALS	SX_IB_20220317_08_36_SB_Blank_ALS	----	----	----
				Sampling date / time	17-Mar-2022 08:34	17-Mar-2022 08:36	----	----	----
Compound	CAS Number	LOR	Unit		EM2204843-003	EM2204843-004	--------	--------	--------
					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	0.02	µg/L		<0.02	<0.02	----	----	----
N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.02	µg/L		<0.02	<0.02	----	----	----
EP231D: (n:2) Fluorotelomer Sulfonic Acids									
4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L		<0.05	<0.05	----	----	----
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.05	µg/L		<0.05	<0.05	----	----	----
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.05	µg/L		<0.05	<0.05	----	----	----
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.05	µg/L		<0.05	<0.05	----	----	----
EP231P: PFAS Sums									
Sum of PFAS	----	0.01	µg/L		<0.01	<0.01	----	----	----
Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L		<0.01	<0.01	----	----	----
Sum of PFAS (WA DER List)	----	0.01	µg/L		<0.01	<0.01	----	----	----
EP231S: PFAS Surrogate									
13C4-PFOS	----	0.02	%		**105**	**109**	----	----	----
13C8-PFOA	----	0.02	%		**105**	**103**	----	----	----

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	: **EM2204843**	Page	: 1 of 26
Client	: **AGON ENVIRONMENTAL PTY LTD**	Laboratory	: Environmental Division Melbourne
Contact	: CRAIG TRIMBUR		
Address	: D1.1 63-85 TURNER STREET PORT MELBOURNE 3207	Address	: 4 Westall Rd Springvale VIC Australia 3171
E-mail	: ----	E-mail	: bronwyn.sheen@alsglobal.com
Telephone	: ----	Telephone	: +6138549 9600
Facsimile	: ----	Facsimile	: +61-3-8549 9626
Project	: JC0927	Date Received	: 18-Mar-2022 11:40
Order number	: ----	Date Analysed	: 21-Mar-2022
C-O-C number	: 20220318042901-ALS-12	Date Issued	: 25-Mar-2022 16:51
No. of samples received	: 18		
No. of samples analysed	: 18	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_20220317_07_53_SS_Primary_ALS	**EM2204843-001**	Nickel	EG005T	5	*< 60 mg/kg*	**132 mg/kg**
SX_IB_20220317_07_53_SS_Duplicate_ALS	**EM2204843-002**	Nickel	EG005T	5	*< 60 mg/kg*	**118 mg/kg**
SX_OB_20220317_12_04_SS_Primary_ALS	**EM2204843-005**	Arsenic	EG005T	5	*< 20 mg/kg*	**22 mg/kg**
SX_OB_20220317_12_04_SS_Primary_ALS	**EM2204843-005**	Nickel	EG005T	5	*< 60 mg/kg*	**83 mg/kg**
SX_OB_20220317_15_54_SS_Primary_ALS	**EM2204843-006**	Arsenic	EG005T	5	*< 20 mg/kg*	**24 mg/kg**
SX_OB_20220317_15_54_SS_Primary_ALS	**EM2204843-006**	Nickel	EG005T	5	*< 60 mg/kg*	**79 mg/kg**
SX_OB_20220317_16_03_SS_Triplicate_ALS	**EM2204843-007**	Arsenic	EG005T	5	*< 20 mg/kg*	**28 mg/kg**
SX_OB_20220317_16_03_SS_Triplicate_ALS	**EM2204843-007**	Nickel	EG005T	5	*< 60 mg/kg*	**119 mg/kg**
SX_OB_20220317_19_57_SS_Primary_ALS	**EM2204843-008**	Arsenic	EG005T	5	*< 20 mg/kg*	**21 mg/kg**
SX_OB_20220317_19_57_SS_Primary_ALS	**EM2204843-008**	Nickel	EG005T	5	*< 60 mg/kg*	**189 mg/kg**
SX_OB_20220318_00_02_SS_Primary_ALS	**EM2204843-009**	Arsenic	EG005T	5	*< 20 mg/kg*	**41 mg/kg**
SX_OB_20220318_00_02_SS_Primary_ALS	**EM2204843-009**	Nickel	EG005T	5	*< 60 mg/kg*	**156 mg/kg**
SX_OB_20220318_04_02_SS_Primary_ALS	**EM2204843-010**	Arsenic	EG005T	5	*< 20 mg/kg*	**42 mg/kg**
SX_OB_20220318_04_02_SS_Primary_ALS	**EM2204843-010**	Nickel	EG005T	5	*< 60 mg/kg*	**129 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	Guideline Lower Limit	Guideline Upper Limit	SX_IB_20220317_07_53_SS_Primary_ALS 17-Mar-2022 07:53 EM2204843-001	MU	SX_IB_20220317_07_53_SS_Duplicate_ALS 17-Mar-2022 07:53 EM2204843-002	MU	SX_OB_20220317_12_04_SS_Primary_ALS 17-Mar-2022 12:04 EM2204843-005	MU	SX_OB_20220317_15_54_SS_Primary_ALS 17-Mar-2022 15:54 EM2204843-006	MU	SX_OB_20220317_16_03_SS_Triplicate_ALS 17-Mar-2022 16:03 EM2204843-007	MU
EA001: pH in soil using 0.01M CaCl extract															
pH (CaCl2)	EA001	0.1	pH Unit	2	12.5	**7.8**	± 0.1	**7.8**	± 0.1	**8.7**	± 0.1	**8.8**	± 0.1	**8.7**	± 0.1
EG005(ED093)T: Total Metals by ICP-AES															
Arsenic	EG005T	5	mg/kg	----	2000	**18**	± 3	**17**	± 3	**22**	± 3	**24**	± 4	**28**	± 4
Cadmium	EG005T	1	mg/kg	----	400	<1	--	<1	--	<1	--	<1	--	<1	--
Copper	EG005T	5	mg/kg	----	20000	**48**	± 6	**43**	± 5	**31**	± 4	**29**	± 4	**38**	± 5
Lead	EG005T	5	mg/kg	----	6000	<5	--	<5	--	<5	--	<5	--	<5	--
Molybdenum	EG005T	5	mg/kg	----	4000	<5	--	<5	--	<5	--	<5	--	<5	--
Nickel	EG005T	5	mg/kg	----	12000	**132**	± 13	**118**	± 12	**83**	± 8	**79**	± 8	**119**	± 12
Selenium	EG005T	5	mg/kg	----	200	<5	--	<5	--	<5	--	<5	--	<5	--
Silver	EG005T	2	mg/kg	----	720	<2	--	<2	--	<2	--	<2	--	<2	--
Zinc	EG005T	5	mg/kg	----	140000	**82**	± 9	**72**	± 8	**50**	± 6	**44**	± 6	**74**	± 8
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	**310**	± 60	**190**	± 40	<100	--	**120**	± 30	**180**	± 40
EP074A: Monocyclic Aromatic Hydrocarbons															
Benzene	EP074-UT	0.2	mg/kg	----	16	<0.2	--	<0.2	--	<0.2	--	<0.2	--	<0.2	--
Sum of monocyclic aromatic hydrocarbons	EP074-UT-SUM	0.5	mg/kg	----	240	<0.5	--	<0.5	--	<0.5	--	<0.5	--	<0.5	--
EP074I: Volatile Halogenated Compounds															
Vinyl chloride	EP074-UT	0.50	mg/kg	----	4.8	<0.50	--	<0.50	--	<0.50	--	<0.50	--	<0.50	--
Hexachlorobutadiene	EP074-UT	0.50	mg/kg	----	11	<0.50	--	<0.50	--	<0.50	--	<0.50	--	<0.50	--
Sum of other chlorinated hydrocarbons	EP074-UT-SUM	0.50	mg/kg	----	50	<0.50	--	<0.50	--	<0.50	--	<0.50	--	<0.50	--
EP075A: Phenolic Compounds (Halogenated)															
Sum of Phenols (halogenated)	EP075-EM-SUM	1.00	mg/kg	----	320	<1.00	--	<1.00	--	<1.00	--	<1.00	--	<1.00	--

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*	Guideline Lower Limit	Guideline Upper Limit	**SX_IB_20220317_07_53_SS_Primary_ALS** 17-Mar-2022 07:53 **EM2204843-001**	MU	**SX_IB_20220317_07_53_SS_Duplicate_ALS** 17-Mar-2022 07:53 **EM2204843-002**	MU	**SX_OB_20220317_12_04_SS_Primary_ALS** 17-Mar-2022 12:04 **EM2204843-005**	MU	**SX_OB_20220317_15_54_SS_Primary_ALS** 17-Mar-2022 15:54 **EM2204843-006**	MU	**SX_OB_20220317_16_03_SS_Triplicate_ALS** 17-Mar-2022 16:03 **EM2204843-007**	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**

				Sample ID						
				Sampling date/time	Guideline	Guideline	SX_IB_20220317_07_53_SS_Primary_ALS	SX_IB_20220317_07_53_SS_Duplicate_ALS	SX_OB_20220317_12_04_SS_Primary_ALS	SX_OB_20220317_15_54_SS_Primary_ALS	SX_OB_20220317_16_03_SS_Triplicate_ALS
							17-Mar-2022 07:53	17-Mar-2022 07:53	17-Mar-2022 12:04	17-Mar-2022 15:54	17-Mar-2022 16:03
Compound	*Method*	*LOR*	*Unit*		Lower Limit	Upper Limit	EM2204843-001 MU	EM2204843-002 MU	EM2204843-005 MU	EM2204843-006 MU	EM2204843-007 MU
EA001: pH in soil using 0.01M CaCl extract											
pH (CaCl2)	EA001	0.1	pH Unit		4	9	**7.8** ± 0.1	**7.8** ± 0.1	**8.7** ± 0.1	**8.8** ± 0.1	**8.7** ± 0.1
EG005(ED093)T: Total Metals by ICP-AES											
Arsenic	EG005T	5	mg/kg		----	500	**18** ± 3	**17** ± 3	**22** ± 3	**24** ± 4	**28** ± 4
Cadmium	EG005T	1	mg/kg		----	100	<1 --	<1 --	<1 --	<1 --	<1 --
Copper	EG005T	5	mg/kg		----	5000	**48** ± 6	**43** ± 5	**31** ± 4	**29** ± 4	**38** ± 5
Lead	EG005T	5	mg/kg		----	1500	<5 --	<5 --	<5 --	<5 --	<5 --
Molybdenum	EG005T	5	mg/kg		----	1000	<5 --	<5 --	<5 --	<5 --	<5 --
Nickel	EG005T	5	mg/kg		----	3000	**132** ± 13	**118** ± 12	**83** ± 8	**79** ± 8	**119** ± 12
Selenium	EG005T	5	mg/kg		----	50	<5 --	<5 --	<5 --	<5 --	<5 --
Silver	EG005T	2	mg/kg		----	180	<2 --	<2 --	<2 --	<2 --	<2 --
Tin	EG005T	10	mg/kg		----	500	<10 --	<10 --	<10 --	<10 --	<10 --
Zinc	EG005T	5	mg/kg		----	35000	**82** ± 9	**72** ± 8	**50** ± 6	**44** ± 6	**74** ± 8
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	**310** ± 60	**190** ± 40	<100 --	**120** ± 30	**180** ± 40
EP074A: Monocyclic Aromatic Hydrocarbons											
Benzene	EP074-UT	0.2	mg/kg		----	4	<0.2 --	<0.2 --	<0.2 --	<0.2 --	<0.2 --
Sum of monocyclic aromatic hydrocarbons	EP074-UT-SUM	0.5	mg/kg		----	70	<0.5 --	<0.5 --	<0.5 --	<0.5 --	<0.5 --
EP074I: Volatile Halogenated Compounds											
Vinyl chloride	EP074-UT	0.50	mg/kg		----	1.2	<0.50 --	<0.50 --	<0.50 --	<0.50 --	<0.50 --
Hexachlorobutadiene	EP074-UT	0.50	mg/kg		----	2.8	<0.50 --	<0.50 --	<0.50 --	<0.50 --	<0.50 --
Sum of other chlorinated hydrocarbons	EP074-UT-SUM	0.50	mg/kg		----	10	<0.50 --	<0.50 --	<0.50 --	<0.50 --	<0.50 --
EP075A: Phenolic Compounds (Halogenated)											
Sum of Phenols (halogenated)	EP075-EM-SUM	1.00	mg/kg		----	10	<1.00 --	<1.00 --	<1.00 --	<1.00 --	<1.00 --

Soil Hazard Categorisation and Management

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

Sub-Matrix: **SOIL**

Compound	*Method*	*LOR*	*Unit*	Guideline Lower Limit	Guideline Upper Limit	**SX_IB_20220317_07_53_SS_Primary_ALS** 17-Mar-2022 07:53 **EM2204843-001**	MU	**SX_IB_20220317_07_53_SS_Duplicate_ALS** 17-Mar-2022 07:53 **EM2204843-002**	MU	**SX_OB_20220317_12_04_SS_Primary_ALS** 17-Mar-2022 12:04 **EM2204843-005**	MU	**SX_OB_20220317_15_54_SS_Primary_ALS** 17-Mar-2022 15:54 **EM2204843-006**	MU	**SX_OB_20220317_16_03_SS_Triplicate_ALS** 17-Mar-2022 16:03 **EM2204843-007**	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*	Guideline Lower Limit	Guideline Upper Limit	*Sample ID* / *Sampling date/time*	SX_IB_20220317_07_53_SS_Primary_ALS 17-Mar-2022 07:53 EM2204843-001	MU	SX_IB_20220317_07_53_SS_Duplicate_ALS 17-Mar-2022 07:53 EM2204843-002	MU	SX_OB_20220317_12_04_SS_Primary_ALS 17-Mar-2022 12:04 EM2204843-005	MU	SX_OB_20220317_15_54_SS_Primary_ALS 17-Mar-2022 15:54 EM2204843-006	MU	SX_OB_20220317_16_03_SS_Triplicate_ALS 17-Mar-2022 16:03 EM2204843-007	MU
EA001: pH in soil using 0.01M CaCl extract																
pH (CaCl2)	EA001	0.1	pH Unit	4	9		**7.8**	± 0.1	**7.8**	± 0.1	**8.7**	± 0.1	**8.8**	± 0.1	**8.7**	± 0.1
EG005(ED093)T: Total Metals by ICP-AES																
Arsenic	EG005T	5	mg/kg	----	20		**18**	± 3	**17**	± 3	**22**	± 3	**24**	± 4	**28**	± 4
Cadmium	EG005T	1	mg/kg	----	3		<1	--	<1	--	<1	--	<1	--	<1	--
Copper	EG005T	5	mg/kg	----	100		**48**	± 6	**43**	± 5	**31**	± 4	**29**	± 4	**38**	± 5
Lead	EG005T	5	mg/kg	----	300		<5	--	<5	--	<5	--	<5	--	<5	--
Molybdenum	EG005T	5	mg/kg	----	40		<5	--	<5	--	<5	--	<5	--	<5	--
Nickel	EG005T	5	mg/kg	----	60		**132**	± 13	**118**	± 12	**83**	± 8	**79**	± 8	**119**	± 12
Selenium	EG005T	5	mg/kg	----	10		<5	--	<5	--	<5	--	<5	--	<5	--
Silver	EG005T	2	mg/kg	----	10		<2	--	<2	--	<2	--	<2	--	<2	--
Tin	EG005T	10	mg/kg	----	50		<10	--	<10	--	<10	--	<10	--	<10	--
Zinc	EG005T	5	mg/kg	----	200		**82**	± 9	**72**	± 8	**50**	± 6	**44**	± 6	**74**	± 8
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		**310**	± 60	**190**	± 40	<100	--	**120**	± 30	**180**	± 40
EP066: Polychlorinated Biphenyls (PCB)																
Total Polychlorinated biphenyls	EP066-EM	0.1	mg/kg	----	2		<0.1	--	<0.1	--	<0.1	--	<0.1	--	<0.1	--
EP074A: Monocyclic Aromatic Hydrocarbons																
Benzene	EP074-UT	0.2	mg/kg	----	1		<0.2	--	<0.2	--	<0.2	--	<0.2	--	<0.2	--
Sum of monocyclic aromatic hydrocarbons	EP074-UT-SUM	0.5	mg/kg	----	7		<0.5	--	<0.5	--	<0.5	--	<0.5	--	<0.5	--
EP074I: Volatile Halogenated Compounds																
Sum of volatile chlorinated hydrocarbons	EP074-UT-SUM	0.50	mg/kg	----	1		<0.50	--	<0.50	--	<0.50	--	<0.50	--	<0.50	--
EP075A: Phenolic Compounds (Halogenated)																
Sum of Phenols (halogenated)	EP075-EM-SUM	1.00	mg/kg	----	1		<1.00	--	<1.00	--	<1.00	--	<1.00	--	<1.00	--
EP075A: Phenolic Compounds (Non-halogenated)																

Soil Hazard Categorisation and Management

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

Sub-Matrix: **SOIL**

Compound	*Method*	*LOR*	*Unit*	Guideline Lower Limit	Guideline Upper Limit	**SX_IB_20220317_07_53_SS_Primary_ALS** 17-Mar-2022 07:53 **EM2204843-001**	MU	**SX_IB_20220317_07_53_SS_Duplicate_ALS** 17-Mar-2022 07:53 **EM2204843-002**	MU	**SX_OB_20220317_12_04_SS_Primary_ALS** 17-Mar-2022 12:04 **EM2204843-005**	MU	**SX_OB_20220317_15_54_SS_Primary_ALS** 17-Mar-2022 15:54 **EM2204843-006**	MU	**SX_OB_20220317_16_03_SS_Triplicate_ALS** 17-Mar-2022 16:03 **EM2204843-007**	MU
Sampling date/time															
Sample ID															
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*	Guideline Lower Limit	Guideline Upper Limit	SX_OB_20220317_19_57_SS_Primary_ALS 17-Mar-2022 19:57 EM2204843-008 MU	SX_OB_20220318_00_02_SS_Primary_ALS 18-Mar-2022 00:02 EM2204843-009 MU	SX_OB_20220318_04_02_SS_Primary_ALS 18-Mar-2022 16:02 EM2204843-010 MU	SX_IB_20220317_07_53_SS_Primary_ALS 17-Mar-2022 07:53 EM2204843-011 MU	SX_IB_20220317_07_53_SS_Duplicate_ALS 17-Mar-2022 07:53 EM2204843-012 MU
EA001: pH in soil using 0.01M CaCl extract										
pH (CaCl2)	EA001	0.1	pH Unit	2	12.5	**8.8** ± 0.1	**8.9** ± 0.1	**8.8** ± 0.1	----	----
EG005(ED093)T: Total Metals by ICP-AES										
Arsenic	EG005T	5	mg/kg	----	2000	**21** ± 3	**41** ± 5	**42** ± 6	----	----
Cadmium	EG005T	1	mg/kg	----	400	<1 --	<1 --	<1 --	----	----
Copper	EG005T	5	mg/kg	----	20000	**61** ± 8	**56** ± 7	**52** ± 6	----	----
Lead	EG005T	5	mg/kg	----	6000	<5 --	<5 --	<5 --	----	----
Molybdenum	EG005T	5	mg/kg	----	4000	<5 --	<5 --	<5 --	----	----
Nickel	EG005T	5	mg/kg	----	12000	**189** ± 18	**156** ± 15	**129** ± 13	----	----
Selenium	EG005T	5	mg/kg	----	200	<5 --	<5 --	<5 --	----	----
Silver	EG005T	2	mg/kg	----	720	<2 --	<2 --	<2 --	----	----
Zinc	EG005T	5	mg/kg	----	140000	**105** ± 12	**94** ± 10	**91** ± 10	----	----
EG035T: Total Recoverable Mercury by FIMS										
Mercury	EG035T	0.1	mg/kg	----	300	<0.1 --	<0.1 --	<0.1 --	----	----
EG048: Hexavalent Chromium (Alkaline Digest)										
Hexavalent Chromium	EG048G	1.0	mg/kg	----	2000	<1.0 --	<1.0 --	<1.0 --	----	----
EK026SF: Total CN by Segmented Flow Analyser										
Total Cyanide	EK026SF	5	mg/kg	----	10000	<5 --	<5 --	<5 --	----	----
EK040T: Fluoride Total										
Fluoride	EK040T	100	mg/kg	----	40000	**180** ± 40	**170** ± 40	**110** ± 30	----	----
EP074A: Monocyclic Aromatic Hydrocarbons										
Benzene	EP074-UT	0.2	mg/kg	----	16	<0.2 --	<0.2 --	<0.2 --	----	----
Sum of monocyclic aromatic hydrocarbons	EP074-UT-SUM	0.5	mg/kg	----	240	<0.5 --	<0.5 --	<0.5 --	----	----
EP074I: Volatile Halogenated Compounds										
Vinyl chloride	EP074-UT	0.50	mg/kg	----	4.8	<0.50 --	<0.50 --	<0.50 --	----	----
Hexachlorobutadiene	EP074-UT	0.50	mg/kg	----	11	<0.50 --	<0.50 --	<0.50 --	----	----
Sum of other chlorinated hydrocarbons	EP074-UT-SUM	0.50	mg/kg	----	50	<0.50 --	<0.50 --	<0.50 --	----	----
EP075A: Phenolic Compounds (Halogenated)										
Sum of Phenols (halogenated)	EP075-EM-SUM	1.00	mg/kg	----	320	<1.00 --	<1.00 --	<1.00 --	----	----
EP075A: Phenolic Compounds (Non-halogenated)										
Sum of Phenols (non-halogenated)	EP075-EM-SUM	20	mg/kg	----	2200	<20 --	<20 --	<20 --	----	----
EP075B: Polynuclear Aromatic Hydrocarbons										

Soil Hazard Categorisation and Management

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

Sub-Matrix: **SOIL**

Compound	*Method*	*LOR*	*Unit*	Guideline Lower Limit	Guideline Upper Limit	**SX_OB_20220317_19_57_SS_Primary_ALS** 17-Mar-2022 19:57 **EM2204843-008** MU	**SX_OB_20220318_00_02_SS_Primary_ALS** 18-Mar-2022 00:02 **EM2204843-009** MU	**SX_OB_20220318_04_02_SS_Primary_ALS** 18-Mar-2022 16:02 **EM2204843-010** MU	**SX_IB_20220317_07_53_SS_Primary_ALS** 17-Mar-2022 07:53 **EM2204843-011** MU	**SX_IB_20220317_07_53_SS_Duplicate_ALS** 17-Mar-2022 07:53 **EM2204843-012** MU
EP075B: Polynuclear Aromatic Hydrocarbons - Continued										
Benzo(a)pyrene	EP075-EM	0.5	mg/kg	----	20	<0.5 --	<0.5 --	<0.5 --	----	----
Sum of polycyclic aromatic hydrocarbons	EP075-EM-SUM	0.5	mg/kg	----	400	<0.5 --	<0.5 --	<0.5 --	----	----
EP075I: Organochlorine Pesticides										
Heptachlor	EP075-EM	0.05	mg/kg	----	4.8	<0.05 --	<0.05 --	<0.05 --	----	----
Sum of Aldrin + Dieldrin	EP075-EM-SUM	0.30	mg/kg	----	4.8	<0.30 --	<0.30 --	<0.30 --	----	----
Sum of DDD + DDE + DDT	EP075-EM-SUM	0.05	mg/kg	----	50	<0.05 --	<0.05 --	<0.05 --	----	----
Chlordane	EP075-EM-SUM	0.10	mg/kg	----	16	<0.10 --	<0.10 --	<0.10 --	----	----
Sum of other organochlorine pesticides	EP075-EM-SUM	0.03	mg/kg	----	50	<0.03 --	<0.03 --	<0.03 --	----	----
EP080/071: Total Petroleum Hydrocarbons										
C6 - C9 Fraction	EP074-UT	20	mg/kg	----	2600	<20 --	<20 --	<20 --	----	----
C10 - C36 Fraction (sum)	EP071-EM	50	mg/kg	----	40000	<50 --	<50 --	<50 --	----	----

Soil Hazard Categorisation and Management

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

Sub-Matrix: **SOIL**

Compound	*Method*	*LOR*	*Unit*	Guideline Lower Limit	Guideline Upper Limit	SX_OB_20220317_19_57_SS_Primary_ALS 17-Mar-2022 19:57 EM2204843-008 MU	SX_OB_20220318_00_02_SS_Primary_ALS 18-Mar-2022 00:02 EM2204843-009 MU	SX_OB_20220318_04_02_SS_Primary_ALS 18-Mar-2022 16:02 EM2204843-010 MU	SX_IB_20220317_07_53_SS_Primary_ALS 17-Mar-2022 07:53 EM2204843-011 MU	SX_IB_20220317_07_53_SS_Duplicate_ALS 17-Mar-2022 07:53 EM2204843-012 MU
EA001: pH in soil using 0.01M CaCl extract										
pH (CaCl2)	EA001	0.1	pH Unit	4	9	**8.8** ± 0.1	**8.9** ± 0.1	**8.8** ± 0.1	----	----
EG005(ED093)T: Total Metals by ICP-AES										
Arsenic	EG005T	5	mg/kg	----	500	**21** ± 3	**41** ± 5	**42** ± 6	----	----
Cadmium	EG005T	1	mg/kg	----	100	<1 --	<1 --	<1 --	----	----
Copper	EG005T	5	mg/kg	----	5000	**61** ± 8	**56** ± 7	**52** ± 6	----	----
Lead	EG005T	5	mg/kg	----	1500	<5 --	<5 --	<5 --	----	----
Molybdenum	EG005T	5	mg/kg	----	1000	<5 --	<5 --	<5 --	----	----
Nickel	EG005T	5	mg/kg	----	3000	**189** ± 18	**156** ± 15	**129** ± 13	----	----
Selenium	EG005T	5	mg/kg	----	50	<5 --	<5 --	<5 --	----	----
Silver	EG005T	2	mg/kg	----	180	<2 --	<2 --	<2 --	----	----
Tin	EG005T	10	mg/kg	----	500	<10 --	<10 --	<10 --	----	----
Zinc	EG005T	5	mg/kg	----	35000	**105** ± 12	**94** ± 10	**91** ± 10	----	----
EG035T: Total Recoverable Mercury by FIMS										
Mercury	EG035T	0.1	mg/kg	----	75	<0.1 --	<0.1 --	<0.1 --	----	----
EG048: Hexavalent Chromium (Alkaline Digest)										
Hexavalent Chromium	EG048G	1.0	mg/kg	----	500	<1.0 --	<1.0 --	<1.0 --	----	----
EK026SF: Total CN by Segmented Flow Analyser										
Total Cyanide	EK026SF	5	mg/kg	----	2500	<5 --	<5 --	<5 --	----	----
EK040T: Fluoride Total										
Fluoride	EK040T	100	mg/kg	----	10000	**180** ± 40	**170** ± 40	**110** ± 30	----	----
EP074A: Monocyclic Aromatic Hydrocarbons										
Benzene	EP074-UT	0.2	mg/kg	----	4	<0.2 --	<0.2 --	<0.2 --	----	----
Sum of monocyclic aromatic hydrocarbons	EP074-UT-SUM	0.5	mg/kg	----	70	<0.5 --	<0.5 --	<0.5 --	----	----
EP074I: Volatile Halogenated Compounds										
Vinyl chloride	EP074-UT	0.50	mg/kg	----	1.2	<0.50 --	<0.50 --	<0.50 --	----	----
Hexachlorobutadiene	EP074-UT	0.50	mg/kg	----	2.8	<0.50 --	<0.50 --	<0.50 --	----	----
Sum of other chlorinated hydrocarbons	EP074-UT-SUM	0.50	mg/kg	----	10	<0.50 --	<0.50 --	<0.50 --	----	----
EP075A: Phenolic Compounds (Halogenated)										
Sum of Phenols (halogenated)	EP075-EM-SUM	1.00	mg/kg	----	10	<1.00 --	<1.00 --	<1.00 --	----	----
EP075A: Phenolic Compounds (Non-halogenated)										
Sum of Phenols (non-halogenated)	EP075-EM-SUM	20	mg/kg	----	560	<20 --	<20 --	<20 --	----	----

Soil Hazard Categorisation and Management

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

Sub-Matrix: **SOIL**

Compound	*Method*	*LOR*	*Unit*	Guideline Lower Limit	Guideline Upper Limit	SX_OB_20220317_19_57_SS_Primary_ALS 17-Mar-2022 19:57 EM2204843-008 MU	SX_OB_20220318_00_02_SS_Primary_ALS 18-Mar-2022 00:02 EM2204843-009 MU	SX_OB_20220318_04_02_SS_Primary_ALS 18-Mar-2022 16:02 EM2204843-010 MU	SX_IB_20220317_07_53_SS_Primary_ALS 17-Mar-2022 07:53 EM2204843-011 MU	SX_IB_20220317_07_53_SS_Duplicate_ALS 17-Mar-2022 07:53 EM2204843-012 MU
EP075B: Polynuclear Aromatic Hydrocarbons										
Benzo(a)pyrene	EP075-EM	0.5	mg/kg	----	5	<0.5	<0.5	<0.5	----	----
Sum of polycyclic aromatic hydrocarbons	EP075-EM-SUM	0.5	mg/kg	----	100	<0.5	<0.5	<0.5	----	----
EP075I: Organochlorine Pesticides										
Heptachlor	EP075-EM	0.05	mg/kg	----	1.2	<0.05	<0.05	<0.05	----	----
Sum of Aldrin + Dieldrin	EP075-EM-SUM	0.30	mg/kg	----	1.2	<0.30	<0.30	<0.30	----	----
Sum of DDD + DDE + DDT	EP075-EM-SUM	0.05	mg/kg	----	50	<0.05	<0.05	<0.05	----	----
Chlordane	EP075-EM-SUM	0.10	mg/kg	----	4	<0.10	<0.10	<0.10	----	----
Sum of other organochlorine pesticides	EP075-EM-SUM	0.03	mg/kg	----	10	<0.03	<0.03	<0.03	----	----
EP080/071: Total Petroleum Hydrocarbons										
C6 - C9 Fraction	EP074-UT	20	mg/kg	----	650	<20	<20	<20	----	----
C10 - C36 Fraction (sum)	EP071-EM	50	mg/kg	----	10000	<50	<50	<50	----	----

Soil Hazard Categorisation and Management

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

Sub-Matrix: **SOIL**

Compound	*Method*	*LOR*	*Unit*	Guideline Lower Limit	Guideline Upper Limit	*Sample ID* / *Sampling date/time*	SX_OB_20220317_19_57_SS_Primary_ALS 17-Mar-2022 19:57 EM2204843-008	MU	SX_OB_20220318_00_02_SS_Primary_ALS 18-Mar-2022 00:02 EM2204843-009	MU	SX_OB_20220318_04_02_SS_Primary_ALS 18-Mar-2022 16:02 EM2204843-010	MU	SX_IB_20220317_07_53_SS_Primary_ALS 17-Mar-2022 07:53 EM2204843-011	MU	SX_IB_20220317_07_53_SS_Duplicate_ALS 17-Mar-2022 07:53 EM2204843-012	MU
EA001: pH in soil using 0.01M CaCl extract																
pH (CaCl2)	EA001	0.1	pH Unit	4	9		**8.8**	± 0.1	**8.9**	± 0.1	**8.8**	± 0.1	----		----	
EG005(ED093)T: Total Metals by ICP-AES																
Arsenic	EG005T	5	mg/kg	----	20		**21**	± 3	**41**	± 5	**42**	± 6	----		----	
Cadmium	EG005T	1	mg/kg	----	3		<1	--	<1	--	<1	--	----		----	
Copper	EG005T	5	mg/kg	----	100		**61**	± 8	**56**	± 7	**52**	± 6	----		----	
Lead	EG005T	5	mg/kg	----	300		<5	--	<5	--	<5	--	----		----	
Molybdenum	EG005T	5	mg/kg	----	40		<5	--	<5	--	<5	--	----		----	
Nickel	EG005T	5	mg/kg	----	60		**189**	± 18	**156**	± 15	**129**	± 13	----		----	
Selenium	EG005T	5	mg/kg	----	10		<5	--	<5	--	<5	--	----		----	
Silver	EG005T	2	mg/kg	----	10		<2	--	<2	--	<2	--	----		----	
Tin	EG005T	10	mg/kg	----	50		<10	--	<10	--	<10	--	----		----	
Zinc	EG005T	5	mg/kg	----	200		**105**	± 12	**94**	± 10	**91**	± 10	----		----	
EG035T: Total Recoverable Mercury by FIMS																
Mercury	EG035T	0.1	mg/kg	----	1		<0.1	--	<0.1	--	<0.1	--	----		----	
EG048: Hexavalent Chromium (Alkaline Digest)																
Hexavalent Chromium	EG048G	1.0	mg/kg	----	1		<1.0	--	<1.0	--	<1.0	--	----		----	
EK026SF: Total CN by Segmented Flow Analyser																
Total Cyanide	EK026SF	5	mg/kg	----	50		<5	--	<5	--	<5	--	----		----	
EK040T: Fluoride Total																
Fluoride	EK040T	100	mg/kg	----	450		**180**	± 40	**170**	± 40	**110**	± 30	----		----	
EP066: Polychlorinated Biphenyls (PCB)																
Total Polychlorinated biphenyls	EP066-EM	0.1	mg/kg	----	2		<0.1	--	<0.1	--	<0.1	--	----		----	
EP074A: Monocyclic Aromatic Hydrocarbons																
Benzene	EP074-UT	0.2	mg/kg	----	1		<0.2	--	<0.2	--	<0.2	--	----		----	
Sum of monocyclic aromatic hydrocarbons	EP074-UT-SUM	0.5	mg/kg	----	7		<0.5	--	<0.5	--	<0.5	--	----		----	
EP074I: Volatile Halogenated Compounds																
Sum of volatile chlorinated hydrocarbons	EP074-UT-SUM	0.50	mg/kg	----	1		<0.50	--	<0.50	--	<0.50	--	----		----	
EP075A: Phenolic Compounds (Halogenated)																
Sum of Phenols (halogenated)	EP075-EM-SUM	1.00	mg/kg	----	1		<1.00	--	<1.00	--	<1.00	--	----		----	
EP075A: Phenolic Compounds (Non-halogenated)																
Sum of Phenols (non-halogenated)	EP075-EM-SUM	20	mg/kg	----	60		<20	--	<20	--	<20	--	----		----	

Soil Hazard Categorisation and Management

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

Sub-Matrix: **SOIL**

Compound	*Method*	*LOR*	*Unit*	Guideline Lower Limit	Guideline Upper Limit	**SX_OB_20220317_19_57_SS_Primary_ALS** 17-Mar-2022 19:57 **EM2204843-008** MU	**SX_OB_20220318_00_02_SS_Primary_ALS** 18-Mar-2022 00:02 **EM2204843-009** MU	**SX_OB_20220318_04_02_SS_Primary_ALS** 18-Mar-2022 16:02 **EM2204843-010** MU	**SX_IB_20220317_07_53_SS_Primary_ALS** 17-Mar-2022 07:53 **EM2204843-011** MU	**SX_IB_20220317_07_53_SS_Duplicate_ALS** 17-Mar-2022 07:53 **EM2204843-012** MU
EP075B: Polynuclear Aromatic Hydrocarbons										
Benzo(a)pyrene	EP075-EM	0.5	mg/kg	----	1	<0.5 --	<0.5 --	<0.5 --	**----**	**----**
Sum of polycyclic aromatic hydrocarbons	EP075-EM-SUM	0.5	mg/kg	----	20	<0.5 --	<0.5 --	<0.5 --	**----**	**----**
EP075I: Organochlorine Pesticides										
Sum of organochlorine pesticides	EP075-EM-SUM	0.10	mg/kg	----	1	<0.10 --	<0.10 --	<0.10 --	**----**	**----**
EP080/071: Total Petroleum Hydrocarbons										
C6 - C9 Fraction	EP074-UT	20	mg/kg	----	100	<20 --	<20 --	<20 --	**----**	**----**
C10 - C36 Fraction (sum)	EP071-EM	50	mg/kg	----	1000	<50 --	<50 --	<50 --	**----**	**----**

Soil Hazard Categorisation and Management

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

Sub-Matrix: **SOIL**

			Sample ID	Guideline	Guideline	**SX_OB_20220317_12_04_SS_Primary_ALS**	**SX_OB_20220317_15_54_SS_Primary_ALS**	**SX_OB_20220317_16_03_SS_Triplicate_ALS**	**SX_OB_20220317_19_57_SS_Primary_ALS**	**SX_OB_20220318_00_02_SS_Primary_ALS**
			Sampling date/time			17-Mar-2022 12:04	17-Mar-2022 15:54	17-Mar-2022 16:03	17-Mar-2022 19:57	18-Mar-2022 00:02
Compound	*Method*	*LOR*	*Unit*	Lower Limit	Upper Limit	**EM2204843-013** MU	**EM2204843-014** MU	**EM2204843-015** MU	**EM2204843-016** MU	**EM2204843-017** MU
EA001: pH in soil using 0.01M CaCl extract										
pH (CaCl2)	EA001	0.1	pH Unit	----	----	----	----	----	----	----
EG005(ED093)T: Total Metals by ICP-AES										
Arsenic	EG005T	5	mg/kg	----	----	----	----	----	----	----
Cadmium	EG005T	1	mg/kg	----	----	----	----	----	----	----
Copper	EG005T	5	mg/kg	----	----	----	----	----	----	----
Lead	EG005T	5	mg/kg	----	----	----	----	----	----	----
Molybdenum	EG005T	5	mg/kg	----	----	----	----	----	----	----
Nickel	EG005T	5	mg/kg	----	----	----	----	----	----	----
Selenium	EG005T	5	mg/kg	----	----	----	----	----	----	----
Silver	EG005T	2	mg/kg	----	----	----	----	----	----	----
Zinc	EG005T	5	mg/kg	----	----	----	----	----	----	----
EG035T: Total Recoverable Mercury by FIMS										
Mercury	EG035T	0.1	mg/kg	----	----	----	----	----	----	----
EG048: Hexavalent Chromium (Alkaline Digest)										
Hexavalent Chromium	EG048G	1.0	mg/kg	----	----	----	----	----	----	----
EK026SF: Total CN by Segmented Flow Analyser										
Total Cyanide	EK026SF	5	mg/kg	----	----	----	----	----	----	----
EK040T: Fluoride Total										
Fluoride	EK040T	100	mg/kg	----	----	----	----	----	----	----
EP074A: Monocyclic Aromatic Hydrocarbons										
Benzene	EP074-UT	0.2	mg/kg	----	----	----	----	----	----	----
Sum of monocyclic aromatic hydrocarbons	EP074-UT-SUM	0.5	mg/kg	----	----	----	----	----	----	----
EP074I: Volatile Halogenated Compounds										
Hexachlorobutadiene	EP074-UT	0.50	mg/kg	----	----	----	----	----	----	----
Sum of other chlorinated hydrocarbons	EP074-UT-SUM	0.50	mg/kg	----	----	----	----	----	----	----
Vinyl chloride	EP074-UT	0.50	mg/kg	----	----	----	----	----	----	----
EP075A: Phenolic Compounds (Halogenated)										
Sum of Phenols (halogenated)	EP075-EM-SUM	1.00	mg/kg	----	----	----	----	----	----	----
EP075A: Phenolic Compounds (Non-halogenated)										
Sum of Phenols (non-halogenated)	EP075-EM-SUM	20	mg/kg	----	----	----	----	----	----	----
EP075B: Polynuclear Aromatic Hydrocarbons										

Soil Hazard Categorisation and Management

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

Sub-Matrix: **SOIL**

Compound	*Method*	*LOR*	*Unit*	Guideline Lower Limit	Guideline Upper Limit	**SX_OB_20220317_12_04_SS_Primary_ALS** 17-Mar-2022 12:04 **EM2204843-013** MU	**SX_OB_20220317_15_54_SS_Primary_ALS** 17-Mar-2022 15:54 **EM2204843-014** MU	**SX_OB_20220317_16_03_SS_Triplicate_ALS** 17-Mar-2022 16:03 **EM2204843-015** MU	**SX_OB_20220317_19_57_SS_Primary_ALS** 17-Mar-2022 19:57 **EM2204843-016** MU	**SX_OB_20220318_00_02_SS_Primary_ALS** 18-Mar-2022 00:02 **EM2204843-017** MU
Sample ID										
Sampling date/time										
EP075B: Polynuclear Aromatic Hydrocarbons - Continued										
Benzo(a)pyrene	EP075-EM	0.5	mg/kg	----	----	**----**	**----**	**----**	**----**	**----**
Sum of polycyclic aromatic hydrocarbons	EP075-EM-SUM	0.5	mg/kg	----	----	**----**	**----**	**----**	**----**	**----**
EP075I: Organochlorine Pesticides										
Chlordane	EP075-EM-SUM	0.10	mg/kg	----	----	**----**	**----**	**----**	**----**	**----**
Heptachlor	EP075-EM	0.05	mg/kg	----	----	**----**	**----**	**----**	**----**	**----**
Sum of Aldrin + Dieldrin	EP075-EM-SUM	0.30	mg/kg	----	----	**----**	**----**	**----**	**----**	**----**
Sum of DDD + DDE + DDT	EP075-EM-SUM	0.05	mg/kg	----	----	**----**	**----**	**----**	**----**	**----**
Sum of other organochlorine pesticides	EP075-EM-SUM	0.03	mg/kg	----	----	**----**	**----**	**----**	**----**	**----**
EP080/071: Total Petroleum Hydrocarbons										
C10 - C36 Fraction (sum)	EP071-EM	50	mg/kg	----	----	**----**	**----**	**----**	**----**	**----**
C6 - C9 Fraction	EP074-UT	20	mg/kg	----	----	**----**	**----**	**----**	**----**	**----**

Soil Hazard Categorisation and Management

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

Sub-Matrix: **SOIL**

Compound	*Method*	*LOR*	*Unit*	Guideline Lower Limit	Guideline Upper Limit	SX_OB_20220317_12_04_SS_Primary_ALS 17-Mar-2022 12:04 EM2204843-013 MU	SX_OB_20220317_15_54_SS_Primary_ALS 17-Mar-2022 15:54 EM2204843-014 MU	SX_OB_20220317_16_03_SS_Triplicate_ALS 17-Mar-2022 16:03 EM2204843-015 MU	SX_OB_20220317_19_57_SS_Primary_ALS 17-Mar-2022 19:57 EM2204843-016 MU	SX_OB_20220318_00_02_SS_Primary_ALS 18-Mar-2022 00:02 EM2204843-017 MU
Sample ID										
Sampling date/time										
EA001: pH in soil using 0.01M CaCl extract										
pH (CaCl2)	EA001	0.1	pH Unit	----	----	----	----	----	----	----
EG005(ED093)T: Total Metals by ICP-AES										
Arsenic	EG005T	5	mg/kg	----	----	----	----	----	----	----
Cadmium	EG005T	1	mg/kg	----	----	----	----	----	----	----
Copper	EG005T	5	mg/kg	----	----	----	----	----	----	----
Lead	EG005T	5	mg/kg	----	----	----	----	----	----	----
Molybdenum	EG005T	5	mg/kg	----	----	----	----	----	----	----
Nickel	EG005T	5	mg/kg	----	----	----	----	----	----	----
Selenium	EG005T	5	mg/kg	----	----	----	----	----	----	----
Silver	EG005T	2	mg/kg	----	----	----	----	----	----	----
Tin	EG005T	10	mg/kg	----	----	----	----	----	----	----
Zinc	EG005T	5	mg/kg	----	----	----	----	----	----	----
EG035T: Total Recoverable Mercury by FIMS										
Mercury	EG035T	0.1	mg/kg	----	----	----	----	----	----	----
EG048: Hexavalent Chromium (Alkaline Digest)										
Hexavalent Chromium	EG048G	1.0	mg/kg	----	----	----	----	----	----	----
EK026SF: Total CN by Segmented Flow Analyser										
Total Cyanide	EK026SF	5	mg/kg	----	----	----	----	----	----	----
EK040T: Fluoride Total										
Fluoride	EK040T	100	mg/kg	----	----	----	----	----	----	----
EP074A: Monocyclic Aromatic Hydrocarbons										
Benzene	EP074-UT	0.2	mg/kg	----	----	----	----	----	----	----
Sum of monocyclic aromatic hydrocarbons	EP074-UT-SUM	0.5	mg/kg	----	----	----	----	----	----	----
EP074I: Volatile Halogenated Compounds										
Hexachlorobutadiene	EP074-UT	0.50	mg/kg	----	----	----	----	----	----	----
Sum of other chlorinated hydrocarbons	EP074-UT-SUM	0.50	mg/kg	----	----	----	----	----	----	----
Vinyl chloride	EP074-UT	0.50	mg/kg	----	----	----	----	----	----	----
EP075A: Phenolic Compounds (Halogenated)										
Sum of Phenols (halogenated)	EP075-EM-SUM	1.00	mg/kg	----	----	----	----	----	----	----
EP075A: Phenolic Compounds (Non-halogenated)										
Sum of Phenols (non-halogenated)	EP075-EM-SUM	20	mg/kg	----	----	----	----	----	----	----

Soil Hazard Categorisation and Management

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

Sub-Matrix: **SOIL**

Compound	*Method*	*LOR*	*Unit*	Guideline Lower Limit	Guideline Upper Limit	**SX_OB_20220317_12_04_SS_Primary_ALS** 17-Mar-2022 12:04 **EM2204843-013** MU	**SX_OB_20220317_15_54_SS_Primary_ALS** 17-Mar-2022 15:54 **EM2204843-014** MU	**SX_OB_20220317_16_03_SS_Triplicate_ALS** 17-Mar-2022 16:03 **EM2204843-015** MU	**SX_OB_20220317_19_57_SS_Primary_ALS** 17-Mar-2022 19:57 **EM2204843-016** MU	**SX_OB_20220318_00_02_SS_Primary_ALS** 18-Mar-2022 00:02 **EM2204843-017** MU
Sample ID										
Sampling date/time										
EP075B: Polynuclear Aromatic Hydrocarbons										
Benzo(a)pyrene	EP075-EM	0.5	mg/kg	----	----	**----**	**----**	**----**	**----**	**----**
Sum of polycyclic aromatic hydrocarbons	EP075-EM-SUM	0.5	mg/kg	----	----	**----**	**----**	**----**	**----**	**----**
EP075I: Organochlorine Pesticides										
Chlordane	EP075-EM-SUM	0.10	mg/kg	----	----	**----**	**----**	**----**	**----**	**----**
Heptachlor	EP075-EM	0.05	mg/kg	----	----	**----**	**----**	**----**	**----**	**----**
Sum of Aldrin + Dieldrin	EP075-EM-SUM	0.30	mg/kg	----	----	**----**	**----**	**----**	**----**	**----**
Sum of DDD + DDE + DDT	EP075-EM-SUM	0.05	mg/kg	----	----	**----**	**----**	**----**	**----**	**----**
Sum of other organochlorine pesticides	EP075-EM-SUM	0.03	mg/kg	----	----	**----**	**----**	**----**	**----**	**----**
EP080/071: Total Petroleum Hydrocarbons										
C10 - C36 Fraction (sum)	EP071-EM	50	mg/kg	----	----	**----**	**----**	**----**	**----**	**----**
C6 - C9 Fraction	EP074-UT	20	mg/kg	----	----	**----**	**----**	**----**	**----**	**----**

Soil Hazard Categorisation and Management

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

Sub-Matrix: **SOIL**

				Sample ID						
				Sampling date/time	Guideline	Guideline	SX_OB_20220317_12_04_SS_Primary_ALS	SX_OB_20220317_15_54_SS_Primary_ALS	SX_OB_20220317_16_03_SS_Triplicate_ALS	SX_OB_20220317_19_57_SS_Primary_ALS	SX_OB_20220318_00_02_SS_Primary_ALS
							17-Mar-2022 12:04	17-Mar-2022 15:54	17-Mar-2022 16:03	17-Mar-2022 19:57	18-Mar-2022 00:02
Compound	*Method*	*LOR*	*Unit*		Lower Limit	Upper Limit	EM2204843-013 MU	EM2204843-014 MU	EM2204843-015 MU	EM2204843-016 MU	EM2204843-017 MU
EA001: pH in soil using 0.01M CaCl extract											
pH (CaCl2)	EA001	0.1	pH Unit	----	----	----	----	----	----	----	----
EG005(ED093)T: Total Metals by ICP-AES											
Arsenic	EG005T	5	mg/kg	----	----	----	----	----	----	----	----
Cadmium	EG005T	1	mg/kg	----	----	----	----	----	----	----	----
Copper	EG005T	5	mg/kg	----	----	----	----	----	----	----	----
Lead	EG005T	5	mg/kg	----	----	----	----	----	----	----	----
Molybdenum	EG005T	5	mg/kg	----	----	----	----	----	----	----	----
Nickel	EG005T	5	mg/kg	----	----	----	----	----	----	----	----
Selenium	EG005T	5	mg/kg	----	----	----	----	----	----	----	----
Silver	EG005T	2	mg/kg	----	----	----	----	----	----	----	----
Tin	EG005T	10	mg/kg	----	----	----	----	----	----	----	----
Zinc	EG005T	5	mg/kg	----	----	----	----	----	----	----	----
EG035T: Total Recoverable Mercury by FIMS											
Mercury	EG035T	0.1	mg/kg	----	----	----	----	----	----	----	----
EG048: Hexavalent Chromium (Alkaline Digest)											
Hexavalent Chromium	EG048G	1.0	mg/kg	----	----	----	----	----	----	----	----
EK026SF: Total CN by Segmented Flow Analyser											
Total Cyanide	EK026SF	5	mg/kg	----	----	----	----	----	----	----	----
EK040T: Fluoride Total											
Fluoride	EK040T	100	mg/kg	----	----	----	----	----	----	----	----
EP066: Polychlorinated Biphenyls (PCB)											
Total Polychlorinated biphenyls	EP066-EM	0.1	mg/kg	----	----	----	----	----	----	----	----
EP074A: Monocyclic Aromatic Hydrocarbons											
Benzene	EP074-UT	0.2	mg/kg	----	----	----	----	----	----	----	----
Sum of monocyclic aromatic hydrocarbons	EP074-UT-SUM	0.5	mg/kg	----	----	----	----	----	----	----	----
EP074I: Volatile Halogenated Compounds											
Sum of volatile chlorinated hydrocarbons	EP074-UT-SUM	0.50	mg/kg	----	----	----	----	----	----	----	----
EP075A: Phenolic Compounds (Halogenated)											
Sum of Phenols (halogenated)	EP075-EM-SUM	1.00	mg/kg	----	----	----	----	----	----	----	----
EP075A: Phenolic Compounds (Non-halogenated)											
Sum of Phenols (non-halogenated)	EP075-EM-SUM	20	mg/kg	----	----	----	----	----	----	----	----

Soil Hazard Categorisation and Management

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

Sub-Matrix: **SOIL**

Compound	*Method*	*LOR*	*Unit*	Guideline Lower Limit	Guideline Upper Limit	**SX_OB_20220317_12_04_SS_Primary_ALS** 17-Mar-2022 12:04 **EM2204843-013** MU	**SX_OB_20220317_15_54_SS_Primary_ALS** 17-Mar-2022 15:54 **EM2204843-014** MU	**SX_OB_20220317_16_03_SS_Triplicate_ALS** 17-Mar-2022 16:03 **EM2204843-015** MU	**SX_OB_20220317_19_57_SS_Primary_ALS** 17-Mar-2022 19:57 **EM2204843-016** MU	**SX_OB_20220318_00_02_SS_Primary_ALS** 18-Mar-2022 00:02 **EM2204843-017** MU
Sample ID										
Sampling date/time										
EP075B: Polynuclear Aromatic Hydrocarbons										
Benzo(a)pyrene	EP075-EM	0.5	mg/kg	----	----	**----**	**----**	**----**	**----**	**----**
Sum of polycyclic aromatic hydrocarbons	EP075-EM-SUM	0.5	mg/kg	----	----	**----**	**----**	**----**	**----**	**----**
EP075I: Organochlorine Pesticides										
Sum of organochlorine pesticides	EP075-EM-SUM	0.10	mg/kg	----	----	**----**	**----**	**----**	**----**	**----**
EP080/071: Total Petroleum Hydrocarbons										
C10 - C36 Fraction (sum)	EP071-EM	50	mg/kg	----	----	**----**	**----**	**----**	**----**	**----**
C6 - C9 Fraction	EP074-UT	20	mg/kg	----	----	**----**	**----**	**----**	**----**	**----**

Soil Hazard Categorisation and Management

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

Sub-Matrix: **SOIL**

Compound	*Method*	*LOR*	*Unit*	*Sample ID*	Guideline Lower Limit	Guideline Upper Limit	**SX_OB_20220318_04_02_SS_Primary_ALS**	----	----	----	----
				Sampling date/time			18-Mar-2022 04:02	----	----	----	----
							EM2204843-018 MU				
EA001: pH in soil using 0.01M CaCl extract											
pH (CaCl2)	EA001	0.1	pH Unit		----	----	**----**	**----**	**----**	**----**	**----**
EG005(ED093)T: Total Metals by ICP-AES											
Arsenic	EG005T	5	mg/kg		----	----	**----**	**----**	**----**	**----**	**----**
Cadmium	EG005T	1	mg/kg		----	----	**----**	**----**	**----**	**----**	**----**
Copper	EG005T	5	mg/kg		----	----	**----**	**----**	**----**	**----**	**----**
Lead	EG005T	5	mg/kg		----	----	**----**	**----**	**----**	**----**	**----**
Molybdenum	EG005T	5	mg/kg		----	----	**----**	**----**	**----**	**----**	**----**
Nickel	EG005T	5	mg/kg		----	----	**----**	**----**	**----**	**----**	**----**
Selenium	EG005T	5	mg/kg		----	----	**----**	**----**	**----**	**----**	**----**
Silver	EG005T	2	mg/kg		----	----	**----**	**----**	**----**	**----**	**----**
Zinc	EG005T	5	mg/kg		----	----	**----**	**----**	**----**	**----**	**----**
EG035T: Total Recoverable Mercury by FIMS											
Mercury	EG035T	0.1	mg/kg		----	----	**----**	**----**	**----**	**----**	**----**
EG048: Hexavalent Chromium (Alkaline Digest)											
Hexavalent Chromium	EG048G	1.0	mg/kg		----	----	**----**	**----**	**----**	**----**	**----**
EK026SF: Total CN by Segmented Flow Analyser											
Total Cyanide	EK026SF	5	mg/kg		----	----	**----**	**----**	**----**	**----**	**----**
EK040T: Fluoride Total											
Fluoride	EK040T	100	mg/kg		----	----	**----**	**----**	**----**	**----**	**----**
EP074A: Monocyclic Aromatic Hydrocarbons											
Benzene	EP074-UT	0.2	mg/kg		----	----	**----**	**----**	**----**	**----**	**----**
Sum of monocyclic aromatic hydrocarbons	EP074-UT-SUM	0.5	mg/kg		----	----	**----**	**----**	**----**	**----**	**----**
EP074I: Volatile Halogenated Compounds											
Hexachlorobutadiene	EP074-UT	0.50	mg/kg		----	----	**----**	**----**	**----**	**----**	**----**
Sum of other chlorinated hydrocarbons	EP074-UT-SUM	0.50	mg/kg		----	----	**----**	**----**	**----**	**----**	**----**
Vinyl chloride	EP074-UT	0.50	mg/kg		----	----	**----**	**----**	**----**	**----**	**----**
EP075A: Phenolic Compounds (Halogenated)											
Sum of Phenols (halogenated)	EP075-EM-SUM	1.00	mg/kg		----	----	**----**	**----**	**----**	**----**	**----**
EP075A: Phenolic Compounds (Non-halogenated)											
Sum of Phenols (non-halogenated)	EP075-EM-SUM	20	mg/kg		----	----	**----**	**----**	**----**	**----**	**----**
EP075B: Polynuclear Aromatic Hydrocarbons											

Soil Hazard Categorisation and Management

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

Sub-Matrix: **SOIL**

Compound	*Method*	*LOR*	*Unit*	Guideline Lower Limit	Guideline Upper Limit	*Sample ID* / *Sampling date/time*				
						SX_OB_20220318_04_02_SS_Primary_ALS	**----**	**----**	**----**	**----**
						18-Mar-2022 04:02	----	----	----	----
						EM2204843-018 MU				
EP075B: Polynuclear Aromatic Hydrocarbons - Continued										
Benzo(a)pyrene	EP075-EM	0.5	mg/kg	----	----	**----**	**----**	**----**	**----**	**----**
Sum of polycyclic aromatic hydrocarbons	EP075-EM-SUM	0.5	mg/kg	----	----	**----**	**----**	**----**	**----**	**----**
EP075I: Organochlorine Pesticides										
Chlordane	EP075-EM-SUM	0.10	mg/kg	----	----	**----**	**----**	**----**	**----**	**----**
Heptachlor	EP075-EM	0.05	mg/kg	----	----	**----**	**----**	**----**	**----**	**----**
Sum of Aldrin + Dieldrin	EP075-EM-SUM	0.30	mg/kg	----	----	**----**	**----**	**----**	**----**	**----**
Sum of DDD + DDE + DDT	EP075-EM-SUM	0.05	mg/kg	----	----	**----**	**----**	**----**	**----**	**----**
Sum of other organochlorine pesticides	EP075-EM-SUM	0.03	mg/kg	----	----	**----**	**----**	**----**	**----**	**----**
EP080/071: Total Petroleum Hydrocarbons										
C10 - C36 Fraction (sum)	EP071-EM	50	mg/kg	----	----	**----**	**----**	**----**	**----**	**----**
C6 - C9 Fraction	EP074-UT	20	mg/kg	----	----	**----**	**----**	**----**	**----**	**----**

Soil Hazard Categorisation and Management

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

Sub-Matrix: **SOIL**

Compound	*Method*	*LOR*	*Unit*	*Sample ID*	Guideline Lower Limit	Guideline Upper Limit	**SX_OB_20220318_04_02_SS_Primary_ALS**	----	----	----	----
				Sampling date/time			18-Mar-2022 04:02	----	----	----	----
							EM2204843-018 MU				
EA001: pH in soil using 0.01M CaCl extract											
pH (CaCl2)	EA001	0.1	pH Unit		----	----	**----**	**----**	**----**	**----**	**----**
EG005(ED093)T: Total Metals by ICP-AES											
Arsenic	EG005T	5	mg/kg		----	----	**----**	**----**	**----**	**----**	**----**
Cadmium	EG005T	1	mg/kg		----	----	**----**	**----**	**----**	**----**	**----**
Copper	EG005T	5	mg/kg		----	----	**----**	**----**	**----**	**----**	**----**
Lead	EG005T	5	mg/kg		----	----	**----**	**----**	**----**	**----**	**----**
Molybdenum	EG005T	5	mg/kg		----	----	**----**	**----**	**----**	**----**	**----**
Nickel	EG005T	5	mg/kg		----	----	**----**	**----**	**----**	**----**	**----**
Selenium	EG005T	5	mg/kg		----	----	**----**	**----**	**----**	**----**	**----**
Silver	EG005T	2	mg/kg		----	----	**----**	**----**	**----**	**----**	**----**
Tin	EG005T	10	mg/kg		----	----	**----**	**----**	**----**	**----**	**----**
Zinc	EG005T	5	mg/kg		----	----	**----**	**----**	**----**	**----**	**----**
EG035T: Total Recoverable Mercury by FIMS											
Mercury	EG035T	0.1	mg/kg		----	----	**----**	**----**	**----**	**----**	**----**
EG048: Hexavalent Chromium (Alkaline Digest)											
Hexavalent Chromium	EG048G	1.0	mg/kg		----	----	**----**	**----**	**----**	**----**	**----**
EK026SF: Total CN by Segmented Flow Analyser											
Total Cyanide	EK026SF	5	mg/kg		----	----	**----**	**----**	**----**	**----**	**----**
EK040T: Fluoride Total											
Fluoride	EK040T	100	mg/kg		----	----	**----**	**----**	**----**	**----**	**----**
EP074A: Monocyclic Aromatic Hydrocarbons											
Benzene	EP074-UT	0.2	mg/kg		----	----	**----**	**----**	**----**	**----**	**----**
Sum of monocyclic aromatic hydrocarbons	EP074-UT-SUM	0.5	mg/kg		----	----	**----**	**----**	**----**	**----**	**----**
EP074I: Volatile Halogenated Compounds											
Hexachlorobutadiene	EP074-UT	0.50	mg/kg		----	----	**----**	**----**	**----**	**----**	**----**
Sum of other chlorinated hydrocarbons	EP074-UT-SUM	0.50	mg/kg		----	----	**----**	**----**	**----**	**----**	**----**
Vinyl chloride	EP074-UT	0.50	mg/kg		----	----	**----**	**----**	**----**	**----**	**----**
EP075A: Phenolic Compounds (Halogenated)											
Sum of Phenols (halogenated)	EP075-EM-SUM	1.00	mg/kg		----	----	**----**	**----**	**----**	**----**	**----**
EP075A: Phenolic Compounds (Non-halogenated)											
Sum of Phenols (non-halogenated)	EP075-EM-SUM	20	mg/kg		----	----	**----**	**----**	**----**	**----**	**----**

Soil Hazard Categorisation and Management

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

Sub-Matrix: **SOIL**

Compound	*Method*	*LOR*	*Unit*	Guideline Lower Limit	Guideline Upper Limit	*Sample ID* / *Sampling date/time*				
						SX_OB_20220318_04_02_SS_Primary_ALS	**----**	**----**	**----**	**----**
						18-Mar-2022 04:02	----	----	----	----
						EM2204843-018 MU				
EP075B: Polynuclear Aromatic Hydrocarbons										
Benzo(a)pyrene	EP075-EM	0.5	mg/kg	----	----	**----**	**----**	**----**	**----**	**----**
Sum of polycyclic aromatic hydrocarbons	EP075-EM-SUM	0.5	mg/kg	----	----	**----**	**----**	**----**	**----**	**----**
EP075I: Organochlorine Pesticides										
Chlordane	EP075-EM-SUM	0.10	mg/kg	----	----	**----**	**----**	**----**	**----**	**----**
Heptachlor	EP075-EM	0.05	mg/kg	----	----	**----**	**----**	**----**	**----**	**----**
Sum of Aldrin + Dieldrin	EP075-EM-SUM	0.30	mg/kg	----	----	**----**	**----**	**----**	**----**	**----**
Sum of DDD + DDE + DDT	EP075-EM-SUM	0.05	mg/kg	----	----	**----**	**----**	**----**	**----**	**----**
Sum of other organochlorine pesticides	EP075-EM-SUM	0.03	mg/kg	----	----	**----**	**----**	**----**	**----**	**----**
EP080/071: Total Petroleum Hydrocarbons										
C10 - C36 Fraction (sum)	EP071-EM	50	mg/kg	----	----	**----**	**----**	**----**	**----**	**----**
C6 - C9 Fraction	EP074-UT	20	mg/kg	----	----	**----**	**----**	**----**	**----**	**----**

Soil Hazard Categorisation and Management

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

Sub-Matrix: **SOIL**

Compound	*Method*	*LOR*	*Unit*	Guideline Lower Limit	Guideline Upper Limit	*Sample ID* / *Sampling date/time* / **EM2204843-018** MU: **SX_OB_20220318_04_02_SS_Primary_ALS** / 18-Mar-2022 04:02	----	----	----	----
EA001: pH in soil using 0.01M CaCl extract										
pH (CaCl2)	EA001	0.1	pH Unit	----	----	----	----	----	----	----
EG005(ED093)T: Total Metals by ICP-AES										
Arsenic	EG005T	5	mg/kg	----	----	----	----	----	----	----
Cadmium	EG005T	1	mg/kg	----	----	----	----	----	----	----
Copper	EG005T	5	mg/kg	----	----	----	----	----	----	----
Lead	EG005T	5	mg/kg	----	----	----	----	----	----	----
Molybdenum	EG005T	5	mg/kg	----	----	----	----	----	----	----
Nickel	EG005T	5	mg/kg	----	----	----	----	----	----	----
Selenium	EG005T	5	mg/kg	----	----	----	----	----	----	----
Silver	EG005T	2	mg/kg	----	----	----	----	----	----	----
Tin	EG005T	10	mg/kg	----	----	----	----	----	----	----
Zinc	EG005T	5	mg/kg	----	----	----	----	----	----	----
EG035T: Total Recoverable Mercury by FIMS										
Mercury	EG035T	0.1	mg/kg	----	----	----	----	----	----	----
EG048: Hexavalent Chromium (Alkaline Digest)										
Hexavalent Chromium	EG048G	1.0	mg/kg	----	----	----	----	----	----	----
EK026SF: Total CN by Segmented Flow Analyser										
Total Cyanide	EK026SF	5	mg/kg	----	----	----	----	----	----	----
EK040T: Fluoride Total										
Fluoride	EK040T	100	mg/kg	----	----	----	----	----	----	----
EP066: Polychlorinated Biphenyls (PCB)										
Total Polychlorinated biphenyls	EP066-EM	0.1	mg/kg	----	----	----	----	----	----	----
EP074A: Monocyclic Aromatic Hydrocarbons										
Benzene	EP074-UT	0.2	mg/kg	----	----	----	----	----	----	----
Sum of monocyclic aromatic hydrocarbons	EP074-UT-SUM	0.5	mg/kg	----	----	----	----	----	----	----
EP074I: Volatile Halogenated Compounds										
Sum of volatile chlorinated hydrocarbons	EP074-UT-SUM	0.50	mg/kg	----	----	----	----	----	----	----
EP075A: Phenolic Compounds (Halogenated)										
Sum of Phenols (halogenated)	EP075-EM-SUM	1.00	mg/kg	----	----	----	----	----	----	----
EP075A: Phenolic Compounds (Non-halogenated)										
Sum of Phenols (non-halogenated)	EP075-EM-SUM	20	mg/kg	----	----	----	----	----	----	----

Soil Hazard Categorisation and Management

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

Sub-Matrix: **SOIL**

Compound	*Method*	*LOR*	*Unit*	Guideline Lower Limit	Guideline Upper Limit	*Sample ID* / *Sampling date/time*				
						SX_OB_20220318_04_02_SS_Primary_ALS	**----**	**----**	**----**	**----**
						18-Mar-2022 04:02	----	----	----	----
						EM2204843-018 MU				
EP075B: Polynuclear Aromatic Hydrocarbons										
Benzo(a)pyrene	EP075-EM	0.5	mg/kg	----	----	**----**	**----**	**----**	**----**	**----**
Sum of polycyclic aromatic hydrocarbons	EP075-EM-SUM	0.5	mg/kg	----	----	**----**	**----**	**----**	**----**	**----**
EP075I: Organochlorine Pesticides										
Sum of organochlorine pesticides	EP075-EM-SUM	0.10	mg/kg	----	----	**----**	**----**	**----**	**----**	**----**
EP080/071: Total Petroleum Hydrocarbons										
C10 - C36 Fraction (sum)	EP071-EM	50	mg/kg	----	----	**----**	**----**	**----**	**----**	**----**
C6 - C9 Fraction	EP074-UT	20	mg/kg	----	----	**----**	**----**	**----**	**----**	**----**

ALS Environmental

QUALITY CONTROL REPORT

Work Order	: **EM2204843**	Page	: 1 of 32
Client	: **AGON ENVIRONMENTAL PTY LTD**	Laboratory	: Environmental Division Melbourne
Contact	: CRAIG TRIMBUR	Contact	: Bronwyn Sheen
Address	: D1.1 63-85 TURNER STREET PORT MELBOURNE 3207	Address	: 4 Westall Rd Springvale VIC Australia 3171
Telephone	: ----	Telephone	: +6138549 9600
Project	: JC0927	Date Samples Received	: 18-Mar-2022
Order number	: ----	Date Analysis Commenced	: 21-Mar-2022
C-O-C number	: 20220318042901-ALS-12	Issue Date	: 25-Mar-2022
Sampler	: ----		
Site	: 20220318042901-ALS-12		
Quote number	: EN/150/19 -WGTP -Bulk Sample Quote		
No. of samples received	: 18		
No. of samples analysed	: 18		

ilac-MRA NATA

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

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

This Quality Control Report contains the following information:

- Laboratory Duplicate (DUP) Report; Relative Percentage Difference (RPD) and Acceptance Limits
- Method Blank (MB) and Laboratory Control Spike (LCS) Report; Recovery and Acceptance Limits
- Matrix Spike (MS) Report; Recovery and Acceptance Limits

Signatories

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

Signatories	*Position*	*Accreditation Category*
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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: 4241584)									
EM2204488-001	Anonymous	EG005T: Cadmium	7440-43-9	1	mg/kg	<1	<1	0.0	No Limit
		EG005T: Chromium	7440-47-3	2	mg/kg	10	17	52.9	No Limit
		EG005T: Molybdenum	7439-98-7	2	mg/kg	<2	<2	0.0	No Limit
		EG005T: Nickel	7440-02-0	2	mg/kg	8	13	48.8	No Limit
		EG005T: Silver	7440-22-4	2	mg/kg	<2	<2	0.0	No Limit
		EG005T: Arsenic	7440-38-2	5	mg/kg	<5	6	20.7	No Limit
		EG005T: Copper	7440-50-8	5	mg/kg	<5	<5	0.0	No Limit
		EG005T: Lead	7439-92-1	5	mg/kg	<5	7	28.8	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	18	29	48.4	No Limit
EM2204531-005	Anonymous	EG005T: Cadmium	7440-43-9	1	mg/kg	<1	<1	0.0	No Limit
		EG005T: Chromium	7440-47-3	2	mg/kg	56	54	2.8	0% - 20%
		EG005T: Molybdenum	7439-98-7	2	mg/kg	<2	<2	0.0	No Limit
		EG005T: Nickel	7440-02-0	2	mg/kg	10	10	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	18	18	0.0	No Limit
		EG005T: Copper	7440-50-8	5	mg/kg	<5	<5	0.0	No Limit
		EG005T: Lead	7439-92-1	5	mg/kg	12	12	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	11	10	14.4	No Limit
EG005(ED093)T: Total Metals by ICP-AES (QC Lot: 4241586)									

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: 4241586) - continued									
EM2204843-008	SX_OB_20220317_19_57_SS_Primary_ALS	EG005T: Chromium	7440-47-3	2	mg/kg	100	94	6.9	0% - 20%
		EG005T: Nickel	7440-02-0	2	mg/kg	189	176	7.0	0% - 20%
		EG005T: Copper	7440-50-8	5	mg/kg	61	56	8.3	0% - 50%
		EG005T: Zinc	7440-66-6	5	mg/kg	105	95	9.9	0% - 20%
EM2204843-008	SX_OB_20220317_19_57_SS_Primary_ALS	EG005T: Cadmium	7440-43-9	1	mg/kg	<1	<1	0.0	No Limit
		EG005T: Molybdenum	7439-98-7	2	mg/kg	<5	<5	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	21	45	71.2	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
EM2204901-006	Anonymous	EG005T: Cadmium	7440-43-9	1	mg/kg	<1	<1	0.0	No Limit
		EG005T: Chromium	7440-47-3	2	mg/kg	10	13	26.9	No Limit
		EG005T: Molybdenum	7439-98-7	2	mg/kg	<2	<2	0.0	No Limit
		EG005T: Nickel	7440-02-0	2	mg/kg	72	74	2.3	0% - 20%
		EG005T: Silver	7440-22-4	2	mg/kg	<2	<2	0.0	No Limit
		EG005T: Arsenic	7440-38-2	5	mg/kg	<5	<5	0.0	No Limit
		EG005T: Copper	7440-50-8	5	mg/kg	28	29	0.0	No Limit
		EG005T: Lead	7439-92-1	5	mg/kg	<5	<5	0.0	No Limit
		EG005T: Selenium	7782-49-2	5	mg/kg	<5	<5	0.0	No Limit
		EG005T: Tin	7440-31-5	5	mg/kg	<5	<5	0.0	No Limit
		EG005T: Zinc	7440-66-6	5	mg/kg	29	31	5.8	No Limit
EA001: pH in soil using 0.01M CaCl extract (QC Lot: 4246393)									
EM2204843-001	SX_IB_20220317_07_53_SS_Primary_ALS	EA001: pH (CaCl2)	----	0.1	pH Unit	7.8	7.8	0.0	0% - 20%
EM2204882-002	Anonymous	EA001: pH (CaCl2)	----	0.1	pH Unit	5.0	4.9	0.0	0% - 20%
EA055: Moisture Content (Dried @ 105-110°C) (QC Lot: 4244248)									
EM2204843-001	SX_IB_20220317_07_53_SS_Primary_ALS	EA055: Moisture Content	----	0.1	%	32.3	32.6	1.0	0% - 20%
EM2204849-004	Anonymous	EA055: Moisture Content	----	0.1	%	15.3	17.6	13.6	0% - 50%
EG035T: Total Recoverable Mercury by FIMS (QC Lot: 4241583)									
EM2204488-001	Anonymous	EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	0.0	No Limit
EM2204531-005	Anonymous	EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	0.0	No Limit
EG035T: Total Recoverable Mercury by FIMS (QC Lot: 4241585)									
EM2204843-008	SX_OB_20220317_19_57_SS_Primary_ALS	EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	0.0	No Limit
EM2204901-006	Anonymous	EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	0.0	No Limit
EG048: Hexavalent Chromium (Alkaline Digest) (QC Lot: 4244861)									

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Acceptable RPD (%)*
EG048: Hexavalent Chromium (Alkaline Digest) (QC Lot: 4244861) - continued									
EM2204537-005	Anonymous	EG048G: Hexavalent Chromium	18540-29-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
EM2204843-010	SX_OB_20220318_04_02_SS_Primary_ALS	EG048G: Hexavalent Chromium	18540-29-9	0.5	mg/kg	<1.0	<1.0	0.0	No Limit
EK026SF: Total CN by Segmented Flow Analyser (QC Lot: 4244762)									
EM2204843-005	SX_OB_20220317_12_04_SS_Primary_ALS	EK026SF: Total Cyanide	57-12-5	1	mg/kg	<5	<5	0.0	No Limit
EM2204682-001	Anonymous	EK026SF: Total Cyanide	57-12-5	1	mg/kg	<1	<1	0.0	No Limit
EK040T: Fluoride Total (QC Lot: 4244184)									
EM2204537-005	Anonymous	EK040T: Fluoride	16984-48-8	40	mg/kg	90	70	19.5	No Limit
EM2204843-009	SX_OB_20220318_00_02_SS_Primary_ALS	EK040T: Fluoride	16984-48-8	40	mg/kg	170	230	32.4	No Limit
EP066: Polychlorinated Biphenyls (PCB) (QC Lot: 4244011)									
EM2204843-001	SX_IB_20220317_07_53_SS_Primary_ALS	EP066-EM: Total Polychlorinated biphenyls	----	0.1	mg/kg	<0.1	<0.1	0.0	No Limit
EM2204882-002	Anonymous	EP066-EM: Total Polychlorinated biphenyls	----	0.1	mg/kg	<0.1	<0.1	0.0	No Limit
EP074A: Monocyclic Aromatic Hydrocarbons (QC Lot: 4237607)									
EM2204843-001	SX_IB_20220317_07_53_SS_Primary_ALS	EP074-UT: Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	0.0	No Limit
		EP074-UT: Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074-UT: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074-UT: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074-UT: Styrene	100-42-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074-UT: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
EP074H: Naphthalene (QC Lot: 4237607)									
EM2204843-001	SX_IB_20220317_07_53_SS_Primary_ALS	EP074-UT: Naphthalene	91-20-3	1	mg/kg	<1	<1	0.0	No Limit
EP074I: Volatile Halogenated Compounds (QC Lot: 4237607)									
EM2204843-001	SX_IB_20220317_07_53_SS_Primary_ALS	EP074-UT: 1.1-Dichloroethene	75-35-4	0.01	mg/kg	<0.50	<0.50	0.0	No Limit
		EP074-UT: cis-1.2-Dichloroethene	156-59-2	0.01	mg/kg	<0.50	<0.50	0.0	No Limit
		EP074-UT: 1.1.1-Trichloroethane	71-55-6	0.01	mg/kg	<0.50	<0.50	0.0	No Limit
		EP074-UT: Carbon Tetrachloride	56-23-5	0.01	mg/kg	<0.50	<0.50	0.0	No Limit
		EP074-UT: 1.1.1.2-Tetrachloroethane	630-20-6	0.01	mg/kg	<0.50	<0.50	0.0	No Limit
		EP074-UT: 1.2.4-Trichlorobenzene	120-82-1	0.01	mg/kg	<0.50	<0.50	0.0	No Limit
		EP074-UT: Vinyl chloride	75-01-4	0.02	mg/kg	<0.50	<0.50	0.0	No Limit
		EP074-UT: trans-1.2-Dichloroethene	156-60-5	0.02	mg/kg	<0.50	<0.50	0.0	No Limit
		EP074-UT: Chloroform	67-66-3	0.02	mg/kg	<0.50	<0.50	0.0	No Limit
		EP074-UT: 1.2-Dichloroethane	107-06-2	0.02	mg/kg	<0.50	<0.50	0.0	No Limit
		EP074-UT: Trichloroethene	79-01-6	0.02	mg/kg	<0.50	<0.50	0.0	No Limit

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: 4237607) - continued									
EM2204843-001	SX_IB_20220317_07_53_SS_Primary_ALS	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: 4244009)									
EM2204843-001	SX_IB_20220317_07_53_SS_Primary_ALS	EP075-EM: 2-Chlorophenol	95-57-8	0.03	mg/kg	<0.50	<0.50	0.0	No Limit
		EP075-EM: 2.4-Dichlorophenol	120-83-2	0.03	mg/kg	<0.50	<0.50	0.0	No Limit
		EP075-EM: 2.6-Dichlorophenol	87-65-0	0.03	mg/kg	<0.50	<0.50	0.0	No Limit
		EP075-EM: 4-Chloro-3-methylphenol	59-50-7	0.03	mg/kg	<1.00	<1.00	0.0	No Limit
		EP075-EM: 2.3.5.6-Tetrachlorophenol	935-95-5	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: 2.4.5-Trichlorophenol	95-95-4	0.05	mg/kg	<1.00	<1.00	0.0	No Limit
		EP075-EM: 2.4.6-Trichlorophenol	88-06-2	0.05	mg/kg	<1.00	<1.00	0.0	No Limit
		EP075-EM: 2.3.4.5 & 2.3.4.6-Tetrachlorophenol	4901-51-3/58-90-2	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: Pentachlorophenol	87-86-5	0.2	mg/kg	<1.0	<1.0	0.0	No Limit
EM2204882-002	Anonymous	EP075-EM: 2-Chlorophenol	95-57-8	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: 2.4-Dichlorophenol	120-83-2	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: 2.6-Dichlorophenol	87-65-0	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: 4-Chloro-3-methylphenol	59-50-7	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: 2.3.5.6-Tetrachlorophenol	935-95-5	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: 2.4.5-Trichlorophenol	95-95-4	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: 2.4.6-Trichlorophenol	88-06-2	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: 2.3.4.5 & 2.3.4.6-Tetrachlorophenol	4901-51-3/58-90-2	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: Pentachlorophenol	87-86-5	0.2	mg/kg	<0.2	<0.2	0.0	No Limit
EP075A: Phenolic Compounds (Non-halogenated) (QC Lot: 4244009)									
EM2204843-001	SX_IB_20220317_07_53_SS_Primary_ALS	EP075-EM: Phenol	108-95-2	1	mg/kg	<1	<1	0.0	No Limit
		EP075-EM: 2-Methylphenol	95-48-7	1	mg/kg	<1	<1	0.0	No Limit
		EP075-EM: 3- & 4-Methylphenol	1319-77-3	1	mg/kg	<1	<1	0.0	No Limit
		EP075-EM: 2-Nitrophenol	88-75-5	1	mg/kg	<1	<1	0.0	No Limit
		EP075-EM: 2.4-Dimethylphenol	105-67-9	1	mg/kg	<1	<1	0.0	No Limit
		EP075-EM: 2.4-Dinitrophenol	51-28-5	5	mg/kg	<5	<5	0.0	No Limit
		EP075-EM: 4-Nitrophenol	100-02-7	5	mg/kg	<5	<5	0.0	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Acceptable RPD (%)*
EP075A: Phenolic Compounds (Non-halogenated) (QC Lot: 4244009) - continued									
EM2204843-001	SX_IB_20220317_07_53_SS_Primary_ALS	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
EM2204882-002	Anonymous	EP075-EM: Phenol	108-95-2	1	mg/kg	<1	<1	0.0	No Limit
		EP075-EM: 2-Methylphenol	95-48-7	1	mg/kg	<1	<1	0.0	No Limit
		EP075-EM: 3- & 4-Methylphenol	1319-77-3	1	mg/kg	<1	<1	0.0	No Limit
		EP075-EM: 2-Nitrophenol	88-75-5	1	mg/kg	<1	<1	0.0	No Limit
		EP075-EM: 2.4-Dimethylphenol	105-67-9	1	mg/kg	<1	<1	0.0	No Limit
		EP075-EM: 2.4-Dinitrophenol	51-28-5	5	mg/kg	<5	<5	0.0	No Limit
		EP075-EM: 4-Nitrophenol	100-02-7	5	mg/kg	<5	<5	0.0	No Limit
		EP075-EM: 2-Methyl-4.6-dinitrophenol	8071-51-0	5	mg/kg	<5	<5	0.0	No Limit
		EP075-EM: Dinoseb	88-85-7	5	mg/kg	<5	<5	0.0	No Limit
		EP075-EM: 2-Cyclohexyl-4.6-Dinitrophenol	131-89-5	5	mg/kg	<5	<5	0.0	No Limit
EP075B: Polynuclear Aromatic Hydrocarbons (QC Lot: 4244009)									
EM2204843-001	SX_IB_20220317_07_53_SS_Primary_ALS	EP075-EM: Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Phenanthrene	85-01-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Fluoranthene	206-44-0	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Benzo(b+j) & Benzo(k)fluoranthene	205-99-2 207-08-9	1	mg/kg	<1.0	<1.0	0.0	No Limit
EM2204882-002	Anonymous	EP075-EM: Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Phenanthrene	85-01-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Fluoranthene	206-44-0	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	0.0	No Limit

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: 4244009) - continued									
EM2204882-002	Anonymous	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: 4244009)									
EM2204843-001	SX_IB_20220317_07_53_SS_Primary_ALS	EP075-EM: alpha-BHC	319-84-6	0.03	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: Hexachlorobenzene (HCB)	118-74-1	0.03	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: beta-BHC	319-85-7	0.03	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: gamma-BHC	58-89-9	0.03	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: delta-BHC	319-86-8	0.03	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: Heptachlor	76-44-8	0.03	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: Aldrin	309-00-2	0.03	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: Heptachlor epoxide	1024-57-3	0.03	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: cis-Chlordane	5103-71-9	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: trans-Chlordane	5103-74-2	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Endosulfan 1	959-98-8	0.03	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: Dieldrin	60-57-1	0.03	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: Endrin aldehyde	7421-93-4	0.03	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: Endrin	72-20-8	0.03	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: Endosulfan 2	33213-65-9	0.03	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: Endosulfan sulfate	1031-07-8	0.03	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: Methoxychlor	72-43-5	0.03	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: 4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: 4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: 4.4`-DDT	50-29-3	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
EM2204882-002	Anonymous	EP075-EM: alpha-BHC	319-84-6	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Hexachlorobenzene (HCB)	118-74-1	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: beta-BHC	319-85-7	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: gamma-BHC	58-89-9	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: delta-BHC	319-86-8	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Heptachlor	76-44-8	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Aldrin	309-00-2	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Heptachlor epoxide	1024-57-3	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: cis-Chlordane	5103-71-9	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: trans-Chlordane	5103-74-2	0.03	mg/kg	<0.03	<0.03	0.0	No Limit

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: 4244009) - continued									
EM2204882-002	Anonymous	EP075-EM: Endosulfan 1	959-98-8	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Dieldrin	60-57-1	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Endrin aldehyde	7421-93-4	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Endrin	72-20-8	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Endosulfan 2	33213-65-9	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Endosulfan sulfate	1031-07-8	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Methoxychlor	72-43-5	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: 4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: 4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: 4.4`-DDT	50-29-3	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 4237607)									
EM2204843-001	SX_IB_20220317_07_53_SS_Primary_ALS	EP074-UT: C6 - C9 Fraction	----	10	mg/kg	<20	<20	0.0	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 4244012)									
EM2204843-001	SX_IB_20220317_07_53_SS_Primary_ALS	EP071-EM: C15 - C28 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071-EM: C29 - C36 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071-EM: C10 - C14 Fraction	----	50	mg/kg	<50	<50	0.0	No Limit
		EP071-EM: C10 - C36 Fraction (sum)	----	50	mg/kg	<50	<50	0.0	No Limit
EM2204882-002	Anonymous	EP071-EM: C15 - C28 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071-EM: C29 - C36 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071-EM: C10 - C14 Fraction	----	50	mg/kg	<50	<50	0.0	No Limit
		EP071-EM: C10 - C36 Fraction (sum)	----	50	mg/kg	<50	<50	0.0	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 4237607)									
EM2204843-001	SX_IB_20220317_07_53_SS_Primary_ALS	EP074-UT: C6 - C10 Fraction	C6_C10	10	mg/kg	<20	<20	0.0	No Limit
		EP074-UT: C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg	<20	<20	0.0	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 4244012)									
EM2204843-001	SX_IB_20220317_07_53_SS_Primary_ALS	EP071-EM: >C16 - C34 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071-EM: >C34 - C40 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071-EM: >C10 - C16 Fraction	----	50	mg/kg	<50	<50	0.0	No Limit
		EP071-EM: >C10 - C40 Fraction (sum)	----	50	mg/kg	<50	<50	0.0	No Limit
EM2204882-002	Anonymous	EP071-EM: >C16 - C34 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071-EM: >C34 - C40 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071-EM: >C10 - C16 Fraction	----	50	mg/kg	<50	<50	0.0	No Limit
		EP071-EM: >C10 - C40 Fraction (sum)	----	50	mg/kg	<50	<50	0.0	No Limit
EP231A: Perfluoroalkyl Sulfonic Acids (QC Lot: 4239608)									
EM2204613-010	Anonymous	EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Acceptable RPD (%)*
EP231A: Perfluoroalkyl Sulfonic Acids (QC Lot: 4239608) - continued									
EM2204613-010	Anonymous	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
EM2204843-008	SX_OB_20220317_19_57_ 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: 4239608)									
EM2204613-010	Anonymous	EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.001	mg/kg	<0.001	<0.001	0.0	No Limit
EM2204843-008	SX_OB_20220317_19_57_ 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: 4239608)									
EM2204613-010	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

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: 4239608) - continued									
EM2204613-010	Anonymous	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
EM2204843-008	SX_OB_20220317_19_57_SS_Primary_ALS	EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.0002	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.0002	mg/kg	<10.0 µg/kg	<0.0100	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.0002	mg/kg	<10.0 µg/kg	<0.0100	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.0005	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.0005	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.0005	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.0005	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QC Lot: 4239608)									
EM2204613-010	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
EM2204843-008	SX_OB_20220317_19_57_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

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 (%)
EP231P: PFAS Sums (QC Lot: 4239608)									
EM2204613-010	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
EM2204843-008	SX_OB_20220317_19_57_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 sample ID	Sample ID	Method: Compound	CAS Number	Laboratory Duplicate (DUP) Report					
				LOR	Unit	Original Result	Duplicate Result	RPD (%)	Acceptable RPD (%)
EP231A: Perfluoroalkyl Sulfonic Acids (QC Lot: 4242599)									
EM2204587-003	Anonymous	EP231X-INJ: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X-INJ: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X-INJ: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X-INJ: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X-INJ: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X-INJ: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L	<0.02	<0.02	0.0	No Limit
EP231A: Perfluoroalkyl Sulfonic Acids (QC Lot: 4247300)									
EM2204488-001	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
EM2204531-005	Anonymous	EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L	<0.02	<0.02	0.0	No Limit
EP231A: Perfluoroalkyl Sulfonic Acids (QC Lot: 4247307)									
EM2204488-008	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

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: 4247307) - continued									
EM2204488-008	Anonymous	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
EM2204531-018	Anonymous	EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L	<0.02	<0.02	0.0	No Limit
EP231B: Perfluoroalkyl Carboxylic Acids (QC Lot: 4242599)									
EM2204587-003	Anonymous	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
EP231B: Perfluoroalkyl Carboxylic Acids (QC Lot: 4247300)									
EM2204488-001	Anonymous	EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L	<0.1	<0.1	0.0	No Limit
EM2204531-005	Anonymous	EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L	<0.02	<0.02	0.0	No Limit

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: 4247300) - continued									
EM2204531-005	Anonymous	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: 4247307)									
EM2204488-008	Anonymous	EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L	<0.1	<0.1	0.0	No Limit
EM2204531-018	Anonymous	EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L	<0.1	<0.1	0.0	No Limit
EP231C: Perfluoroalkyl Sulfonamides (QC Lot: 4242599)									
EM2204587-003	Anonymous	EP231X-INJ: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X-INJ: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X-INJ: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.02	µg/L	<0.02	<0.02	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

Sub-Matrix: **WATER**

Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Laboratory Duplicate (DUP) Report					
				LOR	Unit	Original Result	Duplicate Result	RPD (%)	Acceptable RPD (%)
EP231C: Perfluoroalkyl Sulfonamides (QC Lot: 4242599) - continued									
EM2204587-003	Anonymous	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: 4247300)									
EM2204488-001	Anonymous	EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L	<0.05	<0.05	0.0	No Limit
EM2204531-005	Anonymous	EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L	<0.05	<0.05	0.0	No Limit
EP231C: Perfluoroalkyl Sulfonamides (QC Lot: 4247307)									
EM2204488-008	Anonymous	EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	µg/L	<0.05	<0.05	0.0	No Limit

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: 4247307) - continued									
EM2204488-008	Anonymous	EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L	<0.05	<0.05	0.0	No Limit
EM2204531-018	Anonymous	EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L	<0.05	<0.05	0.0	No Limit
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QC Lot: 4242599)									
EM2204587-003	Anonymous	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: 4247300)									
EM2204488-001	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
EM2204531-005	Anonymous	EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.05	µg/L	<0.05	<0.05	0.0	No Limit

Sub-Matrix: **WATER**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Acceptable RPD (%)*
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QC Lot: 4247300) - continued									
EM2204531-005	Anonymous	EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.05	µg/L	<0.05	<0.05	0.0	No Limit
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QC Lot: 4247307)									
EM2204488-008	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
EM2204531-018	Anonymous	EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.05	µg/L	<0.05	<0.05	0.0	No Limit
EP231P: PFAS Sums (QC Lot: 4242599)									
EM2204587-003	Anonymous	EP231X-INJ: Sum of PFAS	----	0.01	µg/L	<0.01	<0.01	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	<0.01	<0.01	0.0	No Limit
EP231P: PFAS Sums (QC Lot: 4247300)									
EM2204488-001	Anonymous	EP231X: Sum of PFAS	----	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Sum of PFAS (WA DER List)	----	0.01	µg/L	<0.01	<0.01	0.0	No Limit
EM2204531-005	Anonymous	EP231X: Sum of PFAS	----	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Sum of PFAS (WA DER List)	----	0.01	µg/L	<0.01	<0.01	0.0	No Limit
EP231P: PFAS Sums (QC Lot: 4247307)									
EM2204488-008	Anonymous	EP231X: Sum of PFAS	----	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Sum of PFAS (WA DER List)	----	0.01	µg/L	<0.01	<0.01	0.0	No Limit
EM2204531-018	Anonymous	EP231X: Sum of PFAS	----	0.01	µg/L	<0.01	<0.01	0.0	No Limit

Sub-Matrix: **WATER**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Acceptable RPD (%)*
EP231P: PFAS Sums (QC Lot: 4247307) - continued									
EM2204531-018	Anonymous	EP231X: Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Sum of PFAS (WA DER List)	----	0.01	µg/L	<0.01	<0.01	0.0	No Limit

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

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

Sub-Matrix: **SOIL**

				Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Acceptable Limits (%)	
Method: Compound	CAS Number	LOR	Unit	Result	Concentration	LCS	Low	High
EG005(ED093)T: Total Metals by ICP-AES (QCLot: 4241584)								
EG005T: Arsenic	7440-38-2	5	mg/kg	<5	123 mg/kg	85.0	70.0	130
EG005T: Cadmium	7440-43-9	1	mg/kg	<1	1.23 mg/kg	52.6	50.0	130
EG005T: Chromium	7440-47-3	2	mg/kg	<2	20.2 mg/kg	83.7	70.0	130
EG005T: Copper	7440-50-8	5	mg/kg	<5	55.9 mg/kg	81.3	70.0	130
EG005T: Lead	7439-92-1	5	mg/kg	<5	62.4 mg/kg	80.3	70.0	130
EG005T: Molybdenum	7439-98-7	2	mg/kg	<2	2.19 mg/kg	86.4	70.0	130
EG005T: Nickel	7440-02-0	2	mg/kg	<2	15.4 mg/kg	82.6	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	77.1	70.0	130
EG005T: Tin	7440-31-5	5	mg/kg	<5	5.33 mg/kg	75.5	70.0	130
EG005T: Zinc	7440-66-6	5	mg/kg	<5	162 mg/kg	75.3	70.0	130
EG005(ED093)T: Total Metals by ICP-AES (QCLot: 4241586)								
EG005T: Arsenic	7440-38-2	5	mg/kg	<5	123 mg/kg	100	70.0	130
EG005T: Cadmium	7440-43-9	1	mg/kg	<1	1.23 mg/kg	67.7	50.0	130
EG005T: Chromium	7440-47-3	2	mg/kg	<2	20.2 mg/kg	99.2	70.0	130
EG005T: Copper	7440-50-8	5	mg/kg	<5	55.9 mg/kg	93.3	70.0	130
EG005T: Lead	7439-92-1	5	mg/kg	<5	62.4 mg/kg	94.7	70.0	130
EG005T: Molybdenum	7439-98-7	2	mg/kg	<2	2.19 mg/kg	87.1	70.0	130
EG005T: Nickel	7440-02-0	2	mg/kg	<2	15.4 mg/kg	96.1	70.0	130
EG005T: Selenium	7782-49-2	5	mg/kg	<5	----	----	----	----
EG005T: Silver	7440-22-4	2	mg/kg	<2	2.9 mg/kg	95.3	70.0	130
EG005T: Tin	7440-31-5	5	mg/kg	<5	5.33 mg/kg	90.0	70.0	130
EG005T: Zinc	7440-66-6	5	mg/kg	<5	162 mg/kg	76.7	70.0	130
EN60-DI: Bottle Leaching Procedure - Inorganics/PFAS (Plastic Vessel) (QCLot: 4244349)								
EN60-DIa-P: Final pH	----	0.1	pH Unit	6.0	----	----	----	----
EA001: pH in soil using 0.01M CaCl extract (QCLot: 4246393)								
EA001: pH (CaCl2)	----	----	pH Unit	----	4 pH Unit	100	98.8	101
				----	7 pH Unit	100	99.3	101
EG035T: Total Recoverable Mercury by FIMS (QCLot: 4241583)								
EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	0.64 mg/kg	79.7	70.0	130
EG035T: Total Recoverable Mercury by FIMS (QCLot: 4241585)								
EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	0.64 mg/kg	101	70.0	130
EG048: Hexavalent Chromium (Alkaline Digest) (QCLot: 4244861)								
EG048G: Hexavalent Chromium	18540-29-9	0.5	mg/kg	<0.5	20 mg/kg	88.1	70.0	130

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Acceptable Limits (%)	
				Result	Concentration	LCS	Low	High
EK026SF: Total CN by Segmented Flow Analyser (QCLot: 4244762)								
EK026SF: Total Cyanide	57-12-5	1	mg/kg	<1	20 mg/kg	91.7	70.0	130
EK040T: Fluoride Total (QCLot: 4244184)								
EK040T: Fluoride	16984-48-8	40	mg/kg	<40	400 mg/kg	75.4	75.2	110
EP066: Polychlorinated Biphenyls (PCB) (QCLot: 4244011)								
EP066-EM: Total Polychlorinated biphenyls	----	0.1	mg/kg	<0.1	1 mg/kg	125	67.4	136
EP074A: Monocyclic Aromatic Hydrocarbons (QCLot: 4237607)								
EP074-UT: Benzene	71-43-2	0.2	mg/kg	<0.2	2.1 mg/kg	91.7	69.2	116
EP074-UT: Toluene	108-88-3	0.5	mg/kg	<0.5	2.1 mg/kg	92.9	67.7	116
EP074-UT: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	2.1 mg/kg	92.6	66.6	115
EP074-UT: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	4.2 mg/kg	90.7	65.2	112
EP074-UT: Styrene	100-42-5	0.5	mg/kg	<0.5	2.1 mg/kg	95.2	69.4	111
EP074-UT: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	2.1 mg/kg	90.6	68.4	110
EP074H: Naphthalene (QCLot: 4237607)								
EP074-UT: Naphthalene	91-20-3	1	mg/kg	<1	0.6 mg/kg	86.9	72.3	114
EP074I: Volatile Halogenated Compounds (QCLot: 4237607)								
EP074-UT: Vinyl chloride	75-01-4	0.02	mg/kg	<0.02	0.1 mg/kg	72.7	47.0	138
EP074-UT: 1.1-Dichloroethene	75-35-4	0.01	mg/kg	<0.01	0.1 mg/kg	91.8	57.6	125
EP074-UT: Methylene chloride	75-09-2	0.4	mg/kg	<0.4	2.1 mg/kg	91.4	72.3	115
EP074-UT: trans-1.2-Dichloroethene	156-60-5	0.02	mg/kg	<0.02	0.1 mg/kg	92.6	60.5	122
EP074-UT: cis-1.2-Dichloroethene	156-59-2	0.01	mg/kg	<0.01	0.1 mg/kg	92.2	70.3	112
EP074-UT: Chloroform	67-66-3	0.02	mg/kg	<0.02	0.1 mg/kg	92.4	66.6	115
EP074-UT: 1.1.1-Trichloroethane	71-55-6	0.01	mg/kg	<0.01	0.1 mg/kg	93.4	64.4	122
EP074-UT: Carbon Tetrachloride	56-23-5	0.01	mg/kg	<0.01	0.1 mg/kg	91.7	58.4	127
EP074-UT: 1.2-Dichloroethane	107-06-2	0.02	mg/kg	<0.02	0.1 mg/kg	101	72.9	114
EP074-UT: Trichloroethene	79-01-6	0.02	mg/kg	<0.02	0.1 mg/kg	94.2	64.7	115
EP074-UT: 1.1.2-Trichloroethane	79-00-5	0.04	mg/kg	<0.04	0.1 mg/kg	94.8	72.6	116
EP074-UT: Tetrachloroethene	127-18-4	0.02	mg/kg	<0.02	0.1 mg/kg	95.6	60.0	119
EP074-UT: 1.1.1.2-Tetrachloroethane	630-20-6	0.01	mg/kg	<0.01	0.1 mg/kg	91.8	71.8	116
EP074-UT: 1.1.2.2-Tetrachloroethane	79-34-5	0.02	mg/kg	<0.02	0.1 mg/kg	93.6	66.1	116
EP074-UT: Hexachlorobutadiene	87-68-3	0.02	mg/kg	<0.02	0.1 mg/kg	85.4	39.8	128
EP074-UT: Chlorobenzene	108-90-7	0.02	mg/kg	<0.02	0.1 mg/kg	94.4	70.3	113
EP074-UT: 1.4-Dichlorobenzene	106-46-7	0.02	mg/kg	<0.02	0.1 mg/kg	92.6	62.6	113
EP074-UT: 1.2-Dichlorobenzene	95-50-1	0.02	mg/kg	<0.02	0.1 mg/kg	91.4	70.8	110
EP074-UT: 1.2.4-Trichlorobenzene	120-82-1	0.01	mg/kg	<0.01	0.1 mg/kg	94.8	48.4	120
EP075A: Phenolic Compounds (Halogenated) (QCLot: 4244009)								
EP075-EM: 2-Chlorophenol	95-57-8	0.03	mg/kg	<0.03	2 mg/kg	114	74.5	126
EP075-EM: 2.4-Dichlorophenol	120-83-2	0.03	mg/kg	<0.03	2 mg/kg	97.1	72.7	126

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Acceptable Limits (%)	
				Result	Concentration	LCS	Low	High
EP075A: Phenolic Compounds (Halogenated) (QCLot: 4244009) - continued								
EP075-EM: 2.6-Dichlorophenol	87-65-0	0.03	mg/kg	<0.03	2 mg/kg	98.5	73.5	132
EP075-EM: 4-Chloro-3-methylphenol	59-50-7	0.03	mg/kg	<0.03	2 mg/kg	97.2	72.8	128
EP075-EM: 2.4.5-Trichlorophenol	95-95-4	0.05	mg/kg	<0.05	2 mg/kg	99.2	73.3	134
EP075-EM: 2.4.6-Trichlorophenol	88-06-2	0.05	mg/kg	<0.05	2 mg/kg	96.2	72.4	128
EP075-EM: 2.3.5.6-Tetrachlorophenol	935-95-5	0.03	mg/kg	<0.03	2 mg/kg	93.1	69.4	126
EP075-EM: 2.3.4.5 & 2.3.4.6-Tetrachlorophenol	4901-51-3/5 8-90-2	0.05	mg/kg	<0.05	4 mg/kg	105	71.9	128
EP075-EM: Pentachlorophenol	87-86-5	0.2	mg/kg	<0.2	4 mg/kg	87.2	54.4	135
EP075A: Phenolic Compounds (Non-halogenated) (QCLot: 4244009)								
EP075-EM: Phenol	108-95-2	1	mg/kg	<1	2 mg/kg	99.3	71.5	130
EP075-EM: 2-Methylphenol	95-48-7	1	mg/kg	<1	2 mg/kg	102	73.4	129
EP075-EM: 3- & 4-Methylphenol	1319-77-3	1	mg/kg	<1	4 mg/kg	96.9	74.3	129
EP075-EM: 2-Nitrophenol	88-75-5	1	mg/kg	<1	2 mg/kg	94.7	70.9	133
EP075-EM: 2.4-Dimethylphenol	105-67-9	1	mg/kg	<1	2 mg/kg	97.2	71.8	132
EP075-EM: 2.4-Dinitrophenol	51-28-5	5	mg/kg	<5	10 mg/kg	72.2	41.0	156
EP075-EM: 4-Nitrophenol	100-02-7	5	mg/kg	<5	10 mg/kg	101	65.3	134
EP075-EM: 2-Methyl-4.6-dinitrophenol	8071-51-0	5	mg/kg	<5	10 mg/kg	91.2	43.6	128
EP075-EM: Dinoseb	88-85-7	5	mg/kg	<5	10 mg/kg	90.4	62.0	128
EP075-EM: 2-Cyclohexyl-4.6-Dinitrophenol	131-89-5	5	mg/kg	<5	10 mg/kg	78.6	34.5	137
EP075B: Polynuclear Aromatic Hydrocarbons (QCLot: 4244009)								
EP075-EM: Naphthalene	91-20-3	0.5	mg/kg	<0.5	2 mg/kg	96.6	73.0	131
EP075-EM: Acenaphthene	83-32-9	0.5	mg/kg	<0.5	2 mg/kg	95.2	76.3	130
EP075-EM: Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	2 mg/kg	97.4	72.0	135
EP075-EM: Fluorene	86-73-7	0.5	mg/kg	<0.5	2 mg/kg	103	74.4	131
EP075-EM: Phenanthrene	85-01-8	0.5	mg/kg	<0.5	2 mg/kg	99.1	73.3	130
EP075-EM: Anthracene	120-12-7	0.5	mg/kg	<0.5	2 mg/kg	99.2	78.4	127
EP075-EM: Fluoranthene	206-44-0	0.5	mg/kg	<0.5	2 mg/kg	98.1	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	101	75.0	133
EP075-EM: Benzo(b+j) & Benzo(k)fluoranthene	205-99-2 207-08-9	1	mg/kg	<1.0	4 mg/kg	102	75.8	133
EP075-EM: Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	2 mg/kg	101	65.1	130
EP075-EM: Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	2 mg/kg	101	72.1	134
EP075-EM: Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	2 mg/kg	100	72.9	135
EP075-EM: Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	2 mg/kg	100	71.3	134
EP075I: Organochlorine Pesticides (QCLot: 4244009)								
EP075-EM: alpha-BHC	319-84-6	0.03	mg/kg	<0.03	2 mg/kg	99.9	71.0	129

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Acceptable Limits (%)	
				Result	Concentration	LCS	Low	High
EP075I: Organochlorine Pesticides (QCLot: 4244009) - continued								
EP075-EM: Hexachlorobenzene (HCB)	118-74-1	0.03	mg/kg	<0.03	2 mg/kg	99.1	74.8	126
EP075-EM: beta-BHC	319-85-7	0.03	mg/kg	<0.03	2 mg/kg	97.9	75.7	130
EP075-EM: gamma-BHC	58-89-9	0.03	mg/kg	<0.03	2 mg/kg	96.6	70.8	130
EP075-EM: delta-BHC	319-86-8	0.03	mg/kg	<0.03	2 mg/kg	100	76.5	134
EP075-EM: Heptachlor	76-44-8	0.03	mg/kg	<0.03	2 mg/kg	95.7	75.5	131
EP075-EM: Aldrin	309-00-2	0.03	mg/kg	<0.03	2 mg/kg	99.0	76.8	130
EP075-EM: Heptachlor epoxide	1024-57-3	0.03	mg/kg	<0.03	2 mg/kg	99.2	73.6	130
EP075-EM: cis-Chlordane	5103-71-9	0.03	mg/kg	<0.03	2 mg/kg	101	75.0	133
EP075-EM: trans-Chlordane	5103-74-2	0.03	mg/kg	<0.03	2 mg/kg	97.7	75.3	131
EP075-EM: Endosulfan 1	959-98-8	0.03	mg/kg	<0.03	2 mg/kg	98.9	69.4	134
EP075-EM: 4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	2 mg/kg	98.5	71.0	132
EP075-EM: Dieldrin	60-57-1	0.03	mg/kg	<0.03	2 mg/kg	96.3	78.0	133
EP075-EM: Endrin aldehyde	7421-93-4	0.03	mg/kg	<0.03	2 mg/kg	102	69.0	143
EP075-EM: Endrin	72-20-8	0.03	mg/kg	<0.03	2 mg/kg	90.6	55.7	145
EP075-EM: Endosulfan 2	33213-65-9	0.03	mg/kg	<0.03	2 mg/kg	99.0	71.4	135
EP075-EM: 4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	2 mg/kg	101	74.8	134
EP075-EM: Endosulfan sulfate	1031-07-8	0.03	mg/kg	<0.03	2 mg/kg	100	70.2	135
EP075-EM: 4.4`-DDT	50-29-3	0.05	mg/kg	<0.05	2 mg/kg	98.2	77.7	133
EP075-EM: Methoxychlor	72-43-5	0.03	mg/kg	<0.03	2 mg/kg	97.5	63.6	135
EP080/071: Total Petroleum Hydrocarbons (QCLot: 4237607)								
EP074-UT: C6 - C9 Fraction	----	10	mg/kg	<10	39.6 mg/kg	98.9	61.1	119
EP080/071: Total Petroleum Hydrocarbons (QCLot: 4244012)								
EP071-EM: C10 - C14 Fraction	----	50	mg/kg	<50	760 mg/kg	101	74.4	129
EP071-EM: C15 - C28 Fraction	----	100	mg/kg	<100	3270 mg/kg	94.4	81.0	123
EP071-EM: C29 - C36 Fraction	----	100	mg/kg	<100	1550 mg/kg	91.7	81.8	121
EP071-EM: C10 - C36 Fraction (sum)	----	50	mg/kg	<50	5580 mg/kg	94.4	70.0	130
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 4237607)								
EP074-UT: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	48.9 mg/kg	99.6	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: 4244012)								
EP071-EM: >C10 - C16 Fraction	----	50	mg/kg	<50	1110 mg/kg	96.4	75.4	132
EP071-EM: >C16 - C34 Fraction	----	100	mg/kg	<100	4180 mg/kg	94.2	80.8	120
EP071-EM: >C34 - C40 Fraction	----	100	mg/kg	<100	290 mg/kg	100	73.3	136
EP071-EM: >C10 - C40 Fraction (sum)	----	50	mg/kg	<50	5580 mg/kg	95.0	70.0	130
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 4239608)								
EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.0002	mg/kg	<0.0002	0.00111 mg/kg	106	72.0	128
EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.0002	mg/kg	<0.0002	0.00118 mg/kg	100	73.0	123

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Acceptable Limits (%)	
				Result	Concentration	LCS	Low	High
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 4239608) - continued								
EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.0002	mg/kg	<0.0002	0.0014 mg/kg	84.1	67.0	130
EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.0002	mg/kg	<0.0002	0.00119 mg/kg	108	70.0	132
EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.0002	mg/kg	<0.0002	0.00116 mg/kg	81.2	68.0	136
EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.0002	mg/kg	<0.0002	0.00121 mg/kg	88.9	59.0	134
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4239608)								
EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.001	mg/kg	<0.001	0.00625 mg/kg	89.1	71.0	135
EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.0002	mg/kg	<0.0002	0.00125 mg/kg	92.1	69.0	132
EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.0002	mg/kg	<0.0002	0.00125 mg/kg	103	70.0	132
EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.0002	mg/kg	<0.0002	0.00125 mg/kg	102	71.0	131
EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.0002	mg/kg	<0.0002	0.00125 mg/kg	98.6	69.0	133
EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.0002	mg/kg	<0.0002	0.00125 mg/kg	105	72.0	129
EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.0002	mg/kg	<0.0002	0.00125 mg/kg	88.8	69.0	133
EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.0002	mg/kg	<0.0002	0.00125 mg/kg	97.6	64.0	136
EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.0002	mg/kg	<0.0002	0.00125 mg/kg	96.0	69.0	135
EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.0002	mg/kg	<0.0002	0.00125 mg/kg	90.9	66.0	139
EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.0005	mg/kg	<0.0005	0.00312 mg/kg	98.4	69.0	133
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 4239608)								
EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.0002	mg/kg	<0.0002	0.00125 mg/kg	97.1	67.0	137
EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.0005	mg/kg	<0.0005	0.00312 mg/kg	101	70.0	130
EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.0005	mg/kg	<0.0005	0.00312 mg/kg	93.6	70.0	130
EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.0005	mg/kg	<0.0005	0.00312 mg/kg	104	70.0	130
EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.0005	mg/kg	<0.0005	0.00312 mg/kg	121	70.0	130
EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.0002	mg/kg	<0.0002	0.00125 mg/kg	94.5	63.0	144
EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.0002	mg/kg	<0.0002	0.00125 mg/kg	92.8	61.0	139
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 4239608)								
EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.0005	mg/kg	<0.0005	0.00117 mg/kg	99.1	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	107	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	98.1	65.0	137
EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.0005	mg/kg	<0.0005	0.00121 mg/kg	84.8	70.0	130
EP231P: PFAS Sums (QCLot: 4239608)								
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	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Acceptable Limits (%)	
				Result	Concentration	LCS	Low	High
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 4242599)								
EP231X-INJ: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	0.444 µg/L	95.5	72.0	130
EP231X-INJ: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	<0.02	0.47 µg/L	91.9	71.0	127
EP231X-INJ: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	<0.01	0.457 µg/L	88.9	68.0	131
EP231X-INJ: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	<0.02	0.477 µg/L	96.1	69.0	134
EP231X-INJ: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	<0.01	0.465 µg/L	89.9	65.0	140
EP231X-INJ: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L	<0.02	0.482 µg/L	90.5	53.0	142
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 4247300)								
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	93.8	71.0	127
EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	<0.01	0.228 µg/L	95.9	68.0	131
EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	<0.02	0.25 µg/L	94.8	69.0	134
EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	<0.01	0.232 µg/L	99.1	65.0	140
EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L	<0.02	0.241 µg/L	100	53.0	142
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 4247307)								
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	109	71.0	127
EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	<0.01	0.228 µg/L	95.2	68.0	131
EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	<0.02	0.25 µg/L	103	69.0	134
EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	<0.01	0.232 µg/L	96.7	65.0	140
EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L	<0.02	0.241 µg/L	105	53.0	142
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4242599)								
EP231X-INJ: Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L	<0.10	2.5 µg/L	88.2	73.0	129
EP231X-INJ: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	<0.02	0.5 µg/L	91.2	72.0	129
EP231X-INJ: Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	<0.02	0.5 µg/L	90.5	72.0	129
EP231X-INJ: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	<0.02	0.5 µg/L	91.8	72.0	130
EP231X-INJ: Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	<0.01	0.5 µg/L	90.9	71.0	133
EP231X-INJ: Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L	<0.02	0.5 µg/L	98.5	69.0	130
EP231X-INJ: Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L	<0.02	0.5 µg/L	87.4	71.0	129
EP231X-INJ: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L	<0.02	0.5 µg/L	102	69.0	133
EP231X-INJ: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L	<0.02	0.5 µg/L	95.9	72.0	134
EP231X-INJ: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L	<0.02	0.5 µg/L	99.3	65.0	144
EP231X-INJ: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L	<0.05	1.25 µg/L	98.1	71.0	132
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4247300)								
EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L	<0.1	1.25 µg/L	109	73.0	129
EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	<0.02	0.25 µg/L	113	72.0	129
EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	<0.02	0.25 µg/L	104	72.0	129
EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	<0.02	0.25 µg/L	101	72.0	130
EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	<0.01	0.25 µg/L	104	71.0	133

Sub-Matrix: **WATER**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Acceptable Limits (%)	
				Result	Concentration	LCS	Low	High
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4247300) - continued								
EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L	<0.02	0.25 µg/L	102	69.0	130
EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L	<0.02	0.25 µg/L	89.8	71.0	129
EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L	<0.02	0.25 µg/L	103	69.0	133
EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L	<0.02	0.25 µg/L	108	72.0	134
EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L	<0.02	0.25 µg/L	104	65.0	144
EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L	<0.05	0.625 µg/L	113	71.0	132
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4247307)								
EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L	<0.1	1.25 µg/L	97.1	73.0	129
EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	<0.02	0.25 µg/L	105	72.0	129
EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	<0.02	0.25 µg/L	103	72.0	129
EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	<0.02	0.25 µg/L	107	72.0	130
EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	<0.01	0.25 µg/L	107	71.0	133
EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L	<0.02	0.25 µg/L	119	69.0	130
EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L	<0.02	0.25 µg/L	99.6	71.0	129
EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L	<0.02	0.25 µg/L	103	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	96.9	65.0	144
EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L	<0.05	0.625 µg/L	94.7	71.0	132
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 4242599)								
EP231X-INJ: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	µg/L	<0.02	0.5 µg/L	90.1	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
EP231X-INJ: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	µg/L	<0.05	1.25 µg/L	101	70.0	130
EP231X-INJ: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L	<0.05	1.25 µg/L	94.2	70.0	130
EP231X-INJ: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L	<0.05	1.25 µg/L	99.5	70.0	130
EP231X-INJ: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.02	µg/L	<0.02	0.5 µg/L	98.0	65.0	136
EP231X-INJ: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.02	µg/L	<0.02	0.5 µg/L	85.1	61.0	135
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 4247300)								
EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	µg/L	<0.02	0.25 µg/L	96.6	67.0	137
EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L	<0.05	0.625 µg/L	119	68.0	141
EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	µg/L	<0.05	0.625 µg/L	103	70.0	130
EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L	<0.05	0.625 µg/L	90.7	70.0	130
EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L	<0.05	0.625 µg/L	109	70.0	130

Sub-Matrix: **WATER**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Acceptable Limits (%)	
				Result	Concentration	LCS	Low	High
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 4247300) - continued								
EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.02	µg/L	<0.02	0.25 µg/L	108	65.0	136
EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.02	µg/L	<0.02	0.25 µg/L	96.0	61.0	135
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 4247307)								
EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	µg/L	<0.02	0.25 µg/L	101	67.0	137
EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L	<0.05	0.625 µg/L	111	68.0	141
EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	µg/L	<0.05	0.625 µg/L	106	70.0	130
EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L	<0.05	0.625 µg/L	127	70.0	130
EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L	<0.05	0.625 µg/L	106	70.0	130
EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.02	µg/L	<0.02	0.25 µg/L	106	65.0	136
EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.02	µg/L	<0.02	0.25 µg/L	110	61.0	135
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 4242599)								
EP231X-INJ: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L	<0.05	0.469 µg/L	94.6	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	104	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	96.1	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	90.3	70.0	130
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 4247300)								
EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L	<0.05	0.234 µg/L	102	63.0	143
EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.05	µg/L	<0.05	0.238 µg/L	111	64.0	140
EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.05	µg/L	<0.05	0.24 µg/L	111	67.0	138
EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.05	µg/L	<0.05	0.242 µg/L	86.9	70.0	130
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 4247307)								
EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L	<0.05	0.234 µg/L	105	63.0	143
EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.05	µg/L	<0.05	0.238 µg/L	108	64.0	140
EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.05	µg/L	<0.05	0.24 µg/L	90.2	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	80.9	70.0	130
EP231P: PFAS Sums (QCLot: 4242599)								
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: 4247300)								
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 (%): LCS	Acceptable Limits (%): Low	Acceptable Limits (%): High
EP231P: PFAS Sums (QCLot: 4247300) - 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: 4247307)								
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	SpikeRecovery(%): MS	Acceptable Limits (%): Low	Acceptable Limits (%): High
EG005(ED093)T: Total Metals by ICP-AES (QCLot: 4241584)							
EM2204488-002	Anonymous	EG005T: Arsenic	7440-38-2	50 mg/kg	97.1	78.0	124
		EG005T: Cadmium	7440-43-9	50 mg/kg	94.8	79.7	116
		EG005T: Chromium	7440-47-3	50 mg/kg	90.2	79.0	121
		EG005T: Copper	7440-50-8	250 mg/kg	96.3	80.0	120
		EG005T: Lead	7439-92-1	250 mg/kg	94.0	80.0	120
		EG005T: Nickel	7440-02-0	50 mg/kg	86.8	78.0	120
		EG005T: Zinc	7440-66-6	250 mg/kg	89.1	80.0	120
EG005(ED093)T: Total Metals by ICP-AES (QCLot: 4241586)							
EM2204843-009	SX_OB_20220318_00_02_SS_Primary_ALS	EG005T: Arsenic	7440-38-2	50 mg/kg	85.3	78.0	124
		EG005T: Cadmium	7440-43-9	50 mg/kg	116	79.7	116
		EG005T: Chromium	7440-47-3	50 mg/kg	82.4	79.0	121
		EG005T: Copper	7440-50-8	250 mg/kg	116	80.0	120
		EG005T: Lead	7439-92-1	250 mg/kg	115	80.0	120
		EG005T: Nickel	7440-02-0	50 mg/kg	92.1	78.0	120
		EG005T: Zinc	7440-66-6	250 mg/kg	104	80.0	120
EG035T: Total Recoverable Mercury by FIMS (QCLot: 4241583)							
EM2204488-002	Anonymous	EG035T: Mercury	7439-97-6	0.5 mg/kg	92.2	76.0	116
EG035T: Total Recoverable Mercury by FIMS (QCLot: 4241585)							
EM2204843-009	SX_OB_20220318_00_02_SS_Primary_ALS	EG035T: Mercury	7439-97-6	0.5 mg/kg	114	76.0	116
EG048: Hexavalent Chromium (Alkaline Digest) (QCLot: 4244861)							

Sub-Matrix: **SOIL**

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Acceptable Limits (%)	
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Concentration	MS	Low	High
EG048: Hexavalent Chromium (Alkaline Digest) (QCLot: 4244861) - continued							
EM2204537-007	Anonymous	EG048G: Hexavalent Chromium	18540-29-9	20 mg/kg	84.9	58.0	114
EM2204537-007	Anonymous	EG048G: Hexavalent Chromium	18540-29-9	20 mg/kg	93.6	58.0	114
EK026SF: Total CN by Segmented Flow Analyser (QCLot: 4244762)							
EM2204682-002	Anonymous	EK026SF: Total Cyanide	57-12-5	20 mg/kg	96.0	70.0	130
EK040T: Fluoride Total (QCLot: 4244184)							
EM2204537-007	Anonymous	EK040T: Fluoride	16984-48-8	400 mg/kg	70.4	70.0	130
EP066: Polychlorinated Biphenyls (PCB) (QCLot: 4244011)							
EM2204843-002	SX_IB_20220317_07_53_SS_Duplicate_ALS	EP066-EM: Total Polychlorinated biphenyls	----	1 mg/kg	120	59.6	152
EP074A: Monocyclic Aromatic Hydrocarbons (QCLot: 4237607)							
EM2204843-002	SX_IB_20220317_07_53_SS_Duplicate_ALS	EP074-UT: Benzene	71-43-2	2 mg/kg	84.7	53.7	130
		EP074-UT: Toluene	108-88-3	2 mg/kg	86.8	55.1	124
EP074I: Volatile Halogenated Compounds (QCLot: 4237607)							
EM2204843-002	SX_IB_20220317_07_53_SS_Duplicate_ALS	EP074-UT: 1.1-Dichloroethene	75-35-4	2 mg/kg	82.4	38.4	145
		EP074-UT: Trichloroethene	79-01-6	2 mg/kg	79.0	48.1	128
		EP074-UT: Chlorobenzene	108-90-7	2 mg/kg	80.7	55.5	122
EP075A: Phenolic Compounds (Halogenated) (QCLot: 4244009)							
EM2204690-067	Anonymous	EP075-EM: 2-Chlorophenol	95-57-8	3 mg/kg	128	44.0	143
		EP075-EM: 4-Chloro-3-methylphenol	59-50-7	3 mg/kg	103	41.5	139
		EP075-EM: Pentachlorophenol	87-86-5	3 mg/kg	95.0	10.0	144
EP075A: Phenolic Compounds (Non-halogenated) (QCLot: 4244009)							
EM2204690-067	Anonymous	EP075-EM: Phenol	108-95-2	3 mg/kg	111	44.2	134
		EP075-EM: 2-Nitrophenol	88-75-5	3 mg/kg	95.2	34.2	129
EP075B: Polynuclear Aromatic Hydrocarbons (QCLot: 4244009)							
EM2204690-067	Anonymous	EP075-EM: Acenaphthene	83-32-9	3 mg/kg	# Not Determined	42.6	138
		EP075-EM: Pyrene	129-00-0	3 mg/kg	# Not Determined	37.8	152
EP080/071: Total Petroleum Hydrocarbons (QCLot: 4237607)							
EM2204843-002	SX_IB_20220317_07_53_SS_Duplicate_ALS	EP074-UT: C6 - C9 Fraction	----	28 mg/kg	66.6	42.3	111
EP080/071: Total Petroleum Hydrocarbons (QCLot: 4244012)							
EM2204843-005	SX_OB_20220317_12_04_SS_Primary_ALS	EP071-EM: C10 - C14 Fraction	----	760 mg/kg	101	71.3	126
		EP071-EM: C15 - C28 Fraction	----	3270 mg/kg	94.1	75.1	123
		EP071-EM: C29 - C36 Fraction	----	1550 mg/kg	91.3	78.1	120
		EP071-EM: C10 - C36 Fraction (sum)	----	5580 mg/kg	94.6	70.0	130
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 4237607)							

Sub-Matrix: **SOIL**

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Acceptable Limits (%)	
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Concentration	MS	Low	High
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 4237607) - continued							
EM2204843-002	SX_IB_20220317_07_53_SS_Duplicate_ALS	EP074-UT: C6 - C10 Fraction	C6_C10	33 mg/kg	67.2	39.9	109
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 4244012)							
EM2204843-005	SX_OB_20220317_12_04_SS_Primary_ALS	EP071-EM: >C10 - C16 Fraction	----	1110 mg/kg	96.6	71.5	130
		EP071-EM: >C16 - C34 Fraction	----	4180 mg/kg	93.8	76.9	119
		EP071-EM: >C34 - C40 Fraction	----	290 mg/kg	99.1	65.3	139
		EP071-EM: >C10 - C40 Fraction (sum)	----	5580 mg/kg	95.0	70.0	130
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 4239608)							
EM2204670-001	Anonymous	EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.00111 mg/kg	112	72.0	128
		EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.00118 mg/kg	90.0	73.0	123
		EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.00114 mg/kg	78.2	67.0	130
		EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.00119 mg/kg	101	70.0	132
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.00116 mg/kg	104	68.0	136
		EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.00121 mg/kg	88.4	59.0	134
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4239608)							
EM2204670-001	Anonymous	EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.00625 mg/kg	84.4	71.0	135
		EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.00125 mg/kg	94.6	69.0	132
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.00125 mg/kg	95.3	70.0	132
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.00125 mg/kg	101	71.0	131
		EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.00125 mg/kg	97.5	69.0	133
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.00125 mg/kg	98.8	72.0	129
		EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.00125 mg/kg	90.0	69.0	133
		EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.00125 mg/kg	102	64.0	136
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.00125 mg/kg	96.5	69.0	135
		EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.00125 mg/kg	86.0	66.0	139
		EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.00312 mg/kg	102	69.0	133
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 4239608)							
EM2204670-001	Anonymous	EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.00125 mg/kg	93.2	67.0	137
		EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.00312 mg/kg	98.4	70.0	130
		EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.00312 mg/kg	90.7	70.0	130
		EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.00312 mg/kg	94.6	70.0	130
		EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.00312 mg/kg	116	70.0	130
		EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.00125 mg/kg	92.8	63.0	144
		EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.00125 mg/kg	105	61.0	139

Sub-Matrix: **SOIL**

Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Matrix Spike (MS) Report: Spike Concentration	SpikeRecovery(%): MS	Acceptable Limits (%): Low	Acceptable Limits (%): High
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 4239608)							
EM2204670-001	Anonymous	EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.00117 mg/kg	92.2	62.0	145
		EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.00119 mg/kg	90.0	64.0	140
		EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.0012 mg/kg	93.0	65.0	137
		EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.00121 mg/kg	77.9	70.0	130

Sub-Matrix: **WATER**

Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Matrix Spike (MS) Report: Spike Concentration	SpikeRecovery(%): MS	Acceptable Limits (%): Low	Acceptable Limits (%): High
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 4242599)							
EM2204587-004	Anonymous	EP231X-INJ: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.444 µg/L	99.0	72.0	130
		EP231X-INJ: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.47 µg/L	96.4	71.0	127
		EP231X-INJ: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.457 µg/L	93.4	68.0	131
		EP231X-INJ: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.477 µg/L	95.0	69.0	134
		EP231X-INJ: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.465 µg/L	94.2	65.0	140
		EP231X-INJ: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.482 µg/L	95.2	53.0	142
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 4247300)							
EM2204488-002	Anonymous	EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.222 µg/L	102	72.0	130
		EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.235 µg/L	99.4	71.0	127
		EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.228 µg/L	98.5	68.0	131
		EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.238 µg/L	101	69.0	134
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.232 µg/L	101	65.0	140
		EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.241 µg/L	97.0	53.0	142
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 4247307)							
EM2204488-009	Anonymous	EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.222 µg/L	96.7	72.0	130
		EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.235 µg/L	96.4	71.0	127
		EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.228 µg/L	100	68.0	131
		EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.238 µg/L	105	69.0	134
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.232 µg/L	92.6	65.0	140
		EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.241 µg/L	72.1	53.0	142
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4242599)							
EM2204587-004	Anonymous	EP231X-INJ: Perfluorobutanoic acid (PFBA)	375-22-4	2.5 µg/L	95.6	73.0	129
		EP231X-INJ: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.5 µg/L	95.4	72.0	129
		EP231X-INJ: Perfluorohexanoic acid (PFHxA)	307-24-4	0.5 µg/L	100	72.0	129
		EP231X-INJ: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.5 µg/L	95.5	72.0	130
		EP231X-INJ: Perfluorooctanoic acid (PFOA)	335-67-1	0.5 µg/L	98.5	71.0	133
		EP231X-INJ: Perfluorononanoic acid (PFNA)	375-95-1	0.5 µg/L	95.3	69.0	130
		EP231X-INJ: Perfluorodecanoic acid (PFDA)	335-76-2	0.5 µg/L	91.5	71.0	129
		EP231X-INJ: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.5 µg/L	98.9	69.0	133
		EP231X-INJ: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.5 µg/L	103	72.0	134

Sub-Matrix: **WATER**

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Acceptable Limits (%)	
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Concentration	MS	Low	High
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4242599) - continued							
EM2204587-004	Anonymous	EP231X-INJ: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.5 µg/L	102	65.0	144
		EP231X-INJ: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	1.25 µg/L	109	71.0	132
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4247300)							
EM2204488-002	Anonymous	EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	1.25 µg/L	107	73.0	129
		EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.25 µg/L	114	72.0	129
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.25 µg/L	107	72.0	129
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.25 µg/L	99.6	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	102	69.0	130
		EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.25 µg/L	90.5	71.0	129
		EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.25 µg/L	97.0	69.0	133
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.25 µg/L	103	72.0	134
		EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.25 µg/L	95.0	65.0	144
		EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.625 µg/L	118	71.0	132
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4247307)							
EM2204488-009	Anonymous	EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	1.25 µg/L	81.1	73.0	129
		EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.25 µg/L	101	72.0	129
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.25 µg/L	102	72.0	129
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.25 µg/L	99.9	72.0	130
		EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.25 µg/L	101	71.0	133
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.25 µg/L	109	69.0	130
		EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.25 µg/L	100	71.0	129
		EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.25 µg/L	106	69.0	133
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.25 µg/L	128	72.0	134
		EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.25 µg/L	93.1	65.0	144
		EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.625 µg/L	121	71.0	132
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 4242599)							
EM2204587-004	Anonymous	EP231X-INJ: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.5 µg/L	102	67.0	137
		EP231X-INJ: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	1.25 µg/L	104	68.0	141
		EP231X-INJ: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	1.25 µg/L	104	70.0	130
		EP231X-INJ: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	1.25 µg/L	99.3	70.0	130
		EP231X-INJ: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	1.25 µg/L	101	70.0	130
		EP231X-INJ: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.5 µg/L	95.0	65.0	136

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: 4242599) - continued							
EM2204587-004	Anonymous	EP231X-INJ: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.5 µg/L	86.8	61.0	135
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 4247300)							
EM2204488-002	Anonymous	EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.25 µg/L	97.9	67.0	137
		EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.625 µg/L	115	68.0	141
		EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.625 µg/L	98.5	70.0	130
		EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.625 µg/L	99.6	70.0	130
		EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.625 µg/L	114	70.0	130
		EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.25 µg/L	108	65.0	136
		EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.25 µg/L	95.8	61.0	135
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 4247307)							
EM2204488-009	Anonymous	EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.25 µg/L	97.0	67.0	137
		EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.625 µg/L	112	68.0	141
		EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.625 µg/L	120	70.0	130
		EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.625 µg/L	87.8	70.0	130
		EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.625 µg/L	123	70.0	130
		EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.25 µg/L	105	65.0	136
		EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.25 µg/L	133	61.0	135
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 4242599)							
EM2204587-004	Anonymous	EP231X-INJ: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.469 µg/L	107	63.0	143
		EP231X-INJ: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.476 µg/L	101	64.0	140
		EP231X-INJ: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.48 µg/L	103	67.0	138
		EP231X-INJ: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.483 µg/L	88.5	70.0	130
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 4247300)							
EM2204488-002	Anonymous	EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.234 µg/L	110	63.0	143
		EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.238 µg/L	123	64.0	140
		EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.24 µg/L	118	67.0	138
		EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.242 µg/L	93.6	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*
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 4247307)							
EM2204488-009	Anonymous	EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.234 µg/L	106	63.0	143
		EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.238 µg/L	86.8	64.0	140
		EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.24 µg/L	90.0	67.0	138
		EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.242 µg/L	# 61.2	70.0	130

QA/QC Compliance Assessment to assist with Quality Review

Work Order	: **EM2204843**	Page	: 1 of 13
Client	: **AGON ENVIRONMENTAL PTY LTD**	Laboratory	: Environmental Division Melbourne
Contact	: CRAIG TRIMBUR	Telephone	: +6138549 9600
Project	: JC0927	Date Samples Received	: 18-Mar-2022
Site	: 20220318042901-ALS-12	Issue Date	: 25-Mar-2022
Sampler	: ----	No. of samples received	: 18
Order number	: ----	No. of samples analysed	: 18

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							
EP075B: Polynuclear Aromatic Hydrocarbons	EM2204690--067	Anonymous	**Acenaphthene**	83-32-9	Not Determined	----	**MS recovery not determined, background level greater than or equal to 4x spike level.**
EP075B: Polynuclear Aromatic Hydrocarbons	EM2204690--067	Anonymous	**Pyrene**	129-00-0	Not Determined	----	**MS recovery not determined, background level greater than or equal to 4x spike level.**

Matrix: **WATER**

Compound Group Name	Laboratory Sample ID	Client Sample ID	Analyte	CAS Number	Data	Limits	Comment
Matrix Spike (MS) Recoveries							
EP231D: (n:2) Fluorotelomer Sulfonic Acids	EM2204488--009	Anonymous	**10:2 Fluorotelomer sulfonic acid (10:2 FTS)**	120226-60-0	61.2 %	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_20220317_07_53_SS_Primary_ALS,	SX_IB_20220317_07_53_SS_Duplicate_ALS,	**17-Mar-2022**	**24-Mar-2022**	24-Mar-2022	✓	**24-Mar-2022**	24-Mar-2022	✓
SX_OB_20220317_12_04_SS_Primary_ALS,	SX_OB_20220317_15_54_SS_Primary_ALS,							
SX_OB_20220317_16_03_SS_Triplicate_ALS,	SX_OB_20220317_19_57_SS_Primary_ALS							
Soil Glass Jar - Unpreserved (EA001)								
SX_OB_20220318_00_02_SS_Primary_ALS,	SX_OB_20220318_04_02_SS_Primary_ALS	**18-Mar-2022**	**24-Mar-2022**	25-Mar-2022	✓	**24-Mar-2022**	24-Mar-2022	✓
EA055: Moisture Content (Dried @ 105-110°C)								
Soil Glass Jar - Unpreserved (EA055)								
SX_IB_20220317_07_53_SS_Primary_ALS,	SX_IB_20220317_07_53_SS_Duplicate_ALS,	**17-Mar-2022**	**----**	----	----	**23-Mar-2022**	31-Mar-2022	✓
SX_OB_20220317_12_04_SS_Primary_ALS,	SX_OB_20220317_15_54_SS_Primary_ALS,							
SX_OB_20220317_16_03_SS_Triplicate_ALS,	SX_OB_20220317_19_57_SS_Primary_ALS							
Soil Glass Jar - Unpreserved (EA055)								
SX_OB_20220318_00_02_SS_Primary_ALS,	SX_OB_20220318_04_02_SS_Primary_ALS	**18-Mar-2022**	**----**	----	----	**23-Mar-2022**	01-Apr-2022	✓

Matrix: **SOIL**

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

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EG005(ED093)T: Total Metals by ICP-AES							
Soil Glass Jar - Unpreserved (EG005T)							
SX_IB_20220317_07_53_SS_Primary_ALS, SX_IB_20220317_07_53_SS_Duplicate_ALS, SX_OB_20220317_12_04_SS_Primary_ALS, SX_OB_20220317_15_54_SS_Primary_ALS, SX_OB_20220317_16_03_SS_Triplicate_ALS, SX_OB_20220317_19_57_SS_Primary_ALS	**17-Mar-2022**	**23-Mar-2022**	13-Sep-2022	✓	**23-Mar-2022**	13-Sep-2022	✓
Soil Glass Jar - Unpreserved (EG005T)							
SX_OB_20220318_00_02_SS_Primary_ALS, SX_OB_20220318_04_02_SS_Primary_ALS	**18-Mar-2022**	**23-Mar-2022**	14-Sep-2022	✓	**23-Mar-2022**	14-Sep-2022	✓
EG035T: Total Recoverable Mercury by FIMS							
Soil Glass Jar - Unpreserved (EG035T)							
SX_IB_20220317_07_53_SS_Primary_ALS, SX_IB_20220317_07_53_SS_Duplicate_ALS, SX_OB_20220317_12_04_SS_Primary_ALS, SX_OB_20220317_15_54_SS_Primary_ALS, SX_OB_20220317_16_03_SS_Triplicate_ALS, SX_OB_20220317_19_57_SS_Primary_ALS	**17-Mar-2022**	**23-Mar-2022**	14-Apr-2022	✓	**24-Mar-2022**	14-Apr-2022	✓
Soil Glass Jar - Unpreserved (EG035T)							
SX_OB_20220318_00_02_SS_Primary_ALS, SX_OB_20220318_04_02_SS_Primary_ALS	**18-Mar-2022**	**23-Mar-2022**	15-Apr-2022	✓	**24-Mar-2022**	15-Apr-2022	✓
EG048: Hexavalent Chromium (Alkaline Digest)							
Soil Glass Jar - Unpreserved (EG048G)							
SX_IB_20220317_07_53_SS_Primary_ALS, SX_IB_20220317_07_53_SS_Duplicate_ALS, SX_OB_20220317_12_04_SS_Primary_ALS, SX_OB_20220317_15_54_SS_Primary_ALS, SX_OB_20220317_16_03_SS_Triplicate_ALS, SX_OB_20220317_19_57_SS_Primary_ALS	**17-Mar-2022**	**23-Mar-2022**	14-Apr-2022	✓	**24-Mar-2022**	30-Mar-2022	✓
Soil Glass Jar - Unpreserved (EG048G)							
SX_OB_20220318_00_02_SS_Primary_ALS, SX_OB_20220318_04_02_SS_Primary_ALS	**18-Mar-2022**	**23-Mar-2022**	15-Apr-2022	✓	**24-Mar-2022**	30-Mar-2022	✓
EK026SF: Total CN by Segmented Flow Analyser							
Soil Glass Jar - Unpreserved (EK026SF)							
SX_IB_20220317_07_53_SS_Primary_ALS, SX_IB_20220317_07_53_SS_Duplicate_ALS, SX_OB_20220317_12_04_SS_Primary_ALS, SX_OB_20220317_15_54_SS_Primary_ALS, SX_OB_20220317_16_03_SS_Triplicate_ALS, SX_OB_20220317_19_57_SS_Primary_ALS	**17-Mar-2022**	**23-Mar-2022**	31-Mar-2022	✓	**24-Mar-2022**	06-Apr-2022	✓
Soil Glass Jar - Unpreserved (EK026SF)							
SX_OB_20220318_00_02_SS_Primary_ALS, SX_OB_20220318_04_02_SS_Primary_ALS	**18-Mar-2022**	**23-Mar-2022**	01-Apr-2022	✓	**24-Mar-2022**	06-Apr-2022	✓
EK040T: Fluoride Total							
Soil Glass Jar - Unpreserved (EK040T)							
SX_IB_20220317_07_53_SS_Primary_ALS, SX_IB_20220317_07_53_SS_Duplicate_ALS, SX_OB_20220317_12_04_SS_Primary_ALS, SX_OB_20220317_15_54_SS_Primary_ALS, SX_OB_20220317_16_03_SS_Triplicate_ALS, SX_OB_20220317_19_57_SS_Primary_ALS	**17-Mar-2022**	**23-Mar-2022**	14-Apr-2022	✓	**25-Mar-2022**	14-Apr-2022	✓
Soil Glass Jar - Unpreserved (EK040T)							
SX_OB_20220318_00_02_SS_Primary_ALS, SX_OB_20220318_04_02_SS_Primary_ALS	**18-Mar-2022**	**23-Mar-2022**	15-Apr-2022	✓	**25-Mar-2022**	15-Apr-2022	✓
EN60: ASLP Leaching Procedure - Inorganics/PFAS (Plastic Vessel)							
Non-Volatile Leach: 180 day HT (e.g. PFAS, metals ex.Hg) (EN60a-P)							
SX_IB_20220317_07_53_SS_Primary_ALS, SX_IB_20220317_07_53_SS_Duplicate_ALS, SX_OB_20220317_12_04_SS_Primary_ALS, SX_OB_20220317_15_54_SS_Primary_ALS, SX_OB_20220317_16_03_SS_Triplicate_ALS, SX_OB_20220317_19_57_SS_Primary_ALS	**17-Mar-2022**	**23-Mar-2022**	13-Sep-2022	✓	**----**	----	----
Non-Volatile Leach: 180 day HT (e.g. PFAS, metals ex.Hg) (EN60a-P)							
SX_OB_20220318_00_02_SS_Primary_ALS, SX_OB_20220318_04_02_SS_Primary_ALS	**18-Mar-2022**	**23-Mar-2022**	14-Sep-2022	✓	**----**	----	----

Matrix: **SOIL**

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

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EN60-DI: Bottle Leaching Procedure - Inorganics/PFAS (Plastic Vessel)							
Non-Volatile Leach: 180 day HT (e.g. PFAS, metals ex.Hg) (EN60-Dla-P)							
SX_IB_20220317_07_53_SS_Primary_ALS, SX_IB_20220317_07_53_SS_Duplicate_ALS, SX_OB_20220317_12_04_SS_Primary_ALS, SX_OB_20220317_15_54_SS_Primary_ALS, SX_OB_20220317_16_03_SS_Triplicate_ALS, SX_OB_20220317_19_57_SS_Primary_ALS	**17-Mar-2022**	**23-Mar-2022**	13-Sep-2022	✓	**----**	----	----
Non-Volatile Leach: 180 day HT (e.g. PFAS, metals ex.Hg) (EN60-Dla-P)							
SX_OB_20220318_00_02_SS_Primary_ALS, SX_OB_20220318_04_02_SS_Primary_ALS	**18-Mar-2022**	**23-Mar-2022**	14-Sep-2022	✓	**----**	----	----
EP066: Polychlorinated Biphenyls (PCB)							
Soil Glass Jar - Unpreserved (EP066-EM)							
SX_IB_20220317_07_53_SS_Primary_ALS, SX_IB_20220317_07_53_SS_Duplicate_ALS, SX_OB_20220317_12_04_SS_Primary_ALS, SX_OB_20220317_15_54_SS_Primary_ALS, SX_OB_20220317_16_03_SS_Triplicate_ALS, SX_OB_20220317_19_57_SS_Primary_ALS	**17-Mar-2022**	**23-Mar-2022**	31-Mar-2022	✓	**23-Mar-2022**	02-May-2022	✓
Soil Glass Jar - Unpreserved (EP066-EM)							
SX_OB_20220318_00_02_SS_Primary_ALS, SX_OB_20220318_04_02_SS_Primary_ALS	**18-Mar-2022**	**23-Mar-2022**	01-Apr-2022	✓	**23-Mar-2022**	02-May-2022	✓
EP074A: Monocyclic Aromatic Hydrocarbons							
Soil Glass Jar - Unpreserved (EP074-UT)							
SX_IB_20220317_07_53_SS_Primary_ALS, SX_IB_20220317_07_53_SS_Duplicate_ALS, SX_OB_20220317_12_04_SS_Primary_ALS, SX_OB_20220317_15_54_SS_Primary_ALS, SX_OB_20220317_16_03_SS_Triplicate_ALS, SX_OB_20220317_19_57_SS_Primary_ALS	**17-Mar-2022**	**22-Mar-2022**	24-Mar-2022	✓	**22-Mar-2022**	24-Mar-2022	✓
Soil Glass Jar - Unpreserved (EP074-UT)							
SX_OB_20220318_00_02_SS_Primary_ALS, SX_OB_20220318_04_02_SS_Primary_ALS	**18-Mar-2022**	**22-Mar-2022**	25-Mar-2022	✓	**22-Mar-2022**	25-Mar-2022	✓
EP074H: Naphthalene							
Soil Glass Jar - Unpreserved (EP074-UT)							
SX_IB_20220317_07_53_SS_Primary_ALS, SX_IB_20220317_07_53_SS_Duplicate_ALS, SX_OB_20220317_12_04_SS_Primary_ALS, SX_OB_20220317_15_54_SS_Primary_ALS, SX_OB_20220317_16_03_SS_Triplicate_ALS, SX_OB_20220317_19_57_SS_Primary_ALS	**17-Mar-2022**	**22-Mar-2022**	24-Mar-2022	✓	**22-Mar-2022**	24-Mar-2022	✓
Soil Glass Jar - Unpreserved (EP074-UT)							
SX_OB_20220318_00_02_SS_Primary_ALS, SX_OB_20220318_04_02_SS_Primary_ALS	**18-Mar-2022**	**22-Mar-2022**	25-Mar-2022	✓	**22-Mar-2022**	25-Mar-2022	✓
EP074I: Volatile Halogenated Compounds							
Soil Glass Jar - Unpreserved (EP074-UT)							
SX_IB_20220317_07_53_SS_Primary_ALS, SX_IB_20220317_07_53_SS_Duplicate_ALS, SX_OB_20220317_12_04_SS_Primary_ALS, SX_OB_20220317_15_54_SS_Primary_ALS, SX_OB_20220317_16_03_SS_Triplicate_ALS, SX_OB_20220317_19_57_SS_Primary_ALS	**17-Mar-2022**	**22-Mar-2022**	24-Mar-2022	✓	**22-Mar-2022**	24-Mar-2022	✓
Soil Glass Jar - Unpreserved (EP074-UT)							
SX_OB_20220318_00_02_SS_Primary_ALS, SX_OB_20220318_04_02_SS_Primary_ALS	**18-Mar-2022**	**22-Mar-2022**	25-Mar-2022	✓	**22-Mar-2022**	25-Mar-2022	✓
EP075A: Phenolic Compounds (Halogenated)							
Soil Glass Jar - Unpreserved (EP075-EM)							
SX_IB_20220317_07_53_SS_Primary_ALS, SX_IB_20220317_07_53_SS_Duplicate_ALS, SX_OB_20220317_12_04_SS_Primary_ALS, SX_OB_20220317_15_54_SS_Primary_ALS, SX_OB_20220317_16_03_SS_Triplicate_ALS, SX_OB_20220317_19_57_SS_Primary_ALS	**17-Mar-2022**	**23-Mar-2022**	31-Mar-2022	✓	**23-Mar-2022**	02-May-2022	✓
Soil Glass Jar - Unpreserved (EP075-EM)							
SX_OB_20220318_00_02_SS_Primary_ALS, SX_OB_20220318_04_02_SS_Primary_ALS	**18-Mar-2022**	**23-Mar-2022**	01-Apr-2022	✓	**23-Mar-2022**	02-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
EP075A: Phenolic Compounds (Non-halogenated)							
Soil Glass Jar - Unpreserved (EP075-EM)							
SX_IB_20220317_07_53_SS_Primary_ALS, SX_IB_20220317_07_53_SS_Duplicate_ALS, SX_OB_20220317_12_04_SS_Primary_ALS, SX_OB_20220317_15_54_SS_Primary_ALS, SX_OB_20220317_16_03_SS_Triplicate_ALS, SX_OB_20220317_19_57_SS_Primary_ALS	**17-Mar-2022**	**23-Mar-2022**	31-Mar-2022	✓	**23-Mar-2022**	02-May-2022	✓
Soil Glass Jar - Unpreserved (EP075-EM)							
SX_OB_20220318_00_02_SS_Primary_ALS, SX_OB_20220318_04_02_SS_Primary_ALS	**18-Mar-2022**	**23-Mar-2022**	01-Apr-2022	✓	**23-Mar-2022**	02-May-2022	✓
EP075B: Polynuclear Aromatic Hydrocarbons							
Soil Glass Jar - Unpreserved (EP075-EM)							
SX_IB_20220317_07_53_SS_Primary_ALS, SX_IB_20220317_07_53_SS_Duplicate_ALS, SX_OB_20220317_12_04_SS_Primary_ALS, SX_OB_20220317_15_54_SS_Primary_ALS, SX_OB_20220317_16_03_SS_Triplicate_ALS, SX_OB_20220317_19_57_SS_Primary_ALS	**17-Mar-2022**	**23-Mar-2022**	31-Mar-2022	✓	**23-Mar-2022**	02-May-2022	✓
Soil Glass Jar - Unpreserved (EP075-EM)							
SX_OB_20220318_00_02_SS_Primary_ALS, SX_OB_20220318_04_02_SS_Primary_ALS	**18-Mar-2022**	**23-Mar-2022**	01-Apr-2022	✓	**23-Mar-2022**	02-May-2022	✓
EP075I: Organochlorine Pesticides							
Soil Glass Jar - Unpreserved (EP075-EM)							
SX_IB_20220317_07_53_SS_Primary_ALS, SX_IB_20220317_07_53_SS_Duplicate_ALS, SX_OB_20220317_12_04_SS_Primary_ALS, SX_OB_20220317_15_54_SS_Primary_ALS, SX_OB_20220317_16_03_SS_Triplicate_ALS, SX_OB_20220317_19_57_SS_Primary_ALS	**17-Mar-2022**	**23-Mar-2022**	31-Mar-2022	✓	**23-Mar-2022**	02-May-2022	✓
Soil Glass Jar - Unpreserved (EP075-EM)							
SX_OB_20220318_00_02_SS_Primary_ALS, SX_OB_20220318_04_02_SS_Primary_ALS	**18-Mar-2022**	**23-Mar-2022**	01-Apr-2022	✓	**23-Mar-2022**	02-May-2022	✓
EP080/071: Total Petroleum Hydrocarbons							
Soil Glass Jar - Unpreserved (EP074-UT)							
SX_IB_20220317_07_53_SS_Primary_ALS, SX_IB_20220317_07_53_SS_Duplicate_ALS, SX_OB_20220317_12_04_SS_Primary_ALS, SX_OB_20220317_15_54_SS_Primary_ALS, SX_OB_20220317_16_03_SS_Triplicate_ALS, SX_OB_20220317_19_57_SS_Primary_ALS	**17-Mar-2022**	**22-Mar-2022**	24-Mar-2022	✓	**22-Mar-2022**	24-Mar-2022	✓
Soil Glass Jar - Unpreserved (EP071-EM)							
SX_IB_20220317_07_53_SS_Primary_ALS, SX_IB_20220317_07_53_SS_Duplicate_ALS, SX_OB_20220317_12_04_SS_Primary_ALS, SX_OB_20220317_15_54_SS_Primary_ALS, SX_OB_20220317_16_03_SS_Triplicate_ALS, SX_OB_20220317_19_57_SS_Primary_ALS	**17-Mar-2022**	**23-Mar-2022**	31-Mar-2022	✓	**24-Mar-2022**	02-May-2022	✓
Soil Glass Jar - Unpreserved (EP074-UT)							
SX_OB_20220318_00_02_SS_Primary_ALS, SX_OB_20220318_04_02_SS_Primary_ALS	**18-Mar-2022**	**22-Mar-2022**	25-Mar-2022	✓	**22-Mar-2022**	25-Mar-2022	✓
Soil Glass Jar - Unpreserved (EP071-EM)							
SX_OB_20220318_00_02_SS_Primary_ALS, SX_OB_20220318_04_02_SS_Primary_ALS	**18-Mar-2022**	**23-Mar-2022**	01-Apr-2022	✓	**24-Mar-2022**	02-May-2022	✓

Matrix: **SOIL**

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

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions							
Soil Glass Jar - Unpreserved (EP074-UT)							
SX_IB_20220317_07_53_SS_Primary_ALS, SX_IB_20220317_07_53_SS_Duplicate_ALS, SX_OB_20220317_12_04_SS_Primary_ALS, SX_OB_20220317_15_54_SS_Primary_ALS, SX_OB_20220317_16_03_SS_Triplicate_ALS, SX_OB_20220317_19_57_SS_Primary_ALS	**17-Mar-2022**	**22-Mar-2022**	24-Mar-2022	✓	**22-Mar-2022**	24-Mar-2022	✓
Soil Glass Jar - Unpreserved (EP071-EM)							
SX_IB_20220317_07_53_SS_Primary_ALS, SX_IB_20220317_07_53_SS_Duplicate_ALS, SX_OB_20220317_12_04_SS_Primary_ALS, SX_OB_20220317_15_54_SS_Primary_ALS, SX_OB_20220317_16_03_SS_Triplicate_ALS, SX_OB_20220317_19_57_SS_Primary_ALS	**17-Mar-2022**	**23-Mar-2022**	31-Mar-2022	✓	**24-Mar-2022**	02-May-2022	✓
Soil Glass Jar - Unpreserved (EP074-UT)							
SX_OB_20220318_00_02_SS_Primary_ALS, SX_OB_20220318_04_02_SS_Primary_ALS	**18-Mar-2022**	**22-Mar-2022**	25-Mar-2022	✓	**22-Mar-2022**	25-Mar-2022	✓
Soil Glass Jar - Unpreserved (EP071-EM)							
SX_OB_20220318_00_02_SS_Primary_ALS, SX_OB_20220318_04_02_SS_Primary_ALS	**18-Mar-2022**	**23-Mar-2022**	01-Apr-2022	✓	**24-Mar-2022**	02-May-2022	✓
EP231A: Perfluoroalkyl Sulfonic Acids							
HDPE Soil Jar (EP231X)							
SX_IB_20220317_07_53_SS_Primary_ALS, SX_IB_20220317_07_53_SS_Duplicate_ALS, SX_OB_20220317_12_04_SS_Primary_ALS, SX_OB_20220317_15_54_SS_Primary_ALS, SX_OB_20220317_16_03_SS_Triplicate_ALS, SX_OB_20220317_19_57_SS_Primary_ALS	**17-Mar-2022**	**21-Mar-2022**	13-Sep-2022	✓	**23-Mar-2022**	30-Apr-2022	✓
HDPE Soil Jar (EP231X)							
SX_OB_20220318_00_02_SS_Primary_ALS, SX_OB_20220318_04_02_SS_Primary_ALS	**18-Mar-2022**	**21-Mar-2022**	14-Sep-2022	✓	**23-Mar-2022**	30-Apr-2022	✓
EP231B: Perfluoroalkyl Carboxylic Acids							
HDPE Soil Jar (EP231X)							
SX_IB_20220317_07_53_SS_Primary_ALS, SX_IB_20220317_07_53_SS_Duplicate_ALS, SX_OB_20220317_12_04_SS_Primary_ALS, SX_OB_20220317_15_54_SS_Primary_ALS, SX_OB_20220317_16_03_SS_Triplicate_ALS, SX_OB_20220317_19_57_SS_Primary_ALS	**17-Mar-2022**	**21-Mar-2022**	13-Sep-2022	✓	**23-Mar-2022**	30-Apr-2022	✓
HDPE Soil Jar (EP231X)							
SX_OB_20220318_00_02_SS_Primary_ALS, SX_OB_20220318_04_02_SS_Primary_ALS	**18-Mar-2022**	**21-Mar-2022**	14-Sep-2022	✓	**23-Mar-2022**	30-Apr-2022	✓
EP231C: Perfluoroalkyl Sulfonamides							
HDPE Soil Jar (EP231X)							
SX_IB_20220317_07_53_SS_Primary_ALS, SX_IB_20220317_07_53_SS_Duplicate_ALS, SX_OB_20220317_12_04_SS_Primary_ALS, SX_OB_20220317_15_54_SS_Primary_ALS, SX_OB_20220317_16_03_SS_Triplicate_ALS, SX_OB_20220317_19_57_SS_Primary_ALS	**17-Mar-2022**	**21-Mar-2022**	13-Sep-2022	✓	**23-Mar-2022**	30-Apr-2022	✓
HDPE Soil Jar (EP231X)							
SX_OB_20220318_00_02_SS_Primary_ALS, SX_OB_20220318_04_02_SS_Primary_ALS	**18-Mar-2022**	**21-Mar-2022**	14-Sep-2022	✓	**23-Mar-2022**	30-Apr-2022	✓
EP231D: (n:2) Fluorotelomer Sulfonic Acids							
HDPE Soil Jar (EP231X)							
SX_IB_20220317_07_53_SS_Primary_ALS, SX_IB_20220317_07_53_SS_Duplicate_ALS, SX_OB_20220317_12_04_SS_Primary_ALS, SX_OB_20220317_15_54_SS_Primary_ALS, SX_OB_20220317_16_03_SS_Triplicate_ALS, SX_OB_20220317_19_57_SS_Primary_ALS	**17-Mar-2022**	**21-Mar-2022**	13-Sep-2022	✓	**23-Mar-2022**	30-Apr-2022	✓
HDPE Soil Jar (EP231X)							
SX_OB_20220318_00_02_SS_Primary_ALS, SX_OB_20220318_04_02_SS_Primary_ALS	**18-Mar-2022**	**21-Mar-2022**	14-Sep-2022	✓	**23-Mar-2022**	30-Apr-2022	✓

Matrix: **SOIL**

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

Method / Container / Client Sample ID(s)		Sample Date	Extraction / Preparation			Analysis		
			Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP231P: PFAS Sums								
HDPE Soil Jar (EP231X)								
SX_IB_20220317_07_53_SS_Primary_ALS,	SX_IB_20220317_07_53_SS_Duplicate_ALS,	**17-Mar-2022**	**21-Mar-2022**	13-Sep-2022	✓	**23-Mar-2022**	30-Apr-2022	✓
SX_OB_20220317_12_04_SS_Primary_ALS,	SX_OB_20220317_15_54_SS_Primary_ALS,							
SX_OB_20220317_16_03_SS_Triplicate_ALS,	SX_OB_20220317_19_57_SS_Primary_ALS							
HDPE Soil Jar (EP231X)								
SX_OB_20220318_00_02_SS_Primary_ALS,	SX_OB_20220318_04_02_SS_Primary_ALS	**18-Mar-2022**	**21-Mar-2022**	14-Sep-2022	✓	**23-Mar-2022**	30-Apr-2022	✓

Matrix: **WATER**

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

Method / Container / Client Sample ID(s)		Sample Date	Extraction / Preparation			Analysis		
			Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP231A: Perfluoroalkyl Sulfonic Acids								
HDPE (no PTFE) (EP231X)								
SX_IB_20220317_07_53_SS_Primary_ALS,	SX_IB_20220317_07_53_SS_Duplicate_ALS,	**23-Mar-2022**	**24-Mar-2022**	19-Sep-2022	✓	**24-Mar-2022**	19-Sep-2022	✓
SX_OB_20220317_12_04_SS_Primary_ALS,	SX_OB_20220317_15_54_SS_Primary_ALS,							
SX_OB_20220317_16_03_SS_Triplicate_ALS,	SX_OB_20220317_19_57_SS_Primary_ALS,							
SX_OB_20220318_00_02_SS_Primary_ALS,	SX_OB_20220318_04_02_SS_Primary_ALS,							
SX_IB_20220317_07_53_SS_Primary_ALS,	SX_IB_20220317_07_53_SS_Duplicate_ALS,							
SX_OB_20220317_12_04_SS_Primary_ALS,	SX_OB_20220317_15_54_SS_Primary_ALS,							
SX_OB_20220317_16_03_SS_Triplicate_ALS,	SX_OB_20220317_19_57_SS_Primary_ALS,							
SX_OB_20220318_00_02_SS_Primary_ALS,	SX_OB_20220318_04_02_SS_Primary_ALS							
Miscellaneous Plastic bottle - Unpreserved (EP231X-INJ)								
SX_IB_20220317_08_34_SR_Rinsate_ALS,	SX_IB_20220317_08_36_SB_Blank_ALS	**17-Mar-2022**	**22-Mar-2022**	13-Sep-2022	✓	**22-Mar-2022**	13-Sep-2022	✓
EP231B: Perfluoroalkyl Carboxylic Acids								
HDPE (no PTFE) (EP231X)								
SX_IB_20220317_07_53_SS_Primary_ALS,	SX_IB_20220317_07_53_SS_Duplicate_ALS,	**23-Mar-2022**	**24-Mar-2022**	19-Sep-2022	✓	**24-Mar-2022**	19-Sep-2022	✓
SX_OB_20220317_12_04_SS_Primary_ALS,	SX_OB_20220317_15_54_SS_Primary_ALS,							
SX_OB_20220317_16_03_SS_Triplicate_ALS,	SX_OB_20220317_19_57_SS_Primary_ALS,							
SX_OB_20220318_00_02_SS_Primary_ALS,	SX_OB_20220318_04_02_SS_Primary_ALS,							
SX_IB_20220317_07_53_SS_Primary_ALS,	SX_IB_20220317_07_53_SS_Duplicate_ALS,							
SX_OB_20220317_12_04_SS_Primary_ALS,	SX_OB_20220317_15_54_SS_Primary_ALS,							
SX_OB_20220317_16_03_SS_Triplicate_ALS,	SX_OB_20220317_19_57_SS_Primary_ALS,							
SX_OB_20220318_00_02_SS_Primary_ALS,	SX_OB_20220318_04_02_SS_Primary_ALS							
Miscellaneous Plastic bottle - Unpreserved (EP231X-INJ)								
SX_IB_20220317_08_34_SR_Rinsate_ALS,	SX_IB_20220317_08_36_SB_Blank_ALS	**17-Mar-2022**	**22-Mar-2022**	13-Sep-2022	✓	**22-Mar-2022**	13-Sep-2022	✓

Matrix: **WATER**

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

Method / Container / Client Sample ID(s)		Sample Date	Extraction / Preparation			Analysis		
			Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP231C: Perfluoroalkyl Sulfonamides								
HDPE (no PTFE) (EP231X)								
SX_IB_20220317_07_53_SS_Primary_ALS,	SX_IB_20220317_07_53_SS_Duplicate_ALS,	**23-Mar-2022**	**24-Mar-2022**	19-Sep-2022	✓	**24-Mar-2022**	19-Sep-2022	✓
SX_OB_20220317_12_04_SS_Primary_ALS,	SX_OB_20220317_15_54_SS_Primary_ALS,							
SX_OB_20220317_16_03_SS_Triplicate_ALS,	SX_OB_20220317_19_57_SS_Primary_ALS,							
SX_OB_20220318_00_02_SS_Primary_ALS,	SX_OB_20220318_04_02_SS_Primary_ALS,							
SX_IB_20220317_07_53_SS_Primary_ALS,	SX_IB_20220317_07_53_SS_Duplicate_ALS,							
SX_OB_20220317_12_04_SS_Primary_ALS,	SX_OB_20220317_15_54_SS_Primary_ALS,							
SX_OB_20220317_16_03_SS_Triplicate_ALS,	SX_OB_20220317_19_57_SS_Primary_ALS,							
SX_OB_20220318_00_02_SS_Primary_ALS,	SX_OB_20220318_04_02_SS_Primary_ALS							
Miscellaneous Plastic bottle - Unpreserved (EP231X-INJ)								
SX_IB_20220317_08_34_SR_Rinsate_ALS,	SX_IB_20220317_08_36_SB_Blank_ALS	**17-Mar-2022**	**22-Mar-2022**	13-Sep-2022	✓	**22-Mar-2022**	13-Sep-2022	✓
EP231D: (n:2) Fluorotelomer Sulfonic Acids								
HDPE (no PTFE) (EP231X)								
SX_IB_20220317_07_53_SS_Primary_ALS,	SX_IB_20220317_07_53_SS_Duplicate_ALS,	**23-Mar-2022**	**24-Mar-2022**	19-Sep-2022	✓	**24-Mar-2022**	19-Sep-2022	✓
SX_OB_20220317_12_04_SS_Primary_ALS,	SX_OB_20220317_15_54_SS_Primary_ALS,							
SX_OB_20220317_16_03_SS_Triplicate_ALS,	SX_OB_20220317_19_57_SS_Primary_ALS,							
SX_OB_20220318_00_02_SS_Primary_ALS,	SX_OB_20220318_04_02_SS_Primary_ALS,							
SX_IB_20220317_07_53_SS_Primary_ALS,	SX_IB_20220317_07_53_SS_Duplicate_ALS,							
SX_OB_20220317_12_04_SS_Primary_ALS,	SX_OB_20220317_15_54_SS_Primary_ALS,							
SX_OB_20220317_16_03_SS_Triplicate_ALS,	SX_OB_20220317_19_57_SS_Primary_ALS,							
SX_OB_20220318_00_02_SS_Primary_ALS,	SX_OB_20220318_04_02_SS_Primary_ALS							
Miscellaneous Plastic bottle - Unpreserved (EP231X-INJ)								
SX_IB_20220317_08_34_SR_Rinsate_ALS,	SX_IB_20220317_08_36_SB_Blank_ALS	**17-Mar-2022**	**22-Mar-2022**	13-Sep-2022	✓	**22-Mar-2022**	13-Sep-2022	✓
EP231P: PFAS Sums								
HDPE (no PTFE) (EP231X)								
SX_IB_20220317_07_53_SS_Primary_ALS,	SX_IB_20220317_07_53_SS_Duplicate_ALS,	**23-Mar-2022**	**24-Mar-2022**	19-Sep-2022	✓	**24-Mar-2022**	19-Sep-2022	✓
SX_OB_20220317_12_04_SS_Primary_ALS,	SX_OB_20220317_15_54_SS_Primary_ALS,							
SX_OB_20220317_16_03_SS_Triplicate_ALS,	SX_OB_20220317_19_57_SS_Primary_ALS,							
SX_OB_20220318_00_02_SS_Primary_ALS,	SX_OB_20220318_04_02_SS_Primary_ALS,							
SX_IB_20220317_07_53_SS_Primary_ALS,	SX_IB_20220317_07_53_SS_Duplicate_ALS,							
SX_OB_20220317_12_04_SS_Primary_ALS,	SX_OB_20220317_15_54_SS_Primary_ALS,							
SX_OB_20220317_16_03_SS_Triplicate_ALS,	SX_OB_20220317_19_57_SS_Primary_ALS,							
SX_OB_20220318_00_02_SS_Primary_ALS,	SX_OB_20220318_04_02_SS_Primary_ALS							
Miscellaneous Plastic bottle - Unpreserved (EP231X-INJ)								
SX_IB_20220317_08_34_SR_Rinsate_ALS,	SX_IB_20220317_08_36_SB_Blank_ALS	**17-Mar-2022**	**22-Mar-2022**	13-Sep-2022	✓	**22-Mar-2022**	13-Sep-2022	✓

Quality Control Parameter Frequency Compliance

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

Matrix: **SOIL**

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

Quality Control Sample Type		Count		Rate (%)			Quality Control Specification
Analytical Methods	*Method*	*QC*	*Regular*	***Actual***	***Expected***	*Evaluation*	
Laboratory Duplicates (DUP)							
Hexavalent Chromium by Alkaline Digestion and DA Finish	EG048G	2	19	**10.53**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Moisture Content	EA055	2	20	**10.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
PCB - VIC EPA 448.3 Screen	EP066-EM	2	15	**13.33**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	2	20	**10.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
pH in soil using a 0.01M CaCl2 extract	EA001	2	20	**10.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Semivolatile Organic Compounds - Waste Classification	EP075-EM	2	20	**10.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Cyanide by Segmented Flow Analyser	EK026SF	2	20	**10.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Fluoride	EK040T	2	15	**13.33**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	4	40	**10.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	5	40	**12.50**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071-EM	2	15	**13.33**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Volatile Organic Compounds - Ultra-trace	EP074-UT	1	8	**12.50**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Laboratory Control Samples (LCS)							
Hexavalent Chromium by Alkaline Digestion and DA Finish	EG048G	2	19	**10.53**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
PCB - VIC EPA 448.3 Screen	EP066-EM	1	15	**6.67**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
pH in soil using a 0.01M CaCl2 extract	EA001	2	20	**10.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Semivolatile Organic Compounds - Waste Classification	EP075-EM	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Cyanide by Segmented Flow Analyser	EK026SF	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Fluoride	EK040T	1	15	**6.67**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	2	40	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	2	40	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071-EM	1	15	**6.67**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Volatile Organic Compounds - Ultra-trace	EP074-UT	1	8	**12.50**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Method Blanks (MB)							
Deionised Water Leach - Plastic Leaching Vessel	EN60-Dla-P	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Hexavalent Chromium by Alkaline Digestion and DA Finish	EG048G	1	19	**5.26**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
PCB - VIC EPA 448.3 Screen	EP066-EM	1	15	**6.67**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Semivolatile Organic Compounds - Waste Classification	EP075-EM	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Cyanide by Segmented Flow Analyser	EK026SF	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Fluoride	EK040T	1	15	**6.67**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	2	40	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	2	40	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071-EM	1	15	**6.67**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Volatile Organic Compounds - Ultra-trace	EP074-UT	1	8	**12.50**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard

Matrix: **SOIL**

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

Quality Control Sample Type		Count		Rate (%)			Quality Control Specification
Analytical Methods	*Method*	*QC*	*Regular*	***Actual***	***Expected***	*Evaluation*	
Matrix Spikes (MS)							
Hexavalent Chromium by Alkaline Digestion and DA Finish	EG048G	2	19	**10.53**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
PCB - VIC EPA 448.3 Screen	EP066-EM	1	15	**6.67**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Semivolatile Organic Compounds - Waste Classification	EP075-EM	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Cyanide by Segmented Flow Analyser	EK026SF	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Fluoride	EK040T	1	15	**6.67**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	2	40	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	2	40	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071-EM	1	15	**6.67**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Volatile Organic Compounds - Ultra-trace	EP074-UT	1	8	**12.50**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard

Matrix: **WATER**

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

Quality Control Sample Type		Count		Rate (%)			Quality Control Specification
Analytical Methods	*Method*	*QC*	*Regular*	***Actual***	***Expected***	*Evaluation*	
Laboratory Duplicates (DUP)							
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	4	40	**10.00**	**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	40	**5.00**	**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	40	**5.00**	**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	40	**5.00**	**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 CaCl2 extract	EA001	SOIL	In house: Referenced to Rayment and Lyons 4B3 (mod.) or 4B4 (mod.) 10 g of soil is mixed with 50 mL of 0.01M CaCl2 and tumbled end over end for 1 hour. pH is measured from the continuous suspension. This method is compliant with NEPM Schedule B(3).
Moisture Content	EA055	SOIL	In house: A gravimetric procedure based on weight loss over a 12 hour drying period at 105-110 degrees C. This method is compliant with NEPM Schedule B(3).
Total Metals by ICP-AES	EG005T	SOIL	In house: Referenced to APHA 3120; USEPA SW 846 - 6010. Metals are determined following an appropriate acid digestion of the soil. The ICPAES technique ionises samples in a plasma, emitting a characteristic spectrum based on metals present. Intensities at selected wavelengths are compared against those of matrix matched standards. This method is compliant with NEPM Schedule B(3)
Total Mercury by FIMS	EG035T	SOIL	In house: Referenced to APHA 3112 Hg - B (Flow-injection (SnCl2) (Cold Vapour generation) AAS) FIM-AAS is an automated flameless atomic absorption technique. Mercury in solids are determined following an appropriate acid digestion. Ionic mercury is reduced online to atomic mercury vapour by SnCl2 which is then purged into a heated quartz cell. Quantification is by comparing absorbance against a calibration curve. This method is compliant with NEPM Schedule B(3)
Hexavalent Chromium by Alkaline Digestion and DA Finish	EG048G	SOIL	In house: Referenced to USEPA SW846, Method 3060. Hexavalent chromium is extracted by alkaline digestion. The digest is determined by photometrically by automatic discrete analyser, following pH adjustment. The instrument uses colour development using dephenylcarbazide. Each run of samples is measured against a five-point calibration curve. This method is compliant with NEPM Schedule B(3)
Total Cyanide by Segmented Flow Analyser	EK026SF	SOIL	In house: Referenced to APHA 4500-CN C / ASTM D7511 / ISO 14403. Caustic leachates of soil samples are introduced into an automated segmented flow analyser. Complex bound cyanide is decomposed in a continuously flowing stream, at a pH of 3.8, by the effect of UV light. A UV-B lamp (312 nm) and a decomposition spiral of borosilicate glass are used to filter out UV light with a wavelength of less than 290 nm thus preventing the conversion of thiocyanate into cyanide. The hydrogen cyanide present at a pH of 3.8 is separated by gas dialysis. The hydrogen cyanide is then determined photometrically, based on the reaction of cyanide with chloramine-T to form cyanogen chloride. This then reacts with 4-pyridine carboxylic acid and 1,3-dimethylbarbituric acid to give a red colour which is measured at 600 nm. This method is compliant with NEPM Schedule B(3).
Total Fluoride	EK040T	SOIL	(In-house) Total fluoride is determined by ion specific electrode (ISE) in a solution obtained after a Sodium Carbonate / Potassium Carbonate fusion dissolution.
PCB - VIC EPA 448.3 Screen	EP066-EM	SOIL	In house: Referenced to USEPA SW 846 - 8270 Extracts are analysed by Capillary GC/MS and quantification is by comparison against an established 5 point calibration curve. This method is compliant with NEPM Schedule B(3).
TRH - Semivolatile Fraction	EP071-EM	SOIL	In house: Referenced to USEPA SW 846 - 8015A Sample extracts are analysed by Capillary GC/FID and quantified against alkane standards over the range C10 - C40.
Volatile Organic Compounds - Ultra-trace	EP074-UT	SOIL	In house: Referenced to USEPA SW 846 - 8260 Extracts are analysed by Purge and Trap, Capillary GC/MS in partial SIM/Scan mode. Quantification is by comparison against an established multi-point calibration curves. This method is compliant with NEPM Schedule B(3).

Analytical Methods	Method	Matrix	Method Descriptions
Volatile Organic Compounds - Ultra-trace - Summations	EP074-UT-SUM	SOIL	Summation of MAHs and VHCs
Semivolatile Organic Compounds - Waste Classification	EP075-EM	SOIL	In house: Referenced to USEPA SW 846 - 8270 Extracts are analysed by Capillary GC/MS and quantification is by comparison against an established 5 point calibration curve. This technique is compliant with NEPM Schedule B(3).
SVOC - Waste Classification (Sums)	EP075-EM-SUM	SOIL	Summations for EP075 (EM variation)
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	SOIL	In-house: Analysis of fresh and saline waters by Solid Phase Extraction (SPE) followed by LC-Electrospray-MS-MS, Negative Mode using MRM and internal standard quantitation. Isotopically labelled analogues of target analytes used as internal standards and surrogates are added to the sample container. The entire contents are transferred to a solid phase extraction (SPE) cartridge. The sample container is successively rinsed with aliquots of the elution solvent. The eluted extract is combined with an equal volume of reagent water and a portion is filtered for analysis. Method procedures and data quality objectives conform to US DoD QSM 5.3, table B-15 requirements.
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 CaCl2 extract	EA001-PR	SOIL	In house: Referenced to Rayment and Lyons 4B1, 10 g of soil is mixed with 50 mL of 0.01M CaCl2 and tumbled end over end for 1 hour. pH is measured from the continuous suspension. This method is compliant with NEPM Schedule B(3).
Alkaline digestion for Hexavalent Chromium	EG048PR	SOIL	In house: Referenced to USEPA SW846, Method 3060A.
Total Fluoride	EK040T-PR	SOIL	In house: Samples are fused with Sodium Carbonate / Potassium Carbonate flux.
ASLP for Non & Semivolatile Analytes - Plastic Leaching Vessel	EN60a-P	SOIL	In house QWI-EN/60 referenced to AS4439.3 Preparation of Leachates.
Deionised Water Leach - Plastic Leaching Vessel	EN60-DIa-P	SOIL	In house QWI-EN/60 referenced to AS4439.3 Preparation of Leachates
Hot Block Digest for metals in soils sediments and sludges	EN69	SOIL	In house: Referenced to USEPA 200.2. Hot Block Acid Digestion 1.0g of sample is heated with Nitric and Hydrochloric acids, then cooled. Peroxide is added and samples heated and cooled again before being filtered and bulked to volume for analysis. Digest is appropriate for determination of selected metals in sludge, sediments, and soils. This method is compliant with NEPM Schedule B(3).
Methanolic Extraction of Soils - Ultra-trace.	ORG16-UT	SOIL	In house: Referenced to USEPA SW 846 - 5030A. 5g of solid is shaken with surrogate and 10mL methanol prior to analysis by Purge and Trap - GC/MS.
Tumbler Extraction of Solids - VIC EPA Screen	ORG17-EM	SOIL	In house: Mechanical agitation (tumbler). 10g of sample, Na2SO4 and surrogate are extracted with 30mL 1:1 DCM/Acetone by end over end tumble. The solvent is decanted, dehydrated and concentrated (by KD) to the desired volume for analysis.

Preparation Methods	Method	Matrix	Method Descriptions
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.

ALS Melbourne: 4 Westall Rd, Springvale, VIC 3171 Phone (03) 8549 9600; Facsimile (03) 8549 9601. Email Samples.Melbourne@alsenviro.com

CHAIN OF CUSTODY DOCUMENTATION

Australian Laboratory Services Pty Ltd

CLIENT: Agon Evironmental	SAMPLER: LR - EP		
ADDRESS / OFFICE: Melbourne	MOBILE 1: +61 400 826 907 (Craig Trimbur)		
PROJECT MANAGER (PM): Craig Trimbur	MOBILE 2: +61 490 411 004 (David Lawson)		
PROJECT ID: JC0927	EMAIL REPORT TO: Labreports.TST@agonenviro.com.au agonenvironmental@esdat.com.au motherhublabresults1@wgtp.com.au Amrit.Kaur@agile-analytics.com.au		
SITE: 20220326060848-ALS-8 P.O. NO.:			
RESULTS REQUIRED (Date): 5 days	QUOTE NO.: ME-150-19 WGTP	EMAIL INVOICE TO: (if different to report)	Labreports.TST@agonenviro.com.au agonenvironmental@esdat.com.au

COMMENTS / SPECIAL HANDLING / STORAGE OR DISPOSAL:

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

SAMPLE INFORMATION (note: S = Soil, W=Water)					CONTAINER INFORMATION		Spoil Sample Prep	P16 plus Cr	PFAS 28 Extended suite	ASLP PFAS - Extended Suite (Lab to determine pH)	DI Leachate PFAS - Extended Suite								Notes:
ALS ID	SAMPLE ID	MATRIX	DATE	Time	Type / Code	Total bottles													
3 1	SX_IB_20220327_23_57_SS_Primary_ALS	S	27/03/2022	23:57	Bucket	1	x	x	x	x	x								
4 2	SX_IB_20220328_04_11_SS_Primary_ALS	S	28/03/2022	04:11	Bucket	1	x	x	x	x	x								

Environmental Division
Melbourne
Work Order Reference
EM2205468

Telephone : + 61-3-8549 9600

RELINQUISHED BY:		RECEIVED BY		METHOD OF SHIPMENT
Name: Will O'Haire	Date: 28/03/2022	Name: Adri 1082	Date:	Con' Note No:
Of: Agon	Time:	Of:	Time:	
Name:	Date:	Name:	Date: 28/3	Transport Co:
Of:	Time:	Of:	Time: 11-45	

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

AUSTRALIAN LABORATORY SERVICES P/L

ALS Melbourne: 4 Westall Rd, Springvale, VIC 3171 Phone (03) 8549 9600; Facsimile (03) 8549 9601. Email Samples.Melbourne@alsenviro.com

CHAIN OF CUSTODY DOCUMENTATION

Australian Laboratory Services Pty Ltd

CLIENT: Agon Evironmental
ADDRESS / OFFICE: Melbourne
PROJECT MANAGER (PM): Craig Trimbur
PROJECT ID: JC0927
SITE: ~~20220328060846-ALS-8~~
P.O. NO.:
RESULTS REQUIRED (Date): 5 days
QUOTE NO.: ME-150-19 WGTP

SAMPLER: LR - EP
MOBILE 1: +61 400 826 907 (Craig Trimbur)
MOBILE 2: +61 490 411 004 (David Lawson)
EMAIL REPORT TO: Labreports.TST@agonenviro.com.au agonenvironmental@esdat.com.au motherhublabresults1@wgtp.com.au Amrit.Kaur@agile-analytics.com.au
EMAIL INVOICE TO: (If different to report) Labreports.TST@agonenviro.com.au agonenvironmental@esdat.com.au

COMMENTS / SPECIAL HANDLING / STORAGE OR DIPOSAL:

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

SAMPLE INFORMATION (note: S = Soil, W=Water)					CONTAINER INFORMATION		Spoil Sample Prep	P16 plus Cr	PFAS 28 Extended suite	ASLP PFAS - Extended Suite (Lab to determine pH)	DI Leachate PFAS - Extended Suite									Notes:
ALS ID	SAMPLE ID	MATRIX	DATE	Time	Type / Code	Total bottles														
3 1	SX_IB_20220327_23_57_SS_Primary_ALS	S	27/03/2022	23:57	Bucket	1	x	x	x	x	x									
4 2	SX_IB_20220328_04_11_SS_Primary_ALS	S	28/03/2022	04:11	Bucket	1	x	x	x	x	x									

Environmental Division
Melbourne
Work Order Reference
EM2205468

Telephone : - 61-3-8549 9600

RELINQUISHED BY:		RECEIVED BY		METHOD OF SHIPMENT
Name: Will O'Haire	Date: 28/03/2022	Name: Adm 1082	Date:	Con' Note No:
Of: Agon	Time:	Of:	Time:	
Name:	Date:	Name:	Date: 28/3	Transport Co:
Of:	Time:	Of:	Time: 11-45	

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

AUSTRALIAN LABORATORY SERVICES P/L

ALS Environmental

CERTIFICATE OF ANALYSIS

Work Order	: **EM2205468**	Page	: 1 of 14
Client	: **AGON ENVIRONMENTAL PTY LTD**	Laboratory	: Environmental Division Melbourne
Contact	: Craig Trimbur	Contact	: Bronwyn Sheen
Address	: D1.1 63-85 TURNER STREET PORT MELBOURNE 3207	Address	: 4 Westall Rd Springvale VIC Australia 3171
Telephone	: ----	Telephone	: +6138549 9600
Project	: JC0927	Date Samples Received	: 28-Mar-2022 11:45
Order number	: ----	Date Analysis Commenced	: 31-Mar-2022
C-O-C number	: 20220328060846-ALS-8	Issue Date	: 04-Apr-2022 20:17
Sampler	: LR-EP		
Site	: 20220328060846-ALS-8		
Quote number	: EN/150/19 -WGTP -Bulk Sample Quote		
No. of samples received	: 4		
No. of samples analysed	: 4		

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

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

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results
- Surrogate Control Limits

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

Signatories

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

Signatories	*Position*	*Accreditation Category*
Dilani Fernando	Laboratory Coordinator	Melbourne Inorganics, Springvale, VIC
Xing Lin	Senior Organic Chemist	Melbourne Inorganics, Springvale, VIC
Xing Lin	Senior Organic Chemist	Melbourne Organics, Springvale, VIC

General Comments

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

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

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

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

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

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

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

- EP231X: Poor matrix spike recovery for sample EM2205462-005 due to sample matrix interference.
- Benzo(a)pyrene Toxicity Equivalent Quotient (TEQ) per the NEPM (2013) is the sum total of the concentration of the eight carcinogenic PAHs multiplied by their Toxicity Equivalence Factor (TEF) relative to Benzo(a)pyrene. TEF values are provided in brackets as follows: Benz(a)anthracene (0.1), Chrysene (0.01), Benzo(b+j) & Benzo(k)fluoranthene (0.1), Benzo(a)pyrene (1.0), Indeno(1.2.3.cd)pyrene (0.1), Dibenz(a.h)anthracene (1.0), Benzo(g.h.i)perylene (0.01). Less than LOR results for 'TEQ Zero' are treated as zero, for 'TEQ 1/2LOR' are treated as half the reported LOR, and for 'TEQ LOR' are treated as being equal to the reported LOR. Note: TEQ 1/2LOR and TEQ LOR will calculate as 0.6mg/Kg and 1.2mg/Kg respectively for samples with non-detects for all of the eight TEQ PAHs.
- EP231X - Per- and Polyfluoroalkyl Substances (PFAS): Samples received in 20ml or 125ml bottles have been tested in accordance with the QSM5.3 compliant, NATA accredited method. 60mL or 250mL bottles have been tested to the legacy QSM 5.1 aligned, NATA accredited method.
- EP074-UT: Where reported, Total Xylenes is the sum of the reported concentrations of m&p-Xylene and o-Xylene at or above the LOR.
- EP074-WF: Where reported, Sum of trichlorobenzenes is the sum of the reported concentrations of 1,2,3-Trichlorobenzene and 1,2,4-Trichlorobenzene, and 1,3,5-Trichlorobenzene at or above the LOR.
- EP231: Stable isotope enriched internal standards are added to samples prior to extraction. Target compounds have a direct analogous internal standard with the exception of PFPeS, PFHpA, PFDS, PFTrDA and 10:2 FTS. These compounds use an internal standard that is chemically related and has a retention time close to that of the target compound. The DQO for internal standard response is 50-150% of that established at initial calibration. PFOS is quantified using a certified, traceable standard consisting of linear and branched PFOS isomers. These practices are in line with recommendations in the National Environmental Management Plan for PFAS (Australian HEPA) and also conform to QSM 5.3 (US DoD) requirements.
- EN60: Where leachable PFAS analysis is requested, centrifugation rather than pressure filtration is used as the default approach for removal of particulates, in line with AS 4439.3.
- EN60-DI: Where leachable PFAS analysis is requested, centrifugation rather than pressure filtration is used as the default approach for removal of particulates, in line with AS 4439.3.

Analytical Results

Sub-Matrix: ASLP LEACHATE (Matrix: WATER)			Sample ID	SX_IB_20220327_23_57_SS_Primary_ALS	SX_IB_20220328_04_11_SS_Primary_ALS	----	----	----
			Sampling date / time	27-Mar-2022 23:57	28-Mar-2022 04:11	----	----	----
Compound	CAS Number	LOR	Unit	EM2205468-001	EM2205468-002	--------	--------	--------
				Result	Result	----	----	----
EP231A: Perfluoroalkyl Sulfonic Acids								
Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	<0.02	----	----	----
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	<0.02	<0.02	----	----	----
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	<0.01	<0.01	----	----	----
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	<0.02	<0.02	----	----	----
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	<0.01	<0.01	----	----	----
Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L	<0.02	<0.02	----	----	----
EP231B: Perfluoroalkyl Carboxylic Acids								
Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L	<0.1	<0.1	----	----	----
Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	<0.02	<0.02	----	----	----
Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	<0.02	<0.02	----	----	----
Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	<0.02	<0.02	----	----	----
Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	<0.01	<0.01	----	----	----
Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L	<0.02	<0.02	----	----	----
Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L	<0.02	<0.02	----	----	----
Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L	<0.02	<0.02	----	----	----
Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L	<0.02	<0.02	----	----	----
Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L	<0.02	<0.02	----	----	----
Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L	<0.05	<0.05	----	----	----
EP231C: Perfluoroalkyl Sulfonamides								
Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	µg/L	<0.02	<0.02	----	----	----
N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L	<0.05	<0.05	----	----	----
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	µg/L	<0.05	<0.05	----	----	----

Analytical Results

Sub-Matrix: ASLP LEACHATE (Matrix: WATER)				Sample ID	SX_IB_20220327_23_57_SS_Primary_ALS	SX_IB_20220328_04_11_SS_Primary_ALS	----	----	----
				Sampling date / time	27-Mar-2022 23:57	28-Mar-2022 04:11	----	----	----
Compound	CAS Number	LOR	Unit		EM2205468-001	EM2205468-002	--------	--------	--------
					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	0.02	µg/L		<0.02	<0.02	----	----	----
N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.02	µg/L		<0.02	<0.02	----	----	----
EP231D: (n:2) Fluorotelomer Sulfonic Acids									
4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L		<0.05	<0.05	----	----	----
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.05	µg/L		<0.05	<0.05	----	----	----
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.05	µg/L		<0.05	<0.05	----	----	----
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.05	µg/L		<0.05	<0.05	----	----	----
EP231P: PFAS Sums									
Sum of PFAS	----	0.01	µg/L		<0.01	<0.01	----	----	----
Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L		<0.01	<0.01	----	----	----
Sum of PFAS (WA DER List)	----	0.01	µg/L		<0.01	<0.01	----	----	----
EP231S: PFAS Surrogate									
13C4-PFOS	----	0.02	%		**95.1**	**97.8**	----	----	----
13C8-PFOA	----	0.02	%		**101**	**101**	----	----	----

Analytical Results

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

Compound	CAS Number	LOR	Unit	Sample ID	SX_IB_20220327_23_57_SS_Primary_ALS DI	SX_IB_20220328_04_11_SS_Primary_ALS DI	----	----	----
				Sampling date / time	27-Mar-2022 23:57	28-Mar-2022 04:11	----	----	----
					EM2205468-003	EM2205468-004	--------	--------	--------
					Result	Result	----	----	----
EP231A: Perfluoroalkyl Sulfonic Acids									
Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L		<0.02	<0.02	----	----	----
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L		<0.02	<0.02	----	----	----
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L		<0.01	<0.01	----	----	----
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L		<0.02	<0.02	----	----	----
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L		<0.01	<0.01	----	----	----
Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L		<0.02	<0.02	----	----	----
EP231B: Perfluoroalkyl Carboxylic Acids									
Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L		<0.1	<0.1	----	----	----
Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L		<0.02	<0.02	----	----	----
Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L		<0.02	<0.02	----	----	----
Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L		<0.02	<0.02	----	----	----
Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L		<0.01	<0.01	----	----	----
Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L		<0.02	<0.02	----	----	----
Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L		<0.02	<0.02	----	----	----
Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L		<0.02	<0.02	----	----	----
Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L		<0.02	<0.02	----	----	----
Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L		<0.02	<0.02	----	----	----
Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L		<0.05	<0.05	----	----	----
EP231C: Perfluoroalkyl Sulfonamides									
Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	µg/L		<0.02	<0.02	----	----	----
N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L		<0.05	<0.05	----	----	----

Analytical Results

Sub-Matrix: DI WATER LEACHATE (Matrix: WATER)				Sample ID	SX_IB_20220327_23_57_SS_Primary_ALS DI	SX_IB_20220328_04_11_SS_Primary_ALS DI	----	----	----
				Sampling date / time	27-Mar-2022 23:57	28-Mar-2022 04:11	----	----	----
Compound	CAS Number	LOR	Unit		EM2205468-003	EM2205468-004	--------	--------	--------
					Result	Result	----	----	----
EP231C: Perfluoroalkyl Sulfonamides - Continued									
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	µg/L		<0.05	<0.05	----	----	----
N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L		<0.05	<0.05	----	----	----
N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L		<0.05	<0.05	----	----	----
N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.02	µg/L		<0.02	<0.02	----	----	----
N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.02	µg/L		<0.02	<0.02	----	----	----
EP231D: (n:2) Fluorotelomer Sulfonic Acids									
4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L		<0.05	<0.05	----	----	----
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.05	µg/L		<0.05	<0.05	----	----	----
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.05	µg/L		<0.05	<0.05	----	----	----
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.05	µg/L		<0.05	<0.05	----	----	----
EP231P: PFAS Sums									
Sum of PFAS	----	0.01	µg/L		<0.01	<0.01	----	----	----
Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L		<0.01	<0.01	----	----	----
Sum of PFAS (WA DER List)	----	0.01	µg/L		<0.01	<0.01	----	----	----
EP231S: PFAS Surrogate									
13C4-PFOS	----	0.02	%		**92.2**	**93.5**	----	----	----
13C8-PFOA	----	0.02	%		**98.9**	**95.7**	----	----	----

Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

Compound	CAS Number	LOR	Unit	Sample ID	SX_IB_20220327_23_57_SS_Primary_ALS	SX_IB_20220328_04_11_SS_Primary_ALS	SX_IB_20220327_23_57_SS_Primary_ALS DI	SX_IB_20220328_04_11_SS_Primary_ALS DI	----
				Sampling date / time	27-Mar-2022 23:57	28-Mar-2022 04:11	27-Mar-2022 23:57	28-Mar-2022 04:11	----
					EM2205468-001	EM2205468-002	EM2205468-003	EM2205468-004	--------
					Result	Result	Result	Result	----
EA001: pH in soil using 0.01M CaCl extract									
pH (CaCl2)	----	0.1	pH Unit		**7.7**	**7.9**	----	----	----
EA055: Moisture Content (Dried @ 105-110°C)									
Moisture Content	----	1.0	%		**31.5**	**32.6**	----	----	----
EG005(ED093)T: Total Metals by ICP-AES									
Arsenic	7440-38-2	5	mg/kg		**20**	**28**	----	----	----
Cadmium	7440-43-9	1	mg/kg		<1	<1	----	----	----
Chromium	7440-47-3	2	mg/kg		**84**	**98**	----	----	----
Copper	7440-50-8	5	mg/kg		**54**	**54**	----	----	----
Lead	7439-92-1	5	mg/kg		<5	<5	----	----	----
Molybdenum	7439-98-7	2	mg/kg		<2	<2	----	----	----
Nickel	7440-02-0	2	mg/kg		**129**	**140**	----	----	----
Selenium	7782-49-2	5	mg/kg		<5	<5	----	----	----
Silver	7440-22-4	2	mg/kg		<2	<2	----	----	----
Tin	7440-31-5	5	mg/kg		<5	<5	----	----	----
Zinc	7440-66-6	5	mg/kg		**76**	**94**	----	----	----
EG035T: Total Recoverable Mercury by FIMS									
Mercury	7439-97-6	0.1	mg/kg		<0.1	<0.1	----	----	----
EG048: Hexavalent Chromium (Alkaline Digest)									
Hexavalent Chromium	18540-29-9	0.5	mg/kg		<0.5	<0.5	----	----	----
EK026SF: Total CN by Segmented Flow Analyser									
Total Cyanide	57-12-5	1	mg/kg		<1	<1	----	----	----
EK040T: Fluoride Total									
Fluoride	16984-48-8	40	mg/kg		**170**	**160**	----	----	----
EN60: ASLP Leaching Procedure - Inorganics/PFAS (Plastic Vessel)									
Initial pH	----	0.1	pH Unit		**9.2**	**9.6**	----	----	----
After HCl pH	----	0.1	pH Unit		**1.3**	**1.3**	----	----	----
Extraction Fluid pH	----	0.1	pH Unit		**5.0**	**5.0**	----	----	----
Final pH	----	0.1	pH Unit		**5.0**	**5.0**	----	----	----
EN60-DI: Bottle Leaching Procedure - Inorganics/PFAS (Plastic Vessel)									
Final pH	----	0.1	pH Unit		**----**	**----**	**9.6**	**9.6**	----
EP066: Polychlorinated Biphenyls (PCB)									
Total Polychlorinated biphenyls	----	0.1	mg/kg		<0.1	<0.1	----	----	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	SX_IB_20220327_23_57_SS_Primary_ALS	SX_IB_20220328_04_11_SS_Primary_ALS	SX_IB_20220327_23_57_SS_Primary_ALS DI	SX_IB_20220328_04_11_SS_Primary_ALS DI	----
				Sampling date / time	27-Mar-2022 23:57	28-Mar-2022 04:11	27-Mar-2022 23:57	28-Mar-2022 04:11	----
Compound	CAS Number	LOR	Unit		EM2205468-001	EM2205468-002	EM2205468-003	EM2205468-004	--------
					Result	Result	Result	Result	----
EP074A: Monocyclic Aromatic Hydrocarbons									
Benzene	71-43-2	0.2	mg/kg		<0.2	<0.2	----	----	----
Toluene	108-88-3	0.5	mg/kg		<0.5	<0.5	----	----	----
Ethylbenzene	100-41-4	0.5	mg/kg		<0.5	<0.5	----	----	----
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg		<0.5	<0.5	----	----	----
Styrene	100-42-5	0.5	mg/kg		<0.5	<0.5	----	----	----
ortho-Xylene	95-47-6	0.5	mg/kg		<0.5	<0.5	----	----	----
^ Sum of monocyclic aromatic hydrocarbons	----	0.2	mg/kg		<0.2	<0.2	----	----	----
^ Total Xylenes	----	0.5	mg/kg		<0.5	<0.5	----	----	----
EP074H: Naphthalene									
Naphthalene	91-20-3	1	mg/kg		<1	<1	----	----	----
EP074I: Volatile Halogenated Compounds									
Vinyl chloride	75-01-4	0.02	mg/kg		<0.02	<0.02	----	----	----
1.1-Dichloroethene	75-35-4	0.01	mg/kg		<0.01	<0.01	----	----	----
Methylene chloride	75-09-2	0.4	mg/kg		<0.4	<0.4	----	----	----
trans-1.2-Dichloroethene	156-60-5	0.02	mg/kg		<0.02	<0.02	----	----	----
cis-1.2-Dichloroethene	156-59-2	0.01	mg/kg		<0.01	<0.01	----	----	----
Chloroform	67-66-3	0.02	mg/kg		<0.02	<0.02	----	----	----
1.1.1-Trichloroethane	71-55-6	0.01	mg/kg		<0.01	<0.01	----	----	----
Carbon Tetrachloride	56-23-5	0.01	mg/kg		<0.01	<0.01	----	----	----
1.2-Dichloroethane	107-06-2	0.02	mg/kg		<0.02	<0.02	----	----	----
Trichloroethene	79-01-6	0.02	mg/kg		<0.02	<0.02	----	----	----
1.1.2-Trichloroethane	79-00-5	0.04	mg/kg		<0.04	<0.04	----	----	----
Tetrachloroethene	127-18-4	0.02	mg/kg		<0.02	<0.02	----	----	----
1.1.1.2-Tetrachloroethane	630-20-6	0.01	mg/kg		<0.01	<0.01	----	----	----
1.1.2.2-Tetrachloroethane	79-34-5	0.02	mg/kg		<0.02	<0.02	----	----	----
Hexachlorobutadiene	87-68-3	0.02	mg/kg		<0.02	<0.02	----	----	----
Chlorobenzene	108-90-7	0.02	mg/kg		<0.02	<0.02	----	----	----
1.4-Dichlorobenzene	106-46-7	0.02	mg/kg		<0.02	<0.02	----	----	----
1.2-Dichlorobenzene	95-50-1	0.02	mg/kg		<0.02	<0.02	----	----	----
1.2.4-Trichlorobenzene	120-82-1	0.01	mg/kg		<0.01	<0.01	----	----	----
^ Sum of volatile chlorinated hydrocarbons	----	0.01	mg/kg		<0.01	<0.01	----	----	----
^ Sum of other chlorinated hydrocarbons	----	0.01	mg/kg		<0.01	<0.01	----	----	----

Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

Compound	CAS Number	LOR	Unit	Sample ID	SX_IB_20220327_23_57_SS_Primary_ALS	SX_IB_20220328_04_11_SS_Primary_ALS	SX_IB_20220327_23_57_SS_Primary_ALS DI	SX_IB_20220328_04_11_SS_Primary_ALS DI	----
				Sampling date / time	27-Mar-2022 23:57	28-Mar-2022 04:11	27-Mar-2022 23:57	28-Mar-2022 04:11	----
					EM2205468-001	EM2205468-002	EM2205468-003	EM2205468-004	--------
					Result	Result	Result	Result	----
EP075A: Phenolic Compounds (Halogenated)									
2-Chlorophenol	95-57-8	0.03	mg/kg		<0.03	<0.03	----	----	----
2.4-Dichlorophenol	120-83-2	0.03	mg/kg		<0.03	<0.03	----	----	----
2.6-Dichlorophenol	87-65-0	0.03	mg/kg		<0.03	<0.03	----	----	----
4-Chloro-3-methylphenol	59-50-7	0.03	mg/kg		<0.03	<0.03	----	----	----
2.4.5-Trichlorophenol	95-95-4	0.05	mg/kg		<0.05	<0.05	----	----	----
2.4.6-Trichlorophenol	88-06-2	0.05	mg/kg		<0.05	<0.05	----	----	----
2.3.5.6-Tetrachlorophenol	935-95-5	0.03	mg/kg		<0.03	<0.03	----	----	----
2.3.4.5 & 2.3.4.6-Tetrachlorophenol	4901-51-3/58-90-2	0.05	mg/kg		<0.05	<0.05	----	----	----
Pentachlorophenol	87-86-5	0.2	mg/kg		<0.2	<0.2	----	----	----
^ **Sum of Phenols (halogenated)**	----	0.03	mg/kg		<0.03	<0.03	----	----	----
EP075A: Phenolic Compounds (Non-halogenated)									
Phenol	108-95-2	1	mg/kg		<1	<1	----	----	----
2-Methylphenol	95-48-7	1	mg/kg		<1	<1	----	----	----
3- & 4-Methylphenol	1319-77-3	1	mg/kg		<1	<1	----	----	----
2-Nitrophenol	88-75-5	1	mg/kg		<1	<1	----	----	----
2.4-Dimethylphenol	105-67-9	1	mg/kg		<1	<1	----	----	----
2.4-Dinitrophenol	51-28-5	5	mg/kg		<5	<5	----	----	----
4-Nitrophenol	100-02-7	5	mg/kg		<5	<5	----	----	----
2-Methyl-4.6-dinitrophenol	8071-51-0	5	mg/kg		<5	<5	----	----	----
Dinoseb	88-85-7	5	mg/kg		<5	<5	----	----	----
2-Cyclohexyl-4.6-Dinitrophenol	131-89-5	5	mg/kg		<5	<5	----	----	----
^ **Sum of Phenols (non-halogenated)**	----	1	mg/kg		<1	<1	----	----	----
EP075B: Polynuclear Aromatic Hydrocarbons									
Naphthalene	91-20-3	0.5	mg/kg		<0.5	<0.5	----	----	----
Acenaphthene	83-32-9	0.5	mg/kg		<0.5	<0.5	----	----	----
Acenaphthylene	208-96-8	0.5	mg/kg		<0.5	<0.5	----	----	----
Fluorene	86-73-7	0.5	mg/kg		<0.5	<0.5	----	----	----
Phenanthrene	85-01-8	0.5	mg/kg		<0.5	<0.5	----	----	----
Anthracene	120-12-7	0.5	mg/kg		<0.5	<0.5	----	----	----
Fluoranthene	206-44-0	0.5	mg/kg		<0.5	<0.5	----	----	----
Pyrene	129-00-0	0.5	mg/kg		<0.5	<0.5	----	----	----
Benz(a)anthracene	56-55-3	0.5	mg/kg		<0.5	<0.5	----	----	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	SX_IB_20220327_23_57_SS_Primary_ALS	SX_IB_20220328_04_11_SS_Primary_ALS	SX_IB_20220327_23_57_SS_Primary_ALS DI	SX_IB_20220328_04_11_SS_Primary_ALS DI	----
			Sampling date / time	27-Mar-2022 23:57	28-Mar-2022 04:11	27-Mar-2022 23:57	28-Mar-2022 04:11	----
Compound	CAS Number	LOR	Unit	EM2205468-001	EM2205468-002	EM2205468-003	EM2205468-004	--------
				Result	Result	Result	Result	----
EP075B: Polynuclear Aromatic Hydrocarbons - Continued								
Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	----	----	----
Benzo(b+j) & Benzo(k)fluoranthene	205-99-2 207-08-9	1.0	mg/kg	<1.0	<1.0	----	----	----
Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	<0.5	----	----	----
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	<0.5	----	----	----
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.5	----	----	----
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	<0.5	----	----	----
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg	<0.5	<0.5	----	----	----
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg	<0.5	<0.5	----	----	----
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg	**0.6**	**0.6**	----	----	----
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg	**1.2**	**1.2**	----	----	----
EP075I: Organochlorine Pesticides								
alpha-BHC	319-84-6	0.03	mg/kg	<0.03	<0.03	----	----	----
Hexachlorobenzene (HCB)	118-74-1	0.03	mg/kg	<0.03	<0.03	----	----	----
beta-BHC	319-85-7	0.03	mg/kg	<0.03	<0.03	----	----	----
gamma-BHC	58-89-9	0.03	mg/kg	<0.03	<0.03	----	----	----
delta-BHC	319-86-8	0.03	mg/kg	<0.03	<0.03	----	----	----
Heptachlor	76-44-8	0.03	mg/kg	<0.03	<0.03	----	----	----
Aldrin	309-00-2	0.03	mg/kg	<0.03	<0.03	----	----	----
Heptachlor epoxide	1024-57-3	0.03	mg/kg	<0.03	<0.03	----	----	----
cis-Chlordane	5103-71-9	0.03	mg/kg	<0.03	<0.03	----	----	----
trans-Chlordane	5103-74-2	0.03	mg/kg	<0.03	<0.03	----	----	----
Endosulfan 1	959-98-8	0.03	mg/kg	<0.03	<0.03	----	----	----
4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	----	----	----
Dieldrin	60-57-1	0.03	mg/kg	<0.03	<0.03	----	----	----
Endrin aldehyde	7421-93-4	0.03	mg/kg	<0.03	<0.03	----	----	----
Endrin	72-20-8	0.03	mg/kg	<0.03	<0.03	----	----	----
Endosulfan 2	33213-65-9	0.03	mg/kg	<0.03	<0.03	----	----	----
4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	<0.05	----	----	----
Endosulfan sulfate	1031-07-8	0.03	mg/kg	<0.03	<0.03	----	----	----
4.4`-DDT	50-29-3	0.05	mg/kg	<0.05	<0.05	----	----	----
Methoxychlor	72-43-5	0.03	mg/kg	<0.03	<0.03	----	----	----
^ Sum of organochlorine pesticides	----	0.03	mg/kg	<0.03	<0.03	----	----	----

Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

Compound	CAS Number	LOR	Unit	Sample ID	SX_IB_20220327_23_57_SS_Primary_ALS	SX_IB_20220328_04_11_SS_Primary_ALS	SX_IB_20220327_23_57_SS_Primary_ALS DI	SX_IB_20220328_04_11_SS_Primary_ALS DI	----
				Sampling date / time	27-Mar-2022 23:57	28-Mar-2022 04:11	27-Mar-2022 23:57	28-Mar-2022 04:11	----
					EM2205468-001	EM2205468-002	EM2205468-003	EM2205468-004	--------
					Result	Result	Result	Result	----
EP075I: Organochlorine Pesticides - Continued									
^ **Sum of Aldrin + Dieldrin**	309-00-2/60-57-1	0.03	mg/kg		<0.03	<0.03	----	----	----
^ **Sum of DDD + DDE + DDT**	72-54-8/72-55-9/50-2	0.05	mg/kg		<0.05	<0.05	----	----	----
^ **Chlordane**	57-74-9	0.03	mg/kg		<0.03	<0.03	----	----	----
^ **Sum of other organochlorine pesticides**	----	0.03	mg/kg		<0.03	<0.03	----	----	----
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	----	10	mg/kg		<10	<10	----	----	----
C10 - C14 Fraction	----	50	mg/kg		<50	<50	----	----	----
C6 - C10 Fraction	C6_C10	10	mg/kg		<10	<10	----	----	----
C15 - C28 Fraction	----	100	mg/kg		<100	<100	----	----	----
C29 - C36 Fraction	----	100	mg/kg		<100	<100	----	----	----
^ **C10 - C36 Fraction (sum)**	----	50	mg/kg		<50	<50	----	----	----
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
>C10 - C16 Fraction	----	50	mg/kg		<50	<50	----	----	----
>C16 - C34 Fraction	----	100	mg/kg		<100	<100	----	----	----
>C34 - C40 Fraction	----	100	mg/kg		<100	<100	----	----	----
^ **>C10 - C40 Fraction (sum)**	----	50	mg/kg		<50	<50	----	----	----
>C10 - C16 Fraction minus Naphthalene (F2)	----	50	mg/kg		<50	<50	----	----	----
C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg		<10	<10	----	----	----
EP231A: Perfluoroalkyl Sulfonic Acids									
Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.0002	mg/kg		<0.0002	<0.0002	----	----	----
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.0002	mg/kg		<0.0002	<0.0002	----	----	----
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.0002	mg/kg		<0.0002	<0.0002	----	----	----
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.0002	mg/kg		<0.0002	<0.0002	----	----	----
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.0002	mg/kg		<0.0002	<0.0002	----	----	----
Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.0002	mg/kg		<0.0002	<0.0002	----	----	----

Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

Compound	CAS Number	LOR	Unit	Sample ID	SX_IB_20220327_23_57_SS_Primary_ALS	SX_IB_20220328_04_11_SS_Primary_ALS	SX_IB_20220327_23_57_SS_Primary_ALS DI	SX_IB_20220328_04_11_SS_Primary_ALS DI	----
				Sampling date / time	27-Mar-2022 23:57	28-Mar-2022 04:11	27-Mar-2022 23:57	28-Mar-2022 04:11	----
					EM2205468-001	EM2205468-002	EM2205468-003	EM2205468-004	--------
					Result	Result	Result	Result	----
EP231B: Perfluoroalkyl Carboxylic Acids									
Perfluorobutanoic acid (PFBA)	375-22-4	0.001	mg/kg		<0.001	<0.001	----	----	----
Perfluoropentanoic acid (PFPeA)	2706-90-3	0.0002	mg/kg		<0.0002	<0.0002	----	----	----
Perfluorohexanoic acid (PFHxA)	307-24-4	0.0002	mg/kg		<0.0002	<0.0002	----	----	----
Perfluoroheptanoic acid (PFHpA)	375-85-9	0.0002	mg/kg		<0.0002	<0.0002	----	----	----
Perfluorooctanoic acid (PFOA)	335-67-1	0.0002	mg/kg		<0.0002	<0.0002	----	----	----
Perfluorononanoic acid (PFNA)	375-95-1	0.0002	mg/kg		<0.0002	<0.0002	----	----	----
Perfluorodecanoic acid (PFDA)	335-76-2	0.0002	mg/kg		<0.0002	<0.0002	----	----	----
Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.0002	mg/kg		<0.0002	<0.0002	----	----	----
Perfluorododecanoic acid (PFDoDA)	307-55-1	0.0002	mg/kg		<0.0002	<0.0002	----	----	----
Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.0002	mg/kg		<0.0002	<0.0002	----	----	----
Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.0005	mg/kg		<0.0005	<0.0005	----	----	----
EP231C: Perfluoroalkyl Sulfonamides									
Perfluorooctane sulfonamide (FOSA)	754-91-6	0.0002	mg/kg		<0.0002	<0.0002	----	----	----
N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.0005	mg/kg		<0.0005	<0.0005	----	----	----
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.0005	mg/kg		<0.0005	<0.0005	----	----	----
N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.0005	mg/kg		<0.0005	<0.0005	----	----	----
N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.0005	mg/kg		<0.0005	<0.0005	----	----	----
N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.0002	mg/kg		<0.0002	<0.0002	----	----	----
N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.0002	mg/kg		<0.0002	<0.0002	----	----	----
EP231D: (n:2) Fluorotelomer Sulfonic Acids									

Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

Compound	CAS Number	LOR	Unit	Sample ID	SX_IB_20220327_23_57_SS_Primary_ALS	SX_IB_20220328_04_11_SS_Primary_ALS	SX_IB_20220327_23_57_SS_Primary_ALS DI	SX_IB_20220328_04_11_SS_Primary_ALS DI	----
				Sampling date / time	27-Mar-2022 23:57	28-Mar-2022 04:11	27-Mar-2022 23:57	28-Mar-2022 04:11	----
					EM2205468-001	EM2205468-002	EM2205468-003	EM2205468-004	--------
					Result	Result	Result	Result	----
EP231D: (n:2) Fluorotelomer Sulfonic Acids - Continued									
4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.0005	mg/kg		<0.0005	<0.0005	----	----	----
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.0005	mg/kg		<0.0005	<0.0005	----	----	----
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.0005	mg/kg		<0.0005	<0.0005	----	----	----
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.0005	mg/kg		<0.0005	<0.0005	----	----	----
EP231P: PFAS Sums									
Sum of PFAS	----	0.0002	mg/kg		<0.0002	<0.0002	----	----	----
Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.0002	mg/kg		<0.0002	<0.0002	----	----	----
Sum of PFAS (WA DER List)	----	0.0002	mg/kg		<0.0002	<0.0002	----	----	----
EP066S: PCB Surrogate									
Decachlorobiphenyl	2051-24-3	0.1	%		**96.5**	**105**	----	----	----
EP074S: VOC Surrogates (Ultra-Trace)									
1.2-Dichloroethane-D4	17060-07-0	0.1	%		**82.1**	**79.1**	----	----	----
Toluene-D8	2037-26-5	0.1	%		**81.7**	**79.9**	----	----	----
4-Bromofluorobenzene	460-00-4	0.1	%		**92.2**	**89.1**	----	----	----
EP075S: Acid Extractable Surrogates (Waste Classification)									
Phenol-d6	13127-88-3	0.025	%		**75.8**	**75.3**	----	----	----
2-Chlorophenol-D4	93951-73-6	0.025	%		**77.8**	**77.0**	----	----	----
2.4.6-Tribromophenol	118-79-6	0.025	%		**73.3**	**78.1**	----	----	----
EP075T: Base/Neutral Extractable Surrogates (Waste Classification)									
Nitrobenzene-D5	4165-60-0	0.025	%		**77.0**	**76.0**	----	----	----
1.2-Dichlorobenzene-D4	2199-69-1	0.025	%		**72.2**	**73.1**	----	----	----
2-Fluorobiphenyl	321-60-8	0.025	%		**76.4**	**81.8**	----	----	----
Anthracene-d10	1719-06-8	0.025	%		**80.8**	**86.6**	----	----	----
4-Terphenyl-d14	1718-51-0	0.025	%		**71.1**	**76.4**	----	----	----
EP231S: PFAS Surrogate									
13C4-PFOS	----	0.0002	%		**102**	**106**	----	----	----
13C8-PFOA	----	0.0002	%		**101**	**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

QUALITY CONTROL REPORT

Work Order	: **EM2205468**	Page	: 1 of 26
Client	: **AGON ENVIRONMENTAL PTY LTD**	Laboratory	: Environmental Division Melbourne
Contact	: Craig Trimbur	Contact	: Bronwyn Sheen
Address	: D1.1 63-85 TURNER STREET PORT MELBOURNE 3207	Address	: 4 Westall Rd Springvale VIC Australia 3171
Telephone	: ----	Telephone	: +6138549 9600
Project	: JC0927	Date Samples Received	: 28-Mar-2022
Order number	: ----	Date Analysis Commenced	: 31-Mar-2022
C-O-C number	: 20220328060846-ALS-8	Issue Date	: 04-Apr-2022
Sampler	: LR-EP		
Site	: 20220328060846-ALS-8		
Quote number	: EN/150/19 -WGTP -Bulk Sample Quote		
No. of samples received	: 4		
No. of samples analysed	: 4		

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

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

This Quality Control Report contains the following information:

- Laboratory Duplicate (DUP) Report; Relative Percentage Difference (RPD) and Acceptance Limits
- Method Blank (MB) and Laboratory Control Spike (LCS) Report; Recovery and Acceptance Limits
- Matrix Spike (MS) Report; Recovery and Acceptance Limits

Signatories

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

Signatories	*Position*	*Accreditation Category*
Dilani Fernando	Laboratory Coordinator	Melbourne Inorganics, Springvale, VIC
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: 4260554)									
EM2205462-001	Anonymous	EG005T: Cadmium	7440-43-9	1	mg/kg	<1	<1	0.0	No Limit
		EG005T: Chromium	7440-47-3	2	mg/kg	102	106	3.7	0% - 20%
		EG005T: Molybdenum	7439-98-7	2	mg/kg	<2	<2	0.0	No Limit
		EG005T: Nickel	7440-02-0	2	mg/kg	175	158	10.3	0% - 20%
		EG005T: Silver	7440-22-4	2	mg/kg	<2	<2	0.0	No Limit
		EG005T: Arsenic	7440-38-2	5	mg/kg	30	42	33.7	No Limit
		EG005T: Copper	7440-50-8	5	mg/kg	54	52	2.3	0% - 50%
		EG005T: Lead	7439-92-1	5	mg/kg	<5	<5	0.0	No Limit
		EG005T: Selenium	7782-49-2	5	mg/kg	<5	<5	0.0	No Limit
		EG005T: Tin	7440-31-5	5	mg/kg	<5	<5	0.0	No Limit
		EG005T: Zinc	7440-66-6	5	mg/kg	101	84	18.1	0% - 20%
EM2205473-006	Anonymous	EG005T: Cadmium	7440-43-9	1	mg/kg	<1	<1	0.0	No Limit
		EG005T: Chromium	7440-47-3	2	mg/kg	104	107	2.8	0% - 20%
		EG005T: Molybdenum	7439-98-7	2	mg/kg	<5	<5	0.0	No Limit
		EG005T: Nickel	7440-02-0	2	mg/kg	169	158	6.7	0% - 20%
		EG005T: Silver	7440-22-4	2	mg/kg	<2	<2	0.0	No Limit
		EG005T: Arsenic	7440-38-2	5	mg/kg	24	29	20.0	No Limit
		EG005T: Copper	7440-50-8	5	mg/kg	68	57	17.7	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	110	106	3.6	0% - 20%
EA001: pH in soil using 0.01M CaCl extract (QC Lot: 4260574)									
EM2205462-001	Anonymous	EA001: pH (CaCl2)	----	0.1	pH Unit	7.6	7.6	0.0	0% - 20%

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Acceptable RPD (%)*
EA001: pH in soil using 0.01M CaCl extract (QC Lot: 4260574) - continued									
EM2205473-006	Anonymous	EA001: pH (CaCl2)	----	0.1	pH Unit	7.6	7.6	0.0	0% - 20%
EA055: Moisture Content (Dried @ 105-110°C) (QC Lot: 4259844)									
EM2205462-001	Anonymous	EA055: Moisture Content	----	0.1	%	27.4	28.9	5.3	0% - 20%
EM2205473-007	Anonymous	EA055: Moisture Content	----	0.1	%	39.3	38.2	3.0	0% - 20%
EG035T: Total Recoverable Mercury by FIMS (QC Lot: 4260555)									
EM2205462-001	Anonymous	EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	0.0	No Limit
EM2205473-006	Anonymous	EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	0.0	No Limit
EG048: Hexavalent Chromium (Alkaline Digest) (QC Lot: 4260576)									
EM2205462-001	Anonymous	EG048G: Hexavalent Chromium	18540-29-9	0.5	mg/kg	0.9	0.7	20.8	No Limit
EM2205473-006	Anonymous	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: 4263014)									
EM2205462-001	Anonymous	EK026SF: Total Cyanide	57-12-5	1	mg/kg	<1	<1	0.0	No Limit
EM2205473-006	Anonymous	EK026SF: Total Cyanide	57-12-5	1	mg/kg	<5	<5	0.0	No Limit
EK040T: Fluoride Total (QC Lot: 4260551)									
EM2205462-001	Anonymous	EK040T: Fluoride	16984-48-8	40	mg/kg	130	160	22.5	No Limit
EM2205473-006	Anonymous	EK040T: Fluoride	16984-48-8	40	mg/kg	220	170	25.1	No Limit
EP066: Polychlorinated Biphenyls (PCB) (QC Lot: 4259617)									
EM2205462-001	Anonymous	EP066-EM: Total Polychlorinated biphenyls	----	0.1	mg/kg	<0.1	<0.1	0.0	No Limit
EM2205473-007	Anonymous	EP066-EM: Total Polychlorinated biphenyls	----	0.1	mg/kg	<0.1	<0.1	0.0	No Limit
EP074A: Monocyclic Aromatic Hydrocarbons (QC Lot: 4259611)									
EM2205468-001	SX_IB_20220327_23_57_SS_Primary_ALS	EP074-UT: Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	0.0	No Limit
		EP074-UT: Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074-UT: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074-UT: meta- & para-Xylene	108-38-3 106-42-3	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: 4259611)									
EM2205468-001	SX_IB_20220327_23_57_SS_Primary_ALS	EP074-UT: Naphthalene	91-20-3	1	mg/kg	<1	<1	0.0	No Limit
EP074I: Volatile Halogenated Compounds (QC Lot: 4259611)									
EM2205468-001	SX_IB_20220327_23_57_SS_Primary_ALS	EP074-UT: 1.1-Dichloroethene	75-35-4	0.01	mg/kg	<0.01	<0.01	0.0	No Limit
		EP074-UT: cis-1.2-Dichloroethene	156-59-2	0.01	mg/kg	<0.01	<0.01	0.0	No Limit
		EP074-UT: 1.1.1-Trichloroethane	71-55-6	0.01	mg/kg	<0.01	<0.01	0.0	No Limit
		EP074-UT: Carbon Tetrachloride	56-23-5	0.01	mg/kg	<0.01	<0.01	0.0	No Limit
		EP074-UT: 1.1.1.2-Tetrachloroethane	630-20-6	0.01	mg/kg	<0.01	<0.01	0.0	No Limit
		EP074-UT: 1.2.4-Trichlorobenzene	120-82-1	0.01	mg/kg	<0.01	<0.01	0.0	No Limit

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: 4259611) - continued									
EM2205468-001	SX_IB_20220327_23_57_SS_Primary_ALS	EP074-UT: Vinyl chloride	75-01-4	0.02	mg/kg	<0.02	<0.02	0.0	No Limit
		EP074-UT: trans-1.2-Dichloroethene	156-60-5	0.02	mg/kg	<0.02	<0.02	0.0	No Limit
		EP074-UT: Chloroform	67-66-3	0.02	mg/kg	<0.02	<0.02	0.0	No Limit
		EP074-UT: 1.2-Dichloroethane	107-06-2	0.02	mg/kg	<0.02	<0.02	0.0	No Limit
		EP074-UT: Trichloroethene	79-01-6	0.02	mg/kg	<0.02	<0.02	0.0	No Limit
		EP074-UT: Tetrachloroethene	127-18-4	0.02	mg/kg	<0.02	<0.02	0.0	No Limit
		EP074-UT: 1.1.2.2-Tetrachloroethane	79-34-5	0.02	mg/kg	<0.02	<0.02	0.0	No Limit
		EP074-UT: Hexachlorobutadiene	87-68-3	0.02	mg/kg	<0.02	<0.02	0.0	No Limit
		EP074-UT: Chlorobenzene	108-90-7	0.02	mg/kg	<0.02	<0.02	0.0	No Limit
		EP074-UT: 1.4-Dichlorobenzene	106-46-7	0.02	mg/kg	<0.02	<0.02	0.0	No Limit
		EP074-UT: 1.2-Dichlorobenzene	95-50-1	0.02	mg/kg	<0.02	<0.02	0.0	No Limit
		EP074-UT: 1.1.2-Trichloroethane	79-00-5	0.04	mg/kg	<0.04	<0.04	0.0	No Limit
		EP074-UT: Methylene chloride	75-09-2	0.4	mg/kg	<0.4	<0.4	0.0	No Limit
EP075A: Phenolic Compounds (Halogenated) (QC Lot: 4259615)									
EM2205462-001	Anonymous	EP075-EM: 2-Chlorophenol	95-57-8	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: 2.4-Dichlorophenol	120-83-2	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: 2.6-Dichlorophenol	87-65-0	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: 4-Chloro-3-methylphenol	59-50-7	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: 2.3.5.6-Tetrachlorophenol	935-95-5	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: 2.4.5-Trichlorophenol	95-95-4	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: 2.4.6-Trichlorophenol	88-06-2	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: 2.3.4.5 & 2.3.4.6-Tetrachlorophenol	4901-51-3/58-90-2	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: Pentachlorophenol	87-86-5	0.2	mg/kg	<0.2	<0.2	0.0	No Limit
EM2205473-007	Anonymous	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: 4259615)									
EM2205462-001	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

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Acceptable RPD (%)*
EP075A: Phenolic Compounds (Non-halogenated) (QC Lot: 4259615) - continued									
EM2205462-001	Anonymous	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
EM2205473-007	Anonymous	EP075-EM: Phenol	108-95-2	1	mg/kg	<1	<1	0.0	No Limit
		EP075-EM: 2-Methylphenol	95-48-7	1	mg/kg	<1	<1	0.0	No Limit
		EP075-EM: 3- & 4-Methylphenol	1319-77-3	1	mg/kg	<1	<1	0.0	No Limit
		EP075-EM: 2-Nitrophenol	88-75-5	1	mg/kg	<1	<1	0.0	No Limit
		EP075-EM: 2.4-Dimethylphenol	105-67-9	1	mg/kg	<1	<1	0.0	No Limit
		EP075-EM: 2.4-Dinitrophenol	51-28-5	5	mg/kg	<5	<5	0.0	No Limit
		EP075-EM: 4-Nitrophenol	100-02-7	5	mg/kg	<5	<5	0.0	No Limit
		EP075-EM: 2-Methyl-4.6-dinitrophenol	8071-51-0	5	mg/kg	<5	<5	0.0	No Limit
		EP075-EM: Dinoseb	88-85-7	5	mg/kg	<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: 4259615)									
EM2205462-001	Anonymous	EP075-EM: Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Phenanthrene	85-01-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Fluoranthene	206-44-0	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		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
EM2205473-007	Anonymous	EP075-EM: Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Phenanthrene	85-01-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Fluoranthene	206-44-0	0.5	mg/kg	<0.5	<0.5	0.0	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Acceptable RPD (%)*
EP075B: Polynuclear Aromatic Hydrocarbons (QC Lot: 4259615) - continued									
EM2205473-007	Anonymous	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: 4259615)									
EM2205462-001	Anonymous	EP075-EM: alpha-BHC	319-84-6	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Hexachlorobenzene (HCB)	118-74-1	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: beta-BHC	319-85-7	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: gamma-BHC	58-89-9	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: delta-BHC	319-86-8	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Heptachlor	76-44-8	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Aldrin	309-00-2	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Heptachlor epoxide	1024-57-3	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: cis-Chlordane	5103-71-9	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: trans-Chlordane	5103-74-2	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Endosulfan 1	959-98-8	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Dieldrin	60-57-1	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Endrin aldehyde	7421-93-4	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Endrin	72-20-8	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Endosulfan 2	33213-65-9	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Endosulfan sulfate	1031-07-8	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Methoxychlor	72-43-5	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		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
EM2205473-007	Anonymous	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

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: 4259615) - continued									
EM2205473-007	Anonymous	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: 4259611)									
EM2205468-001	SX_IB_20220327_23_57_SS_Primary_ALS	EP074-UT: C6 - C9 Fraction	----	10	mg/kg	<10	<10	0.0	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 4259616)									
EM2205462-001	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
EM2205473-007	Anonymous	EP071-EM: C15 - C28 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071-EM: C29 - C36 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071-EM: C10 - C14 Fraction	----	50	mg/kg	70	110	47.0	No Limit
		EP071-EM: C10 - C36 Fraction (sum)	----	50	mg/kg	70	110	44.4	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 4259611)									
EM2205468-001	SX_IB_20220327_23_57_SS_Primary_ALS	EP074-UT: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	<10	0.0	No Limit
		EP074-UT: C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg	<10	<10	0.0	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 4259616)									
EM2205462-001	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
EM2205473-007	Anonymous	EP071-EM: >C16 - C34 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071-EM: >C34 - C40 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071-EM: >C10 - C16 Fraction	----	50	mg/kg	80	140	46.5	No Limit
		EP071-EM: >C10 - C40 Fraction (sum)	----	50	mg/kg	80	140	54.5	No Limit
EP231A: Perfluoroalkyl Sulfonic Acids (QC Lot: 4261749)									
EM2205462-001	Anonymous	EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Acceptable RPD (%)*
EP231A: Perfluoroalkyl Sulfonic Acids (QC Lot: 4261749) - continued									
EM2205462-001	Anonymous	EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
EM2205473-007	Anonymous	EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.0002	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.0002	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		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: 4261749)									
EM2205462-001	Anonymous	EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.001	mg/kg	<0.001	<0.001	0.0	No Limit
EM2205473-007	Anonymous	EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.0002	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.0002	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.0002	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.0002	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.0002	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.0002	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.0002	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.0002	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.0002	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.0005	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.001	mg/kg	<5 µg/kg	<0.005	0.0	No Limit
EP231C: Perfluoroalkyl Sulfonamides (QC Lot: 4261749)									
EM2205462-001	Anonymous	EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Acceptable RPD (%)*
EP231C: Perfluoroalkyl Sulfonamides (QC Lot: 4261749) - continued									
EM2205462-001	Anonymous	EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
EM2205473-007	Anonymous	EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.0002	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.0002	mg/kg	<10.0 µg/kg	<0.0100	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.0002	mg/kg	<10.0 µg/kg	<0.0100	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.0005	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.0005	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.0005	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.0005	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QC Lot: 4261749)									
EM2205462-001	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
EM2205473-007	Anonymous	EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.0005	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.0005	mg/kg	<10.0 µg/kg	<0.0100	0.0	No Limit
		EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.0005	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.0005	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
EP231P: PFAS Sums (QC Lot: 4261749)									
EM2205462-001	Anonymous	EP231X: Sum of PFAS	----	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Sum of PFAS (WA DER List)	----	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit

Sub-Matrix: **SOIL**

Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Laboratory Duplicate (DUP) Report					
				LOR	Unit	Original Result	Duplicate Result	RPD (%)	Acceptable RPD (%)
EP231P: PFAS Sums (QC Lot: 4261749) - continued									
EM2205473-007	Anonymous	EP231X: Sum of PFAS	----	0.0002	mg/kg	<50.0 µg/kg	<0.0500	0.0	No Limit
		EP231X: Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.0002	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: Sum of PFAS (WA DER List)	----	0.0002	mg/kg	<10.0 µg/kg	<0.0100	0.0	No Limit

Sub-Matrix: **WATER**

Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Laboratory Duplicate (DUP) Report					
				LOR	Unit	Original Result	Duplicate Result	RPD (%)	Acceptable RPD (%)
EP231A: Perfluoroalkyl Sulfonic Acids (QC Lot: 4263003)									
EM2205462-001	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
EM2205473-006	Anonymous	EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L	<0.02	<0.02	0.0	No Limit
EP231A: Perfluoroalkyl Sulfonic Acids (QC Lot: 4263006)									
EM2205398-006	Anonymous	EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L	<0.02	<0.02	0.0	No Limit
EM2205473-010	Anonymous	EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L	<0.02	<0.02	0.0	No Limit
EP231B: Perfluoroalkyl Carboxylic Acids (QC Lot: 4263003)									
EM2205462-001	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

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: 4263003) - continued									
EM2205462-001	Anonymous	EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L	<0.1	<0.1	0.0	No Limit
EM2205473-006	Anonymous	EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L	<0.1	<0.1	0.0	No Limit
EP231B: Perfluoroalkyl Carboxylic Acids (QC Lot: 4263006)									
EM2205398-006	Anonymous	EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L	<0.1	<0.1	0.0	No Limit
EM2205473-010	Anonymous	EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L	<0.1	<0.1	0.0	No Limit
EP231C: Perfluoroalkyl Sulfonamides (QC Lot: 4263003)									
EM2205462-001	Anonymous	EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	µg/L	<0.02	<0.02	0.0	No Limit

Sub-Matrix: **WATER**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Acceptable RPD (%)*
EP231C: Perfluoroalkyl Sulfonamides (QC Lot: 4263003) - continued									
EM2205462-001	Anonymous	EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L	<0.05	<0.05	0.0	No Limit
EM2205473-006	Anonymous	EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L	<0.05	<0.05	0.0	No Limit
EP231C: Perfluoroalkyl Sulfonamides (QC Lot: 4263006)									
EM2205398-006	Anonymous	EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L	<0.05	<0.05	0.0	No Limit
EM2205473-010	Anonymous	EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	µg/L	<0.05	<0.05	0.0	No Limit

Sub-Matrix: **WATER**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Acceptable RPD (%)*
EP231C: Perfluoroalkyl Sulfonamides (QC Lot: 4263006) - continued									
EM2205473-010	Anonymous	EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.02	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.02	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L	<0.05	<0.05	0.0	No Limit
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QC Lot: 4263003)									
EM2205462-001	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
EM2205473-006	Anonymous	EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.05	µg/L	<0.05	<0.05	0.0	No Limit
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QC Lot: 4263006)									
EM2205398-006	Anonymous	EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.05	µg/L	<0.05	<0.05	0.0	No Limit
EM2205473-010	Anonymous	EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L	<0.05	<0.05	0.0	No Limit

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: 4263006) - continued									
EM2205473-010	Anonymous	EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.05	µg/L	<0.05	<0.05	0.0	No Limit
EP231P: PFAS Sums (QC Lot: 4263003)									
EM2205462-001	Anonymous	EP231X: Sum of PFAS	----	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Sum of PFAS (WA DER List)	----	0.01	µg/L	<0.01	<0.01	0.0	No Limit
EM2205473-006	Anonymous	EP231X: Sum of PFAS	----	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Sum of PFAS (WA DER List)	----	0.01	µg/L	<0.01	<0.01	0.0	No Limit
EP231P: PFAS Sums (QC Lot: 4263006)									
EM2205398-006	Anonymous	EP231X: Sum of PFAS	----	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Sum of PFAS (WA DER List)	----	0.01	µg/L	<0.01	<0.01	0.0	No Limit
EM2205473-010	Anonymous	EP231X: Sum of PFAS	----	0.01	µg/L	<0.10	<0.10	0.0	No Limit
		EP231X: Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Sum of PFAS (WA DER List)	----	0.01	µg/L	<0.05	<0.05	0.0	No Limit

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

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

Sub-Matrix: **SOIL**

				Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Acceptable Limits (%)	
Method: Compound	CAS Number	LOR	Unit	Result	Concentration	LCS	Low	High
EG005(ED093)T: Total Metals by ICP-AES (QCLot: 4260554)								
EG005T: Arsenic	7440-38-2	5	mg/kg	<5	123 mg/kg	94.4	70.0	130
EG005T: Cadmium	7440-43-9	1	mg/kg	<1	1.23 mg/kg	62.0	50.0	130
EG005T: Chromium	7440-47-3	2	mg/kg	<2	20.2 mg/kg	106	70.0	130
EG005T: Copper	7440-50-8	5	mg/kg	<5	55.9 mg/kg	90.3	70.0	130
EG005T: Lead	7439-92-1	5	mg/kg	<5	62.4 mg/kg	90.8	70.0	130
EG005T: Molybdenum	7439-98-7	2	mg/kg	<2	2.19 mg/kg	93.2	70.0	130
EG005T: Nickel	7440-02-0	2	mg/kg	<2	15.4 mg/kg	93.7	70.0	130
EG005T: Selenium	7782-49-2	5	mg/kg	<5	----	----	----	----
EG005T: Silver	7440-22-4	2	mg/kg	<2	2.9 mg/kg	73.2	70.0	130
EG005T: Tin	7440-31-5	5	mg/kg	<5	5.33 mg/kg	116	70.0	130
EG005T: Zinc	7440-66-6	5	mg/kg	<5	162 mg/kg	74.1	70.0	130
EN60-DI: Bottle Leaching Procedure - Inorganics/PFAS (Plastic Vessel) (QCLot: 4260851)								
EN60-DIa-P: Final pH	----	0.1	pH Unit	6.9	----	----	----	----
EA001: pH in soil using 0.01M CaCl extract (QCLot: 4260574)								
EA001: pH (CaCl2)	----	----	pH Unit	----	4 pH Unit	101	98.8	101
				----	7 pH Unit	100	99.3	101
EG035T: Total Recoverable Mercury by FIMS (QCLot: 4260555)								
EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	0.64 mg/kg	83.6	70.0	130
EG048: Hexavalent Chromium (Alkaline Digest) (QCLot: 4260576)								
EG048G: Hexavalent Chromium	18540-29-9	0.5	mg/kg	<0.5	20 mg/kg	87.4	70.0	130
EK026SF: Total CN by Segmented Flow Analyser (QCLot: 4263014)								
EK026SF: Total Cyanide	57-12-5	1	mg/kg	<1	20 mg/kg	83.2	70.0	130
EK040T: Fluoride Total (QCLot: 4260551)								
EK040T: Fluoride	16984-48-8	40	mg/kg	<40	400 mg/kg	98.5	75.2	110
EP066: Polychlorinated Biphenyls (PCB) (QCLot: 4259617)								
EP066-EM: Total Polychlorinated biphenyls	----	0.1	mg/kg	<0.1	1 mg/kg	120	67.4	136
EP074A: Monocyclic Aromatic Hydrocarbons (QCLot: 4259611)								
EP074-UT: Benzene	71-43-2	0.2	mg/kg	<0.2	2.1 mg/kg	80.1	69.2	116
EP074-UT: Toluene	108-88-3	0.5	mg/kg	<0.5	2.1 mg/kg	78.4	67.7	116
EP074-UT: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	2.1 mg/kg	76.9	66.6	115
EP074-UT: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	4.2 mg/kg	76.2	65.2	112
EP074-UT: Styrene	100-42-5	0.5	mg/kg	<0.5	2.1 mg/kg	77.8	69.4	111

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Acceptable Limits (%)	
				Result	Concentration	LCS	Low	High
EP074A: Monocyclic Aromatic Hydrocarbons (QCLot: 4259611) - continued								
EP074-UT: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	2.1 mg/kg	78.2	68.4	110
EP074H: Naphthalene (QCLot: 4259611)								
EP074-UT: Naphthalene	91-20-3	1	mg/kg	<1	0.6 mg/kg	77.8	72.3	114
EP074I: Volatile Halogenated Compounds (QCLot: 4259611)								
EP074-UT: Vinyl chloride	75-01-4	0.02	mg/kg	<0.02	0.1 mg/kg	84.5	47.0	138
EP074-UT: 1.1-Dichloroethene	75-35-4	0.01	mg/kg	<0.01	0.1 mg/kg	75.9	57.6	125
EP074-UT: Methylene chloride	75-09-2	0.4	mg/kg	<0.4	2.1 mg/kg	81.9	72.3	115
EP074-UT: trans-1.2-Dichloroethene	156-60-5	0.02	mg/kg	<0.02	0.1 mg/kg	77.3	60.5	122
EP074-UT: cis-1.2-Dichloroethene	156-59-2	0.01	mg/kg	<0.01	0.1 mg/kg	80.8	70.3	112
EP074-UT: Chloroform	67-66-3	0.02	mg/kg	<0.02	0.1 mg/kg	83.3	66.6	115
EP074-UT: 1.1.1-Trichloroethane	71-55-6	0.01	mg/kg	<0.01	0.1 mg/kg	79.0	64.4	122
EP074-UT: Carbon Tetrachloride	56-23-5	0.01	mg/kg	<0.01	0.1 mg/kg	75.7	58.4	127
EP074-UT: 1.2-Dichloroethane	107-06-2	0.02	mg/kg	<0.02	0.1 mg/kg	88.6	72.9	114
EP074-UT: Trichloroethene	79-01-6	0.02	mg/kg	<0.02	0.1 mg/kg	79.8	64.7	115
EP074-UT: 1.1.2-Trichloroethane	79-00-5	0.04	mg/kg	<0.04	0.1 mg/kg	88.2	72.6	116
EP074-UT: Tetrachloroethene	127-18-4	0.02	mg/kg	<0.02	0.1 mg/kg	77.0	60.0	119
EP074-UT: 1.1.1.2-Tetrachloroethane	630-20-6	0.01	mg/kg	<0.01	0.1 mg/kg	84.0	71.8	116
EP074-UT: 1.1.2.2-Tetrachloroethane	79-34-5	0.02	mg/kg	<0.02	0.1 mg/kg	89.8	66.1	116
EP074-UT: Hexachlorobutadiene	87-68-3	0.02	mg/kg	<0.02	0.1 mg/kg	81.0	39.8	128
EP074-UT: Chlorobenzene	108-90-7	0.02	mg/kg	<0.02	0.1 mg/kg	82.6	70.3	113
EP074-UT: 1.4-Dichlorobenzene	106-46-7	0.02	mg/kg	<0.02	0.1 mg/kg	81.7	62.6	113
EP074-UT: 1.2-Dichlorobenzene	95-50-1	0.02	mg/kg	<0.02	0.1 mg/kg	84.3	70.8	110
EP074-UT: 1.2.4-Trichlorobenzene	120-82-1	0.01	mg/kg	<0.01	0.1 mg/kg	89.6	48.4	120
EP075A: Phenolic Compounds (Halogenated) (QCLot: 4259615)								
EP075-EM: 2-Chlorophenol	95-57-8	0.03	mg/kg	<0.03	2 mg/kg	102	74.5	126
EP075-EM: 2.4-Dichlorophenol	120-83-2	0.03	mg/kg	<0.03	2 mg/kg	91.4	72.7	126
EP075-EM: 2.6-Dichlorophenol	87-65-0	0.03	mg/kg	<0.03	2 mg/kg	91.1	73.5	132
EP075-EM: 4-Chloro-3-methylphenol	59-50-7	0.03	mg/kg	<0.03	2 mg/kg	91.4	72.8	128
EP075-EM: 2.4.5-Trichlorophenol	95-95-4	0.05	mg/kg	<0.05	2 mg/kg	92.4	73.3	134
EP075-EM: 2.4.6-Trichlorophenol	88-06-2	0.05	mg/kg	<0.05	2 mg/kg	90.4	72.4	128
EP075-EM: 2.3.5.6-Tetrachlorophenol	935-95-5	0.03	mg/kg	<0.03	2 mg/kg	90.0	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	93.8	71.9	128
EP075-EM: Pentachlorophenol	87-86-5	0.2	mg/kg	<0.2	4 mg/kg	84.1	54.4	135
EP075A: Phenolic Compounds (Non-halogenated) (QCLot: 4259615)								
EP075-EM: Phenol	108-95-2	1	mg/kg	<1	2 mg/kg	105	71.5	130
EP075-EM: 2-Methylphenol	95-48-7	1	mg/kg	<1	2 mg/kg	89.9	73.4	129
EP075-EM: 3- & 4-Methylphenol	1319-77-3	1	mg/kg	<1	4 mg/kg	89.8	74.3	129

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Acceptable Limits (%)	
				Result	Concentration	LCS	Low	High
EP075A: Phenolic Compounds (Non-halogenated) (QCLot: 4259615) - continued								
EP075-EM: 2-Nitrophenol	88-75-5	1	mg/kg	<1	2 mg/kg	89.3	70.9	133
EP075-EM: 2.4-Dimethylphenol	105-67-9	1	mg/kg	<1	2 mg/kg	91.9	71.8	132
EP075-EM: 2.4-Dinitrophenol	51-28-5	5	mg/kg	<5	10 mg/kg	61.9	41.0	156
EP075-EM: 4-Nitrophenol	100-02-7	5	mg/kg	<5	10 mg/kg	90.8	65.3	134
EP075-EM: 2-Methyl-4.6-dinitrophenol	8071-51-0	5	mg/kg	<5	10 mg/kg	82.9	43.6	128
EP075-EM: Dinoseb	88-85-7	5	mg/kg	<5	10 mg/kg	86.4	62.0	128
EP075-EM: 2-Cyclohexyl-4.6-Dinitrophenol	131-89-5	5	mg/kg	<5	10 mg/kg	73.6	34.5	137
EP075B: Polynuclear Aromatic Hydrocarbons (QCLot: 4259615)								
EP075-EM: Naphthalene	91-20-3	0.5	mg/kg	<0.5	2 mg/kg	94.8	73.0	131
EP075-EM: Acenaphthene	83-32-9	0.5	mg/kg	<0.5	2 mg/kg	95.6	76.3	130
EP075-EM: Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	2 mg/kg	94.7	72.0	135
EP075-EM: Fluorene	86-73-7	0.5	mg/kg	<0.5	2 mg/kg	97.4	74.4	131
EP075-EM: Phenanthrene	85-01-8	0.5	mg/kg	<0.5	2 mg/kg	97.4	73.3	130
EP075-EM: Anthracene	120-12-7	0.5	mg/kg	<0.5	2 mg/kg	96.5	78.4	127
EP075-EM: Fluoranthene	206-44-0	0.5	mg/kg	<0.5	2 mg/kg	95.8	75.3	132
EP075-EM: Pyrene	129-00-0	0.5	mg/kg	<0.5	2 mg/kg	96.9	75.4	130
EP075-EM: Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	2 mg/kg	95.6	69.6	133
EP075-EM: Chrysene	218-01-9	0.5	mg/kg	<0.5	2 mg/kg	100	75.0	133
EP075-EM: Benzo(b+j) & Benzo(k)fluoranthene	205-99-2 207-08-9	1	mg/kg	<1.0	4 mg/kg	100	75.8	133
EP075-EM: Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	2 mg/kg	99.0	65.1	130
EP075-EM: Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	2 mg/kg	100	72.1	134
EP075-EM: Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	2 mg/kg	99.5	72.9	135
EP075-EM: Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	2 mg/kg	101	71.3	134
EP075I: Organochlorine Pesticides (QCLot: 4259615)								
EP075-EM: alpha-BHC	319-84-6	0.03	mg/kg	<0.03	2 mg/kg	95.7	71.0	129
EP075-EM: Hexachlorobenzene (HCB)	118-74-1	0.03	mg/kg	<0.03	2 mg/kg	96.2	74.8	126
EP075-EM: beta-BHC	319-85-7	0.03	mg/kg	<0.03	2 mg/kg	95.8	75.7	130
EP075-EM: gamma-BHC	58-89-9	0.03	mg/kg	<0.03	2 mg/kg	97.6	70.8	130
EP075-EM: delta-BHC	319-86-8	0.03	mg/kg	<0.03	2 mg/kg	97.2	76.5	134
EP075-EM: Heptachlor	76-44-8	0.03	mg/kg	<0.03	2 mg/kg	94.9	75.5	131
EP075-EM: Aldrin	309-00-2	0.03	mg/kg	<0.03	2 mg/kg	94.4	76.8	130
EP075-EM: Heptachlor epoxide	1024-57-3	0.03	mg/kg	<0.03	2 mg/kg	93.6	73.6	130
EP075-EM: cis-Chlordane	5103-71-9	0.03	mg/kg	<0.03	2 mg/kg	93.9	75.0	133
EP075-EM: trans-Chlordane	5103-74-2	0.03	mg/kg	<0.03	2 mg/kg	95.0	75.3	131
EP075-EM: Endosulfan 1	959-98-8	0.03	mg/kg	<0.03	2 mg/kg	96.3	69.4	134
EP075-EM: 4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	2 mg/kg	97.8	71.0	132
EP075-EM: Dieldrin	60-57-1	0.03	mg/kg	<0.03	2 mg/kg	96.3	78.0	133
EP075-EM: Endrin aldehyde	7421-93-4	0.03	mg/kg	<0.03	2 mg/kg	91.5	69.0	143

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Acceptable Limits (%)	
				Result	Concentration	LCS	Low	High
EP075I: Organochlorine Pesticides (QCLot: 4259615) - continued								
EP075-EM: Endrin	72-20-8	0.03	mg/kg	<0.03	2 mg/kg	95.5	55.7	145
EP075-EM: Endosulfan 2	33213-65-9	0.03	mg/kg	<0.03	2 mg/kg	97.2	71.4	135
EP075-EM: 4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	2 mg/kg	95.8	74.8	134
EP075-EM: Endosulfan sulfate	1031-07-8	0.03	mg/kg	<0.03	2 mg/kg	96.6	70.2	135
EP075-EM: 4.4`-DDT	50-29-3	0.05	mg/kg	<0.05	2 mg/kg	94.9	77.7	133
EP075-EM: Methoxychlor	72-43-5	0.03	mg/kg	<0.03	2 mg/kg	96.5	63.6	135
EP080/071: Total Petroleum Hydrocarbons (QCLot: 4259611)								
EP074-UT: C6 - C9 Fraction	----	10	mg/kg	<10	39.6 mg/kg	86.0	61.1	119
EP080/071: Total Petroleum Hydrocarbons (QCLot: 4259616)								
EP071-EM: C10 - C14 Fraction	----	50	mg/kg	<50	760 mg/kg	103	74.4	129
EP071-EM: C15 - C28 Fraction	----	100	mg/kg	<100	3270 mg/kg	103	81.0	123
EP071-EM: C29 - C36 Fraction	----	100	mg/kg	<100	1550 mg/kg	103	81.8	121
EP071-EM: C10 - C36 Fraction (sum)	----	50	mg/kg	<50	5580 mg/kg	103	70.0	130
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 4259611)								
EP074-UT: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	48.9 mg/kg	84.9	59.9	119
EP074-UT: C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg	<10	----	----	----	----
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 4259616)								
EP071-EM: >C10 - C16 Fraction	----	50	mg/kg	<50	1110 mg/kg	103	75.4	132
EP071-EM: >C16 - C34 Fraction	----	100	mg/kg	<100	4180 mg/kg	103	80.8	120
EP071-EM: >C34 - C40 Fraction	----	100	mg/kg	<100	290 mg/kg	107	73.3	136
EP071-EM: >C10 - C40 Fraction (sum)	----	50	mg/kg	<50	5580 mg/kg	103	70.0	130
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 4261749)								
EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.0002	mg/kg	<0.0002	0.00111 mg/kg	122	72.0	128
EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.0002	mg/kg	<0.0002	0.00118 mg/kg	94.8	73.0	123
EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.0002	mg/kg	<0.0002	0.0014 mg/kg	75.8	67.0	130
EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.0002	mg/kg	<0.0002	0.00119 mg/kg	110	70.0	132
EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.0002	mg/kg	<0.0002	0.00116 mg/kg	96.2	68.0	136
EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.0002	mg/kg	<0.0002	0.00121 mg/kg	106	59.0	134
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4261749)								
EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.001	mg/kg	<0.001	0.00625 mg/kg	87.3	71.0	135
EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.0002	mg/kg	<0.0002	0.00125 mg/kg	91.6	69.0	132
EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.0002	mg/kg	<0.0002	0.00125 mg/kg	94.7	70.0	132
EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.0002	mg/kg	<0.0002	0.00125 mg/kg	96.1	71.0	131
EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.0002	mg/kg	<0.0002	0.00125 mg/kg	90.1	69.0	133
EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.0002	mg/kg	<0.0002	0.00125 mg/kg	94.6	72.0	129
EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.0002	mg/kg	<0.0002	0.00125 mg/kg	106	69.0	133
EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.0002	mg/kg	<0.0002	0.00125 mg/kg	81.7	64.0	136

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report: Result	Laboratory Control Spike (LCS) Report: Spike Concentration	Spike Recovery (%): LCS	Acceptable Limits (%): Low	Acceptable Limits (%): High
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4261749) - continued								
EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.0002	mg/kg	<0.0002	0.00125 mg/kg	84.0	69.0	135
EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.0002	mg/kg	<0.0002	0.00125 mg/kg	78.4	66.0	139
EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.0005	mg/kg	<0.0005	0.00312 mg/kg	96.5	69.0	133
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 4261749)								
EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.0002	mg/kg	<0.0002	0.00125 mg/kg	104	67.0	137
EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.0005	mg/kg	<0.0005	0.00312 mg/kg	92.4	70.0	130
EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.0005	mg/kg	<0.0005	0.00312 mg/kg	92.9	70.0	130
EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.0005	mg/kg	<0.0005	0.00312 mg/kg	83.8	70.0	130
EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.0005	mg/kg	<0.0005	0.00312 mg/kg	98.0	70.0	130
EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.0002	mg/kg	<0.0002	0.00125 mg/kg	99.2	63.0	144
EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.0002	mg/kg	<0.0002	0.00125 mg/kg	97.8	61.0	139
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 4261749)								
EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.0005	mg/kg	<0.0005	0.00117 mg/kg	93.9	62.0	145
EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.0005	mg/kg	<0.0005	0.00119 mg/kg	96.4	64.0	140
EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.0005	mg/kg	<0.0005	0.0012 mg/kg	108	65.0	137
EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.0005	mg/kg	<0.0005	0.00121 mg/kg	92.8	70.0	130
EP231P: PFAS Sums (QCLot: 4261749)								
EP231X: Sum of PFAS	----	0.0002	mg/kg	<0.0002	----	----	----	----
EP231X: Sum of PFHxS and PFOS	355-46-4/17 63-23-1	0.0002	mg/kg	<0.0002	----	----	----	----
EP231X: Sum of PFAS (WA DER List)	----	0.0002	mg/kg	<0.0002	----	----	----	----

Sub-Matrix: **WATER**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report: Result	Laboratory Control Spike (LCS) Report: Spike Concentration	Spike Recovery (%): LCS	Acceptable Limits (%): Low	Acceptable Limits (%): High
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 4263003)								
EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	0.222 µg/L	110	72.0	130
EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	<0.02	0.235 µg/L	91.6	71.0	127
EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	<0.01	0.228 µg/L	92.1	68.0	131
EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	<0.02	0.25 µg/L	101	69.0	134
EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	<0.01	0.232 µg/L	106	65.0	140
EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L	<0.02	0.241 µg/L	113	53.0	142
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 4263006)								
EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	0.222 µg/L	114	72.0	130
EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	<0.02	0.235 µg/L	96.6	71.0	127

Sub-Matrix: **WATER**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Acceptable Limits (%)	
				Result	Concentration	LCS	Low	High
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 4263006) - continued								
EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	<0.01	0.228 µg/L	96.6	68.0	131
EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	<0.02	0.25 µg/L	106	69.0	134
EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	<0.01	0.232 µg/L	104	65.0	140
EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L	<0.02	0.241 µg/L	106	53.0	142
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4263003)								
EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L	<0.1	1.25 µg/L	87.2	73.0	129
EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	<0.02	0.25 µg/L	95.2	72.0	129
EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	<0.02	0.25 µg/L	98.1	72.0	129
EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	<0.02	0.25 µg/L	95.2	72.0	130
EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	<0.01	0.25 µg/L	94.1	71.0	133
EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L	<0.02	0.25 µg/L	97.9	69.0	130
EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L	<0.02	0.25 µg/L	92.7	71.0	129
EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L	<0.02	0.25 µg/L	83.0	69.0	133
EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L	<0.02	0.25 µg/L	92.9	72.0	134
EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L	<0.02	0.25 µg/L	90.0	65.0	144
EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L	<0.05	0.625 µg/L	85.0	71.0	132
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4263006)								
EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L	<0.1	1.25 µg/L	95.2	73.0	129
EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	<0.02	0.25 µg/L	99.4	72.0	129
EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	<0.02	0.25 µg/L	100	72.0	129
EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	<0.02	0.25 µg/L	99.8	72.0	130
EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	<0.01	0.25 µg/L	99.7	71.0	133
EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L	<0.02	0.25 µg/L	99.8	69.0	130
EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L	<0.02	0.25 µg/L	95.5	71.0	129
EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L	<0.02	0.25 µg/L	84.8	69.0	133
EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L	<0.02	0.25 µg/L	95.7	72.0	134
EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L	<0.02	0.25 µg/L	90.0	65.0	144
EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L	<0.05	0.625 µg/L	84.1	71.0	132
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 4263003)								
EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	µg/L	<0.02	0.25 µg/L	101	67.0	137
EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L	<0.05	0.625 µg/L	97.4	68.0	141
EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	µg/L	<0.05	0.625 µg/L	85.8	70.0	130
EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L	<0.05	0.625 µg/L	89.1	70.0	130
EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L	<0.05	0.625 µg/L	117	70.0	130
EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.02	µg/L	<0.02	0.25 µg/L	95.5	65.0	136

Sub-Matrix: **WATER**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Acceptable Limits (%)	
				Result	Concentration	LCS	Low	High
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 4263003) - continued								
EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.02	µg/L	<0.02	0.25 µg/L	103	61.0	135
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 4263006)								
EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	µg/L	<0.02	0.25 µg/L	106	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	88.1	70.0	130
EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L	<0.05	0.625 µg/L	85.3	70.0	130
EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L	<0.05	0.625 µg/L	118	70.0	130
EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.02	µg/L	<0.02	0.25 µg/L	106	65.0	136
EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.02	µg/L	<0.02	0.25 µg/L	105	61.0	135
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 4263003)								
EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L	<0.05	0.234 µg/L	98.5	63.0	143
EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.05	µg/L	<0.05	0.238 µg/L	101	64.0	140
EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.05	µg/L	<0.05	0.24 µg/L	97.7	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	72.7	70.0	130
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 4263006)								
EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L	<0.05	0.234 µg/L	112	63.0	143
EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.05	µg/L	<0.05	0.238 µg/L	108	64.0	140
EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.05	µg/L	<0.05	0.24 µg/L	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	71.7	70.0	130
EP231P: PFAS Sums (QCLot: 4263003)								
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: 4263006)								
EP231X: Sum of PFAS	----	0.01	µg/L	<0.01	----	----	----	----
EP231X: Sum of PFHxS and PFOS	355-46-4/17 63-23-1	0.01	µg/L	<0.01	----	----	----	----
EP231X: Sum of PFAS (WA DER List)	----	0.01	µg/L	<0.01	----	----	----	----

Matrix Spike (MS) Report

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

Sub-Matrix: **SOIL**

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Acceptable Limits (%)	
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Concentration	MS	Low	High
EG005(ED093)T: Total Metals by ICP-AES (QCLot: 4260554)							
EM2205462-002	Anonymous	EG005T: Arsenic	7440-38-2	50 mg/kg	81.9	78.0	124
		EG005T: Cadmium	7440-43-9	50 mg/kg	89.0	79.7	116
		EG005T: Chromium	7440-47-3	50 mg/kg	95.4	79.0	121
		EG005T: Copper	7440-50-8	250 mg/kg	92.4	80.0	120
		EG005T: Lead	7439-92-1	250 mg/kg	88.2	80.0	120
		EG005T: Nickel	7440-02-0	50 mg/kg	78.2	78.0	120
		EG005T: Zinc	7440-66-6	250 mg/kg	85.1	80.0	120
EG035T: Total Recoverable Mercury by FIMS (QCLot: 4260555)							
EM2205462-002	Anonymous	EG035T: Mercury	7439-97-6	0.5 mg/kg	90.3	76.0	116
EG048: Hexavalent Chromium (Alkaline Digest) (QCLot: 4260576)							
EM2205462-002	Anonymous	EG048G: Hexavalent Chromium	18540-29-9	20 mg/kg	85.4	58.0	114
EM2205462-002	Anonymous	EG048G: Hexavalent Chromium	18540-29-9	20 mg/kg	97.8	58.0	114
EK026SF: Total CN by Segmented Flow Analyser (QCLot: 4263014)							
EM2205462-002	Anonymous	EK026SF: Total Cyanide	57-12-5	20 mg/kg	97.4	70.0	130
EK040T: Fluoride Total (QCLot: 4260551)							
EM2205462-002	Anonymous	EK040T: Fluoride	16984-48-8	400 mg/kg	72.7	70.0	130
EP066: Polychlorinated Biphenyls (PCB) (QCLot: 4259617)							
EM2205468-002	SX_IB_20220328_04_11_SS_Primary_ALS	EP066-EM: Total Polychlorinated biphenyls	----	1 mg/kg	122	59.6	152
EP074A: Monocyclic Aromatic Hydrocarbons (QCLot: 4259611)							
EM2205468-002	SX_IB_20220328_04_11_SS_Primary_ALS	EP074-UT: Benzene	71-43-2	2 mg/kg	89.0	53.7	130
		EP074-UT: Toluene	108-88-3	2 mg/kg	87.6	55.1	124
EP074I: Volatile Halogenated Compounds (QCLot: 4259611)							
EM2205468-002	SX_IB_20220328_04_11_SS_Primary_ALS	EP074-UT: 1.1-Dichloroethene	75-35-4	2 mg/kg	83.5	38.4	145
		EP074-UT: Trichloroethene	79-01-6	2 mg/kg	79.9	48.1	128
		EP074-UT: Chlorobenzene	108-90-7	2 mg/kg	81.9	55.5	122
EP075A: Phenolic Compounds (Halogenated) (QCLot: 4259615)							
EM2205462-002	Anonymous	EP075-EM: 2-Chlorophenol	95-57-8	3 mg/kg	86.0	44.0	143
		EP075-EM: 4-Chloro-3-methylphenol	59-50-7	3 mg/kg	81.8	41.5	139
		EP075-EM: Pentachlorophenol	87-86-5	3 mg/kg	49.9	10.0	144
EP075A: Phenolic Compounds (Non-halogenated) (QCLot: 4259615)							
EM2205462-002	Anonymous	EP075-EM: Phenol	108-95-2	3 mg/kg	79.4	44.2	134
		EP075-EM: 2-Nitrophenol	88-75-5	3 mg/kg	78.7	34.2	129
EP075B: Polynuclear Aromatic Hydrocarbons (QCLot: 4259615)							
EM2205462-002	Anonymous	EP075-EM: Acenaphthene	83-32-9	3 mg/kg	77.1	42.6	138
		EP075-EM: Pyrene	129-00-0	3 mg/kg	74.8	37.8	152

Sub-Matrix: **SOIL**

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Acceptable Limits (%)	
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Concentration	MS	Low	High
EP080/071: Total Petroleum Hydrocarbons (QCLot: 4259611)							
EM2205468-002	SX_IB_20220328_04_11_SS_Primary_ALS	EP074-UT: C6 - C9 Fraction	----	28 mg/kg	81.0	42.3	111
EP080/071: Total Petroleum Hydrocarbons (QCLot: 4259616)							
EM2205468-001	SX_IB_20220327_23_57_SS_Primary_ALS	EP071-EM: C10 - C14 Fraction	----	760 mg/kg	103	71.3	126
		EP071-EM: C15 - C28 Fraction	----	3270 mg/kg	103	75.1	123
		EP071-EM: C29 - C36 Fraction	----	1550 mg/kg	103	78.1	120
		EP071-EM: C10 - C36 Fraction (sum)	----	5580 mg/kg	103	70.0	130
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 4259611)							
EM2205468-002	SX_IB_20220328_04_11_SS_Primary_ALS	EP074-UT: C6 - C10 Fraction	C6_C10	33 mg/kg	79.6	39.9	109
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 4259616)							
EM2205468-001	SX_IB_20220327_23_57_SS_Primary_ALS	EP071-EM: >C10 - C16 Fraction	----	1110 mg/kg	103	71.5	130
		EP071-EM: >C16 - C34 Fraction	----	4180 mg/kg	103	76.9	119
		EP071-EM: >C34 - C40 Fraction	----	290 mg/kg	106	65.3	139
		EP071-EM: >C10 - C40 Fraction (sum)	----	5580 mg/kg	103	70.0	130
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 4261749)							
EM2205462-002	Anonymous	EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.00111 mg/kg	102	72.0	128
		EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.00118 mg/kg	76.0	73.0	123
		EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.00114 mg/kg	91.4	67.0	130
		EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.00119 mg/kg	85.6	70.0	132
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.00116 mg/kg	98.4	68.0	136
		EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.00121 mg/kg	116	59.0	134
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4261749)							
EM2205462-002	Anonymous	EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.00625 mg/kg	85.7	71.0	135
		EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.00125 mg/kg	87.1	69.0	132
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.00125 mg/kg	84.1	70.0	132
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.00125 mg/kg	94.6	71.0	131
		EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.00125 mg/kg	93.2	69.0	133
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.00125 mg/kg	92.2	72.0	129
		EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.00125 mg/kg	93.8	69.0	133
		EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.00125 mg/kg	81.1	64.0	136
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.00125 mg/kg	85.9	69.0	135
		EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.00125 mg/kg	77.5	66.0	139
		EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.00312 mg/kg	90.8	69.0	133
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 4261749)							
EM2205462-002	Anonymous	EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.00125 mg/kg	99.0	67.0	137
		EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.00312 mg/kg	83.5	70.0	130
		EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.00312 mg/kg	82.0	70.0	130

Sub-Matrix: **SOIL**

Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Matrix Spike (MS) Report: Spike Concentration	Matrix Spike (MS) Report: SpikeRecovery(%) MS	Acceptable Limits (%) Low	Acceptable Limits (%) High
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 4261749) - continued							
EM2205462-002	Anonymous	EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.00312 mg/kg	82.8	70.0	130
		EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.00312 mg/kg	94.1	70.0	130
		EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.00125 mg/kg	92.4	63.0	144
		EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.00125 mg/kg	93.7	61.0	139
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 4261749)							
EM2205462-002	Anonymous	EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.00117 mg/kg	83.2	62.0	145
		EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.00119 mg/kg	105	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	77.0	70.0	130

Sub-Matrix: **WATER**

Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Matrix Spike (MS) Report: Spike Concentration	Matrix Spike (MS) Report: SpikeRecovery(%) MS	Acceptable Limits (%) Low	Acceptable Limits (%) High
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 4263003)							
EM2205462-002	Anonymous	EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.222 µg/L	96.6	72.0	130
		EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.235 µg/L	81.2	71.0	127
		EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.228 µg/L	94.4	68.0	131
		EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.238 µg/L	93.9	69.0	134
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.232 µg/L	103	65.0	140
		EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.241 µg/L	124	53.0	142
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 4263006)							
EM2205462-005	Anonymous	EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.222 µg/L	98.4	72.0	130
		EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.235 µg/L	81.7	71.0	127
		EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.228 µg/L	94.3	68.0	131
		EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.238 µg/L	99.2	69.0	134
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.232 µg/L	95.5	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: 4263003)							
EM2205462-002	Anonymous	EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	1.25 µg/L	92.9	73.0	129
		EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.25 µg/L	92.4	72.0	129
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.25 µg/L	94.9	72.0	129
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.25 µg/L	103	72.0	130
		EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.25 µg/L	96.6	71.0	133
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.25 µg/L	99.2	69.0	130
		EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.25 µg/L	104	71.0	129

Sub-Matrix: **WATER**

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Acceptable Limits (%)	
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Concentration	MS	Low	High
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4263003) - continued							
EM2205462-002	Anonymous	EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.25 µg/L	86.8	69.0	133
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.25 µg/L	108	72.0	134
		EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.25 µg/L	97.3	65.0	144
		EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.625 µg/L	92.0	71.0	132
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4263006)							
EM2205462-005	Anonymous	EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	1.25 µg/L	85.0	73.0	129
		EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.25 µg/L	89.1	72.0	129
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.25 µg/L	86.9	72.0	129
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.25 µg/L	94.9	72.0	130
		EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.25 µg/L	95.2	71.0	133
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.25 µg/L	93.3	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	74.4	69.0	133
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.25 µg/L	80.8	72.0	134
		EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.25 µg/L	74.8	65.0	144
		EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.625 µg/L	# 70.8	71.0	132
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 4263003)							
EM2205462-002	Anonymous	EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.25 µg/L	98.5	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	90.1	70.0	130
		EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.625 µg/L	86.6	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	102	65.0	136
		EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.25 µg/L	108	61.0	135
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 4263006)							
EM2205462-005	Anonymous	EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.25 µg/L	96.4	67.0	137
		EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.625 µg/L	72.8	68.0	141
		EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.625 µg/L	# 52.3	70.0	130
		EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.625 µg/L	79.9	70.0	130
		EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.625 µg/L	98.2	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: 4263006) - continued							
EM2205462-005	Anonymous	EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.25 µg/L	85.2	65.0	136
		EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.25 µg/L	85.5	61.0	135
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 4263003)							
EM2205462-002	Anonymous	EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.234 µg/L	92.9	63.0	143
		EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.238 µg/L	109	64.0	140
		EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.24 µg/L	113	67.0	138
		EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.242 µg/L	74.1	70.0	130
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 4263006)							
EM2205462-005	Anonymous	EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.234 µg/L	90.8	63.0	143
		EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.238 µg/L	108	64.0	140
		EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.24 µg/L	104	67.0	138
		EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.242 µg/L	# 62.6	70.0	130

QA/QC Compliance Assessment to assist with Quality Review

Work Order	: **EM2205468**	Page	: 1 of 11
Client	: **AGON ENVIRONMENTAL PTY LTD**	Laboratory	: Environmental Division Melbourne
Contact	: Craig Trimbur	Telephone	: +6138549 9600
Project	: JC0927	Date Samples Received	: 28-Mar-2022
Site	: 20220328060846-ALS-8	Issue Date	: 04-Apr-2022
Sampler	: LR-EP	No. of samples received	: 4
Order number	: ----	No. of samples analysed	: 4

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

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

Summary of Outliers

Outliers : Quality Control Samples

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

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

Outliers : Analysis Holding Time Compliance

- **Analysis Holding Time Outliers exist - please see following pages for full details.**

Outliers : Frequency of Quality Control Samples

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

Outliers : Quality Control Samples

Duplicates, Method Blanks, Laboratory Control Samples and Matrix Spikes

Matrix: **WATER**

Compound Group Name	Laboratory Sample ID	Client Sample ID	Analyte	CAS Number	Data	Limits	Comment
Matrix Spike (MS) Recoveries							
EP231B: Perfluoroalkyl Carboxylic Acids	EM2205462--005	Anonymous	**Perfluorotetradecanoic acid (PFTeDA)**	376-06-7	70.8 %	71.0-132%	**Recovery less than lower data quality objective**
EP231C: Perfluoroalkyl Sulfonamides	EM2205462--005	Anonymous	**N-Ethyl perfluorooctane sulfonamide (EtFOSA)**	4151-50-2	52.3 %	70.0-130%	**Recovery less than lower data quality objective**
EP231D: (n:2) Fluorotelomer Sulfonic Acids	EM2205462--005	Anonymous	**10:2 Fluorotelomer sulfonic acid (10:2 FTS)**	120226-60-0	62.6 %	70.0-130%	**Recovery less than lower data quality objective**

Outliers : Analysis Holding Time Compliance

Matrix: **SOIL**

Method / Container / Client Sample ID(s)	Extraction / Preparation			Analysis		
	Date extracted	Due for extraction	Days overdue	Date analysed	Due for analysis	Days overdue
EA001: pH in soil using 0.01M CaCl extract						
Soil Glass Jar - Unpreserved SX_IB_20220327_23_57_SS_Primary_ALS	----	----	----	01-Apr-2022	31-Mar-2022	**1**
Soil Glass Jar - Unpreserved SX_IB_20220328_04_11_SS_Primary_ALS	----	----	----	01-Apr-2022	31-Mar-2022	**1**

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_20220327_23_57_SS_Primary_ALS	**27-Mar-2022**	**31-Mar-2022**	03-Apr-2022	✓	**01-Apr-2022**	31-Mar-2022	×
Soil Glass Jar - Unpreserved (EA001) SX_IB_20220328_04_11_SS_Primary_ALS	**28-Mar-2022**	**31-Mar-2022**	04-Apr-2022	✓	**01-Apr-2022**	31-Mar-2022	×

Matrix: **SOIL**

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

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EA055: Moisture Content (Dried @ 105-110°C)							
Soil Glass Jar - Unpreserved (EA055) SX_IB_20220327_23_57_SS_Primary_ALS	**27-Mar-2022**	**----**	----	----	**31-Mar-2022**	10-Apr-2022	✓
Soil Glass Jar - Unpreserved (EA055) SX_IB_20220328_04_11_SS_Primary_ALS	**28-Mar-2022**	**----**	----	----	**31-Mar-2022**	11-Apr-2022	✓
EG005(ED093)T: Total Metals by ICP-AES							
Soil Glass Jar - Unpreserved (EG005T) SX_IB_20220327_23_57_SS_Primary_ALS	**27-Mar-2022**	**01-Apr-2022**	23-Sep-2022	✓	**01-Apr-2022**	23-Sep-2022	✓
Soil Glass Jar - Unpreserved (EG005T) SX_IB_20220328_04_11_SS_Primary_ALS	**28-Mar-2022**	**01-Apr-2022**	24-Sep-2022	✓	**01-Apr-2022**	24-Sep-2022	✓
EG035T: Total Recoverable Mercury by FIMS							
Soil Glass Jar - Unpreserved (EG035T) SX_IB_20220327_23_57_SS_Primary_ALS	**27-Mar-2022**	**01-Apr-2022**	24-Apr-2022	✓	**01-Apr-2022**	24-Apr-2022	✓
Soil Glass Jar - Unpreserved (EG035T) SX_IB_20220328_04_11_SS_Primary_ALS	**28-Mar-2022**	**01-Apr-2022**	25-Apr-2022	✓	**01-Apr-2022**	25-Apr-2022	✓
EG048: Hexavalent Chromium (Alkaline Digest)							
Soil Glass Jar - Unpreserved (EG048G) SX_IB_20220327_23_57_SS_Primary_ALS	**27-Mar-2022**	**01-Apr-2022**	24-Apr-2022	✓	**01-Apr-2022**	08-Apr-2022	✓
Soil Glass Jar - Unpreserved (EG048G) SX_IB_20220328_04_11_SS_Primary_ALS	**28-Mar-2022**	**01-Apr-2022**	25-Apr-2022	✓	**01-Apr-2022**	08-Apr-2022	✓
EK026SF: Total CN by Segmented Flow Analyser							
Soil Glass Jar - Unpreserved (EK026SF) SX_IB_20220327_23_57_SS_Primary_ALS	**27-Mar-2022**	**01-Apr-2022**	10-Apr-2022	✓	**02-Apr-2022**	15-Apr-2022	✓
Soil Glass Jar - Unpreserved (EK026SF) SX_IB_20220328_04_11_SS_Primary_ALS	**28-Mar-2022**	**01-Apr-2022**	11-Apr-2022	✓	**02-Apr-2022**	15-Apr-2022	✓
EK040T: Fluoride Total							
Soil Glass Jar - Unpreserved (EK040T) SX_IB_20220327_23_57_SS_Primary_ALS	**27-Mar-2022**	**01-Apr-2022**	24-Apr-2022	✓	**04-Apr-2022**	24-Apr-2022	✓
Soil Glass Jar - Unpreserved (EK040T) SX_IB_20220328_04_11_SS_Primary_ALS	**28-Mar-2022**	**01-Apr-2022**	25-Apr-2022	✓	**04-Apr-2022**	25-Apr-2022	✓
EN60: ASLP Leaching Procedure - Inorganics/PFAS (Plastic Vessel)							
Non-Volatile Leach: 180 day HT (e.g. PFAS, metals ex.Hg) (EN60a-P) SX_IB_20220327_23_57_SS_Primary_ALS	**27-Mar-2022**	**31-Mar-2022**	23-Sep-2022	✓	**----**	----	----
Non-Volatile Leach: 180 day HT (e.g. PFAS, metals ex.Hg) (EN60a-P) SX_IB_20220328_04_11_SS_Primary_ALS	**28-Mar-2022**	**31-Mar-2022**	24-Sep-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_20220327_23_57_SS_Primary_ALS - DI	**27-Mar-2022**	**31-Mar-2022**	23-Sep-2022	✓	**----**	----	----
Non-Volatile Leach: 180 day HT (e.g. PFAS, metals ex.Hg) (EN60-DIa-P) SX_IB_20220328_04_11_SS_Primary_ALS - DI	**28-Mar-2022**	**31-Mar-2022**	24-Sep-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
EP066: Polychlorinated Biphenyls (PCB)							
Soil Glass Jar - Unpreserved (EP066-EM) SX_IB_20220327_23_57_SS_Primary_ALS	**27-Mar-2022**	**01-Apr-2022**	10-Apr-2022	✓	**01-Apr-2022**	11-May-2022	✓
Soil Glass Jar - Unpreserved (EP066-EM) SX_IB_20220328_04_11_SS_Primary_ALS	**28-Mar-2022**	**01-Apr-2022**	11-Apr-2022	✓	**01-Apr-2022**	11-May-2022	✓
EP074A: Monocyclic Aromatic Hydrocarbons							
Soil Glass Jar - Unpreserved (EP074-UT) SX_IB_20220327_23_57_SS_Primary_ALS	**27-Mar-2022**	**31-Mar-2022**	03-Apr-2022	✓	**01-Apr-2022**	03-Apr-2022	✓
Soil Glass Jar - Unpreserved (EP074-UT) SX_IB_20220328_04_11_SS_Primary_ALS	**28-Mar-2022**	**31-Mar-2022**	04-Apr-2022	✓	**01-Apr-2022**	04-Apr-2022	✓
EP074H: Naphthalene							
Soil Glass Jar - Unpreserved (EP074-UT) SX_IB_20220327_23_57_SS_Primary_ALS	**27-Mar-2022**	**31-Mar-2022**	03-Apr-2022	✓	**01-Apr-2022**	03-Apr-2022	✓
Soil Glass Jar - Unpreserved (EP074-UT) SX_IB_20220328_04_11_SS_Primary_ALS	**28-Mar-2022**	**31-Mar-2022**	04-Apr-2022	✓	**01-Apr-2022**	04-Apr-2022	✓
EP074I: Volatile Halogenated Compounds							
Soil Glass Jar - Unpreserved (EP074-UT) SX_IB_20220327_23_57_SS_Primary_ALS	**27-Mar-2022**	**31-Mar-2022**	03-Apr-2022	✓	**01-Apr-2022**	03-Apr-2022	✓
Soil Glass Jar - Unpreserved (EP074-UT) SX_IB_20220328_04_11_SS_Primary_ALS	**28-Mar-2022**	**31-Mar-2022**	04-Apr-2022	✓	**01-Apr-2022**	04-Apr-2022	✓
EP075A: Phenolic Compounds (Halogenated)							
Soil Glass Jar - Unpreserved (EP075-EM) SX_IB_20220327_23_57_SS_Primary_ALS	**27-Mar-2022**	**01-Apr-2022**	10-Apr-2022	✓	**01-Apr-2022**	11-May-2022	✓
Soil Glass Jar - Unpreserved (EP075-EM) SX_IB_20220328_04_11_SS_Primary_ALS	**28-Mar-2022**	**01-Apr-2022**	11-Apr-2022	✓	**01-Apr-2022**	11-May-2022	✓
EP075A: Phenolic Compounds (Non-halogenated)							
Soil Glass Jar - Unpreserved (EP075-EM) SX_IB_20220327_23_57_SS_Primary_ALS	**27-Mar-2022**	**01-Apr-2022**	10-Apr-2022	✓	**01-Apr-2022**	11-May-2022	✓
Soil Glass Jar - Unpreserved (EP075-EM) SX_IB_20220328_04_11_SS_Primary_ALS	**28-Mar-2022**	**01-Apr-2022**	11-Apr-2022	✓	**01-Apr-2022**	11-May-2022	✓
EP075B: Polynuclear Aromatic Hydrocarbons							
Soil Glass Jar - Unpreserved (EP075-EM) SX_IB_20220327_23_57_SS_Primary_ALS	**27-Mar-2022**	**01-Apr-2022**	10-Apr-2022	✓	**01-Apr-2022**	11-May-2022	✓
Soil Glass Jar - Unpreserved (EP075-EM) SX_IB_20220328_04_11_SS_Primary_ALS	**28-Mar-2022**	**01-Apr-2022**	11-Apr-2022	✓	**01-Apr-2022**	11-May-2022	✓
EP075I: Organochlorine Pesticides							
Soil Glass Jar - Unpreserved (EP075-EM) SX_IB_20220327_23_57_SS_Primary_ALS	**27-Mar-2022**	**01-Apr-2022**	10-Apr-2022	✓	**01-Apr-2022**	11-May-2022	✓
Soil Glass Jar - Unpreserved (EP075-EM) SX_IB_20220328_04_11_SS_Primary_ALS	**28-Mar-2022**	**01-Apr-2022**	11-Apr-2022	✓	**01-Apr-2022**	11-May-2022	✓

Matrix: **SOIL**

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

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP080/071: Total Petroleum Hydrocarbons							
Soil Glass Jar - Unpreserved (EP071-EM) SX_IB_20220327_23_57_SS_Primary_ALS	**27-Mar-2022**	**01-Apr-2022**	10-Apr-2022	✓	**01-Apr-2022**	11-May-2022	✓
Soil Glass Jar - Unpreserved (EP074-UT) SX_IB_20220327_23_57_SS_Primary_ALS	**27-Mar-2022**	**31-Mar-2022**	03-Apr-2022	✓	**01-Apr-2022**	03-Apr-2022	✓
Soil Glass Jar - Unpreserved (EP071-EM) SX_IB_20220328_04_11_SS_Primary_ALS	**28-Mar-2022**	**01-Apr-2022**	11-Apr-2022	✓	**01-Apr-2022**	11-May-2022	✓
Soil Glass Jar - Unpreserved (EP074-UT) SX_IB_20220328_04_11_SS_Primary_ALS	**28-Mar-2022**	**31-Mar-2022**	04-Apr-2022	✓	**01-Apr-2022**	04-Apr-2022	✓
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions							
Soil Glass Jar - Unpreserved (EP071-EM) SX_IB_20220327_23_57_SS_Primary_ALS	**27-Mar-2022**	**01-Apr-2022**	10-Apr-2022	✓	**01-Apr-2022**	11-May-2022	✓
Soil Glass Jar - Unpreserved (EP074-UT) SX_IB_20220327_23_57_SS_Primary_ALS	**27-Mar-2022**	**31-Mar-2022**	03-Apr-2022	✓	**01-Apr-2022**	03-Apr-2022	✓
Soil Glass Jar - Unpreserved (EP071-EM) SX_IB_20220328_04_11_SS_Primary_ALS	**28-Mar-2022**	**01-Apr-2022**	11-Apr-2022	✓	**01-Apr-2022**	11-May-2022	✓
Soil Glass Jar - Unpreserved (EP074-UT) SX_IB_20220328_04_11_SS_Primary_ALS	**28-Mar-2022**	**31-Mar-2022**	04-Apr-2022	✓	**01-Apr-2022**	04-Apr-2022	✓
EP231A: Perfluoroalkyl Sulfonic Acids							
HDPE Soil Jar (EP231X) SX_IB_20220327_23_57_SS_Primary_ALS	**27-Mar-2022**	**01-Apr-2022**	23-Sep-2022	✓	**01-Apr-2022**	11-May-2022	✓
HDPE Soil Jar (EP231X) SX_IB_20220328_04_11_SS_Primary_ALS	**28-Mar-2022**	**01-Apr-2022**	24-Sep-2022	✓	**01-Apr-2022**	11-May-2022	✓
EP231B: Perfluoroalkyl Carboxylic Acids							
HDPE Soil Jar (EP231X) SX_IB_20220327_23_57_SS_Primary_ALS	**27-Mar-2022**	**01-Apr-2022**	23-Sep-2022	✓	**01-Apr-2022**	11-May-2022	✓
HDPE Soil Jar (EP231X) SX_IB_20220328_04_11_SS_Primary_ALS	**28-Mar-2022**	**01-Apr-2022**	24-Sep-2022	✓	**01-Apr-2022**	11-May-2022	✓
EP231C: Perfluoroalkyl Sulfonamides							
HDPE Soil Jar (EP231X) SX_IB_20220327_23_57_SS_Primary_ALS	**27-Mar-2022**	**01-Apr-2022**	23-Sep-2022	✓	**01-Apr-2022**	11-May-2022	✓
HDPE Soil Jar (EP231X) SX_IB_20220328_04_11_SS_Primary_ALS	**28-Mar-2022**	**01-Apr-2022**	24-Sep-2022	✓	**01-Apr-2022**	11-May-2022	✓
EP231D: (n:2) Fluorotelomer Sulfonic Acids							
HDPE Soil Jar (EP231X) SX_IB_20220327_23_57_SS_Primary_ALS	**27-Mar-2022**	**01-Apr-2022**	23-Sep-2022	✓	**01-Apr-2022**	11-May-2022	✓
HDPE Soil Jar (EP231X) SX_IB_20220328_04_11_SS_Primary_ALS	**28-Mar-2022**	**01-Apr-2022**	24-Sep-2022	✓	**01-Apr-2022**	11-May-2022	✓
EP231P: PFAS Sums							
HDPE Soil Jar (EP231X) SX_IB_20220327_23_57_SS_Primary_ALS	**27-Mar-2022**	**01-Apr-2022**	23-Sep-2022	✓	**01-Apr-2022**	11-May-2022	✓
HDPE Soil Jar (EP231X) SX_IB_20220328_04_11_SS_Primary_ALS	**28-Mar-2022**	**01-Apr-2022**	24-Sep-2022	✓	**01-Apr-2022**	11-May-2022	✓

Matrix: **WATER**

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

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP231A: Perfluoroalkyl Sulfonic Acids							
HDPE (no PTFE) (EP231X)							
SX_IB_20220327_23_57_SS_Primary_ALS, SX_IB_20220328_04_11_SS_Primary_ALS, SX_IB_20220327_23_57_SS_Primary_ALS - DI, SX_IB_20220328_04_11_SS_Primary_ALS - DI	**31-Mar-2022**	**01-Apr-2022**	27-Sep-2022	✓	**01-Apr-2022**	27-Sep-2022	✓
EP231B: Perfluoroalkyl Carboxylic Acids							
HDPE (no PTFE) (EP231X)							
SX_IB_20220327_23_57_SS_Primary_ALS, SX_IB_20220328_04_11_SS_Primary_ALS, SX_IB_20220327_23_57_SS_Primary_ALS - DI, SX_IB_20220328_04_11_SS_Primary_ALS - DI	**31-Mar-2022**	**01-Apr-2022**	27-Sep-2022	✓	**01-Apr-2022**	27-Sep-2022	✓
EP231C: Perfluoroalkyl Sulfonamides							
HDPE (no PTFE) (EP231X)							
SX_IB_20220327_23_57_SS_Primary_ALS, SX_IB_20220328_04_11_SS_Primary_ALS, SX_IB_20220327_23_57_SS_Primary_ALS - DI, SX_IB_20220328_04_11_SS_Primary_ALS - DI	**31-Mar-2022**	**01-Apr-2022**	27-Sep-2022	✓	**01-Apr-2022**	27-Sep-2022	✓
EP231D: (n:2) Fluorotelomer Sulfonic Acids							
HDPE (no PTFE) (EP231X)							
SX_IB_20220327_23_57_SS_Primary_ALS, SX_IB_20220328_04_11_SS_Primary_ALS, SX_IB_20220327_23_57_SS_Primary_ALS - DI, SX_IB_20220328_04_11_SS_Primary_ALS - DI	**31-Mar-2022**	**01-Apr-2022**	27-Sep-2022	✓	**01-Apr-2022**	27-Sep-2022	✓
EP231P: PFAS Sums							
HDPE (no PTFE) (EP231X)							
SX_IB_20220327_23_57_SS_Primary_ALS, SX_IB_20220328_04_11_SS_Primary_ALS, SX_IB_20220327_23_57_SS_Primary_ALS - DI, SX_IB_20220328_04_11_SS_Primary_ALS - DI	**31-Mar-2022**	**01-Apr-2022**	27-Sep-2022	✓	**01-Apr-2022**	27-Sep-2022	✓

Quality Control Parameter Frequency Compliance

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

Matrix: **SOIL**

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

Quality Control Sample Type		Count		Rate (%)			Quality Control Specification
Analytical Methods	*Method*	*QC*	*Regular*	***Actual***	***Expected***	*Evaluation*	
Laboratory Duplicates (DUP)							
Hexavalent Chromium by Alkaline Digestion and DA Finish	EG048G	2	13	**15.38**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Moisture Content	EA055	2	13	**15.38**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
PCB - VIC EPA 448.3 Screen	EP066-EM	2	13	**15.38**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	2	13	**15.38**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
pH in soil using a 0.01M CaCl2 extract	EA001	2	13	**15.38**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Semivolatile Organic Compounds - Waste Classification	EP075-EM	2	13	**15.38**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Cyanide by Segmented Flow Analyser	EK026SF	2	13	**15.38**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Fluoride	EK040T	2	13	**15.38**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	2	13	**15.38**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	2	13	**15.38**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071-EM	2	13	**15.38**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Volatile Organic Compounds - Ultra-trace	EP074-UT	1	2	**50.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Laboratory Control Samples (LCS)							
Hexavalent Chromium by Alkaline Digestion and DA Finish	EG048G	2	13	**15.38**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
PCB - VIC EPA 448.3 Screen	EP066-EM	1	13	**7.69**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	1	13	**7.69**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
pH in soil using a 0.01M CaCl2 extract	EA001	2	13	**15.38**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Semivolatile Organic Compounds - Waste Classification	EP075-EM	1	13	**7.69**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Cyanide by Segmented Flow Analyser	EK026SF	1	13	**7.69**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Fluoride	EK040T	1	13	**7.69**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	1	13	**7.69**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	1	13	**7.69**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071-EM	1	13	**7.69**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Volatile Organic Compounds - Ultra-trace	EP074-UT	1	2	**50.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Method Blanks (MB)							
Deionised Water Leach - Plastic Leaching Vessel	EN60-Dla-P	1	12	**8.33**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Hexavalent Chromium by Alkaline Digestion and DA Finish	EG048G	1	13	**7.69**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
PCB - VIC EPA 448.3 Screen	EP066-EM	1	13	**7.69**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	1	13	**7.69**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Semivolatile Organic Compounds - Waste Classification	EP075-EM	1	13	**7.69**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Cyanide by Segmented Flow Analyser	EK026SF	1	13	**7.69**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Fluoride	EK040T	1	13	**7.69**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	1	13	**7.69**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	1	13	**7.69**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071-EM	1	13	**7.69**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Volatile Organic Compounds - Ultra-trace	EP074-UT	1	2	**50.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard

Matrix: **SOIL**

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

Quality Control Sample Type		Count		Rate (%)			Quality Control Specification
Analytical Methods	Method	QC	Regular	Actual	Expected	Evaluation	
Matrix Spikes (MS)							
Hexavalent Chromium by Alkaline Digestion and DA Finish	EG048G	2	13	**15.38**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
PCB - VIC EPA 448.3 Screen	EP066-EM	1	13	**7.69**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	1	13	**7.69**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Semivolatile Organic Compounds - Waste Classification	EP075-EM	1	13	**7.69**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Cyanide by Segmented Flow Analyser	EK026SF	1	13	**7.69**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Fluoride	EK040T	1	13	**7.69**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	1	13	**7.69**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	1	13	**7.69**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071-EM	1	13	**7.69**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Volatile Organic Compounds - Ultra-trace	EP074-UT	1	2	**50.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard

Matrix: **WATER**

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

Quality Control Sample Type		Count		Rate (%)			Quality Control Specification
Analytical Methods	Method	QC	Regular	Actual	Expected	Evaluation	
Laboratory Duplicates (DUP)							
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	4	34	**11.76**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Laboratory Control Samples (LCS)							
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	2	34	**5.88**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Method Blanks (MB)							
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	2	34	**5.88**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Matrix Spikes (MS)							
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	2	34	**5.88**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard

Brief Method Summaries

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

Analytical Methods	Method	Matrix	Method Descriptions
pH in soil using a 0.01M CaCl2 extract	EA001	SOIL	In house: Referenced to Rayment and Lyons 4B3 (mod.) or 4B4 (mod.) 10 g of soil is mixed with 50 mL of 0.01M CaCl2 and tumbled end over end for 1 hour. pH is measured from the continuous suspension. This method is compliant with NEPM Schedule B(3).
Moisture Content	EA055	SOIL	In house: A gravimetric procedure based on weight loss over a 12 hour drying period at 105-110 degrees C. This method is compliant with NEPM Schedule B(3).
Total Metals by ICP-AES	EG005T	SOIL	In house: Referenced to APHA 3120; USEPA SW 846 - 6010. Metals are determined following an appropriate acid digestion of the soil. The ICPAES technique ionises samples in a plasma, emitting a characteristic spectrum based on metals present. Intensities at selected wavelengths are compared against those of matrix matched standards. This method is compliant with NEPM Schedule B(3)
Total Mercury by FIMS	EG035T	SOIL	In house: Referenced to APHA 3112 Hg - B (Flow-injection (SnCl2) (Cold Vapour generation) AAS) FIM-AAS is an automated flameless atomic absorption technique. Mercury in solids are determined following an appropriate acid digestion. Ionic mercury is reduced online to atomic mercury vapour by SnCl2 which is then purged into a heated quartz cell. Quantification is by comparing absorbance against a calibration curve. This method is compliant with NEPM Schedule B(3)
Hexavalent Chromium by Alkaline Digestion and DA Finish	EG048G	SOIL	In house: Referenced to USEPA SW846, Method 3060. Hexavalent chromium is extracted by alkaline digestion. The digest is determined by photometrically by automatic discrete analyser, following pH adjustment. The instrument uses colour development using dephenylcarbazide. Each run of samples is measured against a five-point calibration curve. This method is compliant with NEPM Schedule B(3)
Total Cyanide by Segmented Flow Analyser	EK026SF	SOIL	In house: Referenced to APHA 4500-CN C / ASTM D7511 / ISO 14403. Caustic leachates of soil samples are introduced into an automated segmented flow analyser. Complex bound cyanide is decomposed in a continuously flowing stream, at a pH of 3.8, by the effect of UV light. A UV-B lamp (312 nm) and a decomposition spiral of borosilicate glass are used to filter out UV light with a wavelength of less than 290 nm thus preventing the conversion of thiocyanate into cyanide. The hydrogen cyanide present at a pH of 3.8 is separated by gas dialysis. The hydrogen cyanide is then determined photometrically, based on the reaction of cyanide with chloramine-T to form cyanogen chloride. This then reacts with 4-pyridine carboxylic acid and 1,3-dimethylbarbituric acid to give a red colour which is measured at 600 nm. This method is compliant with NEPM Schedule B(3).
Total Fluoride	EK040T	SOIL	(In-house) Total fluoride is determined by ion specific electrode (ISE) in a solution obtained after a Sodium Carbonate / Potassium Carbonate fusion dissolution.
PCB - VIC EPA 448.3 Screen	EP066-EM	SOIL	In house: Referenced to USEPA SW 846 - 8270 Extracts are analysed by Capillary GC/MS and quantification is by comparison against an established 5 point calibration curve. This method is compliant with NEPM Schedule B(3).
TRH - Semivolatile Fraction	EP071-EM	SOIL	In house: Referenced to USEPA SW 846 - 8015A Sample extracts are analysed by Capillary GC/FID and quantified against alkane standards over the range C10 - C40.
Volatile Organic Compounds - Ultra-trace	EP074-UT	SOIL	In house: Referenced to USEPA SW 846 - 8260 Extracts are analysed by Purge and Trap, Capillary GC/MS in partial SIM/Scan mode. Quantification is by comparison against an established multi-point calibration curves. This method is compliant with NEPM Schedule B(3).

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

Preparation Methods	Method	Matrix	Method Descriptions
NaOH leach for CN in Soils	CN-PR	SOIL	In house: APHA 4500 CN. Samples are extracted by end-over-end tumbling with NaOH.
pH in soil using a 0.01M CaCl2 extract	EA001-PR	SOIL	In house: Referenced to Rayment and Lyons 4B1, 10 g of soil is mixed with 50 mL of 0.01M CaCl2 and tumbled end over end for 1 hour. pH is measured from the continuous suspension. This method is compliant with NEPM Schedule B(3).
Alkaline digestion for Hexavalent Chromium	EG048PR	SOIL	In house: Referenced to USEPA SW846, Method 3060A.
Total Fluoride	EK040T-PR	SOIL	In house: Samples are fused with Sodium Carbonate / Potassium Carbonate flux.
ASLP for Non & Semivolatile Analytes - Plastic Leaching Vessel	EN60a-P	SOIL	In house QWI-EN/60 referenced to AS4439.3 Preparation of Leachates.
Deionised Water Leach - Plastic Leaching Vessel	EN60-DIa-P	SOIL	In house QWI-EN/60 referenced to AS4439.3 Preparation of Leachates
Hot Block Digest for metals in soils sediments and sludges	EN69	SOIL	In house: Referenced to USEPA 200.2. Hot Block Acid Digestion 1.0g of sample is heated with Nitric and Hydrochloric acids, then cooled. Peroxide is added and samples heated and cooled again before being filtered and bulked to volume for analysis. Digest is appropriate for determination of selected metals in sludge, sediments, and soils. This method is compliant with NEPM Schedule B(3).
Methanolic Extraction of Soils - Ultra-trace.	ORG16-UT	SOIL	In house: Referenced to USEPA SW 846 - 5030A. 5g of solid is shaken with surrogate and 10mL methanol prior to analysis by Purge and Trap - GC/MS.
Tumbler Extraction of Solids - VIC EPA Screen	ORG17-EM	SOIL	In house: Mechanical agitation (tumbler). 10g of sample, Na2SO4 and surrogate are extracted with 30mL 1:1 DCM/Acetone by end over end tumble. The solvent is decanted, dehydrated and concentrated (by KD) to the desired volume for analysis.
QuECheRS Extraction of Solids	ORG71	SOIL	In house: Sequential extractions with Acetonitrile/Methanol by shaking. Extraction efficiency aided by the addition of salts under acidic conditions. Where relevant, interferences from co-extracted organics are removed with dispersive clean-up media (dSPE). The extract is either diluted or concentrated and exchanged into the analytical solvent.

Preparation Methods	Method	Matrix	Method Descriptions
Solid Phase Extraction (SPE) for PFAS in water	ORG72	SOIL	In-house: Isotopically labelled analogues of target analytes used as internal standards and surrogates are added to the sample container. The entire contents are transferred to a solid phase extraction (SPE) cartridge. The sample container is successively rinsed with aliquots of the elution solvent. The eluted extract is combined with an equal volume of reagent water and a portion is filtered for analysis. Method procedures conform to US DoD QSM 5.3, table B-15 requirements.

ALS Melbourne: 4 Westall Rd, Springvale, VIC 3171 Phone (03) 8549 9600; Facsimile (03) 8549 9601. Email Samples.Melbourne@alsenviro.com

CHAIN OF CUSTODY DOCUMENTATION

Australian Laboratory Services Pty Ltd

CLIENT: Agon Evironmental	SAMPLER: LR - EP RISK WOH - Agon
ADDRESS / OFFICE: Melbourne	MOBILE 1: +61 400 826 907 (Craig Trimbur)
PROJECT MANAGER (PM): Craig Trimbur	MOBILE 2: +61 490 411 004 (David Lawson)
PROJECT ID: JC0927	EMAIL REPORT TO: Labreports.TST@agonenviro.com.au agonenvironmental@esdat.com.au motherhublabresults1@wgtp.com.au Amrit.Kaur@agile-analytics.com.au
SITE: 20220328060408-ALS-8 P.O. NO.:	
RESULTS REQUIRED (Date): 5 days QUOTE NO.: ME-150-19 WGTP	EMAIL INVOICE TO: (if different to report) Labreports.TST@agonenviro.com.au agonenvironmental@esdat.com.au

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

COMMENTS / SPECIAL HANDLING / STORAGE OR DIPOSAL:

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

Notes:

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

	ALS ID	SAMPLE ID	MATRIX	DATE	Time	Type / Code	Total bottles	Spoil Sample Prep	P16 plus Cr	PFAS 28 Extended suite	ASLP PFAS - Extended Suite (Lab to determine pH)	DI Leachate PFAS - Extended Suite
10	1	SX_OB_20220326_20_04_SS_Primary_ALS	S	26/03/2022	20:04	Bucket	1	x	x	x	x	x
11	2	SX_OB_20220327_00_08_SS_Primary_ALS	S	27/03/2022	00:08	Bucket	1	x	x	x	x	x
12	3	SX_OB_20220327_03_55_SS_Primary_ALS	S	27/03/2022	03:55	Bucket	1	x	x	x	x	x
13	4	SX_OB_20220327_07_55_SS_Primary_ALS	S	27/03/2022	07:55	Bucket	1	x	x	x	x	x
14	5	SX_OB_20220327_07_58_SS_Duplicate_ALS	S	27/03/2022	07:58	Bucket	1	x	x	x	x	x
15	6	SX_OB_20220327_11_51_SS_Primary_ALS	S	27/03/2022	11:51	Bucket	1	x	x	x	x	x
16	7	SX_OB_20220327_16_00_SS_Triplicate_ALS	S	27/03/2022	16:00	Bucket	1	X	X	X	X	X
17	8	SX_OB_20220327_16_04_SS_Primary_ALS	S	27/03/2022	16:04	Bucket	1	X	X	X	X	X
18	9	SX_OB_20220327_19_56_SS_Primary_ALS	S	27/03/2022	19:56	Bucket	1	X	X	X	X	X

Environmental Division
Melbourne
Work Order Reference
EM2205473

Telephone : + 61-3-8549 9600

RELINQUISHED BY:		RECEIVED BY		METHOD OF SHIPMENT
Name: Will O'Haire	Date: 28/03/2022	Name: Adin 082	Date:	Con' Note No:
Of: Agon	Time:	Of:	Time:	
Name:	Date:	Name: Marni	Date: 28/3	Transport Co:
Of:	Time:	Of: Au	Time: 1145	

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

ALS Melbourne: 4 Westall Rd, Springvale, VIC 3171 Phone (03) 8549 9600; Facsimile (03) 8549 9601. Email Samples.Melbourne@alsenviro.com

CHAIN OF CUSTODY DOCUMENTATION

Australian Laboratory Services Pty Ltd

CLIENT: Agon Evironmental	SAMPLER: LR - EP RISK WOH - Agon
ADDRESS / OFFICE: Melbourne	MOBILE 1: +61 400 826 907 (Craig Trimbur)
PROJECT MANAGER (PM): Craig Trimbur	MOBILE 2: +61 490 411 004 (David Lawson)
PROJECT ID: JC0927	EMAIL REPORT TO: Labreports.TST@agonenviro.com.au agonenvironmental@esdat.com.au motherhublabresults1@wgtp.com.au Amrit.Kaur@agile-analytics.com.au
SITE: 20220328060408-ALS-8 P.O. NO.:	
RESULTS REQUIRED (Date): 5 days QUOTE NO.: ME-150-19 WGTP	EMAIL INVOICE TO: (if different to report) Labreports.TST@agonenviro.com.au agonenvironmental@esdat.com.au

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

COMMENTS / SPECIAL HANDLING / STORAGE OR DIPOSAL:

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

Notes:

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

	ALS ID	SAMPLE ID	MATRIX	DATE	Time	Type / Code	Total bottles	Spoil Sample Prep	P16 plus Cr	PFAS 28 Extended suite	ASLP PFAS - Extended Suite (Lab to determine pH)	DI Leachate PFAS - Extended Suite
10	1	SX_OB_20220326_20_04_SS_Primary_ALS	S	26/03/2022	20:04	Bucket	1	x	x	x	x	x
11	2	SX_OB_20220327_00_08_SS_Primary_ALS	S	27/03/2022	00:08	Bucket	1	x	x	x	x	x
12	3	SX_OB_20220327_03_55_SS_Primary_ALS	S	27/03/2022	03:55	Bucket	1	x	x	x	x	x
13	4	SX_OB_20220327_07_55_SS_Primary_ALS	S	27/03/2022	07:55	Bucket	1	x	x	x	x	x
14	5	SX_OB_20220327_07_58_SS_Duplicate_ALS	S	27/03/2022	07:58	Bucket	1	x	x	x	x	x
15	6	SX_OB_20220327_11_51_SS_Primary_ALS	S	27/03/2022	11:51	Bucket	1	x	x	x	x	x
16	7	SX_OB_20220327_16_00_SS_Triplicate_ALS	S	27/03/2022	16:00	Bucket	1	X	X	X	X	X
17	8	SX_OB_20220327_16_04_SS_Primary_ALS	S	27/03/2022	16:04	Bucket	1	X	X	X	X	X
18	9	SX_OB_20220327_19_56_SS_Primary_ALS	S	27/03/2022	19:56	Bucket	1	X	X	X	X	X

Environmental Division
Melbourne
Work Order Reference
EM2205473

Telephone : + 61-3-8549 9600

RELINQUISHED BY:		RECEIVED BY		METHOD OF SHIPMENT
Name: Will O'Haire	Date: 28/03/2022	Name: Adm 082	Date:	Con' Note No:
Of: Agon	Time:	Of:	Time:	
Name:	Date:	Name: Marni	Date: 28/3	Transport Co:
Of:	Time:	Of: Au	Time: 11:40	

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

AUSTRALIAN LABORATORY SERVICES P/L

ALS Environmental

CERTIFICATE OF ANALYSIS

Work Order	: **EM2205473**	Page	: 1 of 27
Client	: **AGON ENVIRONMENTAL PTY LTD**	Laboratory	: Environmental Division Melbourne
Contact	: Craig Trimbur	Contact	: Bronwyn Sheen
Address	: D1.1 63-85 TURNER STREET PORT MELBOURNE 3207	Address	: 4 Westall Rd Springvale VIC Australia 3171
Telephone	: ----	Telephone	: +6138549 9600
Project	: JC0927	Date Samples Received	: 28-Mar-2022 11:45
Order number	: -	Date Analysis Commenced	: 31-Mar-2022
C-O-C number	: 20220328060408-ALS-8	Issue Date	: 04-Apr-2022 20:19
Sampler	: LR - EP RISK & WOH - Agon		
Site	: ----		
Quote number	: EN/150/19 -WGTP -Bulk Sample Quote		
No. of samples received	: 18		
No. of samples analysed	: 18		

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

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

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results
- Surrogate Control Limits

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

Signatories

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

Signatories	*Position*	*Accreditation Category*
Dilani Fernando	Laboratory Coordinator	Melbourne Inorganics, Springvale, VIC
Xing Lin	Senior Organic Chemist	Melbourne Organics, Springvale, VIC

General Comments

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

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

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

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

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

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

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

- EP231X: Poor matrix spike recovery for sample EM2205462-005 due to sample matrix interference.
- EG048G: EM2205473 #1 Result for Hexavalent Chromium has 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.
- EP231: Stable isotope enriched internal standards are added to samples prior to extraction. Target compounds have a direct analogous internal standard with the exception of PFPeS, PFHpA, PFDS, PFTrDA and 10:2 FTS. These compounds use an internal standard that is chemically related and has a retention time close to that of the target compound. The DQO for internal standard response is 50-150% of that established at initial calibration. PFOS is quantified using a certified, traceable standard consisting of linear and branched PFOS isomers. These practices are in line with recommendations in the National Environmental Management Plan for PFAS (Australian HEPA) and also conform to QSM 5.3 (US DoD) requirements.
- EN60: Where leachable PFAS analysis is requested, centrifugation rather than pressure filtration is used as the default approach for removal of particulates, in line with AS 4439.3.
- EN60-DI: Where leachable PFAS analysis is requested, centrifugation rather than pressure filtration is used as the default approach for removal of particulates, in line with AS 4439.3.

Analytical Results

Sub-Matrix: **ASLP LEACHATE** (Matrix: **WATER**)

Compound	CAS Number	LOR	Unit	Sample ID	SX_OB_20220326_20_4_SS_Primary_ALS	SX_OB_20220327_00_08_SS_Primary_ALS	SX_OB_20220327_03_55_SS_Primary_ALS	SX_OB_20220327_07_55_SS_Primary_ALS	SX_OB_20220327_07_58_SS_Duplicate_ALS
				Sampling date / time	26-Mar-2022 20:04	27-Mar-2022 00:08	27-Mar-2022 03:55	27-Mar-2022 07:55	27-Mar-2022 07:58
					EM2205473-001	EM2205473-002	EM2205473-003	EM2205473-004	EM2205473-005
					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**)

Compound	CAS Number	LOR	Unit	Sample ID	SX_OB_20220326_20_4_SS_Primary_ALS	SX_OB_20220327_00_08_SS_Primary_ALS	SX_OB_20220327_03_55_SS_Primary_ALS	SX_OB_20220327_07_55_SS_Primary_ALS	SX_OB_20220327_07_58_SS_Duplicate_ALS
				Sampling date / time	26-Mar-2022 20:04	27-Mar-2022 00:08	27-Mar-2022 03:55	27-Mar-2022 07:55	27-Mar-2022 07:58
					EM2205473-001	EM2205473-002	EM2205473-003	EM2205473-004	EM2205473-005
					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	%		**95.5**	**101**	**101**	**99.3**	**98.9**
13C8-PFOA	----	0.02	%		**103**	**101**	**104**	**101**	**101**

Analytical Results

Sub-Matrix: **ASLP LEACHATE** (Matrix: **WATER**)

Compound	CAS Number	LOR	Unit	Sample ID	SX_OB_20220327_11_51_SS_Primary_ALS	SX_OB_20220327_16_00_SS_Triplicate_ALS	SX_OB_20220327_16_04_SS_Primary_ALS	SX_OB_20220327_19_56_SS_Primary_ALS	----
				Sampling date / time	27-Mar-2022 11:51	27-Mar-2022 16:00	27-Mar-2022 16:04	27-Mar-2022 19:56	----
					EM2205473-006	EM2205473-007	EM2205473-008	EM2205473-009	--------
					Result	Result	Result	Result	----
EP231A: Perfluoroalkyl Sulfonic Acids									
Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	----
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	----
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L		<0.01	<0.01	<0.01	<0.01	----
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	----
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L		<0.01	<0.01	<0.01	<0.01	----
Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	----
EP231B: Perfluoroalkyl Carboxylic Acids									
Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L		<0.1	<0.1	<0.1	<0.1	----
Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	----
Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	----
Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	----
Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L		<0.01	<0.01	<0.01	<0.01	----
Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	----
Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	----
Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	----
Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	----
Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	----
Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L		<0.05	<0.05	<0.05	<0.05	----
EP231C: Perfluoroalkyl Sulfonamides									
Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	----
N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L		<0.05	<0.05	<0.05	<0.05	----

Analytical Results

Sub-Matrix: **ASLP LEACHATE** (Matrix: **WATER**)

				Sample ID	SX_OB_20220327_11_51_SS_Primary_ALS	SX_OB_20220327_16_00_SS_Triplicate_ALS	SX_OB_20220327_16_04_SS_Primary_ALS	SX_OB_20220327_19_56_SS_Primary_ALS	----
				Sampling date / time	27-Mar-2022 11:51	27-Mar-2022 16:00	27-Mar-2022 16:04	27-Mar-2022 19:56	----
Compound	CAS Number	LOR	Unit		EM2205473-006	EM2205473-007	EM2205473-008	EM2205473-009	--------
					Result	Result	Result	Result	----
EP231C: Perfluoroalkyl Sulfonamides - Continued									
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	µg/L		<0.05	<0.05	<0.05	<0.05	----
N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L		<0.05	<0.05	<0.05	<0.05	----
N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L		<0.05	<0.05	<0.05	<0.05	----
N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	----
N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	----
EP231D: (n:2) Fluorotelomer Sulfonic Acids									
4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L		<0.05	<0.05	<0.05	<0.05	----
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.05	µg/L		<0.05	<0.05	<0.05	<0.05	----
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.05	µg/L		<0.05	<0.05	<0.05	<0.05	----
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.05	µg/L		<0.05	<0.05	<0.05	<0.05	----
EP231P: PFAS Sums									
Sum of PFAS	----	0.01	µg/L		<0.01	<0.01	<0.01	<0.01	----
Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L		<0.01	<0.01	<0.01	<0.01	----
Sum of PFAS (WA DER List)	----	0.01	µg/L		<0.01	<0.01	<0.01	<0.01	----
EP231S: PFAS Surrogate									
13C4-PFOS	----	0.02	%		**97.9**	**102**	**99.3**	**104**	----
13C8-PFOA	----	0.02	%		**104**	**104**	**101**	**99.8**	----

Analytical Results

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

Compound	CAS Number	LOR	Unit	Sample ID	SX_OB_20220326_20_4_SS_Primary_ALS DI	SX_OB_20220327_00_08_SS_Primary_ALS DI	SX_OB_20220327_03_55_SS_Primary_ALS DI	SX_OB_20220327_07_55_SS_Primary_ALS DI	SX_OB_20220327_07_58_SS_Duplicate_ALS DI
				Sampling date / time	26-Mar-2022 08:04	27-Mar-2022 00:08	27-Mar-2022 03:55	27-Mar-2022 07:55	27-Mar-2022 07:58
					EM2205473-010	EM2205473-011	EM2205473-012	EM2205473-013	EM2205473-014
					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**)

Compound	CAS Number	LOR	Unit	Sample ID	SX_OB_20220326_20_4_SS_Primary_ALS DI	SX_OB_20220327_00_08_SS_Primary_ALS DI	SX_OB_20220327_03_55_SS_Primary_ALS DI	SX_OB_20220327_07_55_SS_Primary_ALS DI	SX_OB_20220327_07_58_SS_Duplicate_ALS DI
				Sampling date / time	26-Mar-2022 08:04	27-Mar-2022 00:08	27-Mar-2022 03:55	27-Mar-2022 07:55	27-Mar-2022 07:58
					EM2205473-010	EM2205473-011	EM2205473-012	EM2205473-013	EM2205473-014
					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	%		**101**	**92.2**	**91.5**	**92.5**	**95.0**
13C8-PFOA	----	0.02	%		**97.4**	**94.5**	**96.0**	**93.6**	**95.3**

Analytical Results

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

Compound	CAS Number	LOR	Unit	Sample ID	SX_OB_20220327_11_51_SS_Primary_ALS DI	SX_OB_20220327_16_00_SS_Triplicate_ALS DI	SX_OB_20220327_16_04_SS_Primary_ALS DI	SX_OB_20220327_19_56_SS_Primary_ALS DI	----
				Sampling date / time	27-Mar-2022 11:51	27-Mar-2022 16:00	27-Mar-2022 16:04	27-Mar-2022 19:56	----
					EM2205473-015	EM2205473-016	EM2205473-017	EM2205473-018	--------
					Result	Result	Result	Result	----
EP231A: Perfluoroalkyl Sulfonic Acids									
Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	----
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	----
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L		<0.01	<0.01	<0.01	<0.01	----
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	----
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L		<0.01	<0.01	<0.01	<0.01	----
Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	----
EP231B: Perfluoroalkyl Carboxylic Acids									
Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L		<0.1	<0.1	<0.1	<0.1	----
Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	----
Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	----
Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	----
Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L		<0.01	<0.01	<0.01	<0.01	----
Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	----
Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	----
Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	----
Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	----
Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	----
Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L		<0.05	<0.05	<0.05	<0.05	----
EP231C: Perfluoroalkyl Sulfonamides									
Perfluorooctane sulfonamide (FOSA)	754-91-6	0.05	µg/L		<0.05	<0.05	<0.05	<0.05	----
N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L		<0.05	<0.05	<0.05	<0.05	----

Analytical Results

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

Compound	CAS Number	LOR	Unit	Sample ID	SX_OB_20220327_11_51_SS_Primary_ALS DI	SX_OB_20220327_16_00_SS_Triplicate_ALS DI	SX_OB_20220327_16_04_SS_Primary_ALS DI	SX_OB_20220327_19_56_SS_Primary_ALS DI	----
				Sampling date / time	27-Mar-2022 11:51	27-Mar-2022 16:00	27-Mar-2022 16:04	27-Mar-2022 19:56	----
					EM2205473-015	EM2205473-016	EM2205473-017	EM2205473-018	--------
					Result	Result	Result	Result	----
EP231C: Perfluoroalkyl Sulfonamides - Continued									
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	µg/L		<0.05	<0.05	<0.05	<0.05	----
N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L		<0.05	<0.05	<0.05	<0.05	----
N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L		<0.05	<0.05	<0.05	<0.05	----
N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.05	µg/L		<0.05	<0.05	<0.05	<0.05	----
N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.05	µg/L		<0.05	<0.05	<0.05	<0.05	----
EP231D: (n:2) Fluorotelomer Sulfonic Acids									
4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L		<0.05	<0.05	<0.05	<0.05	----
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.05	µg/L		<0.05	<0.05	<0.05	<0.05	----
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.05	µg/L		<0.05	<0.05	<0.05	<0.05	----
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.05	µg/L		<0.05	<0.05	<0.05	<0.05	----
EP231P: PFAS Sums									
Sum of PFAS	----	0.10	µg/L		<0.10	<0.10	<0.10	<0.10	----
Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L		<0.01	<0.01	<0.01	<0.01	----
Sum of PFAS (WA DER List)	----	0.05	µg/L		<0.05	<0.05	<0.05	<0.05	----
EP231S: PFAS Surrogate									
13C4-PFOS	----	0.02	%		**91.2**	**93.2**	**95.8**	**95.8**	----
13C8-PFOA	----	0.02	%		**94.4**	**97.2**	**94.5**	**97.1**	----

Analytical Results

Sub-Matrix: SOIL
(Matrix: SOIL)

Compound	CAS Number	LOR	Unit	Sample ID	SX_OB_20220326_20_4_SS_Primary_ALS	SX_OB_20220327_00_08_SS_Primary_ALS	SX_OB_20220327_03_55_SS_Primary_ALS	SX_OB_20220327_07_55_SS_Primary_ALS	SX_OB_20220327_07_58_SS_Duplicate_ALS
				Sampling date / time	26-Mar-2022 20:04	27-Mar-2022 00:08	27-Mar-2022 03:55	27-Mar-2022 07:55	27-Mar-2022 07:58
					EM2205473-001	EM2205473-002	EM2205473-003	EM2205473-004	EM2205473-005
					Result	Result	Result	Result	Result
EA001: pH in soil using 0.01M CaCl extract									
pH (CaCl2)	----	0.1	pH Unit		7.6	7.7	7.5	7.6	7.6
EA055: Moisture Content (Dried @ 105-110°C)									
Moisture Content	----	1.0	%		29.9	27.4	30.0	29.6	27.7
EG005(ED093)T: Total Metals by ICP-AES									
Arsenic	7440-38-2	5	mg/kg		37	24	33	32	43
Cadmium	7440-43-9	1	mg/kg		<1	<1	1	<1	<1
Chromium	7440-47-3	5	mg/kg		109	105	100	103	111
Copper	7440-50-8	5	mg/kg		54	54	56	58	62
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		169	169	181	183	186
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	88	104	99	102
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		1.1	<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	170	160	180	190
EN60: ASLP Leaching Procedure - Inorganics/PFAS (Plastic Vessel)									
Initial pH	----	0.1	pH Unit		9.0	8.9	9.0	8.9	9.1
After HCl pH	----	0.1	pH Unit		1.2	1.2	1.2	1.2	1.1
Extraction Fluid pH	----	0.1	pH Unit		5.0	5.0	5.0	5.0	5.0
Final pH	----	0.1	pH Unit		5.0	4.9	5.0	4.9	4.9
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**)

Compound	CAS Number	LOR	Unit	Sample ID	SX_OB_20220326_20_4_SS_Primary_ALS	SX_OB_20220327_00_08_SS_Primary_ALS	SX_OB_20220327_03_55_SS_Primary_ALS	SX_OB_20220327_07_55_SS_Primary_ALS	SX_OB_20220327_07_58_SS_Duplicate_ALS
				Sampling date / time	26-Mar-2022 20:04	27-Mar-2022 00:08	27-Mar-2022 03:55	27-Mar-2022 07:55	27-Mar-2022 07:58
					EM2205473-001	EM2205473-002	EM2205473-003	EM2205473-004	EM2205473-005
					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**)

Compound	CAS Number	LOR	Unit	Sample ID	SX_OB_20220326_20_4_SS_Primary_ALS	SX_OB_20220327_00_08_SS_Primary_ALS	SX_OB_20220327_03_55_SS_Primary_ALS	SX_OB_20220327_07_55_SS_Primary_ALS	SX_OB_20220327_07_58_SS_Duplicate_ALS
				Sampling date / time	26-Mar-2022 20:04	27-Mar-2022 00:08	27-Mar-2022 03:55	27-Mar-2022 07:55	27-Mar-2022 07:58
					EM2205473-001	EM2205473-002	EM2205473-003	EM2205473-004	EM2205473-005
					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**)

Compound	CAS Number	LOR	Unit	Sample ID	SX_OB_20220326_20_4_SS_Primary_ALS	SX_OB_20220327_00_08_SS_Primary_ALS	SX_OB_20220327_03_55_SS_Primary_ALS	SX_OB_20220327_07_55_SS_Primary_ALS	SX_OB_20220327_07_58_SS_Duplicate_ALS
				Sampling date / time	26-Mar-2022 20:04	27-Mar-2022 00:08	27-Mar-2022 03:55	27-Mar-2022 07:55	27-Mar-2022 07:58
					EM2205473-001	EM2205473-002	EM2205473-003	EM2205473-004	EM2205473-005
					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**)

Compound	CAS Number	LOR	Unit	Sample ID	SX_OB_20220326_20_4_SS_Primary_ALS	SX_OB_20220327_00_08_SS_Primary_ALS	SX_OB_20220327_03_55_SS_Primary_ALS	SX_OB_20220327_07_55_SS_Primary_ALS	SX_OB_20220327_07_58_SS_Duplicate_ALS
				Sampling date / time	26-Mar-2022 20:04	27-Mar-2022 00:08	27-Mar-2022 03:55	27-Mar-2022 07:55	27-Mar-2022 07:58
					EM2205473-001	EM2205473-002	EM2205473-003	EM2205473-004	EM2205473-005
					Result	Result	Result	Result	Result
EP075I: Organochlorine Pesticides - Continued									
^ **Sum of Aldrin + Dieldrin**	309-00-2/60-57-1	0.30	mg/kg		<0.30	<0.30	<0.30	<0.30	<0.30
^ **Sum of DDD + DDE + DDT**	72-54-8/72-55-9/50-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
^ **Chlordane**	57-74-9	0.10	mg/kg		<0.10	<0.10	<0.10	<0.10	<0.10
^ **Sum of other organochlorine pesticides**	----	0.03	mg/kg		<0.03	<0.03	<0.03	<0.03	<0.03
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	----	20	mg/kg		<20	<20	<20	<20	<20
C10 - C14 Fraction	----	50	mg/kg		<50	<50	<50	<50	<50
C6 - C10 Fraction	C6_C10	20	mg/kg		<20	<20	<20	<20	<20
C15 - C28 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
C29 - C36 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
^ **C10 - C36 Fraction (sum)**	----	50	mg/kg		<50	<50	<50	<50	<50
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
>C10 - C16 Fraction	----	50	mg/kg		<50	<50	<50	<50	<50
>C16 - C34 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
>C34 - C40 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
^ **>C10 - C40 Fraction (sum)**	----	50	mg/kg		<50	<50	<50	<50	<50
>C10 - C16 Fraction minus Naphthalene (F2)	----	50	mg/kg		<50	<50	<50	<50	<50
C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	20	mg/kg		<20	<20	<20	<20	<20
EP231A: Perfluoroalkyl Sulfonic Acids									
Perfluorobutane sulfonic acid (PFBS)	375-73-5	5.0	µg/kg		<5.0	<5.0	<5.0	<5.0	<5.0
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	5.0	µg/kg		<5.0	<5.0	<5.0	<5.0	<5.0
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	5.0	µg/kg		<5.0	<5.0	<5.0	<5.0	<5.0
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	5.0	µg/kg		<5.0	<5.0	<5.0	<5.0	<5.0
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	5.0	µg/kg		<5.0	<5.0	<5.0	<5.0	<5.0
Perfluorodecane sulfonic acid (PFDS)	335-77-3	5.0	µg/kg		<5.0	<5.0	<5.0	<5.0	<5.0

Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

Compound	CAS Number	LOR	Unit	Sample ID	SX_OB_20220326_20_4_SS_Primary_ALS	SX_OB_20220327_00_08_SS_Primary_ALS	SX_OB_20220327_03_55_SS_Primary_ALS	SX_OB_20220327_07_55_SS_Primary_ALS	SX_OB_20220327_07_58_SS_Duplicate_ALS
				Sampling date / time	26-Mar-2022 20:04	27-Mar-2022 00:08	27-Mar-2022 03:55	27-Mar-2022 07:55	27-Mar-2022 07:58
					EM2205473-001	EM2205473-002	EM2205473-003	EM2205473-004	EM2205473-005
					Result	Result	Result	Result	Result
EP231B: Perfluoroalkyl Carboxylic Acids									
Perfluorobutanoic acid (PFBA)	375-22-4	5	µg/kg		<5	<5	<5	<5	<5
Perfluoropentanoic acid (PFPeA)	2706-90-3	5.0	µg/kg		<5.0	<5.0	<5.0	<5.0	<5.0
Perfluorohexanoic acid (PFHxA)	307-24-4	5.0	µg/kg		<5.0	<5.0	<5.0	<5.0	<5.0
Perfluoroheptanoic acid (PFHpA)	375-85-9	5.0	µg/kg		<5.0	<5.0	<5.0	<5.0	<5.0
Perfluorooctanoic acid (PFOA)	335-67-1	5.0	µg/kg		<5.0	<5.0	<5.0	<5.0	<5.0
Perfluorononanoic acid (PFNA)	375-95-1	5.0	µg/kg		<5.0	<5.0	<5.0	<5.0	<5.0
Perfluorodecanoic acid (PFDA)	335-76-2	5.0	µg/kg		<5.0	<5.0	<5.0	<5.0	<5.0
Perfluoroundecanoic acid (PFUnDA)	2058-94-8	5.0	µg/kg		<5.0	<5.0	<5.0	<5.0	<5.0
Perfluorododecanoic acid (PFDoDA)	307-55-1	5.0	µg/kg		<5.0	<5.0	<5.0	<5.0	<5.0
Perfluorotridecanoic acid (PFTrDA)	72629-94-8	5.0	µg/kg		<5.0	<5.0	<5.0	<5.0	<5.0
Perfluorotetradecanoic acid (PFTeDA)	376-06-7	5.0	µg/kg		<5.0	<5.0	<5.0	<5.0	<5.0
EP231C: Perfluoroalkyl Sulfonamides									
Perfluorooctane sulfonamide (FOSA)	754-91-6	5.0	µg/kg		<5.0	<5.0	<5.0	<5.0	<5.0
N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	5.0	µg/kg		<5.0	<5.0	<5.0	<5.0	<5.0
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	5.0	µg/kg		<5.0	<5.0	<5.0	<5.0	<5.0
N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	5.0	µg/kg		<5.0	<5.0	<5.0	<5.0	<5.0
N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	5.0	µg/kg		<5.0	<5.0	<5.0	<5.0	<5.0
N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	10.0	µg/kg		<10.0	<10.0	<10.0	<10.0	<10.0
N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	10.0	µg/kg		<10.0	<10.0	<10.0	<10.0	<10.0
EP231D: (n:2) Fluorotelomer Sulfonic Acids									

Analytical Results

Sub-Matrix: SOIL
(Matrix: SOIL)

Compound	CAS Number	LOR	Unit	Sample ID	SX_OB_20220326_20_4_SS_Primary_ALS	SX_OB_20220327_00_08_SS_Primary_ALS	SX_OB_20220327_03_55_SS_Primary_ALS	SX_OB_20220327_07_55_SS_Primary_ALS	SX_OB_20220327_07_58_SS_Duplicate_ALS
				Sampling date / time	26-Mar-2022 20:04	27-Mar-2022 00:08	27-Mar-2022 03:55	27-Mar-2022 07:55	27-Mar-2022 07:58
					EM2205473-001	EM2205473-002	EM2205473-003	EM2205473-004	EM2205473-005
					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	%		**109**	**109**	**112**	**102**	**104**
EP074S: VOC Surrogates (Ultra-Trace)									
1.2-Dichloroethane-D4	17060-07-0	0.1	%		**82.1**	**85.2**	**91.8**	**77.1**	**84.3**
Toluene-D8	2037-26-5	0.1	%		**79.7**	**86.3**	**91.2**	**78.7**	**82.3**
4-Bromofluorobenzene	460-00-4	0.1	%		**94.3**	**94.2**	**99.9**	**88.9**	**92.7**
EP075S: Acid Extractable Surrogates (Waste Classification)									
Phenol-d6	13127-88-3	0.025	%		**73.9**	**75.2**	**77.6**	**74.2**	**78.6**
2-Chlorophenol-D4	93951-73-6	0.025	%		**76.0**	**77.3**	**79.6**	**76.2**	**80.0**
2.4.6-Tribromophenol	118-79-6	0.025	%		**68.2**	**82.1**	**83.1**	**79.0**	**78.6**
EP075T: Base/Neutral Extractable Surrogates (Waste Classification)									
Nitrobenzene-D5	4165-60-0	0.025	%		**75.5**	**77.0**	**79.6**	**76.3**	**80.2**
1.2-Dichlorobenzene-D4	2199-69-1	0.025	%		**68.4**	**70.3**	**71.6**	**68.6**	**71.6**
2-Fluorobiphenyl	321-60-8	0.025	%		**81.1**	**82.1**	**84.4**	**81.2**	**80.2**
Anthracene-d10	1719-06-8	0.025	%		**85.8**	**87.2**	**89.7**	**86.0**	**85.2**
4-Terphenyl-d14	1718-51-0	0.025	%		**74.6**	**76.8**	**77.6**	**74.6**	**74.0**
EP231S: PFAS Surrogate									
13C4-PFOS	----	0.0002	%		**97.0**	**99.6**	**99.2**	**101**	**99.6**
13C8-PFOA	----	0.0002	%		**99.0**	**97.4**	**101**	**101**	**99.3**

Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

Compound	CAS Number	LOR	Unit	Sample ID	SX_OB_20220327_11_51_SS_Primary_ALS	SX_OB_20220327_16_00_SS_Triplicate_ALS	SX_OB_20220327_16_04_SS_Primary_ALS	SX_OB_20220327_19_56_SS_Primary_ALS	SX_OB_20220326_20_4_SS_Primary_ALS DI
				Sampling date / time	27-Mar-2022 11:51	27-Mar-2022 16:00	27-Mar-2022 16:04	27-Mar-2022 19:56	26-Mar-2022 08:04
					EM2205473-006	EM2205473-007	EM2205473-008	EM2205473-009	EM2205473-010
					Result	Result	Result	Result	Result
EA001: pH in soil using 0.01M CaCl extract									
pH (CaCl2)	----	0.1	pH Unit		**7.6**	**9.7**	**7.9**	**8.3**	**----**
EA055: Moisture Content (Dried @ 105-110°C)									
Moisture Content	----	1.0	%		**33.2**	**39.3**	**32.3**	**32.8**	**----**
EG005(ED093)T: Total Metals by ICP-AES									
Arsenic	7440-38-2	5	mg/kg		**24**	**22**	**19**	**21**	**----**
Cadmium	7440-43-9	1	mg/kg		<1	<1	<1	<1	**----**
Chromium	7440-47-3	5	mg/kg		**104**	**98**	**113**	**110**	**----**
Copper	7440-50-8	5	mg/kg		**68**	**56**	**54**	**59**	**----**
Lead	7439-92-1	5	mg/kg		<5	<5	<5	<5	**----**
Molybdenum	7439-98-7	5	mg/kg		<5	<5	<5	<5	**----**
Nickel	7440-02-0	5	mg/kg		**169**	**132**	**153**	**152**	**----**
Selenium	7782-49-2	5	mg/kg		<5	<5	<5	<5	**----**
Silver	7440-22-4	2	mg/kg		<2	<2	<2	<2	**----**
Tin	7440-31-5	10	mg/kg		<10	<10	<10	<10	**----**
Zinc	7440-66-6	5	mg/kg		**110**	**103**	**91**	**96**	**----**
EG035T: Total Recoverable Mercury by FIMS									
Mercury	7439-97-6	0.1	mg/kg		<0.1	<0.1	<0.1	<0.1	**----**
EG048: Hexavalent Chromium (Alkaline Digest)									
Hexavalent Chromium	18540-29-9	1.0	mg/kg		<1.0	<1.0	<1.0	<1.0	**----**
EK026SF: Total CN by Segmented Flow Analyser									
Total Cyanide	57-12-5	5	mg/kg		<5	<5	<5	<5	**----**
EK040T: Fluoride Total									
Fluoride	16984-48-8	100	mg/kg		**220**	**210**	**240**	**200**	**----**
EN60: ASLP Leaching Procedure - Inorganics/PFAS (Plastic Vessel)									
Initial pH	----	0.1	pH Unit		**9.1**	**9.8**	**9.3**	**9.6**	**----**
After HCl pH	----	0.1	pH Unit		**1.2**	**1.2**	**1.2**	**1.3**	**----**
Extraction Fluid pH	----	0.1	pH Unit		**5.0**	**5.0**	**5.0**	**5.0**	**----**
Final pH	----	0.1	pH Unit		**5.0**	**5.2**	**4.9**	**4.9**	**----**
EN60-DI: Bottle Leaching Procedure - Inorganics/PFAS (Plastic Vessel)									
Final pH	----	0.1	pH Unit		**----**	**----**	**----**	**----**	**9.4**
EP066: Polychlorinated Biphenyls (PCB)									
Total Polychlorinated biphenyls	----	0.1	mg/kg		<0.1	<0.1	<0.1	<0.1	**----**

Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

Compound	CAS Number	LOR	Unit	Sample ID	SX_OB_20220327_11_51_SS_Primary_ALS	SX_OB_20220327_16_00_SS_Triplicate_ALS	SX_OB_20220327_16_04_SS_Primary_ALS	SX_OB_20220327_19_56_SS_Primary_ALS	SX_OB_20220326_20_4_SS_Primary_ALS DI
				Sampling date / time	27-Mar-2022 11:51	27-Mar-2022 16:00	27-Mar-2022 16:04	27-Mar-2022 19:56	26-Mar-2022 08:04
					EM2205473-006	EM2205473-007	EM2205473-008	EM2205473-009	EM2205473-010
					Result	Result	Result	Result	Result
EP074A: Monocyclic Aromatic Hydrocarbons									
Benzene	71-43-2	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	----
Toluene	108-88-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	----
Ethylbenzene	100-41-4	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	----
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	----
Styrene	100-42-5	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	----
ortho-Xylene	95-47-6	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	----
^ **Sum of monocyclic aromatic hydrocarbons**	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	----
^ **Total Xylenes**	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	----
EP074H: Naphthalene									
Naphthalene	91-20-3	1	mg/kg		<1	<1	<1	<1	----
EP074I: Volatile Halogenated Compounds									
Vinyl chloride	75-01-4	0.50	mg/kg		<0.50	<0.50	<0.50	<0.50	----
1.1-Dichloroethene	75-35-4	0.50	mg/kg		<0.50	<0.50	<0.50	<0.50	----
Methylene chloride	75-09-2	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	----
trans-1.2-Dichloroethene	156-60-5	0.50	mg/kg		<0.50	<0.50	<0.50	<0.50	----
cis-1.2-Dichloroethene	156-59-2	0.50	mg/kg		<0.50	<0.50	<0.50	<0.50	----
Chloroform	67-66-3	0.50	mg/kg		<0.50	<0.50	<0.50	<0.50	----
1.1.1-Trichloroethane	71-55-6	0.50	mg/kg		<0.50	<0.50	<0.50	<0.50	----
Carbon Tetrachloride	56-23-5	0.50	mg/kg		<0.50	<0.50	<0.50	<0.50	----
1.2-Dichloroethane	107-06-2	0.50	mg/kg		<0.50	<0.50	<0.50	<0.50	----
Trichloroethene	79-01-6	0.50	mg/kg		<0.50	<0.50	<0.50	<0.50	----
1.1.2-Trichloroethane	79-00-5	0.50	mg/kg		<0.50	<0.50	<0.50	<0.50	----
Tetrachloroethene	127-18-4	0.50	mg/kg		<0.50	<0.50	<0.50	<0.50	----
1.1.1.2-Tetrachloroethane	630-20-6	0.50	mg/kg		<0.50	<0.50	<0.50	<0.50	----
1.1.2.2-Tetrachloroethane	79-34-5	0.50	mg/kg		<0.50	<0.50	<0.50	<0.50	----
Hexachlorobutadiene	87-68-3	0.50	mg/kg		<0.50	<0.50	<0.50	<0.50	----
Chlorobenzene	108-90-7	0.50	mg/kg		<0.50	<0.50	<0.50	<0.50	----
1.4-Dichlorobenzene	106-46-7	0.50	mg/kg		<0.50	<0.50	<0.50	<0.50	----
1.2-Dichlorobenzene	95-50-1	0.50	mg/kg		<0.50	<0.50	<0.50	<0.50	----
1.2.4-Trichlorobenzene	120-82-1	0.50	mg/kg		<0.50	<0.50	<0.50	<0.50	----
^ **Sum of volatile chlorinated hydrocarbons**	----	0.50	mg/kg		<0.50	<0.50	<0.50	<0.50	----
^ **Sum of other chlorinated hydrocarbons**	----	0.50	mg/kg		<0.50	<0.50	<0.50	<0.50	----

Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

Compound	CAS Number	LOR	Unit	Sample ID	SX_OB_20220327_11_51_SS_Primary_ALS	SX_OB_20220327_16_00_SS_Triplicate_ALS	SX_OB_20220327_16_04_SS_Primary_ALS	SX_OB_20220327_19_56_SS_Primary_ALS	SX_OB_20220326_20_4_SS_Primary_ALS DI
				Sampling date / time	27-Mar-2022 11:51	27-Mar-2022 16:00	27-Mar-2022 16:04	27-Mar-2022 19:56	26-Mar-2022 08:04
					EM2205473-006	EM2205473-007	EM2205473-008	EM2205473-009	EM2205473-010
					Result	Result	Result	Result	Result
EP075A: Phenolic Compounds (Halogenated)									
2-Chlorophenol	95-57-8	0.50	mg/kg		<0.50	<0.50	<0.50	<0.50	----
2.4-Dichlorophenol	120-83-2	0.50	mg/kg		<0.50	<0.50	<0.50	<0.50	----
2.6-Dichlorophenol	87-65-0	0.50	mg/kg		<0.50	<0.50	<0.50	<0.50	----
4-Chloro-3-methylphenol	59-50-7	1.00	mg/kg		<1.00	<1.00	<1.00	<1.00	----
2.4.5-Trichlorophenol	95-95-4	1.00	mg/kg		<1.00	<1.00	<1.00	<1.00	----
2.4.6-Trichlorophenol	88-06-2	1.00	mg/kg		<1.00	<1.00	<1.00	<1.00	----
2.3.5.6-Tetrachlorophenol	935-95-5	0.03	mg/kg		<0.03	<0.03	<0.03	<0.03	----
2.3.4.5 & 2.3.4.6-Tetrachlorophenol	4901-51-3/58-90-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	----
Pentachlorophenol	87-86-5	1.0	mg/kg		<1.0	<1.0	<1.0	<1.0	----
^ **Sum of Phenols (halogenated)**	----	1.00	mg/kg		<1.00	<1.00	<1.00	<1.00	----
EP075A: Phenolic Compounds (Non-halogenated)									
Phenol	108-95-2	1	mg/kg		<1	<1	<1	<1	----
2-Methylphenol	95-48-7	1	mg/kg		<1	<1	<1	<1	----
3- & 4-Methylphenol	1319-77-3	1	mg/kg		<1	<1	<1	<1	----
2-Nitrophenol	88-75-5	1	mg/kg		<1	<1	<1	<1	----
2.4-Dimethylphenol	105-67-9	1	mg/kg		<1	<1	<1	<1	----
2.4-Dinitrophenol	51-28-5	5	mg/kg		<5	<5	<5	<5	----
4-Nitrophenol	100-02-7	5	mg/kg		<5	<5	<5	<5	----
2-Methyl-4.6-dinitrophenol	8071-51-0	5	mg/kg		<5	<5	<5	<5	----
Dinoseb	88-85-7	20	mg/kg		<20	<20	<20	<20	----
2-Cyclohexyl-4.6-Dinitrophenol	131-89-5	20	mg/kg		<20	<20	<20	<20	----
^ **Sum of Phenols (non-halogenated)**	----	20	mg/kg		<20	<20	<20	<20	----
EP075B: Polynuclear Aromatic Hydrocarbons									
Naphthalene	91-20-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	----
Acenaphthene	83-32-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	----
Acenaphthylene	208-96-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	----
Fluorene	86-73-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	----
Phenanthrene	85-01-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	----
Anthracene	120-12-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	----
Fluoranthene	206-44-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	----
Pyrene	129-00-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	----
Benz(a)anthracene	56-55-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	----

Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

Compound	CAS Number	LOR	Unit	Sample ID	SX_OB_20220327_11_51_SS_Primary_ALS	SX_OB_20220327_16_00_SS_Triplicate_ALS	SX_OB_20220327_16_04_SS_Primary_ALS	SX_OB_20220327_19_56_SS_Primary_ALS	SX_OB_20220326_20_4_SS_Primary_ALS DI
				Sampling date / time	27-Mar-2022 11:51	27-Mar-2022 16:00	27-Mar-2022 16:04	27-Mar-2022 19:56	26-Mar-2022 08:04
					EM2205473-006	EM2205473-007	EM2205473-008	EM2205473-009	EM2205473-010
					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	----
Benzo(b+j) & Benzo(k)fluoranthene	205-99-2 207-08-9	1.0	mg/kg		<1.0	<1.0	<1.0	<1.0	----
Benzo(a)pyrene	50-32-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	----
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	----
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	----
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	----
^ **Sum of polycyclic aromatic hydrocarbons**	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	----
^ **Benzo(a)pyrene TEQ (zero)**	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	----
^ **Benzo(a)pyrene TEQ (half LOR)**	----	0.5	mg/kg		**0.6**	**0.6**	**0.6**	**0.6**	----
^ **Benzo(a)pyrene TEQ (LOR)**	----	0.5	mg/kg		**1.2**	**1.2**	**1.2**	**1.2**	----
EP075I: Organochlorine Pesticides									
alpha-BHC	319-84-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	----
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	----
beta-BHC	319-85-7	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	----
gamma-BHC	58-89-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	----
delta-BHC	319-86-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	----
Heptachlor	76-44-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	----
Aldrin	309-00-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	----
Heptachlor epoxide	1024-57-3	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	----
cis-Chlordane	5103-71-9	0.03	mg/kg		<0.03	<0.03	<0.03	<0.03	----
trans-Chlordane	5103-74-2	0.03	mg/kg		<0.03	<0.03	<0.03	<0.03	----
Endosulfan 1	959-98-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	----
4.4`-DDE	72-55-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	----
Dieldrin	60-57-1	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	----
Endrin aldehyde	7421-93-4	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	----
Endrin	72-20-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	----
Endosulfan 2	33213-65-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	----
4.4`-DDD	72-54-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	----
Endosulfan sulfate	1031-07-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	----
4.4`-DDT	50-29-3	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	----
Methoxychlor	72-43-5	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	----
^ **Sum of organochlorine pesticides**	----	0.10	mg/kg		<0.10	<0.10	<0.10	<0.10	----

Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

Compound	CAS Number	LOR	Unit	Sample ID	SX_OB_20220327_11_51_SS_Primary_ALS	SX_OB_20220327_16_00_SS_Triplicate_ALS	SX_OB_20220327_16_04_SS_Primary_ALS	SX_OB_20220327_19_56_SS_Primary_ALS	SX_OB_20220326_20_4_SS_Primary_ALS DI
				Sampling date / time	27-Mar-2022 11:51	27-Mar-2022 16:00	27-Mar-2022 16:04	27-Mar-2022 19:56	26-Mar-2022 08:04
					EM2205473-006	EM2205473-007	EM2205473-008	EM2205473-009	EM2205473-010
					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	----
^ **Sum of DDD + DDE + DDT**	72-54-8/72-55-9/50-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	----
^ **Chlordane**	57-74-9	0.10	mg/kg		<0.10	<0.10	<0.10	<0.10	----
^ **Sum of other organochlorine pesticides**	----	0.03	mg/kg		<0.03	<0.03	<0.03	<0.03	----
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	----	20	mg/kg		<20	<20	<20	<20	----
C10 - C14 Fraction	----	50	mg/kg		<50	**70**	<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	**70**	<50	<50	----
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
>C10 - C16 Fraction	----	50	mg/kg		<50	**80**	<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	**80**	<50	<50	----
>C10 - C16 Fraction minus Naphthalene (F2)	----	50	mg/kg		<50	**80**	<50	<50	----
C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	20	mg/kg		<20	<20	<20	<20	----
EP231A: Perfluoroalkyl Sulfonic Acids									
Perfluorobutane sulfonic acid (PFBS)	375-73-5	5.0	µg/kg		<5.0	<5.0	<5.0	<5.0	----
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	5.0	µg/kg		<5.0	<5.0	<5.0	<5.0	----
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	5.0	µg/kg		<5.0	<5.0	<5.0	<5.0	----
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	5.0	µg/kg		<5.0	<5.0	<5.0	<5.0	----
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	5.0	µg/kg		<5.0	<5.0	<5.0	<5.0	----
Perfluorodecane sulfonic acid (PFDS)	335-77-3	5.0	µg/kg		<5.0	<5.0	<5.0	<5.0	----

Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

Compound	CAS Number	LOR	Unit	Sample ID	SX_OB_20220327_11_51_SS_Primary_ALS	SX_OB_20220327_16_00_SS_Triplicate_ALS	SX_OB_20220327_16_04_SS_Primary_ALS	SX_OB_20220327_19_56_SS_Primary_ALS	SX_OB_20220326_20_4_SS_Primary_ALS DI
				Sampling date / time	27-Mar-2022 11:51	27-Mar-2022 16:00	27-Mar-2022 16:04	27-Mar-2022 19:56	26-Mar-2022 08:04
					EM2205473-006	EM2205473-007	EM2205473-008	EM2205473-009	EM2205473-010
					Result	Result	Result	Result	Result
EP231B: Perfluoroalkyl Carboxylic Acids									
Perfluorobutanoic acid (PFBA)	375-22-4	5	µg/kg		<5	<5	<5	<5	----
Perfluoropentanoic acid (PFPeA)	2706-90-3	5.0	µg/kg		<5.0	<5.0	<5.0	<5.0	----
Perfluorohexanoic acid (PFHxA)	307-24-4	5.0	µg/kg		<5.0	<5.0	<5.0	<5.0	----
Perfluoroheptanoic acid (PFHpA)	375-85-9	5.0	µg/kg		<5.0	<5.0	<5.0	<5.0	----
Perfluorooctanoic acid (PFOA)	335-67-1	5.0	µg/kg		<5.0	<5.0	<5.0	<5.0	----
Perfluorononanoic acid (PFNA)	375-95-1	5.0	µg/kg		<5.0	<5.0	<5.0	<5.0	----
Perfluorodecanoic acid (PFDA)	335-76-2	5.0	µg/kg		<5.0	<5.0	<5.0	<5.0	----
Perfluoroundecanoic acid (PFUnDA)	2058-94-8	5.0	µg/kg		<5.0	<5.0	<5.0	<5.0	----
Perfluorododecanoic acid (PFDoDA)	307-55-1	5.0	µg/kg		<5.0	<5.0	<5.0	<5.0	----
Perfluorotridecanoic acid (PFTrDA)	72629-94-8	5.0	µg/kg		<5.0	<5.0	<5.0	<5.0	----
Perfluorotetradecanoic acid (PFTeDA)	376-06-7	5.0	µg/kg		<5.0	<5.0	<5.0	<5.0	----
EP231C: Perfluoroalkyl Sulfonamides									
Perfluorooctane sulfonamide (FOSA)	754-91-6	5.0	µg/kg		<5.0	<5.0	<5.0	<5.0	----
N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	5.0	µg/kg		<5.0	<5.0	<5.0	<5.0	----
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	5.0	µg/kg		<5.0	<5.0	<5.0	<5.0	----
N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	5.0	µg/kg		<5.0	<5.0	<5.0	<5.0	----
N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	5.0	µg/kg		<5.0	<5.0	<5.0	<5.0	----
N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	10.0	µg/kg		<10.0	<10.0	<10.0	<10.0	----
N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	10.0	µg/kg		<10.0	<10.0	<10.0	<10.0	----
EP231D: (n:2) Fluorotelomer Sulfonic Acids									

Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

Compound	CAS Number	LOR	Unit	Sample ID	SX_OB_20220327_11_51_SS_Primary_ALS	SX_OB_20220327_16_00_SS_Triplicate_ALS	SX_OB_20220327_16_04_SS_Primary_ALS	SX_OB_20220327_19_56_SS_Primary_ALS	SX_OB_20220326_20_4_SS_Primary_ALS DI
				Sampling date / time	27-Mar-2022 11:51	27-Mar-2022 16:00	27-Mar-2022 16:04	27-Mar-2022 19:56	26-Mar-2022 08:04
					EM2205473-006	EM2205473-007	EM2205473-008	EM2205473-009	EM2205473-010
					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	----
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	10.0	µg/kg		<10.0	<10.0	<10.0	<10.0	----
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	5.0	µg/kg		<5.0	<5.0	<5.0	<5.0	----
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	5.0	µg/kg		<5.0	<5.0	<5.0	<5.0	----
EP231P: PFAS Sums									
Sum of PFAS	----	50.0	µg/kg		<50.0	<50.0	<50.0	<50.0	----
Sum of PFHxS and PFOS	355-46-4/1763-23-1	5.0	µg/kg		<5.0	<5.0	<5.0	<5.0	----
Sum of PFAS (WA DER List)	----	10.0	µg/kg		<10.0	<10.0	<10.0	<10.0	----
EP066S: PCB Surrogate									
Decachlorobiphenyl	2051-24-3	0.1	%		**102**	**89.7**	**111**	**102**	----
EP074S: VOC Surrogates (Ultra-Trace)									
1.2-Dichloroethane-D4	17060-07-0	0.1	%		**82.5**	**86.0**	**90.0**	**89.8**	----
Toluene-D8	2037-26-5	0.1	%		**80.3**	**87.5**	**88.4**	**89.2**	----
4-Bromofluorobenzene	460-00-4	0.1	%		**93.2**	**98.5**	**98.9**	**99.4**	----
EP075S: Acid Extractable Surrogates (Waste Classification)									
Phenol-d6	13127-88-3	0.025	%		**75.4**	**70.0**	**78.8**	**75.0**	----
2-Chlorophenol-D4	93951-73-6	0.025	%		**75.9**	**71.7**	**75.3**	**81.1**	----
2.4.6-Tribromophenol	118-79-6	0.025	%		**74.4**	**65.5**	**81.1**	**59.2**	----
EP075T: Base/Neutral Extractable Surrogates (Waste Classification)									
Nitrobenzene-D5	4165-60-0	0.025	%		**72.9**	**76.7**	**75.2**	**76.9**	----
1.2-Dichlorobenzene-D4	2199-69-1	0.025	%		**72.8**	**72.0**	**72.8**	**73.4**	----
2-Fluorobiphenyl	321-60-8	0.025	%		**78.0**	**74.0**	**79.4**	**80.3**	----
Anthracene-d10	1719-06-8	0.025	%		**82.4**	**71.3**	**84.4**	**85.3**	----
4-Terphenyl-d14	1718-51-0	0.025	%		**72.8**	**64.4**	**75.4**	**75.2**	----
EP231S: PFAS Surrogate									
13C4-PFOS	----	0.0002	%		**99.9**	**103**	**106**	**98.2**	----
13C8-PFOA	----	0.0002	%		**99.4**	**97.4**	**100**	**101**	----

Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

Compound	CAS Number	LOR	Unit	Sample ID	SX_OB_20220327_00_08_SS_Primary_ALS DI	SX_OB_20220327_03_55_SS_Primary_ALS DI	SX_OB_20220327_07_55_SS_Primary_ALS DI	SX_OB_20220327_07_58_SS_Duplicate_ALS DI	SX_OB_20220327_11_51_SS_Primary_ALS DI
				Sampling date / time	27-Mar-2022 00:08	27-Mar-2022 03:55	27-Mar-2022 07:55	27-Mar-2022 07:58	27-Mar-2022 11:51
					EM2205473-011	**EM2205473-012**	**EM2205473-013**	**EM2205473-014**	**EM2205473-015**
					Result	Result	Result	Result	Result
EN60-DI: Bottle Leaching Procedure - Inorganics/PFAS (Plastic Vessel)									
Final pH	----	0.1	pH Unit		**9.5**	**9.6**	**9.6**	**9.4**	**9.6**

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	SX_OB_20220327_16_00_SS_Triplicate_ALS DI	SX_OB_20220327_16_04_SS_Primary_ALS DI	SX_OB_20220327_19_56_SS_Primary_ALS DI	----	----
			Sampling date / time	27-Mar-2022 16:00	27-Mar-2022 16:04	27-Mar-2022 19:56	----	----
Compound	CAS Number	LOR	Unit	EM2205473-016	EM2205473-017	EM2205473-018	--------	--------
				Result	Result	Result	----	----
EN60-DI: Bottle Leaching Procedure - Inorganics/PFAS (Plastic Vessel)								
Final pH	----	0.1	pH Unit	**10.5**	**9.9**	**10.0**	**----**	**----**

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

QUALITY CONTROL REPORT

Work Order	: **EM2205473**	Page	: 1 of 27
Client	: **AGON ENVIRONMENTAL PTY LTD**	Laboratory	: Environmental Division Melbourne
Contact	: Craig Trimbur	Contact	: Bronwyn Sheen
Address	: D1.1 63-85 TURNER STREET PORT MELBOURNE 3207	Address	: 4 Westall Rd Springvale VIC Australia 3171
Telephone	: ----	Telephone	: +6138549 9600
Project	: JC0927	Date Samples Received	: 28-Mar-2022
Order number	: -	Date Analysis Commenced	: 31-Mar-2022
C-O-C number	: 20220328060408-ALS-8	Issue Date	: 04-Apr-2022
Sampler	: LR - EP RISK & WOH - Agon		
Site	: ----		
Quote number	: EN/150/19 -WGTP -Bulk Sample Quote		
No. of samples received	: 18		
No. of samples analysed	: 18		

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

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

This Quality Control Report contains the following information:

- Laboratory Duplicate (DUP) Report; Relative Percentage Difference (RPD) and Acceptance Limits
- Method Blank (MB) and Laboratory Control Spike (LCS) Report; Recovery and Acceptance Limits
- Matrix Spike (MS) Report; Recovery and Acceptance Limits

Signatories

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

Signatories	*Position*	*Accreditation Category*
Dilani Fernando	Laboratory Coordinator	Melbourne Inorganics, Springvale, VIC
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: 4260554)									
EM2205462-001	Anonymous	EG005T: Cadmium	7440-43-9	1	mg/kg	<1	<1	0.0	No Limit
		EG005T: Chromium	7440-47-3	2	mg/kg	102	106	3.7	0% - 20%
		EG005T: Molybdenum	7439-98-7	2	mg/kg	<2	<2	0.0	No Limit
		EG005T: Nickel	7440-02-0	2	mg/kg	175	158	10.3	0% - 20%
		EG005T: Silver	7440-22-4	2	mg/kg	<2	<2	0.0	No Limit
		EG005T: Arsenic	7440-38-2	5	mg/kg	30	42	33.7	No Limit
		EG005T: Copper	7440-50-8	5	mg/kg	54	52	2.3	0% - 50%
		EG005T: Lead	7439-92-1	5	mg/kg	<5	<5	0.0	No Limit
		EG005T: Selenium	7782-49-2	5	mg/kg	<5	<5	0.0	No Limit
		EG005T: Tin	7440-31-5	5	mg/kg	<5	<5	0.0	No Limit
		EG005T: Zinc	7440-66-6	5	mg/kg	101	84	18.1	0% - 20%
EM2205473-006	SX_OB_20220327_11_51_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	104	107	2.8	0% - 20%
		EG005T: Molybdenum	7439-98-7	2	mg/kg	<5	<5	0.0	No Limit
		EG005T: Nickel	7440-02-0	2	mg/kg	169	158	6.7	0% - 20%
		EG005T: Silver	7440-22-4	2	mg/kg	<2	<2	0.0	No Limit
		EG005T: Arsenic	7440-38-2	5	mg/kg	24	29	20.0	No Limit
		EG005T: Copper	7440-50-8	5	mg/kg	68	57	17.7	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	110	106	3.6	0% - 20%
EA001: pH in soil using 0.01M CaCl extract (QC Lot: 4260574)									

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: 4260574) - continued									
EM2205462-001	Anonymous	EA001: pH (CaCl2)	----	0.1	pH Unit	7.6	7.6	0.0	0% - 20%
EM2205473-006	SX_OB_20220327_11_51_SS_Primary_ALS	EA001: pH (CaCl2)	----	0.1	pH Unit	7.6	7.6	0.0	0% - 20%
EA055: Moisture Content (Dried @ 105-110°C) (QC Lot: 4259844)									
EM2205462-001	Anonymous	EA055: Moisture Content	----	0.1	%	27.4	28.9	5.3	0% - 20%
EM2205473-007	SX_OB_20220327_16_00_SS_Triplicate_ALS	EA055: Moisture Content	----	0.1	%	39.3	38.2	3.0	0% - 20%
EG035T: Total Recoverable Mercury by FIMS (QC Lot: 4260555)									
EM2205462-001	Anonymous	EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	0.0	No Limit
EM2205473-006	SX_OB_20220327_11_51_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: 4260576)									
EM2205462-001	Anonymous	EG048G: Hexavalent Chromium	18540-29-9	0.5	mg/kg	0.9	0.7	20.8	No Limit
EM2205473-006	SX_OB_20220327_11_51_SS_Primary_ALS	EG048G: Hexavalent Chromium	18540-29-9	0.5	mg/kg	<1.0	<1.0	0.0	No Limit
EK026SF: Total CN by Segmented Flow Analyser (QC Lot: 4263014)									
EM2205462-001	Anonymous	EK026SF: Total Cyanide	57-12-5	1	mg/kg	<1	<1	0.0	No Limit
EM2205473-006	SX_OB_20220327_11_51_SS_Primary_ALS	EK026SF: Total Cyanide	57-12-5	1	mg/kg	<5	<5	0.0	No Limit
EK040T: Fluoride Total (QC Lot: 4260551)									
EM2205462-001	Anonymous	EK040T: Fluoride	16984-48-8	40	mg/kg	130	160	22.5	No Limit
EM2205473-006	SX_OB_20220327_11_51_SS_Primary_ALS	EK040T: Fluoride	16984-48-8	40	mg/kg	220	170	25.1	No Limit
EP066: Polychlorinated Biphenyls (PCB) (QC Lot: 4259617)									
EM2205462-001	Anonymous	EP066-EM: Total Polychlorinated biphenyls	----	0.1	mg/kg	<0.1	<0.1	0.0	No Limit
EM2205473-007	SX_OB_20220327_16_00_SS_Triplicate_ALS	EP066-EM: Total Polychlorinated biphenyls	----	0.1	mg/kg	<0.1	<0.1	0.0	No Limit
EP074A: Monocyclic Aromatic Hydrocarbons (QC Lot: 4259603)									
EM2205473-001	SX_OB_20220326_20_4_SS_Primary_ALS	EP074-UT: Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	0.0	No Limit
		EP074-UT: Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074-UT: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074-UT: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074-UT: Styrene	100-42-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074-UT: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
EP074H: Naphthalene (QC Lot: 4259603)									
EM2205473-001	SX_OB_20220326_20_4_SS_Primary_ALS	EP074-UT: Naphthalene	91-20-3	1	mg/kg	<1	<1	0.0	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Acceptable RPD (%)*
EP074I: Volatile Halogenated Compounds (QC Lot: 4259603)									
EM2205473-001	SX_OB_20220326_20_4_SS_Primary_ALS	EP074-UT: 1.1-Dichloroethene	75-35-4	0.01	mg/kg	<0.50	<0.50	0.0	No Limit
		EP074-UT: cis-1.2-Dichloroethene	156-59-2	0.01	mg/kg	<0.50	<0.50	0.0	No Limit
		EP074-UT: 1.1.1-Trichloroethane	71-55-6	0.01	mg/kg	<0.50	<0.50	0.0	No Limit
		EP074-UT: Carbon Tetrachloride	56-23-5	0.01	mg/kg	<0.50	<0.50	0.0	No Limit
		EP074-UT: 1.1.1.2-Tetrachloroethane	630-20-6	0.01	mg/kg	<0.50	<0.50	0.0	No Limit
		EP074-UT: 1.2.4-Trichlorobenzene	120-82-1	0.01	mg/kg	<0.50	<0.50	0.0	No Limit
		EP074-UT: Vinyl chloride	75-01-4	0.02	mg/kg	<0.50	<0.50	0.0	No Limit
		EP074-UT: trans-1.2-Dichloroethene	156-60-5	0.02	mg/kg	<0.50	<0.50	0.0	No Limit
		EP074-UT: Chloroform	67-66-3	0.02	mg/kg	<0.50	<0.50	0.0	No Limit
		EP074-UT: 1.2-Dichloroethane	107-06-2	0.02	mg/kg	<0.50	<0.50	0.0	No Limit
		EP074-UT: Trichloroethene	79-01-6	0.02	mg/kg	<0.50	<0.50	0.0	No Limit
		EP074-UT: Tetrachloroethene	127-18-4	0.02	mg/kg	<0.50	<0.50	0.0	No Limit
		EP074-UT: 1.1.2.2-Tetrachloroethane	79-34-5	0.02	mg/kg	<0.50	<0.50	0.0	No Limit
		EP074-UT: Hexachlorobutadiene	87-68-3	0.02	mg/kg	<0.50	<0.50	0.0	No Limit
		EP074-UT: Chlorobenzene	108-90-7	0.02	mg/kg	<0.50	<0.50	0.0	No Limit
		EP074-UT: 1.4-Dichlorobenzene	106-46-7	0.02	mg/kg	<0.50	<0.50	0.0	No Limit
		EP074-UT: 1.2-Dichlorobenzene	95-50-1	0.02	mg/kg	<0.50	<0.50	0.0	No Limit
		EP074-UT: 1.1.2-Trichloroethane	79-00-5	0.04	mg/kg	<0.50	<0.50	0.0	No Limit
		EP074-UT: Methylene chloride	75-09-2	0.4	mg/kg	<0.5	<0.5	0.0	No Limit
EP075A: Phenolic Compounds (Halogenated) (QC Lot: 4259615)									
EM2205462-001	Anonymous	EP075-EM: 2-Chlorophenol	95-57-8	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: 2.4-Dichlorophenol	120-83-2	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: 2.6-Dichlorophenol	87-65-0	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: 4-Chloro-3-methylphenol	59-50-7	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: 2.3.5.6-Tetrachlorophenol	935-95-5	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: 2.4.5-Trichlorophenol	95-95-4	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: 2.4.6-Trichlorophenol	88-06-2	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: 2.3.4.5 & 2.3.4.6-Tetrachlorophenol	4901-51-3/58-90-2	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: Pentachlorophenol	87-86-5	0.2	mg/kg	<0.2	<0.2	0.0	No Limit
EM2205473-007	SX_OB_20220327_16_00_SS_Triplicate_ALS	EP075-EM: 2-Chlorophenol	95-57-8	0.03	mg/kg	<0.50	<0.50	0.0	No Limit
		EP075-EM: 2.4-Dichlorophenol	120-83-2	0.03	mg/kg	<0.50	<0.50	0.0	No Limit
		EP075-EM: 2.6-Dichlorophenol	87-65-0	0.03	mg/kg	<0.50	<0.50	0.0	No Limit
		EP075-EM: 4-Chloro-3-methylphenol	59-50-7	0.03	mg/kg	<1.00	<1.00	0.0	No Limit
		EP075-EM: 2.3.5.6-Tetrachlorophenol	935-95-5	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: 2.4.5-Trichlorophenol	95-95-4	0.05	mg/kg	<1.00	<1.00	0.0	No Limit
		EP075-EM: 2.4.6-Trichlorophenol	88-06-2	0.05	mg/kg	<1.00	<1.00	0.0	No Limit

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: 4259615) - continued									
EM2205473-007	SX_OB_20220327_16_00_SS_Triplicate_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: 4259615)									
EM2205462-001	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
EM2205473-007	SX_OB_20220327_16_00_SS_Triplicate_ALS	EP075-EM: Phenol	108-95-2	1	mg/kg	<1	<1	0.0	No Limit
		EP075-EM: 2-Methylphenol	95-48-7	1	mg/kg	<1	<1	0.0	No Limit
		EP075-EM: 3- & 4-Methylphenol	1319-77-3	1	mg/kg	<1	<1	0.0	No Limit
		EP075-EM: 2-Nitrophenol	88-75-5	1	mg/kg	<1	<1	0.0	No Limit
		EP075-EM: 2.4-Dimethylphenol	105-67-9	1	mg/kg	<1	<1	0.0	No Limit
		EP075-EM: 2.4-Dinitrophenol	51-28-5	5	mg/kg	<5	<5	0.0	No Limit
		EP075-EM: 4-Nitrophenol	100-02-7	5	mg/kg	<5	<5	0.0	No Limit
		EP075-EM: 2-Methyl-4.6-dinitrophenol	8071-51-0	5	mg/kg	<5	<5	0.0	No Limit
		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: 4259615)									
EM2205462-001	Anonymous	EP075-EM: Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Phenanthrene	85-01-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Fluoranthene	206-44-0	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		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

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: 4259615) - continued									
EM2205462-001	Anonymous	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
EM2205473-007	SX_OB_20220327_16_00_SS_Triplicate_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: 4259615)									
EM2205462-001	Anonymous	EP075-EM: alpha-BHC	319-84-6	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Hexachlorobenzene (HCB)	118-74-1	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: beta-BHC	319-85-7	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: gamma-BHC	58-89-9	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: delta-BHC	319-86-8	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Heptachlor	76-44-8	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Aldrin	309-00-2	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Heptachlor epoxide	1024-57-3	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: cis-Chlordane	5103-71-9	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: trans-Chlordane	5103-74-2	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Endosulfan 1	959-98-8	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Dieldrin	60-57-1	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Endrin aldehyde	7421-93-4	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Endrin	72-20-8	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Endosulfan 2	33213-65-9	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Endosulfan sulfate	1031-07-8	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Methoxychlor	72-43-5	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		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

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: 4259615) - continued									
EM2205473-007	SX_OB_20220327_16_00_SS_Triplicate_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: 4259603)									
EM2205473-001	SX_OB_20220326_20_4_SS_Primary_ALS	EP074-UT: C6 - C9 Fraction	----	10	mg/kg	<20	<20	0.0	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 4259616)									
EM2205462-001	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
EM2205473-007	SX_OB_20220327_16_00_SS_Triplicate_ALS	EP071-EM: C15 - C28 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071-EM: C29 - C36 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071-EM: C10 - C14 Fraction	----	50	mg/kg	70	110	47.0	No Limit
		EP071-EM: C10 - C36 Fraction (sum)	----	50	mg/kg	70	110	44.4	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 4259603)									
EM2205473-001	SX_OB_20220326_20_4_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: 4259616)									
EM2205462-001	Anonymous	EP071-EM: >C16 - C34 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 Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 4259616) - continued									
EM2205462-001	Anonymous	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
EM2205473-007	SX_OB_20220327_16_00_ SS_Triplicate_ALS	EP071-EM: >C16 - C34 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071-EM: >C34 - C40 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071-EM: >C10 - C16 Fraction	----	50	mg/kg	80	140	46.5	No Limit
		EP071-EM: >C10 - C40 Fraction (sum)	----	50	mg/kg	80	140	54.5	No Limit
EP231A: Perfluoroalkyl Sulfonic Acids (QC Lot: 4261749)									
EM2205462-001	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
EM2205473-007	SX_OB_20220327_16_00_ SS_Triplicate_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: 4261749)									
EM2205462-001	Anonymous	EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.001	mg/kg	<0.001	<0.001	0.0	No Limit
EM2205473-007	SX_OB_20220327_16_00_ SS_Triplicate_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

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: 4261749) - continued									
EM2205473-007	SX_OB_20220327_16_00_SS_Triplicate_ALS	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: 4261749)									
EM2205462-001	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
EM2205473-007	SX_OB_20220327_16_00_SS_Triplicate_ALS	EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.0002	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.0002	mg/kg	<10.0 µg/kg	<0.0100	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.0002	mg/kg	<10.0 µg/kg	<0.0100	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.0005	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.0005	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.0005	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.0005	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QC Lot: 4261749)									
EM2205462-001	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

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Acceptable RPD (%)
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QC Lot: 4261749) - continued									
EM2205462-001	Anonymous	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
EM2205473-007	SX_OB_20220327_16_00_SS_Triplicate_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: 4261749)									
EM2205462-001	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
EM2205473-007	SX_OB_20220327_16_00_SS_Triplicate_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: 4263003)									
EM2205462-001	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
EM2205473-006	SX_OB_20220327_11_51_SS_Primary_ALS	EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L	<0.02	<0.02	0.0	No Limit
EP231A: Perfluoroalkyl Sulfonic Acids (QC Lot: 4263006)									
EM2205398-006	Anonymous	EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	<0.01	<0.01	0.0	No Limit

Sub-Matrix: **WATER**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Acceptable RPD (%)*
EP231A: Perfluoroalkyl Sulfonic Acids (QC Lot: 4263006) - continued									
EM2205398-006	Anonymous	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
EM2205473-010	SX_OB_20220326_20_4_SS_Primary_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: 4263003)									
EM2205462-001	Anonymous	EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L	<0.1	<0.1	0.0	No Limit
EM2205473-006	SX_OB_20220327_11_51_SS_Primary_ALS	EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L	<0.1	<0.1	0.0	No Limit
EP231B: Perfluoroalkyl Carboxylic Acids (QC Lot: 4263006)									
EM2205398-006	Anonymous	EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	<0.02	<0.02	0.0	No Limit

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: 4263006) - continued									
EM2205398-006	Anonymous	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
EM2205473-010	SX_OB_20220326_20_4_SS_Primary_ALS DI	EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L	<0.1	<0.1	0.0	No Limit
EP231C: Perfluoroalkyl Sulfonamides (QC Lot: 4263003)									
EM2205462-001	Anonymous	EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L	<0.05	<0.05	0.0	No Limit
EM2205473-006	SX_OB_20220327_11_51_SS_Primary_ALS	EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.02	µg/L	<0.02	<0.02	0.0	No Limit

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: 4263003) - continued									
EM2205473-006	SX_OB_20220327_11_51_SS_Primary_ALS	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: 4263006)									
EM2205398-006	Anonymous	EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L	<0.05	<0.05	0.0	No Limit
EM2205473-010	SX_OB_20220326_20_4_SS_Primary_ALS DI	EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.02	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.02	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L	<0.05	<0.05	0.0	No Limit
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QC Lot: 4263003)									
EM2205462-001	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

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: 4263003) - continued									
EM2205462-001	Anonymous	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
EM2205473-006	SX_OB_20220327_11_51_SS_Primary_ALS	EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.05	µg/L	<0.05	<0.05	0.0	No Limit
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QC Lot: 4263006)									
EM2205398-006	Anonymous	EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.05	µg/L	<0.05	<0.05	0.0	No Limit
EM2205473-010	SX_OB_20220326_20_4_SS_Primary_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: 4263003)									
EM2205462-001	Anonymous	EP231X: Sum of PFAS	----	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Sum of PFAS (WA DER List)	----	0.01	µg/L	<0.01	<0.01	0.0	No Limit
EM2205473-006	SX_OB_20220327_11_51_SS_Primary_ALS	EP231X: Sum of PFAS	----	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Sum of PFAS (WA DER List)	----	0.01	µg/L	<0.01	<0.01	0.0	No Limit
EP231P: PFAS Sums (QC Lot: 4263006)									
EM2205398-006	Anonymous	EP231X: Sum of PFAS	----	0.01	µg/L	<0.01	<0.01	0.0	No Limit

Sub-Matrix: **WATER**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Acceptable RPD (%)*
EP231P: PFAS Sums (QC Lot: 4263006) - continued									
EM2205398-006	Anonymous	EP231X: Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Sum of PFAS (WA DER List)	----	0.01	µg/L	<0.01	<0.01	0.0	No Limit
EM2205473-010	SX_OB_20220326_20_4_SS_Primary_ALS DI	EP231X: Sum of PFAS	----	0.01	µg/L	<0.10	<0.10	0.0	No Limit
		EP231X: Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Sum of PFAS (WA DER List)	----	0.01	µg/L	<0.05	<0.05	0.0	No Limit

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

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

Sub-Matrix: **SOIL**

				Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Acceptable Limits (%)	
Method: Compound	CAS Number	LOR	Unit	Result	Concentration	LCS	Low	High
EG005(ED093)T: Total Metals by ICP-AES (QCLot: 4260554)								
EG005T: Arsenic	7440-38-2	5	mg/kg	<5	123 mg/kg	94.4	70.0	130
EG005T: Cadmium	7440-43-9	1	mg/kg	<1	1.23 mg/kg	62.0	50.0	130
EG005T: Chromium	7440-47-3	2	mg/kg	<2	20.2 mg/kg	106	70.0	130
EG005T: Copper	7440-50-8	5	mg/kg	<5	55.9 mg/kg	90.3	70.0	130
EG005T: Lead	7439-92-1	5	mg/kg	<5	62.4 mg/kg	90.8	70.0	130
EG005T: Molybdenum	7439-98-7	2	mg/kg	<2	2.19 mg/kg	93.2	70.0	130
EG005T: Nickel	7440-02-0	2	mg/kg	<2	15.4 mg/kg	93.7	70.0	130
EG005T: Selenium	7782-49-2	5	mg/kg	<5	----	----	----	----
EG005T: Silver	7440-22-4	2	mg/kg	<2	2.9 mg/kg	73.2	70.0	130
EG005T: Tin	7440-31-5	5	mg/kg	<5	5.33 mg/kg	116	70.0	130
EG005T: Zinc	7440-66-6	5	mg/kg	<5	162 mg/kg	74.1	70.0	130
EN60-DI: Bottle Leaching Procedure - Inorganics/PFAS (Plastic Vessel) (QCLot: 4260851)								
EN60-DIa-P: Final pH	----	0.1	pH Unit	6.9	----	----	----	----
EN60-DI: Bottle Leaching Procedure - Inorganics/PFAS (Plastic Vessel) (QCLot: 4260895)								
EN60-DIa-P: Final pH	----	0.1	pH Unit	6.9	----	----	----	----
EA001: pH in soil using 0.01M CaCl extract (QCLot: 4260574)								
EA001: pH (CaCl2)	----	----	pH Unit	----	4 pH Unit	101	98.8	101
				----	7 pH Unit	100	99.3	101
EG035T: Total Recoverable Mercury by FIMS (QCLot: 4260555)								
EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	0.64 mg/kg	83.6	70.0	130
EG048: Hexavalent Chromium (Alkaline Digest) (QCLot: 4260576)								
EG048G: Hexavalent Chromium	18540-29-9	0.5	mg/kg	<0.5	20 mg/kg	87.4	70.0	130
EK026SF: Total CN by Segmented Flow Analyser (QCLot: 4263014)								
EK026SF: Total Cyanide	57-12-5	1	mg/kg	<1	20 mg/kg	83.2	70.0	130
EK040T: Fluoride Total (QCLot: 4260551)								
EK040T: Fluoride	16984-48-8	40	mg/kg	<40	400 mg/kg	98.5	75.2	110
EP066: Polychlorinated Biphenyls (PCB) (QCLot: 4259617)								
EP066-EM: Total Polychlorinated biphenyls	----	0.1	mg/kg	<0.1	1 mg/kg	120	67.4	136
EP074A: Monocyclic Aromatic Hydrocarbons (QCLot: 4259603)								
EP074-UT: Benzene	71-43-2	0.2	mg/kg	<0.2	2.1 mg/kg	85.1	69.2	116
EP074-UT: Toluene	108-88-3	0.5	mg/kg	<0.5	2.1 mg/kg	82.9	67.7	116
EP074-UT: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	2.1 mg/kg	81.4	66.6	115

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report: Result	Laboratory Control Spike (LCS) Report: Spike Concentration	Spike Recovery (%): LCS	Acceptable Limits (%): Low	Acceptable Limits (%): High
EP074A: Monocyclic Aromatic Hydrocarbons (QCLot: 4259603) - continued								
EP074-UT: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	4.2 mg/kg	80.0	65.2	112
EP074-UT: Styrene	100-42-5	0.5	mg/kg	<0.5	2.1 mg/kg	81.0	69.4	111
EP074-UT: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	2.1 mg/kg	80.5	68.4	110
EP074H: Naphthalene (QCLot: 4259603)								
EP074-UT: Naphthalene	91-20-3	1	mg/kg	<1	0.6 mg/kg	81.3	72.3	114
EP074I: Volatile Halogenated Compounds (QCLot: 4259603)								
EP074-UT: Vinyl chloride	75-01-4	0.02	mg/kg	<0.02	0.1 mg/kg	75.7	47.0	138
EP074-UT: 1.1-Dichloroethene	75-35-4	0.01	mg/kg	<0.01	0.1 mg/kg	82.6	57.6	125
EP074-UT: Methylene chloride	75-09-2	0.4	mg/kg	<0.4	2.1 mg/kg	85.6	72.3	115
EP074-UT: trans-1.2-Dichloroethene	156-60-5	0.02	mg/kg	<0.02	0.1 mg/kg	82.0	60.5	122
EP074-UT: cis-1.2-Dichloroethene	156-59-2	0.01	mg/kg	<0.01	0.1 mg/kg	86.0	70.3	112
EP074-UT: Chloroform	67-66-3	0.02	mg/kg	<0.02	0.1 mg/kg	87.4	66.6	115
EP074-UT: 1.1.1-Trichloroethane	71-55-6	0.01	mg/kg	<0.01	0.1 mg/kg	85.0	64.4	122
EP074-UT: Carbon Tetrachloride	56-23-5	0.01	mg/kg	<0.01	0.1 mg/kg	83.5	58.4	127
EP074-UT: 1.2-Dichloroethane	107-06-2	0.02	mg/kg	<0.02	0.1 mg/kg	92.4	72.9	114
EP074-UT: Trichloroethene	79-01-6	0.02	mg/kg	<0.02	0.1 mg/kg	84.5	64.7	115
EP074-UT: 1.1.2-Trichloroethane	79-00-5	0.04	mg/kg	<0.04	0.1 mg/kg	90.7	72.6	116
EP074-UT: Tetrachloroethene	127-18-4	0.02	mg/kg	<0.02	0.1 mg/kg	81.2	60.0	119
EP074-UT: 1.1.1.2-Tetrachloroethane	630-20-6	0.01	mg/kg	<0.01	0.1 mg/kg	86.6	71.8	116
EP074-UT: 1.1.2.2-Tetrachloroethane	79-34-5	0.02	mg/kg	<0.02	0.1 mg/kg	91.0	66.1	116
EP074-UT: Hexachlorobutadiene	87-68-3	0.02	mg/kg	<0.02	0.1 mg/kg	85.0	39.8	128
EP074-UT: Chlorobenzene	108-90-7	0.02	mg/kg	<0.02	0.1 mg/kg	86.8	70.3	113
EP074-UT: 1.4-Dichlorobenzene	106-46-7	0.02	mg/kg	<0.02	0.1 mg/kg	86.2	62.6	113
EP074-UT: 1.2-Dichlorobenzene	95-50-1	0.02	mg/kg	<0.02	0.1 mg/kg	87.8	70.8	110
EP074-UT: 1.2.4-Trichlorobenzene	120-82-1	0.01	mg/kg	<0.01	0.1 mg/kg	89.8	48.4	120
EP075A: Phenolic Compounds (Halogenated) (QCLot: 4259615)								
EP075-EM: 2-Chlorophenol	95-57-8	0.03	mg/kg	<0.03	2 mg/kg	102	74.5	126
EP075-EM: 2.4-Dichlorophenol	120-83-2	0.03	mg/kg	<0.03	2 mg/kg	91.4	72.7	126
EP075-EM: 2.6-Dichlorophenol	87-65-0	0.03	mg/kg	<0.03	2 mg/kg	91.1	73.5	132
EP075-EM: 4-Chloro-3-methylphenol	59-50-7	0.03	mg/kg	<0.03	2 mg/kg	91.4	72.8	128
EP075-EM: 2.4.5-Trichlorophenol	95-95-4	0.05	mg/kg	<0.05	2 mg/kg	92.4	73.3	134
EP075-EM: 2.4.6-Trichlorophenol	88-06-2	0.05	mg/kg	<0.05	2 mg/kg	90.4	72.4	128
EP075-EM: 2.3.5.6-Tetrachlorophenol	935-95-5	0.03	mg/kg	<0.03	2 mg/kg	90.0	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	93.8	71.9	128
EP075-EM: Pentachlorophenol	87-86-5	0.2	mg/kg	<0.2	4 mg/kg	84.1	54.4	135
EP075A: Phenolic Compounds (Non-halogenated) (QCLot: 4259615)								

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Acceptable Limits (%)	
				Result	Concentration	LCS	Low	High
EP075A: Phenolic Compounds (Non-halogenated) (QCLot: 4259615) - continued								
EP075-EM: Phenol	108-95-2	1	mg/kg	<1	2 mg/kg	105	71.5	130
EP075-EM: 2-Methylphenol	95-48-7	1	mg/kg	<1	2 mg/kg	89.9	73.4	129
EP075-EM: 3- & 4-Methylphenol	1319-77-3	1	mg/kg	<1	4 mg/kg	89.8	74.3	129
EP075-EM: 2-Nitrophenol	88-75-5	1	mg/kg	<1	2 mg/kg	89.3	70.9	133
EP075-EM: 2.4-Dimethylphenol	105-67-9	1	mg/kg	<1	2 mg/kg	91.9	71.8	132
EP075-EM: 2.4-Dinitrophenol	51-28-5	5	mg/kg	<5	10 mg/kg	61.9	41.0	156
EP075-EM: 4-Nitrophenol	100-02-7	5	mg/kg	<5	10 mg/kg	90.8	65.3	134
EP075-EM: 2-Methyl-4.6-dinitrophenol	8071-51-0	5	mg/kg	<5	10 mg/kg	82.9	43.6	128
EP075-EM: Dinoseb	88-85-7	5	mg/kg	<5	10 mg/kg	86.4	62.0	128
EP075-EM: 2-Cyclohexyl-4.6-Dinitrophenol	131-89-5	5	mg/kg	<5	10 mg/kg	73.6	34.5	137
EP075B: Polynuclear Aromatic Hydrocarbons (QCLot: 4259615)								
EP075-EM: Naphthalene	91-20-3	0.5	mg/kg	<0.5	2 mg/kg	94.8	73.0	131
EP075-EM: Acenaphthene	83-32-9	0.5	mg/kg	<0.5	2 mg/kg	95.6	76.3	130
EP075-EM: Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	2 mg/kg	94.7	72.0	135
EP075-EM: Fluorene	86-73-7	0.5	mg/kg	<0.5	2 mg/kg	97.4	74.4	131
EP075-EM: Phenanthrene	85-01-8	0.5	mg/kg	<0.5	2 mg/kg	97.4	73.3	130
EP075-EM: Anthracene	120-12-7	0.5	mg/kg	<0.5	2 mg/kg	96.5	78.4	127
EP075-EM: Fluoranthene	206-44-0	0.5	mg/kg	<0.5	2 mg/kg	95.8	75.3	132
EP075-EM: Pyrene	129-00-0	0.5	mg/kg	<0.5	2 mg/kg	96.9	75.4	130
EP075-EM: Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	2 mg/kg	95.6	69.6	133
EP075-EM: Chrysene	218-01-9	0.5	mg/kg	<0.5	2 mg/kg	100	75.0	133
EP075-EM: Benzo(b+j) & Benzo(k)fluoranthene	205-99-2 207-08-9	1	mg/kg	<1.0	4 mg/kg	100	75.8	133
EP075-EM: Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	2 mg/kg	99.0	65.1	130
EP075-EM: Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	2 mg/kg	100	72.1	134
EP075-EM: Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	2 mg/kg	99.5	72.9	135
EP075-EM: Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	2 mg/kg	101	71.3	134
EP075I: Organochlorine Pesticides (QCLot: 4259615)								
EP075-EM: alpha-BHC	319-84-6	0.03	mg/kg	<0.03	2 mg/kg	95.7	71.0	129
EP075-EM: Hexachlorobenzene (HCB)	118-74-1	0.03	mg/kg	<0.03	2 mg/kg	96.2	74.8	126
EP075-EM: beta-BHC	319-85-7	0.03	mg/kg	<0.03	2 mg/kg	95.8	75.7	130
EP075-EM: gamma-BHC	58-89-9	0.03	mg/kg	<0.03	2 mg/kg	97.6	70.8	130
EP075-EM: delta-BHC	319-86-8	0.03	mg/kg	<0.03	2 mg/kg	97.2	76.5	134
EP075-EM: Heptachlor	76-44-8	0.03	mg/kg	<0.03	2 mg/kg	94.9	75.5	131
EP075-EM: Aldrin	309-00-2	0.03	mg/kg	<0.03	2 mg/kg	94.4	76.8	130
EP075-EM: Heptachlor epoxide	1024-57-3	0.03	mg/kg	<0.03	2 mg/kg	93.6	73.6	130
EP075-EM: cis-Chlordane	5103-71-9	0.03	mg/kg	<0.03	2 mg/kg	93.9	75.0	133
EP075-EM: trans-Chlordane	5103-74-2	0.03	mg/kg	<0.03	2 mg/kg	95.0	75.3	131
EP075-EM: Endosulfan 1	959-98-8	0.03	mg/kg	<0.03	2 mg/kg	96.3	69.4	134

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Acceptable Limits (%)	
				Result	Concentration	LCS	Low	High
EP075I: Organochlorine Pesticides (QCLot: 4259615) - continued								
EP075-EM: 4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	2 mg/kg	97.8	71.0	132
EP075-EM: Dieldrin	60-57-1	0.03	mg/kg	<0.03	2 mg/kg	96.3	78.0	133
EP075-EM: Endrin aldehyde	7421-93-4	0.03	mg/kg	<0.03	2 mg/kg	91.5	69.0	143
EP075-EM: Endrin	72-20-8	0.03	mg/kg	<0.03	2 mg/kg	95.5	55.7	145
EP075-EM: Endosulfan 2	33213-65-9	0.03	mg/kg	<0.03	2 mg/kg	97.2	71.4	135
EP075-EM: 4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	2 mg/kg	95.8	74.8	134
EP075-EM: Endosulfan sulfate	1031-07-8	0.03	mg/kg	<0.03	2 mg/kg	96.6	70.2	135
EP075-EM: 4.4`-DDT	50-29-3	0.05	mg/kg	<0.05	2 mg/kg	94.9	77.7	133
EP075-EM: Methoxychlor	72-43-5	0.03	mg/kg	<0.03	2 mg/kg	96.5	63.6	135
EP080/071: Total Petroleum Hydrocarbons (QCLot: 4259603)								
EP074-UT: C6 - C9 Fraction	----	10	mg/kg	<10	39.6 mg/kg	92.4	61.1	119
EP080/071: Total Petroleum Hydrocarbons (QCLot: 4259616)								
EP071-EM: C10 - C14 Fraction	----	50	mg/kg	<50	760 mg/kg	103	74.4	129
EP071-EM: C15 - C28 Fraction	----	100	mg/kg	<100	3270 mg/kg	103	81.0	123
EP071-EM: C29 - C36 Fraction	----	100	mg/kg	<100	1550 mg/kg	103	81.8	121
EP071-EM: C10 - C36 Fraction (sum)	----	50	mg/kg	<50	5580 mg/kg	103	70.0	130
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 4259603)								
EP074-UT: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	48.9 mg/kg	91.4	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: 4259616)								
EP071-EM: >C10 - C16 Fraction	----	50	mg/kg	<50	1110 mg/kg	103	75.4	132
EP071-EM: >C16 - C34 Fraction	----	100	mg/kg	<100	4180 mg/kg	103	80.8	120
EP071-EM: >C34 - C40 Fraction	----	100	mg/kg	<100	290 mg/kg	107	73.3	136
EP071-EM: >C10 - C40 Fraction (sum)	----	50	mg/kg	<50	5580 mg/kg	103	70.0	130
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 4261749)								
EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.0002	mg/kg	<0.0002	0.00111 mg/kg	122	72.0	128
EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.0002	mg/kg	<0.0002	0.00118 mg/kg	94.8	73.0	123
EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.0002	mg/kg	<0.0002	0.0014 mg/kg	75.8	67.0	130
EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.0002	mg/kg	<0.0002	0.00119 mg/kg	110	70.0	132
EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.0002	mg/kg	<0.0002	0.00116 mg/kg	96.2	68.0	136
EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.0002	mg/kg	<0.0002	0.00121 mg/kg	106	59.0	134
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4261749)								
EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.001	mg/kg	<0.001	0.00625 mg/kg	87.3	71.0	135
EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.0002	mg/kg	<0.0002	0.00125 mg/kg	91.6	69.0	132
EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.0002	mg/kg	<0.0002	0.00125 mg/kg	94.7	70.0	132
EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.0002	mg/kg	<0.0002	0.00125 mg/kg	96.1	71.0	131
EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.0002	mg/kg	<0.0002	0.00125 mg/kg	90.1	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 (%): LCS	Acceptable Limits (%): Low	Acceptable Limits (%): High
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4261749) - continued								
EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.0002	mg/kg	<0.0002	0.00125 mg/kg	94.6	72.0	129
EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.0002	mg/kg	<0.0002	0.00125 mg/kg	106	69.0	133
EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.0002	mg/kg	<0.0002	0.00125 mg/kg	81.7	64.0	136
EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.0002	mg/kg	<0.0002	0.00125 mg/kg	84.0	69.0	135
EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.0002	mg/kg	<0.0002	0.00125 mg/kg	78.4	66.0	139
EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.0005	mg/kg	<0.0005	0.00312 mg/kg	96.5	69.0	133
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 4261749)								
EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.0002	mg/kg	<0.0002	0.00125 mg/kg	104	67.0	137
EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.0005	mg/kg	<0.0005	0.00312 mg/kg	92.4	70.0	130
EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.0005	mg/kg	<0.0005	0.00312 mg/kg	92.9	70.0	130
EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.0005	mg/kg	<0.0005	0.00312 mg/kg	83.8	70.0	130
EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.0005	mg/kg	<0.0005	0.00312 mg/kg	98.0	70.0	130
EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.0002	mg/kg	<0.0002	0.00125 mg/kg	99.2	63.0	144
EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.0002	mg/kg	<0.0002	0.00125 mg/kg	97.8	61.0	139
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 4261749)								
EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.0005	mg/kg	<0.0005	0.00117 mg/kg	93.9	62.0	145
EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.0005	mg/kg	<0.0005	0.00119 mg/kg	96.4	64.0	140
EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.0005	mg/kg	<0.0005	0.0012 mg/kg	108	65.0	137
EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.0005	mg/kg	<0.0005	0.00121 mg/kg	92.8	70.0	130
EP231P: PFAS Sums (QCLot: 4261749)								
EP231X: Sum of PFAS	----	0.0002	mg/kg	<0.0002	----	----	----	----
EP231X: Sum of PFHxS and PFOS	355-46-4/17 63-23-1	0.0002	mg/kg	<0.0002	----	----	----	----
EP231X: Sum of PFAS (WA DER List)	----	0.0002	mg/kg	<0.0002	----	----	----	----

Sub-Matrix: **WATER**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report: Result	Laboratory Control Spike (LCS) Report: Spike Concentration	Spike Recovery (%): LCS	Acceptable Limits (%): Low	Acceptable Limits (%): High
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 4263003)								
EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	0.222 µg/L	110	72.0	130
EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	<0.02	0.235 µg/L	91.6	71.0	127
EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	<0.01	0.228 µg/L	92.1	68.0	131
EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	<0.02	0.25 µg/L	101	69.0	134
EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	<0.01	0.232 µg/L	106	65.0	140
EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L	<0.02	0.241 µg/L	113	53.0	142

Sub-Matrix: **WATER**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Acceptable Limits (%)	
				Result	Concentration	LCS	Low	High
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 4263006)								
EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	0.222 µg/L	114	72.0	130
EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	<0.02	0.235 µg/L	96.6	71.0	127
EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	<0.01	0.228 µg/L	96.6	68.0	131
EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	<0.02	0.25 µg/L	106	69.0	134
EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	<0.01	0.232 µg/L	104	65.0	140
EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L	<0.02	0.241 µg/L	106	53.0	142
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4263003)								
EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L	<0.1	1.25 µg/L	87.2	73.0	129
EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	<0.02	0.25 µg/L	95.2	72.0	129
EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	<0.02	0.25 µg/L	98.1	72.0	129
EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	<0.02	0.25 µg/L	95.2	72.0	130
EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	<0.01	0.25 µg/L	94.1	71.0	133
EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L	<0.02	0.25 µg/L	97.9	69.0	130
EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L	<0.02	0.25 µg/L	92.7	71.0	129
EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L	<0.02	0.25 µg/L	83.0	69.0	133
EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L	<0.02	0.25 µg/L	92.9	72.0	134
EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L	<0.02	0.25 µg/L	90.0	65.0	144
EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L	<0.05	0.625 µg/L	85.0	71.0	132
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4263006)								
EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L	<0.1	1.25 µg/L	95.2	73.0	129
EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	<0.02	0.25 µg/L	99.4	72.0	129
EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	<0.02	0.25 µg/L	100	72.0	129
EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	<0.02	0.25 µg/L	99.8	72.0	130
EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	<0.01	0.25 µg/L	99.7	71.0	133
EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L	<0.02	0.25 µg/L	99.8	69.0	130
EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L	<0.02	0.25 µg/L	95.5	71.0	129
EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L	<0.02	0.25 µg/L	84.8	69.0	133
EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L	<0.02	0.25 µg/L	95.7	72.0	134
EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L	<0.02	0.25 µg/L	90.0	65.0	144
EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L	<0.05	0.625 µg/L	84.1	71.0	132
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 4263003)								
EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	µg/L	<0.02	0.25 µg/L	101	67.0	137
EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L	<0.05	0.625 µg/L	97.4	68.0	141
EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	µg/L	<0.05	0.625 µg/L	85.8	70.0	130
EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L	<0.05	0.625 µg/L	89.1	70.0	130
EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L	<0.05	0.625 µg/L	117	70.0	130

Sub-Matrix: **WATER**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Acceptable Limits (%)	
				Result	Concentration	LCS	Low	High
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 4263003) - continued								
EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.02	µg/L	<0.02	0.25 µg/L	95.5	65.0	136
EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.02	µg/L	<0.02	0.25 µg/L	103	61.0	135
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 4263006)								
EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	µg/L	<0.02	0.25 µg/L	106	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	88.1	70.0	130
EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L	<0.05	0.625 µg/L	85.3	70.0	130
EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L	<0.05	0.625 µg/L	118	70.0	130
EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.02	µg/L	<0.02	0.25 µg/L	106	65.0	136
EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.02	µg/L	<0.02	0.25 µg/L	105	61.0	135
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 4263003)								
EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L	<0.05	0.234 µg/L	98.5	63.0	143
EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.05	µg/L	<0.05	0.238 µg/L	101	64.0	140
EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.05	µg/L	<0.05	0.24 µg/L	97.7	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	72.7	70.0	130
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 4263006)								
EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L	<0.05	0.234 µg/L	112	63.0	143
EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.05	µg/L	<0.05	0.238 µg/L	108	64.0	140
EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.05	µg/L	<0.05	0.24 µg/L	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	71.7	70.0	130
EP231P: PFAS Sums (QCLot: 4263003)								
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: 4263006)								
EP231X: Sum of PFAS	----	0.01	µg/L	<0.01	----	----	----	----
EP231X: Sum of PFHxS and PFOS	355-46-4/17 63-23-1	0.01	µg/L	<0.01	----	----	----	----
EP231X: Sum of PFAS (WA DER List)	----	0.01	µg/L	<0.01	----	----	----	----

Matrix Spike (MS) Report

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

Sub-Matrix: **SOIL**

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Acceptable Limits (%)	
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Concentration	MS	Low	High
EG005(ED093)T: Total Metals by ICP-AES (QCLot: 4260554)							
EM2205462-002	Anonymous	EG005T: Arsenic	7440-38-2	50 mg/kg	81.9	78.0	124
		EG005T: Cadmium	7440-43-9	50 mg/kg	89.0	79.7	116
		EG005T: Chromium	7440-47-3	50 mg/kg	95.4	79.0	121
		EG005T: Copper	7440-50-8	250 mg/kg	92.4	80.0	120
		EG005T: Lead	7439-92-1	250 mg/kg	88.2	80.0	120
		EG005T: Nickel	7440-02-0	50 mg/kg	78.2	78.0	120
		EG005T: Zinc	7440-66-6	250 mg/kg	85.1	80.0	120
EG035T: Total Recoverable Mercury by FIMS (QCLot: 4260555)							
EM2205462-002	Anonymous	EG035T: Mercury	7439-97-6	0.5 mg/kg	90.3	76.0	116
EG048: Hexavalent Chromium (Alkaline Digest) (QCLot: 4260576)							
EM2205462-002	Anonymous	EG048G: Hexavalent Chromium	18540-29-9	20 mg/kg	85.4	58.0	114
EM2205462-002	Anonymous	EG048G: Hexavalent Chromium	18540-29-9	20 mg/kg	97.8	58.0	114
EK026SF: Total CN by Segmented Flow Analyser (QCLot: 4263014)							
EM2205462-002	Anonymous	EK026SF: Total Cyanide	57-12-5	20 mg/kg	97.4	70.0	130
EK040T: Fluoride Total (QCLot: 4260551)							
EM2205462-002	Anonymous	EK040T: Fluoride	16984-48-8	400 mg/kg	72.7	70.0	130
EP066: Polychlorinated Biphenyls (PCB) (QCLot: 4259617)							
EM2205468-002	Anonymous	EP066-EM: Total Polychlorinated biphenyls	----	1 mg/kg	122	59.6	152
EP074A: Monocyclic Aromatic Hydrocarbons (QCLot: 4259603)							
EM2205473-002	SX_OB_20220327_00_08_SS_Primary_ALS	EP074-UT: Benzene	71-43-2	2 mg/kg	80.7	53.7	130
		EP074-UT: Toluene	108-88-3	2 mg/kg	80.4	55.1	124
EP074I: Volatile Halogenated Compounds (QCLot: 4259603)							
EM2205473-002	SX_OB_20220327_00_08_SS_Primary_ALS	EP074-UT: 1.1-Dichloroethene	75-35-4	2 mg/kg	75.0	38.4	145
		EP074-UT: Trichloroethene	79-01-6	2 mg/kg	73.5	48.1	128
		EP074-UT: Chlorobenzene	108-90-7	2 mg/kg	75.2	55.5	122
EP075A: Phenolic Compounds (Halogenated) (QCLot: 4259615)							
EM2205462-002	Anonymous	EP075-EM: 2-Chlorophenol	95-57-8	3 mg/kg	86.0	44.0	143
		EP075-EM: 4-Chloro-3-methylphenol	59-50-7	3 mg/kg	81.8	41.5	139
		EP075-EM: Pentachlorophenol	87-86-5	3 mg/kg	49.9	10.0	144
EP075A: Phenolic Compounds (Non-halogenated) (QCLot: 4259615)							
EM2205462-002	Anonymous	EP075-EM: Phenol	108-95-2	3 mg/kg	79.4	44.2	134
		EP075-EM: 2-Nitrophenol	88-75-5	3 mg/kg	78.7	34.2	129
EP075B: Polynuclear Aromatic Hydrocarbons (QCLot: 4259615)							
EM2205462-002	Anonymous	EP075-EM: Acenaphthene	83-32-9	3 mg/kg	77.1	42.6	138

Sub-Matrix: **SOIL**

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Acceptable Limits (%)	
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Concentration	MS	Low	High
EP075B: Polynuclear Aromatic Hydrocarbons (QCLot: 4259615) - continued							
EM2205462-002	Anonymous	EP075-EM: Pyrene	129-00-0	3 mg/kg	74.8	37.8	152
EP080/071: Total Petroleum Hydrocarbons (QCLot: 4259603)							
EM2205473-002	SX_OB_20220327_00_08_SS_Primary_ALS	EP074-UT: C6 - C9 Fraction	----	28 mg/kg	77.4	42.3	111
EP080/071: Total Petroleum Hydrocarbons (QCLot: 4259616)							
EM2205468-001	Anonymous	EP071-EM: C10 - C14 Fraction	----	760 mg/kg	103	71.3	126
		EP071-EM: C15 - C28 Fraction	----	3270 mg/kg	103	75.1	123
		EP071-EM: C29 - C36 Fraction	----	1550 mg/kg	103	78.1	120
		EP071-EM: C10 - C36 Fraction (sum)	----	5580 mg/kg	103	70.0	130
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 4259603)							
EM2205473-002	SX_OB_20220327_00_08_SS_Primary_ALS	EP074-UT: C6 - C10 Fraction	C6_C10	33 mg/kg	75.4	39.9	109
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 4259616)							
EM2205468-001	Anonymous	EP071-EM: >C10 - C16 Fraction	----	1110 mg/kg	103	71.5	130
		EP071-EM: >C16 - C34 Fraction	----	4180 mg/kg	103	76.9	119
		EP071-EM: >C34 - C40 Fraction	----	290 mg/kg	106	65.3	139
		EP071-EM: >C10 - C40 Fraction (sum)	----	5580 mg/kg	103	70.0	130
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 4261749)							
EM2205462-002	Anonymous	EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.00111 mg/kg	102	72.0	128
		EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.00118 mg/kg	76.0	73.0	123
		EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.00114 mg/kg	91.4	67.0	130
		EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.00119 mg/kg	85.6	70.0	132
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.00116 mg/kg	98.4	68.0	136
		EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.00121 mg/kg	116	59.0	134
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4261749)							
EM2205462-002	Anonymous	EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.00625 mg/kg	85.7	71.0	135
		EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.00125 mg/kg	87.1	69.0	132
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.00125 mg/kg	84.1	70.0	132
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.00125 mg/kg	94.6	71.0	131
		EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.00125 mg/kg	93.2	69.0	133
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.00125 mg/kg	92.2	72.0	129
		EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.00125 mg/kg	93.8	69.0	133
		EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.00125 mg/kg	81.1	64.0	136
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.00125 mg/kg	85.9	69.0	135
		EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.00125 mg/kg	77.5	66.0	139
		EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.00312 mg/kg	90.8	69.0	133
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 4261749)							
EM2205462-002	Anonymous	EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.00125 mg/kg	99.0	67.0	137

Sub-Matrix: **SOIL**

Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Matrix Spike (MS) Report: Spike Concentration	Matrix Spike (MS) Report: SpikeRecovery(%) MS	Acceptable Limits (%) Low	Acceptable Limits (%) High
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 4261749) - continued							
EM2205462-002	Anonymous	EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.00312 mg/kg	83.5	70.0	130
		EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.00312 mg/kg	82.0	70.0	130
		EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.00312 mg/kg	82.8	70.0	130
		EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.00312 mg/kg	94.1	70.0	130
		EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.00125 mg/kg	92.4	63.0	144
		EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.00125 mg/kg	93.7	61.0	139
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 4261749)							
EM2205462-002	Anonymous	EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.00117 mg/kg	83.2	62.0	145
		EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.00119 mg/kg	105	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	77.0	70.0	130

Sub-Matrix: **WATER**

Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Matrix Spike (MS) Report: Spike Concentration	Matrix Spike (MS) Report: SpikeRecovery(%) MS	Acceptable Limits (%) Low	Acceptable Limits (%) High
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 4263003)							
EM2205462-002	Anonymous	EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.222 µg/L	96.6	72.0	130
		EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.235 µg/L	81.2	71.0	127
		EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.228 µg/L	94.4	68.0	131
		EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.238 µg/L	93.9	69.0	134
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.232 µg/L	103	65.0	140
		EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.241 µg/L	124	53.0	142
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 4263006)							
EM2205462-005	Anonymous	EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.222 µg/L	98.4	72.0	130
		EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.235 µg/L	81.7	71.0	127
		EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.228 µg/L	94.3	68.0	131
		EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.238 µg/L	99.2	69.0	134
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.232 µg/L	95.5	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: 4263003)							
EM2205462-002	Anonymous	EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	1.25 µg/L	92.9	73.0	129
		EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.25 µg/L	92.4	72.0	129
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.25 µg/L	94.9	72.0	129
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.25 µg/L	103	72.0	130

Sub-Matrix: **WATER**

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Acceptable Limits (%)	
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Concentration	MS	Low	High
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4263003) - continued							
EM2205462-002	Anonymous	EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.25 µg/L	96.6	71.0	133
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.25 µg/L	99.2	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	86.8	69.0	133
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.25 µg/L	108	72.0	134
		EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.25 µg/L	97.3	65.0	144
		EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.625 µg/L	92.0	71.0	132
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4263006)							
EM2205462-005	Anonymous	EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	1.25 µg/L	85.0	73.0	129
		EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.25 µg/L	89.1	72.0	129
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.25 µg/L	86.9	72.0	129
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.25 µg/L	94.9	72.0	130
		EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.25 µg/L	95.2	71.0	133
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.25 µg/L	93.3	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	74.4	69.0	133
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.25 µg/L	80.8	72.0	134
		EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.25 µg/L	74.8	65.0	144
		EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.625 µg/L	# 70.8	71.0	132
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 4263003)							
EM2205462-002	Anonymous	EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.25 µg/L	98.5	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	90.1	70.0	130
		EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.625 µg/L	86.6	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	102	65.0	136
		EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.25 µg/L	108	61.0	135
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 4263006)							
EM2205462-005	Anonymous	EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.25 µg/L	96.4	67.0	137
		EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.625 µg/L	72.8	68.0	141
		EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.625 µg/L	# 52.3	70.0	130
		EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.625 µg/L	79.9	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: 4263006) - continued							
EM2205462-005	Anonymous	EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.625 µg/L	98.2	70.0	130
		EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.25 µg/L	85.2	65.0	136
		EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.25 µg/L	85.5	61.0	135
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 4263003)							
EM2205462-002	Anonymous	EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.234 µg/L	92.9	63.0	143
		EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.238 µg/L	109	64.0	140
		EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.24 µg/L	113	67.0	138
		EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.242 µg/L	74.1	70.0	130
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 4263006)							
EM2205462-005	Anonymous	EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.234 µg/L	90.8	63.0	143
		EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.238 µg/L	108	64.0	140
		EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.24 µg/L	104	67.0	138
		EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.242 µg/L	# 62.6	70.0	130

ALS Environmental

QA/QC Compliance Assessment to assist with Quality Review

Work Order	: **EM2205473**	Page	: 1 of 14
Client	: **AGON ENVIRONMENTAL PTY LTD**	Laboratory	: Environmental Division Melbourne
Contact	: Craig Trimbur	Telephone	: +6138549 9600
Project	: JC0927	Date Samples Received	: 28-Mar-2022
Site	: ----	Issue Date	: 04-Apr-2022
Sampler	: LR - EP RISK & WOH - Agon	No. of samples received	: 18
Order number	: -	No. of samples analysed	: 18

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

- **Analysis Holding Time Outliers exist - please see following pages for full details.**

Outliers : Frequency of Quality Control Samples

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

Outliers : Quality Control Samples

Duplicates, Method Blanks, Laboratory Control Samples and Matrix Spikes

Matrix: **WATER**

Compound Group Name	Laboratory Sample ID	Client Sample ID	Analyte	CAS Number	Data	Limits	Comment
Matrix Spike (MS) Recoveries							
EP231B: Perfluoroalkyl Carboxylic Acids	EM2205462--005	Anonymous	**Perfluorotetradecanoic acid (PFTeDA)**	376-06-7	70.8 %	71.0-132%	**Recovery less than lower data quality objective**
EP231C: Perfluoroalkyl Sulfonamides	EM2205462--005	Anonymous	**N-Ethyl perfluorooctane sulfonamide (EtFOSA)**	4151-50-2	52.3 %	70.0-130%	**Recovery less than lower data quality objective**
EP231D: (n:2) Fluorotelomer Sulfonic Acids	EM2205462--005	Anonymous	**10:2 Fluorotelomer sulfonic acid (10:2 FTS)**	120226-60-0	62.6 %	70.0-130%	**Recovery less than lower data quality objective**

Outliers : Analysis Holding Time Compliance

Matrix: **SOIL**

Method / Container / Client Sample ID(s)		Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Days overdue	Date analysed	Due for analysis	Days overdue
EA001: pH in soil using 0.01M CaCl extract							
Soil Glass Jar - Unpreserved							
SX_OB_20220326_20_4_SS_Primary_ALS		----	----	----	01-Apr-2022	31-Mar-2022	**1**
Soil Glass Jar - Unpreserved							
SX_OB_20220327_00_08_SS_Primary_ALS,	SX_OB_20220327_03_55_SS_Primary_ALS,	----	----	----	01-Apr-2022	31-Mar-2022	**1**
SX_OB_20220327_07_55_SS_Primary_ALS,	SX_OB_20220327_07_58_SS_Duplicate_ALS,						
SX_OB_20220327_11_51_SS_Primary_ALS,	SX_OB_20220327_16_00_SS_Triplicate_ALS,						
SX_OB_20220327_16_04_SS_Primary_ALS,	SX_OB_20220327_19_56_SS_Primary_ALS						

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

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_20220326_20_4_SS_Primary_ALS	**26-Mar-2022**	**31-Mar-2022**	02-Apr-2022	✓	**01-Apr-2022**	31-Mar-2022	×
Soil Glass Jar - Unpreserved (EA001)							
SX_OB_20220327_00_08_SS_Primary_ALS, SX_OB_20220327_03_55_SS_Primary_ALS, SX_OB_20220327_07_55_SS_Primary_ALS, SX_OB_20220327_07_58_SS_Duplicate_ALS, SX_OB_20220327_11_51_SS_Primary_ALS, SX_OB_20220327_16_00_SS_Triplicate_ALS, SX_OB_20220327_16_04_SS_Primary_ALS, SX_OB_20220327_19_56_SS_Primary_ALS	**27-Mar-2022**	**31-Mar-2022**	03-Apr-2022	✓	**01-Apr-2022**	31-Mar-2022	×
EA055: Moisture Content (Dried @ 105-110°C)							
Soil Glass Jar - Unpreserved (EA055)							
SX_OB_20220326_20_4_SS_Primary_ALS	**26-Mar-2022**	**----**	----	----	**31-Mar-2022**	09-Apr-2022	✓
Soil Glass Jar - Unpreserved (EA055)							
SX_OB_20220327_00_08_SS_Primary_ALS, SX_OB_20220327_03_55_SS_Primary_ALS, SX_OB_20220327_07_55_SS_Primary_ALS, SX_OB_20220327_07_58_SS_Duplicate_ALS, SX_OB_20220327_11_51_SS_Primary_ALS, SX_OB_20220327_16_00_SS_Triplicate_ALS, SX_OB_20220327_16_04_SS_Primary_ALS, SX_OB_20220327_19_56_SS_Primary_ALS	**27-Mar-2022**	**----**	----	----	**31-Mar-2022**	10-Apr-2022	✓
EG005(ED093)T: Total Metals by ICP-AES							
Soil Glass Jar - Unpreserved (EG005T)							
SX_OB_20220326_20_4_SS_Primary_ALS	**26-Mar-2022**	**01-Apr-2022**	22-Sep-2022	✓	**01-Apr-2022**	22-Sep-2022	✓
Soil Glass Jar - Unpreserved (EG005T)							
SX_OB_20220327_00_08_SS_Primary_ALS, SX_OB_20220327_03_55_SS_Primary_ALS, SX_OB_20220327_07_55_SS_Primary_ALS, SX_OB_20220327_07_58_SS_Duplicate_ALS, SX_OB_20220327_11_51_SS_Primary_ALS, SX_OB_20220327_16_00_SS_Triplicate_ALS, SX_OB_20220327_16_04_SS_Primary_ALS, SX_OB_20220327_19_56_SS_Primary_ALS	**27-Mar-2022**	**01-Apr-2022**	23-Sep-2022	✓	**01-Apr-2022**	23-Sep-2022	✓
EG035T: Total Recoverable Mercury by FIMS							
Soil Glass Jar - Unpreserved (EG035T)							
SX_OB_20220326_20_4_SS_Primary_ALS	**26-Mar-2022**	**01-Apr-2022**	23-Apr-2022	✓	**01-Apr-2022**	23-Apr-2022	✓
Soil Glass Jar - Unpreserved (EG035T)							
SX_OB_20220327_00_08_SS_Primary_ALS, SX_OB_20220327_03_55_SS_Primary_ALS, SX_OB_20220327_07_55_SS_Primary_ALS, SX_OB_20220327_07_58_SS_Duplicate_ALS, SX_OB_20220327_11_51_SS_Primary_ALS, SX_OB_20220327_16_00_SS_Triplicate_ALS, SX_OB_20220327_16_04_SS_Primary_ALS, SX_OB_20220327_19_56_SS_Primary_ALS	**27-Mar-2022**	**01-Apr-2022**	24-Apr-2022	✓	**01-Apr-2022**	24-Apr-2022	✓
EG048: Hexavalent Chromium (Alkaline Digest)							
Soil Glass Jar - Unpreserved (EG048G)							
SX_OB_20220326_20_4_SS_Primary_ALS	**26-Mar-2022**	**01-Apr-2022**	23-Apr-2022	✓	**01-Apr-2022**	08-Apr-2022	✓
Soil Glass Jar - Unpreserved (EG048G)							
SX_OB_20220327_00_08_SS_Primary_ALS, SX_OB_20220327_03_55_SS_Primary_ALS, SX_OB_20220327_07_55_SS_Primary_ALS, SX_OB_20220327_07_58_SS_Duplicate_ALS, SX_OB_20220327_11_51_SS_Primary_ALS, SX_OB_20220327_16_00_SS_Triplicate_ALS, SX_OB_20220327_16_04_SS_Primary_ALS, SX_OB_20220327_19_56_SS_Primary_ALS	**27-Mar-2022**	**01-Apr-2022**	24-Apr-2022	✓	**01-Apr-2022**	08-Apr-2022	✓

Matrix: **SOIL**

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

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EK026SF: Total CN by Segmented Flow Analyser							
Soil Glass Jar - Unpreserved (EK026SF)							
SX_OB_20220326_20_4_SS_Primary_ALS	**26-Mar-2022**	**01-Apr-2022**	09-Apr-2022	✓	**02-Apr-2022**	15-Apr-2022	✓
Soil Glass Jar - Unpreserved (EK026SF)							
SX_OB_20220327_00_08_SS_Primary_ALS, SX_OB_20220327_03_55_SS_Primary_ALS, SX_OB_20220327_07_55_SS_Primary_ALS, SX_OB_20220327_07_58_SS_Duplicate_ALS, SX_OB_20220327_11_51_SS_Primary_ALS, SX_OB_20220327_16_00_SS_Triplicate_ALS, SX_OB_20220327_16_04_SS_Primary_ALS, SX_OB_20220327_19_56_SS_Primary_ALS	**27-Mar-2022**	**01-Apr-2022**	10-Apr-2022	✓	**02-Apr-2022**	15-Apr-2022	✓
EK040T: Fluoride Total							
Soil Glass Jar - Unpreserved (EK040T)							
SX_OB_20220326_20_4_SS_Primary_ALS	**26-Mar-2022**	**01-Apr-2022**	23-Apr-2022	✓	**04-Apr-2022**	23-Apr-2022	✓
Soil Glass Jar - Unpreserved (EK040T)							
SX_OB_20220327_00_08_SS_Primary_ALS, SX_OB_20220327_03_55_SS_Primary_ALS, SX_OB_20220327_07_55_SS_Primary_ALS, SX_OB_20220327_07_58_SS_Duplicate_ALS, SX_OB_20220327_11_51_SS_Primary_ALS, SX_OB_20220327_16_00_SS_Triplicate_ALS, SX_OB_20220327_16_04_SS_Primary_ALS, SX_OB_20220327_19_56_SS_Primary_ALS	**27-Mar-2022**	**01-Apr-2022**	24-Apr-2022	✓	**04-Apr-2022**	24-Apr-2022	✓
EN60: ASLP Leaching Procedure - Inorganics/PFAS (Plastic Vessel)							
Non-Volatile Leach: 180 day HT (e.g. PFAS, metals ex.Hg) (EN60a-P)							
SX_OB_20220326_20_4_SS_Primary_ALS	**26-Mar-2022**	**31-Mar-2022**	22-Sep-2022	✓	**----**	----	----
Non-Volatile Leach: 180 day HT (e.g. PFAS, metals ex.Hg) (EN60a-P)							
SX_OB_20220327_00_08_SS_Primary_ALS, SX_OB_20220327_03_55_SS_Primary_ALS, SX_OB_20220327_07_55_SS_Primary_ALS, SX_OB_20220327_07_58_SS_Duplicate_ALS, SX_OB_20220327_11_51_SS_Primary_ALS, SX_OB_20220327_16_00_SS_Triplicate_ALS, SX_OB_20220327_16_04_SS_Primary_ALS, SX_OB_20220327_19_56_SS_Primary_ALS	**27-Mar-2022**	**31-Mar-2022**	23-Sep-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_20220326_20_4_SS_Primary_ALS - DI	**26-Mar-2022**	**31-Mar-2022**	22-Sep-2022	✓	**----**	----	----
Non-Volatile Leach: 180 day HT (e.g. PFAS, metals ex.Hg) (EN60-DIa-P)							
SX_OB_20220327_00_08_SS_Primary_ALS - DI, SX_OB_20220327_03_55_SS_Primary_ALS - DI, SX_OB_20220327_07_55_SS_Primary_ALS - DI, SX_OB_20220327_07_58_SS_Duplicate_ALS - DI, SX_OB_20220327_11_51_SS_Primary_ALS - DI, SX_OB_20220327_16_00_SS_Triplicate_ALS - DI, SX_OB_20220327_16_04_SS_Primary_ALS - DI, SX_OB_20220327_19_56_SS_Primary_ALS - DI	**27-Mar-2022**	**31-Mar-2022**	23-Sep-2022	✓	**----**	----	----
EP066: Polychlorinated Biphenyls (PCB)							
Soil Glass Jar - Unpreserved (EP066-EM)							
SX_OB_20220326_20_4_SS_Primary_ALS	**26-Mar-2022**	**01-Apr-2022**	09-Apr-2022	✓	**01-Apr-2022**	11-May-2022	✓
Soil Glass Jar - Unpreserved (EP066-EM)							
SX_OB_20220327_00_08_SS_Primary_ALS, SX_OB_20220327_03_55_SS_Primary_ALS, SX_OB_20220327_07_55_SS_Primary_ALS, SX_OB_20220327_07_58_SS_Duplicate_ALS, SX_OB_20220327_11_51_SS_Primary_ALS, SX_OB_20220327_16_00_SS_Triplicate_ALS, SX_OB_20220327_16_04_SS_Primary_ALS, SX_OB_20220327_19_56_SS_Primary_ALS	**27-Mar-2022**	**01-Apr-2022**	10-Apr-2022	✓	**01-Apr-2022**	11-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
EP074A: Monocyclic Aromatic Hydrocarbons							
Soil Glass Jar - Unpreserved (EP074-UT)							
SX_OB_20220326_20_4_SS_Primary_ALS	**26-Mar-2022**	**31-Mar-2022**	02-Apr-2022	✓	**01-Apr-2022**	02-Apr-2022	✓
Soil Glass Jar - Unpreserved (EP074-UT)							
SX_OB_20220327_00_08_SS_Primary_ALS, SX_OB_20220327_03_55_SS_Primary_ALS, SX_OB_20220327_07_55_SS_Primary_ALS, SX_OB_20220327_07_58_SS_Duplicate_ALS, SX_OB_20220327_11_51_SS_Primary_ALS, SX_OB_20220327_16_00_SS_Triplicate_ALS, SX_OB_20220327_16_04_SS_Primary_ALS, SX_OB_20220327_19_56_SS_Primary_ALS	**27-Mar-2022**	**31-Mar-2022**	03-Apr-2022	✓	**01-Apr-2022**	03-Apr-2022	✓
EP074H: Naphthalene							
Soil Glass Jar - Unpreserved (EP074-UT)							
SX_OB_20220326_20_4_SS_Primary_ALS	**26-Mar-2022**	**31-Mar-2022**	02-Apr-2022	✓	**01-Apr-2022**	02-Apr-2022	✓
Soil Glass Jar - Unpreserved (EP074-UT)							
SX_OB_20220327_00_08_SS_Primary_ALS, SX_OB_20220327_03_55_SS_Primary_ALS, SX_OB_20220327_07_55_SS_Primary_ALS, SX_OB_20220327_07_58_SS_Duplicate_ALS, SX_OB_20220327_11_51_SS_Primary_ALS, SX_OB_20220327_16_00_SS_Triplicate_ALS, SX_OB_20220327_16_04_SS_Primary_ALS, SX_OB_20220327_19_56_SS_Primary_ALS	**27-Mar-2022**	**31-Mar-2022**	03-Apr-2022	✓	**01-Apr-2022**	03-Apr-2022	✓
EP074I: Volatile Halogenated Compounds							
Soil Glass Jar - Unpreserved (EP074-UT)							
SX_OB_20220326_20_4_SS_Primary_ALS	**26-Mar-2022**	**31-Mar-2022**	02-Apr-2022	✓	**01-Apr-2022**	02-Apr-2022	✓
Soil Glass Jar - Unpreserved (EP074-UT)							
SX_OB_20220327_00_08_SS_Primary_ALS, SX_OB_20220327_03_55_SS_Primary_ALS, SX_OB_20220327_07_55_SS_Primary_ALS, SX_OB_20220327_07_58_SS_Duplicate_ALS, SX_OB_20220327_11_51_SS_Primary_ALS, SX_OB_20220327_16_00_SS_Triplicate_ALS, SX_OB_20220327_16_04_SS_Primary_ALS, SX_OB_20220327_19_56_SS_Primary_ALS	**27-Mar-2022**	**31-Mar-2022**	03-Apr-2022	✓	**01-Apr-2022**	03-Apr-2022	✓
EP075A: Phenolic Compounds (Halogenated)							
Soil Glass Jar - Unpreserved (EP075-EM)							
SX_OB_20220326_20_4_SS_Primary_ALS	**26-Mar-2022**	**01-Apr-2022**	09-Apr-2022	✓	**01-Apr-2022**	11-May-2022	✓
Soil Glass Jar - Unpreserved (EP075-EM)							
SX_OB_20220327_00_08_SS_Primary_ALS, SX_OB_20220327_03_55_SS_Primary_ALS, SX_OB_20220327_07_55_SS_Primary_ALS, SX_OB_20220327_07_58_SS_Duplicate_ALS, SX_OB_20220327_11_51_SS_Primary_ALS, SX_OB_20220327_16_00_SS_Triplicate_ALS, SX_OB_20220327_16_04_SS_Primary_ALS, SX_OB_20220327_19_56_SS_Primary_ALS	**27-Mar-2022**	**01-Apr-2022**	10-Apr-2022	✓	**01-Apr-2022**	11-May-2022	✓
EP075A: Phenolic Compounds (Non-halogenated)							
Soil Glass Jar - Unpreserved (EP075-EM)							
SX_OB_20220326_20_4_SS_Primary_ALS	**26-Mar-2022**	**01-Apr-2022**	09-Apr-2022	✓	**01-Apr-2022**	11-May-2022	✓
Soil Glass Jar - Unpreserved (EP075-EM)							
SX_OB_20220327_00_08_SS_Primary_ALS, SX_OB_20220327_03_55_SS_Primary_ALS, SX_OB_20220327_07_55_SS_Primary_ALS, SX_OB_20220327_07_58_SS_Duplicate_ALS, SX_OB_20220327_11_51_SS_Primary_ALS, SX_OB_20220327_16_00_SS_Triplicate_ALS, SX_OB_20220327_16_04_SS_Primary_ALS, SX_OB_20220327_19_56_SS_Primary_ALS	**27-Mar-2022**	**01-Apr-2022**	10-Apr-2022	✓	**01-Apr-2022**	11-May-2022	✓

Matrix: **SOIL**

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

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP075B: Polynuclear Aromatic Hydrocarbons							
Soil Glass Jar - Unpreserved (EP075-EM)							
SX_OB_20220326_20_4_SS_Primary_ALS	**26-Mar-2022**	**01-Apr-2022**	09-Apr-2022	✓	**01-Apr-2022**	11-May-2022	✓
Soil Glass Jar - Unpreserved (EP075-EM)							
SX_OB_20220327_00_08_SS_Primary_ALS, SX_OB_20220327_03_55_SS_Primary_ALS, SX_OB_20220327_07_55_SS_Primary_ALS, SX_OB_20220327_07_58_SS_Duplicate_ALS, SX_OB_20220327_11_51_SS_Primary_ALS, SX_OB_20220327_16_00_SS_Triplicate_ALS, SX_OB_20220327_16_04_SS_Primary_ALS, SX_OB_20220327_19_56_SS_Primary_ALS	**27-Mar-2022**	**01-Apr-2022**	10-Apr-2022	✓	**01-Apr-2022**	11-May-2022	✓
EP075I: Organochlorine Pesticides							
Soil Glass Jar - Unpreserved (EP075-EM)							
SX_OB_20220326_20_4_SS_Primary_ALS	**26-Mar-2022**	**01-Apr-2022**	09-Apr-2022	✓	**01-Apr-2022**	11-May-2022	✓
Soil Glass Jar - Unpreserved (EP075-EM)							
SX_OB_20220327_00_08_SS_Primary_ALS, SX_OB_20220327_03_55_SS_Primary_ALS, SX_OB_20220327_07_55_SS_Primary_ALS, SX_OB_20220327_07_58_SS_Duplicate_ALS, SX_OB_20220327_11_51_SS_Primary_ALS, SX_OB_20220327_16_00_SS_Triplicate_ALS, SX_OB_20220327_16_04_SS_Primary_ALS, SX_OB_20220327_19_56_SS_Primary_ALS	**27-Mar-2022**	**01-Apr-2022**	10-Apr-2022	✓	**01-Apr-2022**	11-May-2022	✓
EP080/071: Total Petroleum Hydrocarbons							
Soil Glass Jar - Unpreserved (EP071-EM)							
SX_OB_20220326_20_4_SS_Primary_ALS	**26-Mar-2022**	**01-Apr-2022**	09-Apr-2022	✓	**01-Apr-2022**	11-May-2022	✓
Soil Glass Jar - Unpreserved (EP074-UT)							
SX_OB_20220326_20_4_SS_Primary_ALS	**26-Mar-2022**	**31-Mar-2022**	02-Apr-2022	✓	**01-Apr-2022**	02-Apr-2022	✓
Soil Glass Jar - Unpreserved (EP071-EM)							
SX_OB_20220327_00_08_SS_Primary_ALS, SX_OB_20220327_03_55_SS_Primary_ALS, SX_OB_20220327_07_55_SS_Primary_ALS, SX_OB_20220327_07_58_SS_Duplicate_ALS, SX_OB_20220327_11_51_SS_Primary_ALS, SX_OB_20220327_16_00_SS_Triplicate_ALS, SX_OB_20220327_16_04_SS_Primary_ALS, SX_OB_20220327_19_56_SS_Primary_ALS	**27-Mar-2022**	**01-Apr-2022**	10-Apr-2022	✓	**01-Apr-2022**	11-May-2022	✓
Soil Glass Jar - Unpreserved (EP074-UT)							
SX_OB_20220327_00_08_SS_Primary_ALS, SX_OB_20220327_03_55_SS_Primary_ALS, SX_OB_20220327_07_55_SS_Primary_ALS, SX_OB_20220327_07_58_SS_Duplicate_ALS, SX_OB_20220327_11_51_SS_Primary_ALS, SX_OB_20220327_16_00_SS_Triplicate_ALS, SX_OB_20220327_16_04_SS_Primary_ALS, SX_OB_20220327_19_56_SS_Primary_ALS	**27-Mar-2022**	**31-Mar-2022**	03-Apr-2022	✓	**01-Apr-2022**	03-Apr-2022	✓

Matrix: **SOIL**

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

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions							
Soil Glass Jar - Unpreserved (EP071-EM)							
SX_OB_20220326_20_4_SS_Primary_ALS	**26-Mar-2022**	**01-Apr-2022**	09-Apr-2022	✓	**01-Apr-2022**	11-May-2022	✓
Soil Glass Jar - Unpreserved (EP074-UT)							
SX_OB_20220326_20_4_SS_Primary_ALS	**26-Mar-2022**	**31-Mar-2022**	02-Apr-2022	✓	**01-Apr-2022**	02-Apr-2022	✓
Soil Glass Jar - Unpreserved (EP071-EM)							
SX_OB_20220327_00_08_SS_Primary_ALS, SX_OB_20220327_03_55_SS_Primary_ALS, SX_OB_20220327_07_55_SS_Primary_ALS, SX_OB_20220327_07_58_SS_Duplicate_ALS, SX_OB_20220327_11_51_SS_Primary_ALS, SX_OB_20220327_16_00_SS_Triplicate_ALS, SX_OB_20220327_16_04_SS_Primary_ALS, SX_OB_20220327_19_56_SS_Primary_ALS	**27-Mar-2022**	**01-Apr-2022**	10-Apr-2022	✓	**01-Apr-2022**	11-May-2022	✓
Soil Glass Jar - Unpreserved (EP074-UT)							
SX_OB_20220327_00_08_SS_Primary_ALS, SX_OB_20220327_03_55_SS_Primary_ALS, SX_OB_20220327_07_55_SS_Primary_ALS, SX_OB_20220327_07_58_SS_Duplicate_ALS, SX_OB_20220327_11_51_SS_Primary_ALS, SX_OB_20220327_16_00_SS_Triplicate_ALS, SX_OB_20220327_16_04_SS_Primary_ALS, SX_OB_20220327_19_56_SS_Primary_ALS	**27-Mar-2022**	**31-Mar-2022**	03-Apr-2022	✓	**01-Apr-2022**	03-Apr-2022	✓
EP231A: Perfluoroalkyl Sulfonic Acids							
HDPE Soil Jar (EP231X)							
SX_OB_20220326_20_4_SS_Primary_ALS	**26-Mar-2022**	**01-Apr-2022**	22-Sep-2022	✓	**01-Apr-2022**	11-May-2022	✓
HDPE Soil Jar (EP231X)							
SX_OB_20220327_00_08_SS_Primary_ALS, SX_OB_20220327_03_55_SS_Primary_ALS, SX_OB_20220327_07_55_SS_Primary_ALS, SX_OB_20220327_07_58_SS_Duplicate_ALS, SX_OB_20220327_11_51_SS_Primary_ALS, SX_OB_20220327_16_00_SS_Triplicate_ALS, SX_OB_20220327_16_04_SS_Primary_ALS, SX_OB_20220327_19_56_SS_Primary_ALS	**27-Mar-2022**	**01-Apr-2022**	23-Sep-2022	✓	**01-Apr-2022**	11-May-2022	✓
EP231B: Perfluoroalkyl Carboxylic Acids							
HDPE Soil Jar (EP231X)							
SX_OB_20220326_20_4_SS_Primary_ALS	**26-Mar-2022**	**01-Apr-2022**	22-Sep-2022	✓	**01-Apr-2022**	11-May-2022	✓
HDPE Soil Jar (EP231X)							
SX_OB_20220327_00_08_SS_Primary_ALS, SX_OB_20220327_03_55_SS_Primary_ALS, SX_OB_20220327_07_55_SS_Primary_ALS, SX_OB_20220327_07_58_SS_Duplicate_ALS, SX_OB_20220327_11_51_SS_Primary_ALS, SX_OB_20220327_16_00_SS_Triplicate_ALS, SX_OB_20220327_16_04_SS_Primary_ALS, SX_OB_20220327_19_56_SS_Primary_ALS	**27-Mar-2022**	**01-Apr-2022**	23-Sep-2022	✓	**01-Apr-2022**	11-May-2022	✓
EP231C: Perfluoroalkyl Sulfonamides							
HDPE Soil Jar (EP231X)							
SX_OB_20220326_20_4_SS_Primary_ALS	**26-Mar-2022**	**01-Apr-2022**	22-Sep-2022	✓	**01-Apr-2022**	11-May-2022	✓
HDPE Soil Jar (EP231X)							
SX_OB_20220327_00_08_SS_Primary_ALS, SX_OB_20220327_03_55_SS_Primary_ALS, SX_OB_20220327_07_55_SS_Primary_ALS, SX_OB_20220327_07_58_SS_Duplicate_ALS, SX_OB_20220327_11_51_SS_Primary_ALS, SX_OB_20220327_16_00_SS_Triplicate_ALS, SX_OB_20220327_16_04_SS_Primary_ALS, SX_OB_20220327_19_56_SS_Primary_ALS	**27-Mar-2022**	**01-Apr-2022**	23-Sep-2022	✓	**01-Apr-2022**	11-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
EP231D: (n:2) Fluorotelomer Sulfonic Acids							
HDPE Soil Jar (EP231X)							
SX_OB_20220326_20_4_SS_Primary_ALS	**26-Mar-2022**	**01-Apr-2022**	22-Sep-2022	✓	**01-Apr-2022**	11-May-2022	✓
HDPE Soil Jar (EP231X)							
SX_OB_20220327_00_08_SS_Primary_ALS, SX_OB_20220327_03_55_SS_Primary_ALS, SX_OB_20220327_07_55_SS_Primary_ALS, SX_OB_20220327_07_58_SS_Duplicate_ALS, SX_OB_20220327_11_51_SS_Primary_ALS, SX_OB_20220327_16_00_SS_Triplicate_ALS, SX_OB_20220327_16_04_SS_Primary_ALS, SX_OB_20220327_19_56_SS_Primary_ALS	**27-Mar-2022**	**01-Apr-2022**	23-Sep-2022	✓	**01-Apr-2022**	11-May-2022	✓
EP231P: PFAS Sums							
HDPE Soil Jar (EP231X)							
SX_OB_20220326_20_4_SS_Primary_ALS	**26-Mar-2022**	**01-Apr-2022**	22-Sep-2022	✓	**01-Apr-2022**	11-May-2022	✓
HDPE Soil Jar (EP231X)							
SX_OB_20220327_00_08_SS_Primary_ALS, SX_OB_20220327_03_55_SS_Primary_ALS, SX_OB_20220327_07_55_SS_Primary_ALS, SX_OB_20220327_07_58_SS_Duplicate_ALS, SX_OB_20220327_11_51_SS_Primary_ALS, SX_OB_20220327_16_00_SS_Triplicate_ALS, SX_OB_20220327_16_04_SS_Primary_ALS, SX_OB_20220327_19_56_SS_Primary_ALS	**27-Mar-2022**	**01-Apr-2022**	23-Sep-2022	✓	**01-Apr-2022**	11-May-2022	✓

Matrix: **WATER**

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

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP231A: Perfluoroalkyl Sulfonic Acids							
HDPE (no PTFE) (EP231X)							
SX_OB_20220326_20_4_SS_Primary_ALS, SX_OB_20220327_00_08_SS_Primary_ALS, SX_OB_20220327_03_55_SS_Primary_ALS, SX_OB_20220327_07_55_SS_Primary_ALS, SX_OB_20220327_07_58_SS_Duplicate_ALS, SX_OB_20220327_11_51_SS_Primary_ALS, SX_OB_20220327_16_00_SS_Triplicate_ALS, SX_OB_20220327_16_04_SS_Primary_ALS, SX_OB_20220327_19_56_SS_Primary_ALS, SX_OB_20220326_20_4_SS_Primary_ALS - DI, SX_OB_20220327_00_08_SS_Primary_ALS - DI, SX_OB_20220327_03_55_SS_Primary_ALS - DI, SX_OB_20220327_07_55_SS_Primary_ALS - DI, SX_OB_20220327_07_58_SS_Duplicate_ALS - DI, SX_OB_20220327_11_51_SS_Primary_ALS - DI, SX_OB_20220327_16_00_SS_Triplicate_ALS - DI, SX_OB_20220327_16_04_SS_Primary_ALS - DI, SX_OB_20220327_19_56_SS_Primary_ALS - DI	**31-Mar-2022**	**01-Apr-2022**	27-Sep-2022	✓	**01-Apr-2022**	27-Sep-2022	✓
EP231B: Perfluoroalkyl Carboxylic Acids							
HDPE (no PTFE) (EP231X)							
SX_OB_20220326_20_4_SS_Primary_ALS, SX_OB_20220327_00_08_SS_Primary_ALS, SX_OB_20220327_03_55_SS_Primary_ALS, SX_OB_20220327_07_55_SS_Primary_ALS, SX_OB_20220327_07_58_SS_Duplicate_ALS, SX_OB_20220327_11_51_SS_Primary_ALS, SX_OB_20220327_16_00_SS_Triplicate_ALS, SX_OB_20220327_16_04_SS_Primary_ALS, SX_OB_20220327_19_56_SS_Primary_ALS, SX_OB_20220326_20_4_SS_Primary_ALS - DI, SX_OB_20220327_00_08_SS_Primary_ALS - DI, SX_OB_20220327_03_55_SS_Primary_ALS - DI, SX_OB_20220327_07_55_SS_Primary_ALS - DI, SX_OB_20220327_07_58_SS_Duplicate_ALS - DI, SX_OB_20220327_11_51_SS_Primary_ALS - DI, SX_OB_20220327_16_00_SS_Triplicate_ALS - DI, SX_OB_20220327_16_04_SS_Primary_ALS - DI, SX_OB_20220327_19_56_SS_Primary_ALS - DI	**31-Mar-2022**	**01-Apr-2022**	27-Sep-2022	✓	**01-Apr-2022**	27-Sep-2022	✓

Matrix: **WATER**

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

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP231C: Perfluoroalkyl Sulfonamides							
HDPE (no PTFE) (EP231X)							
SX_OB_20220326_20_4_SS_Primary_ALS, SX_OB_20220327_00_08_SS_Primary_ALS, SX_OB_20220327_03_55_SS_Primary_ALS, SX_OB_20220327_07_55_SS_Primary_ALS, SX_OB_20220327_07_58_SS_Duplicate_ALS, SX_OB_20220327_11_51_SS_Primary_ALS, SX_OB_20220327_16_00_SS_Triplicate_ALS, SX_OB_20220327_16_04_SS_Primary_ALS, SX_OB_20220327_19_56_SS_Primary_ALS, SX_OB_20220326_20_4_SS_Primary_ALS - DI, SX_OB_20220327_00_08_SS_Primary_ALS - DI, SX_OB_20220327_03_55_SS_Primary_ALS - DI, SX_OB_20220327_07_55_SS_Primary_ALS - DI, SX_OB_20220327_07_58_SS_Duplicate_ALS - DI, SX_OB_20220327_11_51_SS_Primary_ALS - DI, SX_OB_20220327_16_00_SS_Triplicate_ALS - DI, SX_OB_20220327_16_04_SS_Primary_ALS - DI, SX_OB_20220327_19_56_SS_Primary_ALS - DI	**31-Mar-2022**	**01-Apr-2022**	27-Sep-2022	✓	**01-Apr-2022**	27-Sep-2022	✓
EP231D: (n:2) Fluorotelomer Sulfonic Acids							
HDPE (no PTFE) (EP231X)							
SX_OB_20220326_20_4_SS_Primary_ALS, SX_OB_20220327_00_08_SS_Primary_ALS, SX_OB_20220327_03_55_SS_Primary_ALS, SX_OB_20220327_07_55_SS_Primary_ALS, SX_OB_20220327_07_58_SS_Duplicate_ALS, SX_OB_20220327_11_51_SS_Primary_ALS, SX_OB_20220327_16_00_SS_Triplicate_ALS, SX_OB_20220327_16_04_SS_Primary_ALS, SX_OB_20220327_19_56_SS_Primary_ALS, SX_OB_20220326_20_4_SS_Primary_ALS - DI, SX_OB_20220327_00_08_SS_Primary_ALS - DI, SX_OB_20220327_03_55_SS_Primary_ALS - DI, SX_OB_20220327_07_55_SS_Primary_ALS - DI, SX_OB_20220327_07_58_SS_Duplicate_ALS - DI, SX_OB_20220327_11_51_SS_Primary_ALS - DI, SX_OB_20220327_16_00_SS_Triplicate_ALS - DI, SX_OB_20220327_16_04_SS_Primary_ALS - DI, SX_OB_20220327_19_56_SS_Primary_ALS - DI	**31-Mar-2022**	**01-Apr-2022**	27-Sep-2022	✓	**01-Apr-2022**	27-Sep-2022	✓
EP231P: PFAS Sums							
HDPE (no PTFE) (EP231X)							
SX_OB_20220326_20_4_SS_Primary_ALS, SX_OB_20220327_00_08_SS_Primary_ALS, SX_OB_20220327_03_55_SS_Primary_ALS, SX_OB_20220327_07_55_SS_Primary_ALS, SX_OB_20220327_07_58_SS_Duplicate_ALS, SX_OB_20220327_11_51_SS_Primary_ALS, SX_OB_20220327_16_00_SS_Triplicate_ALS, SX_OB_20220327_16_04_SS_Primary_ALS, SX_OB_20220327_19_56_SS_Primary_ALS, SX_OB_20220326_20_4_SS_Primary_ALS - DI, SX_OB_20220327_00_08_SS_Primary_ALS - DI, SX_OB_20220327_03_55_SS_Primary_ALS - DI, SX_OB_20220327_07_55_SS_Primary_ALS - DI, SX_OB_20220327_07_58_SS_Duplicate_ALS - DI, SX_OB_20220327_11_51_SS_Primary_ALS - DI, SX_OB_20220327_16_00_SS_Triplicate_ALS - DI, SX_OB_20220327_16_04_SS_Primary_ALS - DI, SX_OB_20220327_19_56_SS_Primary_ALS - DI	**31-Mar-2022**	**01-Apr-2022**	27-Sep-2022	✓	**01-Apr-2022**	27-Sep-2022	✓

Quality Control Parameter Frequency Compliance

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

Matrix: **SOIL**

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

Quality Control Sample Type		Count		Rate (%)			Quality Control Specification
Analytical Methods	*Method*	*QC*	*Regular*	***Actual***	***Expected***	*Evaluation*	
Laboratory Duplicates (DUP)							
Hexavalent Chromium by Alkaline Digestion and DA Finish	EG048G	2	13	**15.38**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Moisture Content	EA055	2	13	**15.38**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
PCB - VIC EPA 448.3 Screen	EP066-EM	2	13	**15.38**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	2	13	**15.38**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
pH in soil using a 0.01M CaCl2 extract	EA001	2	13	**15.38**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Semivolatile Organic Compounds - Waste Classification	EP075-EM	2	13	**15.38**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Cyanide by Segmented Flow Analyser	EK026SF	2	13	**15.38**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Fluoride	EK040T	2	13	**15.38**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	2	13	**15.38**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	2	13	**15.38**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071-EM	2	13	**15.38**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Volatile Organic Compounds - Ultra-trace	EP074-UT	1	9	**11.11**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Laboratory Control Samples (LCS)							
Hexavalent Chromium by Alkaline Digestion and DA Finish	EG048G	2	13	**15.38**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
PCB - VIC EPA 448.3 Screen	EP066-EM	1	13	**7.69**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	1	13	**7.69**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
pH in soil using a 0.01M CaCl2 extract	EA001	2	13	**15.38**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Semivolatile Organic Compounds - Waste Classification	EP075-EM	1	13	**7.69**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Cyanide by Segmented Flow Analyser	EK026SF	1	13	**7.69**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Fluoride	EK040T	1	13	**7.69**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	1	13	**7.69**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	1	13	**7.69**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071-EM	1	13	**7.69**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Volatile Organic Compounds - Ultra-trace	EP074-UT	1	9	**11.11**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Method Blanks (MB)							
Deionised Water Leach - Plastic Leaching Vessel	EN60-Dla-P	2	13	**15.38**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Hexavalent Chromium by Alkaline Digestion and DA Finish	EG048G	1	13	**7.69**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
PCB - VIC EPA 448.3 Screen	EP066-EM	1	13	**7.69**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	1	13	**7.69**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Semivolatile Organic Compounds - Waste Classification	EP075-EM	1	13	**7.69**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Cyanide by Segmented Flow Analyser	EK026SF	1	13	**7.69**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Fluoride	EK040T	1	13	**7.69**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	1	13	**7.69**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	1	13	**7.69**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071-EM	1	13	**7.69**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Volatile Organic Compounds - Ultra-trace	EP074-UT	1	9	**11.11**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard

Matrix: **SOIL**

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

Quality Control Sample Type		Count		Rate (%)			Quality Control Specification
Analytical Methods	Method	QC	Regular	Actual	Expected	Evaluation	
Matrix Spikes (MS)							
Hexavalent Chromium by Alkaline Digestion and DA Finish	EG048G	2	13	**15.38**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
PCB - VIC EPA 448.3 Screen	EP066-EM	1	13	**7.69**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	1	13	**7.69**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Semivolatile Organic Compounds - Waste Classification	EP075-EM	1	13	**7.69**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Cyanide by Segmented Flow Analyser	EK026SF	1	13	**7.69**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Fluoride	EK040T	1	13	**7.69**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	1	13	**7.69**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	1	13	**7.69**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071-EM	1	13	**7.69**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Volatile Organic Compounds - Ultra-trace	EP074-UT	1	9	**11.11**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard

Matrix: **WATER**

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

Quality Control Sample Type		Count		Rate (%)			Quality Control Specification
Analytical Methods	Method	QC	Regular	Actual	Expected	Evaluation	
Laboratory Duplicates (DUP)							
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	4	34	**11.76**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Laboratory Control Samples (LCS)							
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	2	34	**5.88**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Method Blanks (MB)							
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	2	34	**5.88**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Matrix Spikes (MS)							
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	2	34	**5.88**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard

Brief Method Summaries

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

Analytical Methods	Method	Matrix	Method Descriptions
pH in soil using a 0.01M CaCl2 extract	EA001	SOIL	In house: Referenced to Rayment and Lyons 4B3 (mod.) or 4B4 (mod.) 10 g of soil is mixed with 50 mL of 0.01M CaCl2 and tumbled end over end for 1 hour. pH is measured from the continuous suspension. This method is compliant with NEPM Schedule B(3).
Moisture Content	EA055	SOIL	In house: A gravimetric procedure based on weight loss over a 12 hour drying period at 105-110 degrees C. This method is compliant with NEPM Schedule B(3).
Total Metals by ICP-AES	EG005T	SOIL	In house: Referenced to APHA 3120; USEPA SW 846 - 6010. Metals are determined following an appropriate acid digestion of the soil. The ICPAES technique ionises samples in a plasma, emitting a characteristic spectrum based on metals present. Intensities at selected wavelengths are compared against those of matrix matched standards. This method is compliant with NEPM Schedule B(3)
Total Mercury by FIMS	EG035T	SOIL	In house: Referenced to APHA 3112 Hg - B (Flow-injection (SnCl2) (Cold Vapour generation) AAS) FIM-AAS is an automated flameless atomic absorption technique. Mercury in solids are determined following an appropriate acid digestion. Ionic mercury is reduced online to atomic mercury vapour by SnCl2 which is then purged into a heated quartz cell. Quantification is by comparing absorbance against a calibration curve. This method is compliant with NEPM Schedule B(3)
Hexavalent Chromium by Alkaline Digestion and DA Finish	EG048G	SOIL	In house: Referenced to USEPA SW846, Method 3060. Hexavalent chromium is extracted by alkaline digestion. The digest is determined by photometrically by automatic discrete analyser, following pH adjustment. The instrument uses colour development using dephenylcarbazide. Each run of samples is measured against a five-point calibration curve. This method is compliant with NEPM Schedule B(3)
Total Cyanide by Segmented Flow Analyser	EK026SF	SOIL	In house: Referenced to APHA 4500-CN C / ASTM D7511 / ISO 14403. Caustic leachates of soil samples are introduced into an automated segmented flow analyser. Complex bound cyanide is decomposed in a continuously flowing stream, at a pH of 3.8, by the effect of UV light. A UV-B lamp (312 nm) and a decomposition spiral of borosilicate glass are used to filter out UV light with a wavelength of less than 290 nm thus preventing the conversion of thiocyanate into cyanide. The hydrogen cyanide present at a pH of 3.8 is separated by gas dialysis. The hydrogen cyanide is then determined photometrically, based on the reaction of cyanide with chloramine-T to form cyanogen chloride. This then reacts with 4-pyridine carboxylic acid and 1,3-dimethylbarbituric acid to give a red colour which is measured at 600 nm. This method is compliant with NEPM Schedule B(3).
Total Fluoride	EK040T	SOIL	(In-house) Total fluoride is determined by ion specific electrode (ISE) in a solution obtained after a Sodium Carbonate / Potassium Carbonate fusion dissolution.
PCB - VIC EPA 448.3 Screen	EP066-EM	SOIL	In house: Referenced to USEPA SW 846 - 8270 Extracts are analysed by Capillary GC/MS and quantification is by comparison against an established 5 point calibration curve. This method is compliant with NEPM Schedule B(3).
TRH - Semivolatile Fraction	EP071-EM	SOIL	In house: Referenced to USEPA SW 846 - 8015A Sample extracts are analysed by Capillary GC/FID and quantified against alkane standards over the range C10 - C40.
Volatile Organic Compounds - Ultra-trace	EP074-UT	SOIL	In house: Referenced to USEPA SW 846 - 8260 Extracts are analysed by Purge and Trap, Capillary GC/MS in partial SIM/Scan mode. Quantification is by comparison against an established multi-point calibration curves. This method is compliant with NEPM Schedule B(3).

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

Preparation Methods	Method	Matrix	Method Descriptions
NaOH leach for CN in Soils	CN-PR	SOIL	In house: APHA 4500 CN. Samples are extracted by end-over-end tumbling with NaOH.
pH in soil using a 0.01M CaCl2 extract	EA001-PR	SOIL	In house: Referenced to Rayment and Lyons 4B1, 10 g of soil is mixed with 50 mL of 0.01M CaCl2 and tumbled end over end for 1 hour. pH is measured from the continuous suspension. This method is compliant with NEPM Schedule B(3).
Alkaline digestion for Hexavalent Chromium	EG048PR	SOIL	In house: Referenced to USEPA SW846, Method 3060A.
Total Fluoride	EK040T-PR	SOIL	In house: Samples are fused with Sodium Carbonate / Potassium Carbonate flux.
ASLP for Non & Semivolatile Analytes - Plastic Leaching Vessel	EN60a-P	SOIL	In house QWI-EN/60 referenced to AS4439.3 Preparation of Leachates.
Deionised Water Leach - Plastic Leaching Vessel	EN60-DIa-P	SOIL	In house QWI-EN/60 referenced to AS4439.3 Preparation of Leachates
Hot Block Digest for metals in soils sediments and sludges	EN69	SOIL	In house: Referenced to USEPA 200.2. Hot Block Acid Digestion 1.0g of sample is heated with Nitric and Hydrochloric acids, then cooled. Peroxide is added and samples heated and cooled again before being filtered and bulked to volume for analysis. Digest is appropriate for determination of selected metals in sludge, sediments, and soils. This method is compliant with NEPM Schedule B(3).
Methanolic Extraction of Soils - Ultra-trace.	ORG16-UT	SOIL	In house: Referenced to USEPA SW 846 - 5030A. 5g of solid is shaken with surrogate and 10mL methanol prior to analysis by Purge and Trap - GC/MS.
Tumbler Extraction of Solids - VIC EPA Screen	ORG17-EM	SOIL	In house: Mechanical agitation (tumbler). 10g of sample, Na2SO4 and surrogate are extracted with 30mL 1:1 DCM/Acetone by end over end tumble. The solvent is decanted, dehydrated and concentrated (by KD) to the desired volume for analysis.
QuECheRS Extraction of Solids	ORG71	SOIL	In house: Sequential extractions with Acetonitrile/Methanol by shaking. Extraction efficiency aided by the addition of salts under acidic conditions. Where relevant, interferences from co-extracted organics are removed with dispersive clean-up media (dSPE). The extract is either diluted or concentrated and exchanged into the analytical solvent.

Preparation Methods	Method	Matrix	Method Descriptions
Solid Phase Extraction (SPE) for PFAS in water	ORG72	SOIL	In-house: Isotopically labelled analogues of target analytes used as internal standards and surrogates are added to the sample container. The entire contents are transferred to a solid phase extraction (SPE) cartridge. The sample container is successively rinsed with aliquots of the elution solvent. The eluted extract is combined with an equal volume of reagent water and a portion is filtered for analysis. Method procedures conform to US DoD QSM 5.3, table B-15 requirements.

ALS Melbourne: 4 Westall Rd, Springvale, VIC 3171 Phone (03) 8549 9600; Facsimile (03) 8549 9601. Email Samples.Melbourne@alsenviro.com

Environmental Division
Melbourne
Work Order Reference
EM2205583

Telephone : + 61-3-8549 9600

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CHAIN OF COUSTODY DOCUMENTATION

Australian Laboratory Services Pty Ltd

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PROJECT MANAGER (PM): Craig Trimbur	MOBILE 2: +61 490 411 004 (David Lawson)
PROJECT ID: JC0927	EMAIL REPORT TO: Labreports.TST@agonenviro.com.au agonenvironmental@esdat.com.au motherhublabresults1@wgtp.com.au Amrit.Kaur@agile-analytics.com.au
SITE: 20220329050622-ALS-14 P.O. NO.:	
RESULTS REQUIRED (Date): 5 days QUOTE NO.: ME-150-19 WGTP	EMAIL INVOICE TO: (if different to report) Labreports.TST@agonenviro.com.au agonenvironmental@esdat.com.au

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

COMMENTS / SPECIAL HANDLING / STORAGE OR DIPOSAL:

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

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

	ALS ID	SAMPLE ID	MATRIX	DATE	Time	Type / Code	Total bottles	Spoil Sample Prep	P16 plus Cr	PFAS 28 Extended suite	ASLP PFAS - Extended Suite (Lab to determine pH)	DI Leachate PFAS - Extended Suite								Notes:
9	1	SX_IB_20220328_07_41_SS_Primary_ALS	S	28/03/2022	07:41	Bucket	1	x	x	x	x	x								
10	2	SX_IB_20220328_07_45_SS_Duplicate_ALS	S	28/03/2022	07:45	Bucket	1	x	x	x	x	x								
11	3	SX_IB_20220328_11_59_SS_Primary_ALS	S	28/03/2022	11:59	Bucket	1	x	x	x	x	x								
12	4	SX_IB_20220328_15_48_SS_Triplicate_ALS	S	28/03/2022	15:48	Bucket	1	x	x	x	x	x								
13	5	SX_IB_20220328_15_50_SS_Primary_ALS	S	28/03/2022	15:50	Bucket	1	x	x	x	x	x								
14	6	SX_IB_20220328_20_19_SS_Primary_ALS	S	28/03/2022	20:19	Bucket	1	x	x	x	x	x								
15	7	SX_IB_20220329_00_09_SS_Primary_ALS	S	29/03/2022	00:09	Bucket	1	x	x	x	x	x								
16	8	SX_IB_20220329_04_21_SS_Primary_ALS	S	29/03/2022	04:09	Bucket	1	x	x	x	x	x								

RELINQUISHED BY:		RECEIVED BY		METHOD OF SHIPMENT
Name: Hannah Kennedy	Date: 29/3/22	Name: [illegible signature]	Date: 29/3	Con' Note No:
Of: EP Risk	Time:	Of: ALS	Time: 12:20	
Name:	Date:	Name:	Date:	Transport Co:
Of:	Time:	Of:	Time:	

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

AUSTRALIAN LABORATORY SERVICES P/L

ALS Environmental

CERTIFICATE OF ANALYSIS

Work Order	: **EM2205583**	Page	: 1 of 27
Client	: **AGON ENVIRONMENTAL PTY LTD**	Laboratory	: Environmental Division Melbourne
Contact	: Craig Trimbur	Contact	: Bronwyn Sheen
Address	: D1.1 63-85 TURNER STREET PORT MELBOURNE 3207	Address	: 4 Westall Rd Springvale VIC Australia 3171
Telephone	: ----	Telephone	: +6138549 9600
Project	: JC0927	Date Samples Received	: 29-Mar-2022 12:20
Order number	: ----	Date Analysis Commenced	: 31-Mar-2022
C-O-C number	: 20220329050622-ALS-14	Issue Date	: 05-Apr-2022 17:34
Sampler	: BRANDON CLARKE, WILLIAM O'HAIRE		
Site	: 20220329050622-ALS-14		
Quote number	: EN/150/19 -WGTP -Bulk Sample Quote		
No. of samples received	: 16		
No. of samples analysed	: 16		

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

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

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results
- Surrogate Control Limits

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

Signatories

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

Signatories	*Position*	*Accreditation Category*
Dilani Fernando	Laboratory Coordinator	Melbourne Inorganics, Springvale, VIC
Nancy Wang	2IC Organic Chemist	Melbourne Organics, Springvale, VIC
Xing Lin	Senior Organic Chemist	Melbourne Organics, Springvale, VIC

General Comments

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

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

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

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

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

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

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

- Benzo(a)pyrene Toxicity Equivalent Quotient (TEQ) per the NEPM (2013) is the sum total of the concentration of the eight carcinogenic PAHs multiplied by their Toxicity Equivalence Factor (TEF) relative to Benzo(a)pyrene. TEF values are provided in brackets as follows: Benz(a)anthracene (0.1), Chrysene (0.01), Benzo(b+j) & Benzo(k)fluoranthene (0.1), Benzo(a)pyrene (1.0), Indeno(1.2.3.cd)pyrene (0.1), Dibenz(a.h)anthracene (1.0), Benzo(g.h.i)perylene (0.01). Less than LOR results for 'TEQ Zero' are treated as zero, for 'TEQ 1/2LOR' are treated as half the reported LOR, and for 'TEQ LOR' are treated as being equal to the reported LOR. Note: TEQ 1/2LOR and TEQ LOR will calculate as 0.6mg/Kg and 1.2mg/Kg respectively for samples with non-detects for all of the eight TEQ PAHs.
- EP231X - Per- and Polyfluoroalkyl Substances (PFAS): Samples received in 20ml or 125ml bottles have been tested in accordance with the QSM5.3 compliant, NATA accredited method. 60mL or 250mL bottles have been tested to the legacy QSM 5.1 aligned, NATA accredited method.
- EP074-UT: Where reported, Total Xylenes is the sum of the reported concentrations of m&p-Xylene and o-Xylene at or above the LOR.
- EP074-WF: Where reported, Sum of trichlorobenzenes is the sum of the reported concentrations of 1,2,3-Trichlorobenzene and 1,2,4-Trichlorobenzene, and 1,3,5-Trichlorobenzene at or above the LOR.
- EG035T: EM2205589 #1 Poor duplicate precision for mercury due to sample heterogeneity. Confirmed by re-extraction and re-analysis.
- EP231: Stable isotope enriched internal standards are added to samples prior to extraction. Target compounds have a direct analogous internal standard with the exception of PFPeS, PFHpA, PFDS, PFTrDA and 10:2 FTS. These compounds use an internal standard that is chemically related and has a retention time close to that of the target compound. The DQO for internal standard response is 50-150% of that established at initial calibration. PFOS is quantified using a certified, traceable standard consisting of linear and branched PFOS isomers. These practices are in line with recommendations in the National Environmental Management Plan for PFAS (Australian HEPA) and also conform to QSM 5.3 (US DoD) requirements.
- EN60: Where leachable PFAS analysis is requested, centrifugation rather than pressure filtration is used as the default approach for removal of particulates, in line with AS 4439.3.
- EN60-DI: Where leachable PFAS analysis is requested, centrifugation rather than pressure filtration is used as the default approach for removal of particulates, in line with AS 4439.3.

Analytical Results

Sub-Matrix: **ASLP LEACHATE** (Matrix: **WATER**)

Compound	CAS Number	LOR	Unit	Sample ID	SX_IB_20220328_07_41_SS_Primary_ALS	SX_IB_20220328_07_45_SS_Duplicate_ALS	SX_IB_20220328_11_59_SS_Primary_ALS	SX_IB_20220328_15_48_SS_Triplicate_ALS	SX_IB_20220328_15_50_SS_Primary_ALS
				Sampling date / time	28-Mar-2022 07:41	28-Mar-2022 07:45	28-Mar-2022 11:59	28-Mar-2022 15:48	28-Mar-2022 15:50
					EM2205583-001	EM2205583-002	EM2205583-003	EM2205583-004	EM2205583-005
					Result	Result	Result	Result	Result
EP231A: Perfluoroalkyl Sulfonic Acids									
Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	<0.02
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L		<0.01	<0.01	<0.01	<0.01	<0.01
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L		<0.01	<0.01	<0.01	<0.01	<0.01
Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	<0.02
EP231B: Perfluoroalkyl Carboxylic Acids									
Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L		<0.1	<0.1	<0.1	<0.1	<0.1
Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	<0.02
Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L		<0.01	<0.01	<0.01	<0.01	<0.01
Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	<0.02
Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L		<0.05	<0.05	<0.05	<0.05	<0.05
EP231C: Perfluoroalkyl Sulfonamides									
Perfluorooctane sulfonamide (FOSA)	754-91-6	0.05	µg/L		<0.05	<0.05	<0.05	<0.05	<0.05
N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L		<0.05	<0.05	<0.05	<0.05	<0.05
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**)

Compound	CAS Number	LOR	Unit	Sample ID	SX_IB_20220328_07_41_SS_Primary_ALS	SX_IB_20220328_07_45_SS_Duplicate_ALS	SX_IB_20220328_11_59_SS_Primary_ALS	SX_IB_20220328_15_48_SS_Triplicate_ALS	SX_IB_20220328_15_50_SS_Primary_ALS
				Sampling date / time	28-Mar-2022 07:41	28-Mar-2022 07:45	28-Mar-2022 11:59	28-Mar-2022 15:48	28-Mar-2022 15:50
					EM2205583-001	EM2205583-002	EM2205583-003	EM2205583-004	EM2205583-005
					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	%		**96.6**	**97.4**	**110**	**97.8**	**99.6**
13C8-PFOA	----	0.02	%		**105**	**104**	**101**	**106**	**106**

Analytical Results

Sub-Matrix: ASLP LEACHATE (Matrix: WATER)				Sample ID	SX_IB_20220328_20_19_SS_Primary_ALS	SX_IB_20220329_00_09_SS_Primary_ALS	SX_IB_20220329_04_21_SS_Primary_ALS	----	----
				Sampling date / time	28-Mar-2022 20:19	29-Mar-2022 00:09	29-Mar-2022 04:09	----	----
Compound	CAS Number	LOR	Unit		EM2205583-006	EM2205583-007	EM2205583-008	--------	--------
					Result	Result	Result	----	----
EP231A: Perfluoroalkyl Sulfonic Acids									
Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L		<0.02	<0.02	<0.02	----	----
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L		<0.02	<0.02	<0.02	----	----
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L		<0.01	<0.01	<0.01	----	----
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L		<0.02	<0.02	<0.02	----	----
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L		<0.01	<0.01	<0.01	----	----
Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L		<0.02	<0.02	<0.02	----	----
EP231B: Perfluoroalkyl Carboxylic Acids									
Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L		<0.1	<0.1	<0.1	----	----
Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L		<0.02	<0.02	<0.02	----	----
Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L		<0.02	<0.02	<0.02	----	----
Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L		<0.02	<0.02	<0.02	----	----
Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L		<0.01	<0.01	<0.01	----	----
Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L		<0.02	<0.02	<0.02	----	----
Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L		<0.02	<0.02	<0.02	----	----
Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L		<0.02	<0.02	<0.02	----	----
Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L		<0.02	<0.02	<0.02	----	----
Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L		<0.02	<0.02	<0.02	----	----
Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L		<0.05	<0.05	<0.05	----	----
EP231C: Perfluoroalkyl Sulfonamides									
Perfluorooctane sulfonamide (FOSA)	754-91-6	0.05	µg/L		<0.05	<0.05	<0.05	----	----
N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L		<0.05	<0.05	<0.05	----	----
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	µg/L		<0.05	<0.05	<0.05	----	----

Analytical Results

Sub-Matrix: ASLP LEACHATE (Matrix: WATER)				Sample ID	SX_IB_20220328_20_19_SS_Primary_ALS	SX_IB_20220329_00_09_SS_Primary_ALS	SX_IB_20220329_04_21_SS_Primary_ALS	----	----
				Sampling date / time	28-Mar-2022 20:19	29-Mar-2022 00:09	29-Mar-2022 04:09	----	----
Compound	CAS Number	LOR	Unit		EM2205583-006	EM2205583-007	EM2205583-008	--------	--------
					Result	Result	Result	----	----
EP231C: Perfluoroalkyl Sulfonamides - Continued									
N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L		<0.05	<0.05	<0.05	----	----
N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L		<0.05	<0.05	<0.05	----	----
N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.05	µg/L		<0.05	<0.05	<0.05	----	----
N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.05	µg/L		<0.05	<0.05	<0.05	----	----
EP231D: (n:2) Fluorotelomer Sulfonic Acids									
4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L		<0.05	<0.05	<0.05	----	----
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.05	µg/L		<0.05	<0.05	<0.05	----	----
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.05	µg/L		<0.05	<0.05	<0.05	----	----
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.05	µg/L		<0.05	<0.05	<0.05	----	----
EP231P: PFAS Sums									
Sum of PFAS	----	0.10	µg/L		<0.10	<0.10	<0.10	----	----
Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L		<0.01	<0.01	<0.01	----	----
Sum of PFAS (WA DER List)	----	0.05	µg/L		<0.05	<0.05	<0.05	----	----
EP231S: PFAS Surrogate									
13C4-PFOS	----	0.02	%		**98.8**	**98.7**	**110**	----	----
13C8-PFOA	----	0.02	%		**104**	**104**	**106**	----	----

Analytical Results

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

Compound	CAS Number	LOR	Unit	Sample ID	SX_IB_20220328_07_41_SS_Primary_ALS DI	SX_IB_20220328_07_45_SS_Duplicate_ALS DI	SX_IB_20220328_11_59_SS_Primary_ALS DI	SX_IB_20220328_15_48_SS_Triplicate_ALS DI	SX_IB_20220328_15_50_SS_Primary_ALS DI
				Sampling date / time	28-Mar-2022 07:41	28-Mar-2022 07:45	28-Mar-2022 11:59	28-Mar-2022 15:48	28-Mar-2022 15:50
					EM2205583-009	EM2205583-010	EM2205583-011	EM2205583-012	EM2205583-013
					Result	Result	Result	Result	Result
EP231A: Perfluoroalkyl Sulfonic Acids									
Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	<0.02
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L		<0.01	<0.01	<0.01	<0.01	<0.01
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L		<0.01	<0.01	<0.01	<0.01	<0.01
Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	<0.02
EP231B: Perfluoroalkyl Carboxylic Acids									
Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L		<0.1	<0.1	<0.1	<0.1	<0.1
Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	<0.02
Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L		<0.01	<0.01	<0.01	<0.01	<0.01
Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	<0.02
Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L		<0.05	<0.05	<0.05	<0.05	<0.05
EP231C: Perfluoroalkyl Sulfonamides									
Perfluorooctane sulfonamide (FOSA)	754-91-6	0.05	µg/L		<0.05	<0.05	<0.05	<0.05	<0.05
N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L		<0.05	<0.05	<0.05	<0.05	<0.05

Analytical Results

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

Compound	CAS Number	LOR	Unit	Sample ID	SX_IB_20220328_07_41_SS_Primary_ALS DI	SX_IB_20220328_07_45_SS_Duplicate_ALS DI	SX_IB_20220328_11_59_SS_Primary_ALS DI	SX_IB_20220328_15_48_SS_Triplicate_ALS DI	SX_IB_20220328_15_50_SS_Primary_ALS DI
				Sampling date / time	28-Mar-2022 07:41	28-Mar-2022 07:45	28-Mar-2022 11:59	28-Mar-2022 15:48	28-Mar-2022 15:50
					EM2205583-009	EM2205583-010	EM2205583-011	EM2205583-012	EM2205583-013
					Result	Result	Result	Result	Result
EP231C: Perfluoroalkyl Sulfonamides - Continued									
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	µg/L		<0.05	<0.05	<0.05	<0.05	<0.05
N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L		<0.05	<0.05	<0.05	<0.05	<0.05
N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L		<0.05	<0.05	<0.05	<0.05	<0.05
N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.05	µg/L		<0.05	<0.05	<0.05	<0.05	<0.05
N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.05	µg/L		<0.05	<0.05	<0.05	<0.05	<0.05
EP231D: (n:2) Fluorotelomer Sulfonic Acids									
4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L		<0.05	<0.05	<0.05	<0.05	<0.05
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.05	µg/L		<0.05	<0.05	<0.05	<0.05	<0.05
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.05	µg/L		<0.05	<0.05	<0.05	<0.05	<0.05
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.05	µg/L		<0.05	<0.05	<0.05	<0.05	<0.05
EP231P: PFAS Sums									
Sum of PFAS	----	0.10	µg/L		<0.10	<0.10	<0.10	<0.10	<0.10
Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L		<0.01	<0.01	<0.01	<0.01	<0.01
Sum of PFAS (WA DER List)	----	0.05	µg/L		<0.05	<0.05	<0.05	<0.05	<0.05
EP231S: PFAS Surrogate									
13C4-PFOS	----	0.02	%		**94.3**	**94.6**	**101**	**98.0**	**98.1**
13C8-PFOA	----	0.02	%		**104**	**102**	**103**	**102**	**104**

Analytical Results

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

Compound	CAS Number	LOR	Unit	Sample ID	SX_IB_20220328_20_19_SS_Primary_ALS DI	SX_IB_20220329_00_09_SS_Primary_ALS DI	SX_IB_20220329_04_21_SS_Primary_ALS DI	----	----
				Sampling date / time	28-Mar-2022 08:19	29-Mar-2022 12:09	29-Mar-2022 04:09	----	----
					EM2205583-014	**EM2205583-015**	**EM2205583-016**	**--------**	**--------**
					Result	Result	Result	----	----
EP231A: Perfluoroalkyl Sulfonic Acids									
Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L		<0.02	<0.02	<0.02	**----**	**----**
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L		<0.02	<0.02	<0.02	**----**	**----**
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L		<0.01	<0.01	<0.01	**----**	**----**
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L		<0.02	<0.02	<0.02	**----**	**----**
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L		<0.01	<0.01	<0.01	**----**	**----**
Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L		<0.02	<0.02	<0.02	**----**	**----**
EP231B: Perfluoroalkyl Carboxylic Acids									
Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L		<0.1	<0.1	<0.1	**----**	**----**
Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L		<0.02	<0.02	<0.02	**----**	**----**
Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L		<0.02	<0.02	<0.02	**----**	**----**
Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L		<0.02	<0.02	<0.02	**----**	**----**
Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L		<0.01	<0.01	<0.01	**----**	**----**
Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L		<0.02	<0.02	<0.02	**----**	**----**
Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L		<0.02	<0.02	<0.02	**----**	**----**
Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L		<0.02	<0.02	<0.02	**----**	**----**
Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L		<0.02	<0.02	<0.02	**----**	**----**
Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L		<0.02	<0.02	<0.02	**----**	**----**
Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L		<0.05	<0.05	<0.05	**----**	**----**
EP231C: Perfluoroalkyl Sulfonamides									
Perfluorooctane sulfonamide (FOSA)	754-91-6	0.05	µg/L		<0.05	<0.05	<0.05	**----**	**----**
N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L		<0.05	<0.05	<0.05	**----**	**----**

Analytical Results

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

Compound	CAS Number	LOR	Unit	Sample ID	SX_IB_20220328_20_19_SS_Primary_ALS DI	SX_IB_20220329_00_09_SS_Primary_ALS DI	SX_IB_20220329_04_21_SS_Primary_ALS DI	----	----
				Sampling date / time	28-Mar-2022 08:19	29-Mar-2022 12:09	29-Mar-2022 04:09	----	----
					EM2205583-014	**EM2205583-015**	**EM2205583-016**	**--------**	**--------**
					Result	Result	Result	----	----
EP231C: Perfluoroalkyl Sulfonamides - Continued									
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	µg/L		<0.05	<0.05	<0.05	**----**	**----**
N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L		<0.05	<0.05	<0.05	**----**	**----**
N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L		<0.05	<0.05	<0.05	**----**	**----**
N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.05	µg/L		<0.05	<0.05	<0.05	**----**	**----**
N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.05	µg/L		<0.05	<0.05	<0.05	**----**	**----**
EP231D: (n:2) Fluorotelomer Sulfonic Acids									
4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L		<0.05	<0.05	<0.05	**----**	**----**
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.05	µg/L		<0.05	<0.05	<0.05	**----**	**----**
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.05	µg/L		<0.05	<0.05	<0.05	**----**	**----**
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.05	µg/L		<0.05	<0.05	<0.05	**----**	**----**
EP231P: PFAS Sums									
Sum of PFAS	----	0.10	µg/L		<0.10	<0.10	<0.10	**----**	**----**
Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L		<0.01	<0.01	<0.01	**----**	**----**
Sum of PFAS (WA DER List)	----	0.05	µg/L		<0.05	<0.05	<0.05	**----**	**----**
EP231S: PFAS Surrogate									
13C4-PFOS	----	0.02	%		**99.6**	**99.6**	**96.6**	**----**	**----**
13C8-PFOA	----	0.02	%		**102**	**104**	**104**	**----**	**----**

Analytical Results

Sub-Matrix: SOIL
(Matrix: SOIL)

Compound	CAS Number	LOR	Unit	Sample ID	SX_IB_20220328_07_41_SS_Primary_ALS	SX_IB_20220328_07_45_SS_Duplicate_ALS	SX_IB_20220328_11_59_SS_Primary_ALS	SX_IB_20220328_15_48_SS_Triplicate_ALS	SX_IB_20220328_15_50_SS_Primary_ALS
				Sampling date / time	28-Mar-2022 07:41	28-Mar-2022 07:45	28-Mar-2022 11:59	28-Mar-2022 15:48	28-Mar-2022 15:50
					EM2205583-001	EM2205583-002	EM2205583-003	EM2205583-004	EM2205583-005
					Result	Result	Result	Result	Result
EA001: pH in soil using 0.01M CaCl extract									
pH (CaCl2)	----	0.1	pH Unit		8.0	8.1	7.8	8.0	7.8
EA055: Moisture Content (Dried @ 105-110°C)									
Moisture Content	----	1.0	%		31.4	32.0	29.9	31.3	28.9
EG005(ED093)T: Total Metals by ICP-AES									
Arsenic	7440-38-2	5	mg/kg		17	18	20	23	24
Cadmium	7440-43-9	1	mg/kg		1	1	<1	<1	<1
Chromium	7440-47-3	5	mg/kg		96	106	93	102	102
Copper	7440-50-8	5	mg/kg		63	64	59	57	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		174	169	173	151	162
Selenium	7782-49-2	5	mg/kg		<5	<5	<5	<5	<5
Silver	7440-22-4	2	mg/kg		<2	<2	<2	<2	<2
Tin	7440-31-5	10	mg/kg		<10	<10	<10	<10	<10
Zinc	7440-66-6	5	mg/kg		102	100	100	93	93
EG035T: Total Recoverable Mercury by FIMS									
Mercury	7439-97-6	0.1	mg/kg		<0.1	<0.1	<0.1	<0.1	<0.1
EG048: Hexavalent Chromium (Alkaline Digest)									
Hexavalent Chromium	18540-29-9	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		230	210	240	360	240
EN60: ASLP Leaching Procedure - Inorganics/PFAS (Plastic Vessel)									
Initial pH	----	0.1	pH Unit		7.7	9.3	8.9	9.2	9.2
After HCl pH	----	0.1	pH Unit		1.6	1.6	1.6	1.5	1.4
Extraction Fluid pH	----	0.1	pH Unit		5.0	5.0	5.0	5.0	5.0
Final pH	----	0.1	pH Unit		5.0	5.2	5.0	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_20220328_07_41_SS_Primary_ALS	SX_IB_20220328_07_45_SS_Duplicate_ALS	SX_IB_20220328_11_59_SS_Primary_ALS	SX_IB_20220328_15_48_SS_Triplicate_ALS	SX_IB_20220328_15_50_SS_Primary_ALS
				Sampling date / time	28-Mar-2022 07:41	28-Mar-2022 07:45	28-Mar-2022 11:59	28-Mar-2022 15:48	28-Mar-2022 15:50
Compound	CAS Number	LOR	Unit		EM2205583-001	EM2205583-002	EM2205583-003	EM2205583-004	EM2205583-005
					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	<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)

Compound	CAS Number	LOR	Unit	Sample ID	SX_IB_20220328_07_41_SS_Primary_ALS	SX_IB_20220328_07_45_SS_Duplicate_ALS	SX_IB_20220328_11_59_SS_Primary_ALS	SX_IB_20220328_15_48_SS_Triplicate_ALS	SX_IB_20220328_15_50_SS_Primary_ALS
				Sampling date / time	28-Mar-2022 07:41	28-Mar-2022 07:45	28-Mar-2022 11:59	28-Mar-2022 15:48	28-Mar-2022 15:50
					EM2205583-001	EM2205583-002	EM2205583-003	EM2205583-004	EM2205583-005
					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**)

Compound	CAS Number	LOR	Unit	Sample ID	SX_IB_20220328_07_41_SS_Primary_ALS	SX_IB_20220328_07_45_SS_Duplicate_ALS	SX_IB_20220328_11_59_SS_Primary_ALS	SX_IB_20220328_15_48_SS_Triplicate_ALS	SX_IB_20220328_15_50_SS_Primary_ALS
				Sampling date / time	28-Mar-2022 07:41	28-Mar-2022 07:45	28-Mar-2022 11:59	28-Mar-2022 15:48	28-Mar-2022 15:50
					EM2205583-001	EM2205583-002	EM2205583-003	EM2205583-004	EM2205583-005
					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	72-54-8/72-55-9/50-2	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

Analytical Results

Sub-Matrix: SOIL
(Matrix: SOIL)

Compound	CAS Number	LOR	Unit	Sample ID	SX_IB_20220328_07_41_SS_Primary_ALS	SX_IB_20220328_07_45_SS_Duplicate_ALS	SX_IB_20220328_11_59_SS_Primary_ALS	SX_IB_20220328_15_48_SS_Triplicate_ALS	SX_IB_20220328_15_50_SS_Primary_ALS
				Sampling date / time	28-Mar-2022 07:41	28-Mar-2022 07:45	28-Mar-2022 11:59	28-Mar-2022 15:48	28-Mar-2022 15:50
					EM2205583-001	EM2205583-002	EM2205583-003	EM2205583-004	EM2205583-005
					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	<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
>C10 - C16 Fraction minus Naphthalene (F2)	----	50	mg/kg		<50	<50	<50	<50	----
C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	20	mg/kg		<20	<20	<20	<20	<20
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
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

Analytical Results

Sub-Matrix: SOIL
(Matrix: SOIL)

Compound	CAS Number	LOR	Unit	Sample ID	SX_IB_20220328_07_41_SS_Primary_ALS	SX_IB_20220328_07_45_SS_Duplicate_ALS	SX_IB_20220328_11_59_SS_Primary_ALS	SX_IB_20220328_15_48_SS_Triplicate_ALS	SX_IB_20220328_15_50_SS_Primary_ALS
				Sampling date / time	28-Mar-2022 07:41	28-Mar-2022 07:45	28-Mar-2022 11:59	28-Mar-2022 15:48	28-Mar-2022 15:50
					EM2205583-001	EM2205583-002	EM2205583-003	EM2205583-004	EM2205583-005
					Result	Result	Result	Result	Result
EP231B: Perfluoroalkyl Carboxylic Acids - Continued									
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									
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

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	SX_IB_20220328_07_41_SS_Primary_ALS	SX_IB_20220328_07_45_SS_Duplicate_ALS	SX_IB_20220328_11_59_SS_Primary_ALS	SX_IB_20220328_15_48_SS_Triplicate_ALS	SX_IB_20220328_15_50_SS_Primary_ALS
				Sampling date / time	28-Mar-2022 07:41	28-Mar-2022 07:45	28-Mar-2022 11:59	28-Mar-2022 15:48	28-Mar-2022 15:50
Compound	CAS Number	LOR	Unit		EM2205583-001	EM2205583-002	EM2205583-003	EM2205583-004	EM2205583-005
					Result	Result	Result	Result	Result
EP231D: (n:2) Fluorotelomer Sulfonic Acids - Continued									
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	%		**120**	**119**	**120**	**120**	**118**
EP074S: VOC Surrogates (Ultra-Trace)									
1.2-Dichloroethane-D4	17060-07-0	0.1	%		**86.9**	**86.4**	**94.1**	**78.5**	**85.5**
Toluene-D8	2037-26-5	0.1	%		**85.4**	**86.9**	**94.6**	**77.1**	**82.4**
4-Bromofluorobenzene	460-00-4	0.1	%		**92.6**	**95.1**	**103**	**85.2**	**90.1**
EP075S: Acid Extractable Surrogates (Waste Classification)									
Phenol-d6	13127-88-3	0.025	%		**90.8**	**90.9**	**96.1**	**90.1**	**86.2**
2-Chlorophenol-D4	93951-73-6	0.025	%		**86.4**	**92.6**	**95.1**	**93.6**	**89.3**
2.4.6-Tribromophenol	118-79-6	0.025	%		**82.0**	**84.4**	**85.6**	**85.0**	**80.5**
EP075T: Base/Neutral Extractable Surrogates (Waste Classification)									
Nitrobenzene-D5	4165-60-0	0.025	%		**86.7**	**91.1**	**92.0**	**90.2**	**89.6**
1.2-Dichlorobenzene-D4	2199-69-1	0.025	%		**77.5**	**82.6**	**82.8**	**82.8**	**78.4**
2-Fluorobiphenyl	321-60-8	0.025	%		**83.6**	**87.3**	**90.7**	**89.2**	**85.0**
Anthracene-d10	1719-06-8	0.025	%		**82.5**	**87.8**	**90.0**	**88.8**	**85.8**
4-Terphenyl-d14	1718-51-0	0.025	%		**84.1**	**89.1**	**90.3**	**89.1**	**86.8**
EP231S: PFAS Surrogate									
13C4-PFOS	----	0.0002	%		**88.9**	**90.6**	**93.4**	**85.9**	**87.5**
13C8-PFOA	----	0.0002	%		**97.1**	**96.2**	**95.8**	**98.2**	**99.6**

Analytical Results

Sub-Matrix: SOIL
(Matrix: SOIL)

Compound	CAS Number	LOR	Unit	Sample ID	SX_IB_20220328_20_19_SS_Primary_ALS	SX_IB_20220329_00_09_SS_Primary_ALS	SX_IB_20220329_04_21_SS_Primary_ALS	SX_IB_20220328_07_41_SS_Primary_ALS DI	SX_IB_20220328_07_45_SS_Duplicate_ALS DI
				Sampling date / time	28-Mar-2022 20:19	29-Mar-2022 00:09	29-Mar-2022 04:09	28-Mar-2022 07:41	28-Mar-2022 07:45
					EM2205583-006	EM2205583-007	EM2205583-008	EM2205583-009	EM2205583-010
					Result	Result	Result	Result	Result
EA001: pH in soil using 0.01M CaCl extract									
pH (CaCl2)	----	0.1	pH Unit		8.2	8.0	7.8	----	----
EA055: Moisture Content (Dried @ 105-110°C)									
Moisture Content	----	1.0	%		27.5	30.1	27.0	----	----
EG005(ED093)T: Total Metals by ICP-AES									
Arsenic	7440-38-2	5	mg/kg		17	18	16	----	----
Cadmium	7440-43-9	1	mg/kg		<1	<1	<1	----	----
Chromium	7440-47-3	5	mg/kg		87	95	90	----	----
Copper	7440-50-8	5	mg/kg		51	59	54	----	----
Lead	7439-92-1	5	mg/kg		<5	<5	<5	----	----
Molybdenum	7439-98-7	5	mg/kg		<5	<5	<5	----	----
Nickel	7440-02-0	5	mg/kg		140	161	152	----	----
Selenium	7782-49-2	5	mg/kg		<5	<5	<5	----	----
Silver	7440-22-4	2	mg/kg		<2	<2	<2	----	----
Tin	7440-31-5	10	mg/kg		<10	<10	<10	----	----
Zinc	7440-66-6	5	mg/kg		80	91	85	----	----
EG035T: Total Recoverable Mercury by FIMS									
Mercury	7439-97-6	0.1	mg/kg		<0.1	<0.1	<0.1	----	----
EG048: Hexavalent Chromium (Alkaline Digest)									
Hexavalent Chromium	18540-29-9	1.0	mg/kg		<1.0	<1.0	<1.0	----	----
EK026SF: Total CN by Segmented Flow Analyser									
Total Cyanide	57-12-5	5	mg/kg		<5	<5	<5	----	----
EK040T: Fluoride Total									
Fluoride	16984-48-8	100	mg/kg		220	210	240	----	----
EN60: ASLP Leaching Procedure - Inorganics/PFAS (Plastic Vessel)									
Initial pH	----	0.1	pH Unit		9.6	9.5	9.3	----	----
After HCl pH	----	0.1	pH Unit		1.4	1.4	1.4	----	----
Extraction Fluid pH	----	0.1	pH Unit		5.0	5.0	5.0	----	----
Final pH	----	0.1	pH Unit		5.1	5.1	5.1	----	----
EN60-DI: Bottle Leaching Procedure - Inorganics/PFAS (Plastic Vessel)									
Final pH	----	0.1	pH Unit		----	----	----	9.4	9.7
EP066: Polychlorinated Biphenyls (PCB)									
Total Polychlorinated biphenyls	----	0.1	mg/kg		<0.1	<0.1	<0.1	----	----

Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

Compound	CAS Number	LOR	Unit	Sample ID	SX_IB_20220328_20_19_SS_Primary_ALS	SX_IB_20220329_00_09_SS_Primary_ALS	SX_IB_20220329_04_21_SS_Primary_ALS	SX_IB_20220328_07_41_SS_Primary_ALS DI	SX_IB_20220328_07_45_SS_Duplicate_ALS DI
				Sampling date / time	28-Mar-2022 20:19	29-Mar-2022 00:09	29-Mar-2022 04:09	28-Mar-2022 07:41	28-Mar-2022 07:45
					EM2205583-006	EM2205583-007	EM2205583-008	EM2205583-009	EM2205583-010
					Result	Result	Result	Result	Result
EP074A: Monocyclic Aromatic Hydrocarbons									
Benzene	71-43-2	0.2	mg/kg		<0.2	<0.2	<0.2	----	----
Toluene	108-88-3	0.5	mg/kg		<0.5	<0.5	<0.5	----	----
Ethylbenzene	100-41-4	0.5	mg/kg		<0.5	<0.5	<0.5	----	----
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg		<0.5	<0.5	<0.5	----	----
Styrene	100-42-5	0.5	mg/kg		<0.5	<0.5	<0.5	----	----
ortho-Xylene	95-47-6	0.5	mg/kg		<0.5	<0.5	<0.5	----	----
^ **Sum of monocyclic aromatic hydrocarbons**	----	0.5	mg/kg		<0.5	<0.5	<0.5	----	----
^ **Total Xylenes**	----	0.5	mg/kg		<0.5	<0.5	<0.5	----	----
EP074H: Naphthalene									
Naphthalene	91-20-3	1	mg/kg		<1	<1	<1	----	----
EP074I: Volatile Halogenated Compounds									
Vinyl chloride	75-01-4	0.50	mg/kg		<0.50	<0.50	<0.50	----	----
1.1-Dichloroethene	75-35-4	0.50	mg/kg		<0.50	<0.50	<0.50	----	----
Methylene chloride	75-09-2	0.5	mg/kg		<0.5	<0.5	<0.5	----	----
trans-1.2-Dichloroethene	156-60-5	0.50	mg/kg		<0.50	<0.50	<0.50	----	----
cis-1.2-Dichloroethene	156-59-2	0.50	mg/kg		<0.50	<0.50	<0.50	----	----
Chloroform	67-66-3	0.50	mg/kg		<0.50	<0.50	<0.50	----	----
1.1.1-Trichloroethane	71-55-6	0.50	mg/kg		<0.50	<0.50	<0.50	----	----
Carbon Tetrachloride	56-23-5	0.50	mg/kg		<0.50	<0.50	<0.50	----	----
1.2-Dichloroethane	107-06-2	0.50	mg/kg		<0.50	<0.50	<0.50	----	----
Trichloroethene	79-01-6	0.50	mg/kg		<0.50	<0.50	<0.50	----	----
1.1.2-Trichloroethane	79-00-5	0.50	mg/kg		<0.50	<0.50	<0.50	----	----
Tetrachloroethene	127-18-4	0.50	mg/kg		<0.50	<0.50	<0.50	----	----
1.1.1.2-Tetrachloroethane	630-20-6	0.50	mg/kg		<0.50	<0.50	<0.50	----	----
1.1.2.2-Tetrachloroethane	79-34-5	0.50	mg/kg		<0.50	<0.50	<0.50	----	----
Hexachlorobutadiene	87-68-3	0.50	mg/kg		<0.50	<0.50	<0.50	----	----
Chlorobenzene	108-90-7	0.50	mg/kg		<0.50	<0.50	<0.50	----	----
1.4-Dichlorobenzene	106-46-7	0.50	mg/kg		<0.50	<0.50	<0.50	----	----
1.2-Dichlorobenzene	95-50-1	0.50	mg/kg		<0.50	<0.50	<0.50	----	----
1.2.4-Trichlorobenzene	120-82-1	0.50	mg/kg		<0.50	<0.50	<0.50	----	----
^ **Sum of volatile chlorinated hydrocarbons**	----	0.50	mg/kg		<0.50	<0.50	<0.50	----	----
^ **Sum of other chlorinated hydrocarbons**	----	0.50	mg/kg		<0.50	<0.50	<0.50	----	----

Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

Compound	CAS Number	LOR	Unit	Sample ID	SX_IB_20220328_20_19_SS_Primary_ALS	SX_IB_20220329_00_09_SS_Primary_ALS	SX_IB_20220329_04_21_SS_Primary_ALS	SX_IB_20220328_07_41_SS_Primary_ALS DI	SX_IB_20220328_07_45_SS_Duplicate_ALS DI
				Sampling date / time	28-Mar-2022 20:19	29-Mar-2022 00:09	29-Mar-2022 04:09	28-Mar-2022 07:41	28-Mar-2022 07:45
					EM2205583-006	EM2205583-007	EM2205583-008	EM2205583-009	EM2205583-010
					Result	Result	Result	Result	Result
EP075A: Phenolic Compounds (Halogenated)									
2-Chlorophenol	95-57-8	0.50	mg/kg		<0.50	<0.50	<0.50	----	----
2.4-Dichlorophenol	120-83-2	0.50	mg/kg		<0.50	<0.50	<0.50	----	----
2.6-Dichlorophenol	87-65-0	0.50	mg/kg		<0.50	<0.50	<0.50	----	----
4-Chloro-3-methylphenol	59-50-7	1.00	mg/kg		<1.00	<1.00	<1.00	----	----
2.4.5-Trichlorophenol	95-95-4	1.00	mg/kg		<1.00	<1.00	<1.00	----	----
2.4.6-Trichlorophenol	88-06-2	1.00	mg/kg		<1.00	<1.00	<1.00	----	----
2.3.5.6-Tetrachlorophenol	935-95-5	0.03	mg/kg		<0.03	<0.03	<0.03	----	----
2.3.4.5 & 2.3.4.6-Tetrachlorophenol	4901-51-3/58-90-2	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
Pentachlorophenol	87-86-5	1.0	mg/kg		<1.0	<1.0	<1.0	----	----
^ **Sum of Phenols (halogenated)**	----	1.00	mg/kg		<1.00	<1.00	<1.00	----	----
EP075A: Phenolic Compounds (Non-halogenated)									
Phenol	108-95-2	1	mg/kg		<1	<1	<1	----	----
2-Methylphenol	95-48-7	1	mg/kg		<1	<1	<1	----	----
3- & 4-Methylphenol	1319-77-3	1	mg/kg		<1	<1	<1	----	----
2-Nitrophenol	88-75-5	1	mg/kg		<1	<1	<1	----	----
2.4-Dimethylphenol	105-67-9	1	mg/kg		<1	<1	<1	----	----
2.4-Dinitrophenol	51-28-5	5	mg/kg		<5	<5	<5	----	----
4-Nitrophenol	100-02-7	5	mg/kg		<5	<5	<5	----	----
2-Methyl-4.6-dinitrophenol	8071-51-0	5	mg/kg		<5	<5	<5	----	----
Dinoseb	88-85-7	20	mg/kg		<20	<20	<20	----	----
2-Cyclohexyl-4.6-Dinitrophenol	131-89-5	20	mg/kg		<20	<20	<20	----	----
^ **Sum of Phenols (non-halogenated)**	----	20	mg/kg		<20	<20	<20	----	----
EP075B: Polynuclear Aromatic Hydrocarbons									
Naphthalene	91-20-3	0.5	mg/kg		<0.5	<0.5	<0.5	----	----
Acenaphthene	83-32-9	0.5	mg/kg		<0.5	<0.5	<0.5	----	----
Acenaphthylene	208-96-8	0.5	mg/kg		<0.5	<0.5	<0.5	----	----
Fluorene	86-73-7	0.5	mg/kg		<0.5	<0.5	<0.5	----	----
Phenanthrene	85-01-8	0.5	mg/kg		<0.5	<0.5	<0.5	----	----
Anthracene	120-12-7	0.5	mg/kg		<0.5	<0.5	<0.5	----	----
Fluoranthene	206-44-0	0.5	mg/kg		<0.5	<0.5	<0.5	----	----
Pyrene	129-00-0	0.5	mg/kg		<0.5	<0.5	<0.5	----	----
Benz(a)anthracene	56-55-3	0.5	mg/kg		<0.5	<0.5	<0.5	----	----

Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

Compound	CAS Number	LOR	Unit	Sample ID	SX_IB_20220328_20_19_SS_Primary_ALS	SX_IB_20220329_00_09_SS_Primary_ALS	SX_IB_20220329_04_21_SS_Primary_ALS	SX_IB_20220328_07_41_SS_Primary_ALS DI	SX_IB_20220328_07_45_SS_Duplicate_ALS DI
				Sampling date / time	28-Mar-2022 20:19	29-Mar-2022 00:09	29-Mar-2022 04:09	28-Mar-2022 07:41	28-Mar-2022 07:45
					EM2205583-006	EM2205583-007	EM2205583-008	EM2205583-009	EM2205583-010
					Result	Result	Result	Result	Result
EP075B: Polynuclear Aromatic Hydrocarbons - Continued									
Chrysene	218-01-9	0.5	mg/kg		<0.5	<0.5	<0.5	----	----
Benzo(b+j) & Benzo(k)fluoranthene	205-99-2 207-08-9	1.0	mg/kg		<1.0	<1.0	<1.0	----	----
Benzo(a)pyrene	50-32-8	0.5	mg/kg		<0.5	<0.5	<0.5	----	----
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg		<0.5	<0.5	<0.5	----	----
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg		<0.5	<0.5	<0.5	----	----
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg		<0.5	<0.5	<0.5	----	----
^ **Sum of polycyclic aromatic hydrocarbons**	----	0.5	mg/kg		<0.5	<0.5	<0.5	----	----
^ **Benzo(a)pyrene TEQ (zero)**	----	0.5	mg/kg		<0.5	<0.5	<0.5	----	----
^ **Benzo(a)pyrene TEQ (half LOR)**	----	0.5	mg/kg		**0.6**	**0.6**	**0.6**	----	----
^ **Benzo(a)pyrene TEQ (LOR)**	----	0.5	mg/kg		**1.2**	**1.2**	**1.2**	----	----
EP075I: Organochlorine Pesticides									
alpha-BHC	319-84-6	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
beta-BHC	319-85-7	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
gamma-BHC	58-89-9	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
delta-BHC	319-86-8	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
Heptachlor	76-44-8	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
Aldrin	309-00-2	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
Heptachlor epoxide	1024-57-3	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
cis-Chlordane	5103-71-9	0.03	mg/kg		<0.03	<0.03	<0.03	----	----
trans-Chlordane	5103-74-2	0.03	mg/kg		<0.03	<0.03	<0.03	----	----
Endosulfan 1	959-98-8	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
4.4`-DDE	72-55-9	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
Dieldrin	60-57-1	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
Endrin aldehyde	7421-93-4	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
Endrin	72-20-8	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
Endosulfan 2	33213-65-9	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
4.4`-DDD	72-54-8	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
Endosulfan sulfate	1031-07-8	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
4.4`-DDT	50-29-3	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
Methoxychlor	72-43-5	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
^ **Sum of organochlorine pesticides**	----	0.10	mg/kg		<0.10	<0.10	<0.10	----	----

Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

Compound	CAS Number	LOR	Unit	Sample ID	SX_IB_20220328_20_19_SS_Primary_ALS	SX_IB_20220329_00_09_SS_Primary_ALS	SX_IB_20220329_04_21_SS_Primary_ALS	SX_IB_20220328_07_41_SS_Primary_ALS DI	SX_IB_20220328_07_45_SS_Duplicate_ALS DI
				Sampling date / time	28-Mar-2022 20:19	29-Mar-2022 00:09	29-Mar-2022 04:09	28-Mar-2022 07:41	28-Mar-2022 07:45
					EM2205583-006	EM2205583-007	EM2205583-008	EM2205583-009	EM2205583-010
					Result	Result	Result	Result	Result
EP075I: Organochlorine Pesticides - Continued									
^ **Sum of Aldrin + Dieldrin**	309-00-2/60-57-1	0.30	mg/kg		<0.30	<0.30	<0.30	----	----
^ **Sum of DDD + DDE + DDT**	72-54-8/72-55-9/50-2	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
^ **Chlordane**	57-74-9	0.10	mg/kg		<0.10	<0.10	<0.10	----	----
^ **Sum of other organochlorine pesticides**	----	0.03	mg/kg		<0.03	<0.03	<0.03	----	----
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	----	20	mg/kg		<20	<20	<20	----	----
C10 - C14 Fraction	----	50	mg/kg		<50	<50	<50	----	----
C6 - C10 Fraction	C6_C10	20	mg/kg		<20	<20	<20	----	----
C15 - C28 Fraction	----	100	mg/kg		<100	<100	<100	----	----
C29 - C36 Fraction	----	100	mg/kg		<100	<100	<100	----	----
^ **C10 - C36 Fraction (sum)**	----	50	mg/kg		<50	<50	<50	----	----
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
>C10 - C16 Fraction	----	50	mg/kg		<50	<50	<50	----	----
>C16 - C34 Fraction	----	100	mg/kg		<100	<100	<100	----	----
>C34 - C40 Fraction	----	100	mg/kg		<100	<100	<100	----	----
^ **>C10 - C40 Fraction (sum)**	----	50	mg/kg		<50	<50	<50	----	----
>C10 - C16 Fraction minus Naphthalene (F2)	----	50	mg/kg		<50	<50	<50	----	----
C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	20	mg/kg		<20	<20	<20	----	----
EP231A: Perfluoroalkyl Sulfonic Acids									
Perfluorobutane sulfonic acid (PFBS)	375-73-5	5.0	µg/kg		<5.0	<5.0	<5.0	----	----
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	5.0	µg/kg		<5.0	<5.0	<5.0	----	----
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	5.0	µg/kg		<5.0	<5.0	<5.0	----	----
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	5.0	µg/kg		<5.0	<5.0	<5.0	----	----
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	5.0	µg/kg		<5.0	<5.0	<5.0	----	----
Perfluorodecane sulfonic acid (PFDS)	335-77-3	5.0	µg/kg		<5.0	<5.0	<5.0	----	----

Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

Compound	CAS Number	LOR	Unit	Sample ID	SX_IB_20220328_20_19_SS_Primary_ALS	SX_IB_20220329_00_09_SS_Primary_ALS	SX_IB_20220329_04_21_SS_Primary_ALS	SX_IB_20220328_07_41_SS_Primary_ALS DI	SX_IB_20220328_07_45_SS_Duplicate_ALS DI
				Sampling date / time	28-Mar-2022 20:19	29-Mar-2022 00:09	29-Mar-2022 04:09	28-Mar-2022 07:41	28-Mar-2022 07:45
					EM2205583-006	EM2205583-007	EM2205583-008	EM2205583-009	EM2205583-010
					Result	Result	Result	Result	Result
EP231B: Perfluoroalkyl Carboxylic Acids									
Perfluorobutanoic acid (PFBA)	375-22-4	5	µg/kg		<5	<5	<5	----	----
Perfluoropentanoic acid (PFPeA)	2706-90-3	5.0	µg/kg		<5.0	<5.0	<5.0	----	----
Perfluorohexanoic acid (PFHxA)	307-24-4	5.0	µg/kg		<5.0	<5.0	<5.0	----	----
Perfluoroheptanoic acid (PFHpA)	375-85-9	5.0	µg/kg		<5.0	<5.0	<5.0	----	----
Perfluorooctanoic acid (PFOA)	335-67-1	5.0	µg/kg		<5.0	<5.0	<5.0	----	----
Perfluorononanoic acid (PFNA)	375-95-1	5.0	µg/kg		<5.0	<5.0	<5.0	----	----
Perfluorodecanoic acid (PFDA)	335-76-2	5.0	µg/kg		<5.0	<5.0	<5.0	----	----
Perfluoroundecanoic acid (PFUnDA)	2058-94-8	5.0	µg/kg		<5.0	<5.0	<5.0	----	----
Perfluorododecanoic acid (PFDoDA)	307-55-1	5.0	µg/kg		<5.0	<5.0	<5.0	----	----
Perfluorotridecanoic acid (PFTrDA)	72629-94-8	5.0	µg/kg		<5.0	<5.0	<5.0	----	----
Perfluorotetradecanoic acid (PFTeDA)	376-06-7	5.0	µg/kg		<5.0	<5.0	<5.0	----	----
EP231C: Perfluoroalkyl Sulfonamides									
Perfluorooctane sulfonamide (FOSA)	754-91-6	5.0	µg/kg		<5.0	<5.0	<5.0	----	----
N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	5.0	µg/kg		<5.0	<5.0	<5.0	----	----
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	5.0	µg/kg		<5.0	<5.0	<5.0	----	----
N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	5.0	µg/kg		<5.0	<5.0	<5.0	----	----
N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	5.0	µg/kg		<5.0	<5.0	<5.0	----	----
N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	10.0	µg/kg		<10.0	<10.0	<10.0	----	----
N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	10.0	µg/kg		<10.0	<10.0	<10.0	----	----
EP231D: (n:2) Fluorotelomer Sulfonic Acids									

Analytical Results

Sub-Matrix: SOIL
(Matrix: SOIL)

Compound	CAS Number	LOR	Unit	Sample ID	SX_IB_20220328_20_19_SS_Primary_ALS	SX_IB_20220329_00_09_SS_Primary_ALS	SX_IB_20220329_04_21_SS_Primary_ALS	SX_IB_20220328_07_41_SS_Primary_ALS DI	SX_IB_20220328_07_45_SS_Duplicate_ALS DI
				Sampling date / time	28-Mar-2022 20:19	29-Mar-2022 00:09	29-Mar-2022 04:09	28-Mar-2022 07:41	28-Mar-2022 07:45
					EM2205583-006	EM2205583-007	EM2205583-008	EM2205583-009	EM2205583-010
					Result	Result	Result	Result	Result
EP231D: (n:2) Fluorotelomer Sulfonic Acids - Continued									
4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	5.0	µg/kg		<5.0	<5.0	<5.0	----	----
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	10.0	µg/kg		<10.0	<10.0	<10.0	----	----
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	5.0	µg/kg		<5.0	<5.0	<5.0	----	----
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	5.0	µg/kg		<5.0	<5.0	<5.0	----	----
EP231P: PFAS Sums									
Sum of PFAS	----	50.0	µg/kg		<50.0	<50.0	<50.0	----	----
Sum of PFHxS and PFOS	355-46-4/1763-23-1	5.0	µg/kg		<5.0	<5.0	<5.0	----	----
Sum of PFAS (WA DER List)	----	10.0	µg/kg		<10.0	<10.0	<10.0	----	----
EP066S: PCB Surrogate									
Decachlorobiphenyl	2051-24-3	0.1	%		**112**	**118**	**120**	----	----
EP074S: VOC Surrogates (Ultra-Trace)									
1.2-Dichloroethane-D4	17060-07-0	0.1	%		**93.4**	**78.9**	**91.6**	----	----
Toluene-D8	2037-26-5	0.1	%		**91.2**	**80.4**	**89.5**	----	----
4-Bromofluorobenzene	460-00-4	0.1	%		**98.3**	**88.4**	**98.5**	----	----
EP075S: Acid Extractable Surrogates (Waste Classification)									
Phenol-d6	13127-88-3	0.025	%		**77.6**	**88.5**	**85.3**	----	----
2-Chlorophenol-D4	93951-73-6	0.025	%		**81.8**	**92.5**	**91.9**	----	----
2.4.6-Tribromophenol	118-79-6	0.025	%		**72.8**	**83.5**	**80.6**	----	----
EP075T: Base/Neutral Extractable Surrogates (Waste Classification)									
Nitrobenzene-D5	4165-60-0	0.025	%		**82.1**	**93.4**	**89.7**	----	----
1.2-Dichlorobenzene-D4	2199-69-1	0.025	%		**71.8**	**81.4**	**79.7**	----	----
2-Fluorobiphenyl	321-60-8	0.025	%		**77.6**	**87.8**	**88.1**	----	----
Anthracene-d10	1719-06-8	0.025	%		**78.5**	**88.5**	**87.2**	----	----
4-Terphenyl-d14	1718-51-0	0.025	%		**78.2**	**88.2**	**87.6**	----	----
EP231S: PFAS Surrogate									
13C4-PFOS	----	0.0002	%		**91.0**	**94.8**	**92.2**	----	----
13C8-PFOA	----	0.0002	%		**100**	**96.1**	**98.0**	----	----

Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

Compound	CAS Number	LOR	Unit	Sample ID	SX_IB_20220328_11_59_SS_Primary_ALS DI	SX_IB_20220328_15_48_SS_Triplicate_ALS DI	SX_IB_20220328_15_50_SS_Primary_ALS DI	SX_IB_20220328_20_19_SS_Primary_ALS DI	SX_IB_20220329_00_09_SS_Primary_ALS DI
				Sampling date / time	28-Mar-2022 11:59	28-Mar-2022 15:48	28-Mar-2022 15:50	28-Mar-2022 08:19	29-Mar-2022 12:09
					EM2205583-011	EM2205583-012	EM2205583-013	EM2205583-014	EM2205583-015
					Result	Result	Result	Result	Result
EN60-DI: Bottle Leaching Procedure - Inorganics/PFAS (Plastic Vessel)									
Final pH	----	0.1	pH Unit		**9.4**	**9.5**	**9.3**	**9.7**	**9.5**

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	SX_IB_20220329_04_21_SS_Primary_ALS DI	----	----	----	----
				Sampling date / time	29-Mar-2022 04:09	----	----	----	----
Compound	CAS Number	LOR	Unit	EM2205583-016	--------	--------	--------	--------	
				Result	----	----	----	----	
EN60-DI: Bottle Leaching Procedure - Inorganics/PFAS (Plastic Vessel)									
Final pH	----	0.1	pH Unit	**9.6**	**----**	**----**	**----**	**----**	

Surrogate Control Limits

Sub-Matrix: ASLP LEACHATE		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

ALS Environmental

QUALITY CONTROL REPORT

Work Order	: **EM2205583**	Page	: 1 of 27
Client	: **AGON ENVIRONMENTAL PTY LTD**	Laboratory	: Environmental Division Melbourne
Contact	: Craig Trimbur	Contact	: Bronwyn Sheen
Address	: D1.1 63-85 TURNER STREET PORT MELBOURNE 3207	Address	: 4 Westall Rd Springvale VIC Australia 3171
Telephone	: ----	Telephone	: +6138549 9600
Project	: JC0927	Date Samples Received	: 29-Mar-2022
Order number	: ----	Date Analysis Commenced	: 31-Mar-2022
C-O-C number	: 20220329050622-ALS-14	Issue Date	: 05-Apr-2022
Sampler	: BRANDON CLARKE, WILLIAM O'HAIRE		
Site	: 20220329050622-ALS-14		
Quote number	: EN/150/19 -WGTP -Bulk Sample Quote		
No. of samples received	: 16		
No. of samples analysed	: 16		

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

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

This Quality Control Report contains the following information:

- Laboratory Duplicate (DUP) Report; Relative Percentage Difference (RPD) and Acceptance Limits
- Method Blank (MB) and Laboratory Control Spike (LCS) Report; Recovery and Acceptance Limits
- Matrix Spike (MS) Report; Recovery and Acceptance Limits

Signatories

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

Signatories	*Position*	*Accreditation Category*
Dilani Fernando	Laboratory Coordinator	Melbourne Inorganics, Springvale, VIC
Nancy Wang	2IC Organic Chemist	Melbourne Organics, Springvale, VIC
Xing Lin	Senior Organic Chemist	Melbourne Organics, Springvale, VIC

General Comments

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

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

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

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

Laboratory Duplicate (DUP) Report

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

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Acceptable RPD (%)
EG005(ED093)T: Total Metals by ICP-AES (QC Lot: 4262047)									
EM2205589-001	Anonymous	EG005T: Chromium	7440-47-3	2	mg/kg	12	17	36.9	No Limit
EM2205579-001	Anonymous	EG005T: Cadmium	7440-43-9	1	mg/kg	2	1	0.0	No Limit
		EG005T: Chromium	7440-47-3	2	mg/kg	20	18	9.3	0% - 50%
		EG005T: Molybdenum	7439-98-7	2	mg/kg	<2	<2	0.0	No Limit
		EG005T: Nickel	7440-02-0	2	mg/kg	36	31	15.0	0% - 50%
		EG005T: Silver	7440-22-4	2	mg/kg	<2	<2	0.0	No Limit
		EG005T: Arsenic	7440-38-2	5	mg/kg	48	58	18.0	0% - 50%
		EG005T: Copper	7440-50-8	5	mg/kg	76	68	10.3	0% - 50%
		EG005T: Lead	7439-92-1	5	mg/kg	268	258	4.0	0% - 20%
		EG005T: Selenium	7782-49-2	5	mg/kg	<5	<5	0.0	No Limit
		EG005T: Tin	7440-31-5	5	mg/kg	10	17	52.8	No Limit
		EG005T: Zinc	7440-66-6	5	mg/kg	326	324	0.8	0% - 20%
EM2205589-001	Anonymous	EG005T: Cadmium	7440-43-9	1	mg/kg	<1	<1	0.0	No Limit
		EG005T: Molybdenum	7439-98-7	2	mg/kg	<2	<2	0.0	No Limit
		EG005T: Nickel	7440-02-0	2	mg/kg	19	19	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	1340	1220	9.2	0% - 20%
		EG005T: Copper	7440-50-8	5	mg/kg	37	34	7.2	No Limit
		EG005T: Lead	7439-92-1	5	mg/kg	64	71	10.9	0% - 50%
		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	187	176	6.0	0% - 20%
EA001: pH in soil using 0.01M CaCl extract (QC Lot: 4263486)									
EM2205471-005	Anonymous	EA001: pH (CaCl2)	----	0.1	pH Unit	7.5	7.6	1.7	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: 4263486) - continued									
EM2205583-002	SX_IB_20220328_07_45_SS_Duplicate_ALS	EA001: pH (CaCl2)	----	0.1	pH Unit	8.1	8.2	0.0	0% - 20%
EA055: Moisture Content (Dried @ 105-110°C) (QC Lot: 4262253)									
EM2205583-001	SX_IB_20220328_07_41_SS_Primary_ALS	EA055: Moisture Content	----	0.1	%	31.4	29.6	5.7	0% - 20%
EM2205589-006	Anonymous	EA055: Moisture Content	----	0.1	%	21.8	18.5	16.3	0% - 20%
EG035T: Total Recoverable Mercury by FIMS (QC Lot: 4262048)									
EM2205589-001	Anonymous	EG035T: Mercury	7439-97-6	0.1	mg/kg	2.2	# 1.7	22.5	0% - 20%
EM2205579-001	Anonymous	EG035T: Mercury	7439-97-6	0.1	mg/kg	1.8	1.7	0.0	0% - 50%
EG048: Hexavalent Chromium (Alkaline Digest) (QC Lot: 4262070)									
EM2205306-001	Anonymous	EG048G: Hexavalent Chromium	18540-29-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
EM2205507-001	Anonymous	EG048G: Hexavalent Chromium	18540-29-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
EG048: Hexavalent Chromium (Alkaline Digest) (QC Lot: 4262071)									
EM2205583-002	SX_IB_20220328_07_45_SS_Duplicate_ALS	EG048G: Hexavalent Chromium	18540-29-9	0.5	mg/kg	<1.0	<1.0	0.0	No Limit
EM2205648-001	Anonymous	EG048G: Hexavalent Chromium	18540-29-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
EK026SF: Total CN by Segmented Flow Analyser (QC Lot: 4263025)									
EM2205522-016	Anonymous	EK026SF: Total Cyanide	57-12-5	1	mg/kg	1	1	0.0	No Limit
EM2205541-002	Anonymous	EK026SF: Total Cyanide	57-12-5	1	mg/kg	<2	<2	0.0	No Limit
EK040T: Fluoride Total (QC Lot: 4262230)									
EM2205306-001	Anonymous	EK040T: Fluoride	16984-48-8	40	mg/kg	190	170	12.9	No Limit
EM2205583-002	SX_IB_20220328_07_45_SS_Duplicate_ALS	EK040T: Fluoride	16984-48-8	40	mg/kg	210	250	14.0	No Limit
EP066: Polychlorinated Biphenyls (PCB) (QC Lot: 4262137)									
EM2205306-001	Anonymous	EP066-EM: Total Polychlorinated biphenyls	----	0.1	mg/kg	<0.1	<0.1	0.0	No Limit
EM2205583-005	SX_IB_20220328_15_50_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: 4259605)									
EM2205583-001	SX_IB_20220328_07_41_SS_Primary_ALS	EP074-UT: Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	0.0	No Limit
		EP074-UT: Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074-UT: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074-UT: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074-UT: Styrene	100-42-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074-UT: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
EP074H: Naphthalene (QC Lot: 4259605)									
EM2205583-001	SX_IB_20220328_07_41_SS_Primary_ALS	EP074-UT: Naphthalene	91-20-3	1	mg/kg	<1	<1	0.0	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Acceptable RPD (%)*
EP074I: Volatile Halogenated Compounds (QC Lot: 4259605)									
EM2205583-001	SX_IB_20220328_07_41_SS_Primary_ALS	EP074-UT: 1.1-Dichloroethene	75-35-4	0.01	mg/kg	<0.50	<0.50	0.0	No Limit
		EP074-UT: cis-1.2-Dichloroethene	156-59-2	0.01	mg/kg	<0.50	<0.50	0.0	No Limit
		EP074-UT: 1.1.1-Trichloroethane	71-55-6	0.01	mg/kg	<0.50	<0.50	0.0	No Limit
		EP074-UT: Carbon Tetrachloride	56-23-5	0.01	mg/kg	<0.50	<0.50	0.0	No Limit
		EP074-UT: 1.1.1.2-Tetrachloroethane	630-20-6	0.01	mg/kg	<0.50	<0.50	0.0	No Limit
		EP074-UT: 1.2.4-Trichlorobenzene	120-82-1	0.01	mg/kg	<0.50	<0.50	0.0	No Limit
		EP074-UT: Vinyl chloride	75-01-4	0.02	mg/kg	<0.50	<0.50	0.0	No Limit
		EP074-UT: trans-1.2-Dichloroethene	156-60-5	0.02	mg/kg	<0.50	<0.50	0.0	No Limit
		EP074-UT: Chloroform	67-66-3	0.02	mg/kg	<0.50	<0.50	0.0	No Limit
		EP074-UT: 1.2-Dichloroethane	107-06-2	0.02	mg/kg	<0.50	<0.50	0.0	No Limit
		EP074-UT: Trichloroethene	79-01-6	0.02	mg/kg	<0.50	<0.50	0.0	No Limit
		EP074-UT: Tetrachloroethene	127-18-4	0.02	mg/kg	<0.50	<0.50	0.0	No Limit
		EP074-UT: 1.1.2.2-Tetrachloroethane	79-34-5	0.02	mg/kg	<0.50	<0.50	0.0	No Limit
		EP074-UT: Hexachlorobutadiene	87-68-3	0.02	mg/kg	<0.50	<0.50	0.0	No Limit
		EP074-UT: Chlorobenzene	108-90-7	0.02	mg/kg	<0.50	<0.50	0.0	No Limit
		EP074-UT: 1.4-Dichlorobenzene	106-46-7	0.02	mg/kg	<0.50	<0.50	0.0	No Limit
		EP074-UT: 1.2-Dichlorobenzene	95-50-1	0.02	mg/kg	<0.50	<0.50	0.0	No Limit
		EP074-UT: 1.1.2-Trichloroethane	79-00-5	0.04	mg/kg	<0.50	<0.50	0.0	No Limit
		EP074-UT: Methylene chloride	75-09-2	0.4	mg/kg	<0.5	<0.5	0.0	No Limit
EP075A: Phenolic Compounds (Halogenated) (QC Lot: 4262135)									
EM2205306-001	Anonymous	EP075-EM: 2-Chlorophenol	95-57-8	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: 2.4-Dichlorophenol	120-83-2	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: 2.6-Dichlorophenol	87-65-0	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: 4-Chloro-3-methylphenol	59-50-7	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: 2.3.5.6-Tetrachlorophenol	935-95-5	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: 2.4.5-Trichlorophenol	95-95-4	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: 2.4.6-Trichlorophenol	88-06-2	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: 2.3.4.5 & 2.3.4.6-Tetrachlorophenol	4901-51-3/58-90-2	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: Pentachlorophenol	87-86-5	0.2	mg/kg	<0.2	<0.2	0.0	No Limit
EM2205583-005	SX_IB_20220328_15_50_SS_Primary_ALS	EP075-EM: 2-Chlorophenol	95-57-8	0.03	mg/kg	<0.50	<0.50	0.0	No Limit
		EP075-EM: 2.4-Dichlorophenol	120-83-2	0.03	mg/kg	<0.50	<0.50	0.0	No Limit
		EP075-EM: 2.6-Dichlorophenol	87-65-0	0.03	mg/kg	<0.50	<0.50	0.0	No Limit
		EP075-EM: 4-Chloro-3-methylphenol	59-50-7	0.03	mg/kg	<1.00	<1.00	0.0	No Limit
		EP075-EM: 2.3.5.6-Tetrachlorophenol	935-95-5	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: 2.4.5-Trichlorophenol	95-95-4	0.05	mg/kg	<1.00	<1.00	0.0	No Limit
		EP075-EM: 2.4.6-Trichlorophenol	88-06-2	0.05	mg/kg	<1.00	<1.00	0.0	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Acceptable RPD (%)*
EP075A: Phenolic Compounds (Halogenated) (QC Lot: 4262135) - continued									
EM2205583-005	SX_IB_20220328_15_50_SS_Primary_ALS	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: 4262135)									
EM2205306-001	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
EM2205583-005	SX_IB_20220328_15_50_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: 4262135)									
EM2205306-001	Anonymous	EP075-EM: Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Phenanthrene	85-01-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075-EM: Fluoranthene	206-44-0	0.5	mg/kg	0.5	<0.5	0.0	No Limit
		EP075-EM: Pyrene	129-00-0	0.5	mg/kg	0.6	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

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: 4262135) - continued									
EM2205306-001	Anonymous	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
EM2205583-005	SX_IB_20220328_15_50_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: 4262135)									
EM2205306-001	Anonymous	EP075-EM: alpha-BHC	319-84-6	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Hexachlorobenzene (HCB)	118-74-1	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: beta-BHC	319-85-7	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: gamma-BHC	58-89-9	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: delta-BHC	319-86-8	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Heptachlor	76-44-8	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Aldrin	309-00-2	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Heptachlor epoxide	1024-57-3	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: cis-Chlordane	5103-71-9	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: trans-Chlordane	5103-74-2	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Endosulfan 1	959-98-8	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Dieldrin	60-57-1	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Endrin aldehyde	7421-93-4	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Endrin	72-20-8	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Endosulfan 2	33213-65-9	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Endosulfan sulfate	1031-07-8	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Methoxychlor	72-43-5	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		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

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: 4262135) - continued									
EM2205583-005	SX_IB_20220328_15_50_SS_Primary_ALS	EP075-EM: alpha-BHC	319-84-6	0.03	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: Hexachlorobenzene (HCB)	118-74-1	0.03	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: beta-BHC	319-85-7	0.03	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: gamma-BHC	58-89-9	0.03	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: delta-BHC	319-86-8	0.03	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: Heptachlor	76-44-8	0.03	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: Aldrin	309-00-2	0.03	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: Heptachlor epoxide	1024-57-3	0.03	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: cis-Chlordane	5103-71-9	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: trans-Chlordane	5103-74-2	0.03	mg/kg	<0.03	<0.03	0.0	No Limit
		EP075-EM: Endosulfan 1	959-98-8	0.03	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: Dieldrin	60-57-1	0.03	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: Endrin aldehyde	7421-93-4	0.03	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: Endrin	72-20-8	0.03	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: Endosulfan 2	33213-65-9	0.03	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: Endosulfan sulfate	1031-07-8	0.03	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: Methoxychlor	72-43-5	0.03	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: 4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: 4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP075-EM: 4.4`-DDT	50-29-3	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 4259605)									
EM2205583-001	SX_IB_20220328_07_41_SS_Primary_ALS	EP074-UT: C6 - C9 Fraction	----	10	mg/kg	<20	<20	0.0	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 4262136)									
EM2205306-001	Anonymous	EP071-EM: C15 - C28 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071-EM: C29 - C36 Fraction	----	100	mg/kg	<100	110	10.4	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	110	75.0	No Limit
EM2205583-005	SX_IB_20220328_15_50_SS_Primary_ALS	EP071-EM: C15 - C28 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071-EM: C29 - C36 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071-EM: C10 - C14 Fraction	----	50	mg/kg	<50	<50	0.0	No Limit
		EP071-EM: C10 - C36 Fraction (sum)	----	50	mg/kg	<50	<50	0.0	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 4259605)									
EM2205583-001	SX_IB_20220328_07_41_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: 4262136)									
EM2205306-001	Anonymous	EP071-EM: >C16 - C34 Fraction	----	100	mg/kg	<100	110	11.7	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Acceptable RPD (%)*
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 4262136) - continued									
EM2205306-001	Anonymous	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	110	75.0	No Limit
EM2205583-005	SX_IB_20220328_15_50_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: 4264546)									
EM2205492-004	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
EM2205583-007	SX_IB_20220329_00_09_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: 4264546)									
EM2205492-004	Anonymous	EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.001	mg/kg	<0.001	<0.001	0.0	No Limit
EM2205583-007	SX_IB_20220329_00_09_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

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: 4264546) - continued									
EM2205583-007	SX_IB_20220329_00_09_SS_Primary_ALS	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: 4264546)									
EM2205492-004	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
EM2205583-007	SX_IB_20220329_00_09_SS_Primary_ALS	EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.0002	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.0002	mg/kg	<10.0 µg/kg	<0.0100	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.0002	mg/kg	<10.0 µg/kg	<0.0100	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.0005	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.0005	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.0005	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.0005	mg/kg	<5.0 µg/kg	<0.0050	0.0	No Limit
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QC Lot: 4264546)									
EM2205492-004	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

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Acceptable RPD (%)
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QC Lot: 4264546) - continued									
EM2205492-004	Anonymous	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
EM2205583-007	SX_IB_20220329_00_09_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: 4264546)									
EM2205492-004	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
EM2205583-007	SX_IB_20220329_00_09_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: 4264535)									
EM2205583-009	SX_IB_20220328_07_41_SS_Primary_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
EM2205648-004	Anonymous	EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L	<0.02	<0.02	0.0	No Limit
EP231A: Perfluoroalkyl Sulfonic Acids (QC Lot: 4264537)									

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: 4264537) - continued									
EM2205583-001	SX_IB_20220328_07_41_SS_Primary_ALS	EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L	<0.02	<0.02	0.0	No Limit
EM2205665-005	Anonymous	EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L	<0.02	<0.02	0.0	No Limit
EP231B: Perfluoroalkyl Carboxylic Acids (QC Lot: 4264535)									
EM2205583-009	SX_IB_20220328_07_41_SS_Primary_ALS DI	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
EM2205648-004	Anonymous	EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L	<0.1	<0.1	0.0	No Limit
EP231B: Perfluoroalkyl Carboxylic Acids (QC Lot: 4264537)									
EM2205583-001	SX_IB_20220328_07_41_SS_Primary_ALS	EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	<0.01	<0.01	0.0	No Limit

Sub-Matrix: **WATER**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Acceptable RPD (%)*
EP231B: Perfluoroalkyl Carboxylic Acids (QC Lot: 4264537) - continued									
EM2205583-001	SX_IB_20220328_07_41_SS_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
EM2205665-005	Anonymous	EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L	<0.1	<0.1	0.0	No Limit
EP231C: Perfluoroalkyl Sulfonamides (QC Lot: 4264535)									
EM2205583-009	SX_IB_20220328_07_41_SS_Primary_ALS DI	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
EM2205648-004	Anonymous	EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.02	µg/L	<0.02	<0.02	0.0	No Limit

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: 4264535) - continued									
EM2205648-004	Anonymous	EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L	<0.05	<0.05	0.0	No Limit
EP231C: Perfluoroalkyl Sulfonamides (QC Lot: 4264537)									
EM2205583-001	SX_IB_20220328_07_41_SS_Primary_ALS	EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.02	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.02	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		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
EM2205665-005	Anonymous	EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L	<0.05	<0.05	0.0	No Limit
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QC Lot: 4264535)									
EM2205583-009	SX_IB_20220328_07_41_SS_Primary_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

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: 4264535) - continued									
EM2205583-009	SX_IB_20220328_07_41_SS_Primary_ALS DI	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
EM2205648-004	Anonymous	EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		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: 4264537)									
EM2205583-001	SX_IB_20220328_07_41_SS_Primary_ALS	EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.05	µg/L	<0.05	<0.05	0.0	No Limit
EM2205665-005	Anonymous	EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.05	µg/L	<0.05	<0.05	0.0	No Limit
EP231P: PFAS Sums (QC Lot: 4264535)									
EM2205583-009	SX_IB_20220328_07_41_SS_Primary_ALS DI	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
EM2205648-004	Anonymous	EP231X: Sum of PFAS	----	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Sum of PFAS (WA DER List)	----	0.01	µg/L	<0.01	<0.01	0.0	No Limit

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: 4264537)									
EM2205583-001	SX_IB_20220328_07_41_SS_Primary_ALS	EP231X: Sum of PFAS	----	0.01	µg/L	<0.10	<0.10	0.0	No Limit
		EP231X: Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Sum of PFAS (WA DER List)	----	0.01	µg/L	<0.05	<0.05	0.0	No Limit
EM2205665-005	Anonymous	EP231X: Sum of PFAS	----	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Sum of PFAS (WA DER List)	----	0.01	µg/L	<0.01	<0.01	0.0	No Limit

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

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

Sub-Matrix: **SOIL**

				Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Acceptable Limits (%)	
Method: Compound	CAS Number	LOR	Unit	Result	Concentration	LCS	Low	High
EG005(ED093)T: Total Metals by ICP-AES (QCLot: 4262047)								
EG005T: Arsenic	7440-38-2	5	mg/kg	<5	123 mg/kg	96.1	70.0	130
EG005T: Cadmium	7440-43-9	1	mg/kg	<1	1.23 mg/kg	64.3	50.0	130
EG005T: Chromium	7440-47-3	2	mg/kg	<2	20.2 mg/kg	103	70.0	130
EG005T: Copper	7440-50-8	5	mg/kg	<5	55.9 mg/kg	92.8	70.0	130
EG005T: Lead	7439-92-1	5	mg/kg	<5	62.4 mg/kg	95.0	70.0	130
EG005T: Molybdenum	7439-98-7	2	mg/kg	<2	2.19 mg/kg	97.5	70.0	130
EG005T: Nickel	7440-02-0	2	mg/kg	<2	15.4 mg/kg	96.9	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	92.1	70.0	130
EG005T: Tin	7440-31-5	5	mg/kg	<5	5.33 mg/kg	81.5	70.0	130
EG005T: Zinc	7440-66-6	5	mg/kg	<5	162 mg/kg	72.5	70.0	130
EN60-DI: Bottle Leaching Procedure - Inorganics/PFAS (Plastic Vessel) (QCLot: 4262768)								
EN60-DIa-P: Final pH	----	0.1	pH Unit	7.0	----	----	----	----
EA001: pH in soil using 0.01M CaCl extract (QCLot: 4263486)								
EA001: pH (CaCl2)	----	----	pH Unit	----	4 pH Unit	99.8	98.8	101
				----	7 pH Unit	100	99.3	101
EG035T: Total Recoverable Mercury by FIMS (QCLot: 4262048)								
EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	0.64 mg/kg	75.5	70.0	130
EG048: Hexavalent Chromium (Alkaline Digest) (QCLot: 4262070)								
EG048G: Hexavalent Chromium	18540-29-9	0.5	mg/kg	<0.5	20 mg/kg	82.3	70.0	130
EG048: Hexavalent Chromium (Alkaline Digest) (QCLot: 4262071)								
EG048G: Hexavalent Chromium	18540-29-9	0.5	mg/kg	<0.5	20 mg/kg	87.6	70.0	130
EK026SF: Total CN by Segmented Flow Analyser (QCLot: 4263025)								
EK026SF: Total Cyanide	57-12-5	1	mg/kg	<1	20 mg/kg	83.3	70.0	130
EK040T: Fluoride Total (QCLot: 4262230)								
EK040T: Fluoride	16984-48-8	40	mg/kg	<40	400 mg/kg	90.6	75.2	110
EP066: Polychlorinated Biphenyls (PCB) (QCLot: 4262137)								
EP066-EM: Total Polychlorinated biphenyls	----	0.1	mg/kg	<0.1	1 mg/kg	115	67.4	136
EP074A: Monocyclic Aromatic Hydrocarbons (QCLot: 4259605)								
EP074-UT: Benzene	71-43-2	0.2	mg/kg	<0.2	2.1 mg/kg	72.7	69.2	116
EP074-UT: Toluene	108-88-3	0.5	mg/kg	<0.5	2.1 mg/kg	71.4	67.7	116
EP074-UT: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	2.1 mg/kg	70.0	66.6	115

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report: Result	Laboratory Control Spike (LCS) Report: Spike Concentration	Spike Recovery (%): LCS	Acceptable Limits (%): Low	Acceptable Limits (%): High
EP074A: Monocyclic Aromatic Hydrocarbons (QCLot: 4259605) - continued								
EP074-UT: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	4.2 mg/kg	68.9	65.2	112
EP074-UT: Styrene	100-42-5	0.5	mg/kg	<0.5	2.1 mg/kg	70.3	69.4	111
EP074-UT: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	2.1 mg/kg	71.1	68.4	110
EP074H: Naphthalene (QCLot: 4259605)								
EP074-UT: Naphthalene	91-20-3	1	mg/kg	<1	0.6 mg/kg	76.1	72.3	114
EP074I: Volatile Halogenated Compounds (QCLot: 4259605)								
EP074-UT: Vinyl chloride	75-01-4	0.02	mg/kg	<0.02	0.1 mg/kg	53.5	47.0	138
EP074-UT: 1.1-Dichloroethene	75-35-4	0.01	mg/kg	<0.01	0.1 mg/kg	64.8	57.6	125
EP074-UT: Methylene chloride	75-09-2	0.4	mg/kg	<0.4	2.1 mg/kg	73.6	72.3	115
EP074-UT: trans-1.2-Dichloroethene	156-60-5	0.02	mg/kg	<0.02	0.1 mg/kg	68.6	60.5	122
EP074-UT: cis-1.2-Dichloroethene	156-59-2	0.01	mg/kg	<0.01	0.1 mg/kg	75.1	70.3	112
EP074-UT: Chloroform	67-66-3	0.02	mg/kg	<0.02	0.1 mg/kg	77.7	66.6	115
EP074-UT: 1.1.1-Trichloroethane	71-55-6	0.01	mg/kg	<0.01	0.1 mg/kg	70.8	64.4	122
EP074-UT: Carbon Tetrachloride	56-23-5	0.01	mg/kg	<0.01	0.1 mg/kg	68.8	58.4	127
EP074-UT: 1.2-Dichloroethane	107-06-2	0.02	mg/kg	<0.02	0.1 mg/kg	85.0	72.9	114
EP074-UT: Trichloroethene	79-01-6	0.02	mg/kg	<0.02	0.1 mg/kg	72.2	64.7	115
EP074-UT: 1.1.2-Trichloroethane	79-00-5	0.04	mg/kg	<0.04	0.1 mg/kg	82.4	72.6	116
EP074-UT: Tetrachloroethene	127-18-4	0.02	mg/kg	<0.02	0.1 mg/kg	69.0	60.0	119
EP074-UT: 1.1.1.2-Tetrachloroethane	630-20-6	0.01	mg/kg	<0.01	0.1 mg/kg	74.0	71.8	116
EP074-UT: 1.1.2.2-Tetrachloroethane	79-34-5	0.02	mg/kg	<0.02	0.1 mg/kg	83.9	66.1	116
EP074-UT: Hexachlorobutadiene	87-68-3	0.02	mg/kg	<0.02	0.1 mg/kg	71.8	39.8	128
EP074-UT: Chlorobenzene	108-90-7	0.02	mg/kg	<0.02	0.1 mg/kg	75.2	70.3	113
EP074-UT: 1.4-Dichlorobenzene	106-46-7	0.02	mg/kg	<0.02	0.1 mg/kg	73.8	62.6	113
EP074-UT: 1.2-Dichlorobenzene	95-50-1	0.02	mg/kg	<0.02	0.1 mg/kg	77.4	70.8	110
EP074-UT: 1.2.4-Trichlorobenzene	120-82-1	0.01	mg/kg	<0.01	0.1 mg/kg	74.7	48.4	120
EP075A: Phenolic Compounds (Halogenated) (QCLot: 4262135)								
EP075-EM: 2-Chlorophenol	95-57-8	0.03	mg/kg	<0.03	2 mg/kg	91.5	74.5	126
EP075-EM: 2.4-Dichlorophenol	120-83-2	0.03	mg/kg	<0.03	2 mg/kg	88.9	72.7	126
EP075-EM: 2.6-Dichlorophenol	87-65-0	0.03	mg/kg	<0.03	2 mg/kg	88.9	73.5	132
EP075-EM: 4-Chloro-3-methylphenol	59-50-7	0.03	mg/kg	<0.03	2 mg/kg	87.9	72.8	128
EP075-EM: 2.4.5-Trichlorophenol	95-95-4	0.05	mg/kg	<0.05	2 mg/kg	88.5	73.3	134
EP075-EM: 2.4.6-Trichlorophenol	88-06-2	0.05	mg/kg	<0.05	2 mg/kg	86.0	72.4	128
EP075-EM: 2.3.5.6-Tetrachlorophenol	935-95-5	0.03	mg/kg	<0.03	2 mg/kg	85.9	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	84.8	71.9	128
EP075-EM: Pentachlorophenol	87-86-5	0.2	mg/kg	<0.2	4 mg/kg	83.0	54.4	135
EP075A: Phenolic Compounds (Non-halogenated) (QCLot: 4262135)								

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Acceptable Limits (%)	
				Result	Concentration	LCS	Low	High
EP075A: Phenolic Compounds (Non-halogenated) (QCLot: 4262135) - continued								
EP075-EM: Phenol	108-95-2	1	mg/kg	<1	2 mg/kg	97.0	71.5	130
EP075-EM: 2-Methylphenol	95-48-7	1	mg/kg	<1	2 mg/kg	95.7	73.4	129
EP075-EM: 3- & 4-Methylphenol	1319-77-3	1	mg/kg	<1	4 mg/kg	92.3	74.3	129
EP075-EM: 2-Nitrophenol	88-75-5	1	mg/kg	<1	2 mg/kg	88.5	70.9	133
EP075-EM: 2.4-Dimethylphenol	105-67-9	1	mg/kg	<1	2 mg/kg	88.4	71.8	132
EP075-EM: 2.4-Dinitrophenol	51-28-5	5	mg/kg	<5	10 mg/kg	78.2	41.0	156
EP075-EM: 4-Nitrophenol	100-02-7	5	mg/kg	<5	10 mg/kg	94.6	65.3	134
EP075-EM: 2-Methyl-4.6-dinitrophenol	8071-51-0	5	mg/kg	<5	10 mg/kg	78.5	43.6	128
EP075-EM: Dinoseb	88-85-7	5	mg/kg	<5	10 mg/kg	82.3	62.0	128
EP075-EM: 2-Cyclohexyl-4.6-Dinitrophenol	131-89-5	5	mg/kg	<5	10 mg/kg	67.5	34.5	137
EP075B: Polynuclear Aromatic Hydrocarbons (QCLot: 4262135)								
EP075-EM: Naphthalene	91-20-3	0.5	mg/kg	<0.5	2 mg/kg	88.4	73.0	131
EP075-EM: Acenaphthene	83-32-9	0.5	mg/kg	<0.5	2 mg/kg	85.5	76.3	130
EP075-EM: Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	2 mg/kg	85.6	72.0	135
EP075-EM: Fluorene	86-73-7	0.5	mg/kg	<0.5	2 mg/kg	89.1	74.4	131
EP075-EM: Phenanthrene	85-01-8	0.5	mg/kg	<0.5	2 mg/kg	87.4	73.3	130
EP075-EM: Anthracene	120-12-7	0.5	mg/kg	<0.5	2 mg/kg	88.2	78.4	127
EP075-EM: Fluoranthene	206-44-0	0.5	mg/kg	<0.5	2 mg/kg	88.7	75.3	132
EP075-EM: Pyrene	129-00-0	0.5	mg/kg	<0.5	2 mg/kg	88.9	75.4	130
EP075-EM: Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	2 mg/kg	94.0	69.6	133
EP075-EM: Chrysene	218-01-9	0.5	mg/kg	<0.5	2 mg/kg	93.2	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	86.9	75.8	133
EP075-EM: Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	2 mg/kg	86.6	65.1	130
EP075-EM: Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	2 mg/kg	87.2	72.1	134
EP075-EM: Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	2 mg/kg	88.0	72.9	135
EP075-EM: Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	2 mg/kg	86.8	71.3	134
EP075I: Organochlorine Pesticides (QCLot: 4262135)								
EP075-EM: alpha-BHC	319-84-6	0.03	mg/kg	<0.03	2 mg/kg	87.9	71.0	129
EP075-EM: Hexachlorobenzene (HCB)	118-74-1	0.03	mg/kg	<0.03	2 mg/kg	87.4	74.8	126
EP075-EM: beta-BHC	319-85-7	0.03	mg/kg	<0.03	2 mg/kg	89.2	75.7	130
EP075-EM: gamma-BHC	58-89-9	0.03	mg/kg	<0.03	2 mg/kg	89.6	70.8	130
EP075-EM: delta-BHC	319-86-8	0.03	mg/kg	<0.03	2 mg/kg	91.0	76.5	134
EP075-EM: Heptachlor	76-44-8	0.03	mg/kg	<0.03	2 mg/kg	87.7	75.5	131
EP075-EM: Aldrin	309-00-2	0.03	mg/kg	<0.03	2 mg/kg	88.5	76.8	130
EP075-EM: Heptachlor epoxide	1024-57-3	0.03	mg/kg	<0.03	2 mg/kg	88.8	73.6	130
EP075-EM: cis-Chlordane	5103-71-9	0.03	mg/kg	<0.03	2 mg/kg	89.0	75.0	133
EP075-EM: trans-Chlordane	5103-74-2	0.03	mg/kg	<0.03	2 mg/kg	88.7	75.3	131
EP075-EM: Endosulfan 1	959-98-8	0.03	mg/kg	<0.03	2 mg/kg	91.9	69.4	134

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Acceptable Limits (%)	
				Result	Concentration	LCS	Low	High
EP075I: Organochlorine Pesticides (QCLot: 4262135) - continued								
EP075-EM: 4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	2 mg/kg	87.5	71.0	132
EP075-EM: Dieldrin	60-57-1	0.03	mg/kg	<0.03	2 mg/kg	89.4	78.0	133
EP075-EM: Endrin aldehyde	7421-93-4	0.03	mg/kg	<0.03	2 mg/kg	80.4	69.0	143
EP075-EM: Endrin	72-20-8	0.03	mg/kg	<0.03	2 mg/kg	93.1	55.7	145
EP075-EM: Endosulfan 2	33213-65-9	0.03	mg/kg	<0.03	2 mg/kg	91.7	71.4	135
EP075-EM: 4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	2 mg/kg	92.1	74.8	134
EP075-EM: Endosulfan sulfate	1031-07-8	0.03	mg/kg	<0.03	2 mg/kg	92.3	70.2	135
EP075-EM: 4.4`-DDT	50-29-3	0.05	mg/kg	<0.05	2 mg/kg	90.7	77.7	133
EP075-EM: Methoxychlor	72-43-5	0.03	mg/kg	<0.03	2 mg/kg	92.1	63.6	135
EP080/071: Total Petroleum Hydrocarbons (QCLot: 4259605)								
EP074-UT: C6 - C9 Fraction	----	10	mg/kg	<10	39.6 mg/kg	77.3	61.1	119
EP080/071: Total Petroleum Hydrocarbons (QCLot: 4262136)								
EP071-EM: C10 - C14 Fraction	----	50	mg/kg	<50	760 mg/kg	74.7	74.4	129
EP071-EM: C15 - C28 Fraction	----	100	mg/kg	<100	3270 mg/kg	89.4	81.0	123
EP071-EM: C29 - C36 Fraction	----	100	mg/kg	<100	1550 mg/kg	90.3	81.8	121
EP071-EM: C10 - C36 Fraction (sum)	----	50	mg/kg	<50	5580 mg/kg	87.6	70.0	130
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 4259605)								
EP074-UT: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	48.9 mg/kg	76.2	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: 4262136)								
EP071-EM: >C10 - C16 Fraction	----	50	mg/kg	<50	1110 mg/kg	82.4	75.4	132
EP071-EM: >C16 - C34 Fraction	----	100	mg/kg	<100	4180 mg/kg	89.4	80.8	120
EP071-EM: >C34 - C40 Fraction	----	100	mg/kg	<100	290 mg/kg	77.3	73.3	136
EP071-EM: >C10 - C40 Fraction (sum)	----	50	mg/kg	<50	5580 mg/kg	87.3	70.0	130
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 4264546)								
EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.0002	mg/kg	<0.0002	0.00111 mg/kg	115	72.0	128
EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.0002	mg/kg	<0.0002	0.00118 mg/kg	92.2	73.0	123
EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.0002	mg/kg	<0.0002	0.0014 mg/kg	78.7	67.0	130
EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.0002	mg/kg	<0.0002	0.00119 mg/kg	113	70.0	132
EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.0002	mg/kg	<0.0002	0.00116 mg/kg	113	68.0	136
EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.0002	mg/kg	<0.0002	0.00121 mg/kg	121	59.0	134
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4264546)								
EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.001	mg/kg	<0.001	0.00625 mg/kg	103	71.0	135
EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.0002	mg/kg	<0.0002	0.00125 mg/kg	119	69.0	132
EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.0002	mg/kg	<0.0002	0.00125 mg/kg	114	70.0	132
EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.0002	mg/kg	<0.0002	0.00125 mg/kg	105	71.0	131
EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.0002	mg/kg	<0.0002	0.00125 mg/kg	105	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 (%): LCS	Acceptable Limits (%): Low	Acceptable Limits (%): High
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4264546) - continued								
EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.0002	mg/kg	<0.0002	0.00125 mg/kg	106	72.0	129
EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.0002	mg/kg	<0.0002	0.00125 mg/kg	105	69.0	133
EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.0002	mg/kg	<0.0002	0.00125 mg/kg	84.4	64.0	136
EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.0002	mg/kg	<0.0002	0.00125 mg/kg	97.8	69.0	135
EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.0002	mg/kg	<0.0002	0.00125 mg/kg	94.1	66.0	139
EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.0005	mg/kg	<0.0005	0.00312 mg/kg	121	69.0	133
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 4264546)								
EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.0002	mg/kg	<0.0002	0.00125 mg/kg	115	67.0	137
EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.0005	mg/kg	<0.0005	0.00312 mg/kg	107	70.0	130
EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.0005	mg/kg	<0.0005	0.00312 mg/kg	100	70.0	130
EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.0005	mg/kg	<0.0005	0.00312 mg/kg	98.0	70.0	130
EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.0005	mg/kg	<0.0005	0.00312 mg/kg	120	70.0	130
EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.0002	mg/kg	<0.0002	0.00125 mg/kg	116	63.0	144
EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.0002	mg/kg	<0.0002	0.00125 mg/kg	110	61.0	139
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 4264546)								
EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.0005	mg/kg	<0.0005	0.00117 mg/kg	113	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	112	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	125	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: 4264546)								
EP231X: Sum of PFAS	----	0.0002	mg/kg	<0.0002	----	----	----	----
EP231X: Sum of PFHxS and PFOS	355-46-4/17 63-23-1	0.0002	mg/kg	<0.0002	----	----	----	----
EP231X: Sum of PFAS (WA DER List)	----	0.0002	mg/kg	<0.0002	----	----	----	----

Sub-Matrix: **WATER**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report: Result	Laboratory Control Spike (LCS) Report: Spike Concentration	Spike Recovery (%): LCS	Acceptable Limits (%): Low	Acceptable Limits (%): High
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 4264535)								
EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	0.222 µg/L	99.5	72.0	130
EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	<0.02	0.235 µg/L	99.3	71.0	127
EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	<0.01	0.228 µg/L	93.7	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	91.6	65.0	140
EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L	<0.02	0.241 µg/L	87.4	53.0	142

Sub-Matrix: **WATER**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Acceptable Limits (%)	
				Result	Concentration	LCS	Low	High
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 4264537)								
EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	0.222 µg/L	91.9	72.0	130
EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	<0.02	0.235 µg/L	106	71.0	127
EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	<0.01	0.228 µg/L	100	68.0	131
EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	<0.02	0.25 µg/L	90.3	69.0	134
EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	<0.01	0.232 µg/L	101	65.0	140
EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L	<0.02	0.241 µg/L	97.7	53.0	142
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4264535)								
EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L	<0.1	1.25 µg/L	97.9	73.0	129
EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	<0.02	0.25 µg/L	104	72.0	129
EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	<0.02	0.25 µg/L	95.6	72.0	129
EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	<0.02	0.25 µg/L	102	72.0	130
EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	<0.01	0.25 µg/L	98.4	71.0	133
EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L	<0.02	0.25 µg/L	95.0	69.0	130
EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L	<0.02	0.25 µg/L	105	71.0	129
EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L	<0.02	0.25 µg/L	85.4	69.0	133
EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L	<0.02	0.25 µg/L	102	72.0	134
EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L	<0.02	0.25 µg/L	96.8	65.0	144
EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L	<0.05	0.625 µg/L	104	71.0	132
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4264537)								
EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L	<0.1	1.25 µg/L	97.7	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	94.0	72.0	129
EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	<0.02	0.25 µg/L	98.2	72.0	130
EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	<0.01	0.25 µg/L	92.8	71.0	133
EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L	<0.02	0.25 µg/L	93.5	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	106	72.0	134
EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L	<0.02	0.25 µg/L	93.1	65.0	144
EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L	<0.05	0.625 µg/L	102	71.0	132
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 4264535)								
EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	µg/L	<0.02	0.25 µg/L	89.0	67.0	137
EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L	<0.05	0.625 µg/L	87.4	68.0	141
EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	µg/L	<0.05	0.625 µg/L	95.4	70.0	130
EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L	<0.05	0.625 µg/L	98.0	70.0	130
EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L	<0.05	0.625 µg/L	103	70.0	130

Sub-Matrix: **WATER**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Acceptable Limits (%)	
				Result	Concentration	LCS	Low	High
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 4264535) - continued								
EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.02	µg/L	<0.02	0.25 µg/L	110	65.0	136
EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.02	µg/L	<0.02	0.25 µg/L	97.6	61.0	135
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 4264537)								
EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	µg/L	<0.02	0.25 µg/L	92.0	67.0	137
EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L	<0.05	0.625 µg/L	107	68.0	141
EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	µg/L	<0.05	0.625 µg/L	102	70.0	130
EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L	<0.05	0.625 µg/L	92.6	70.0	130
EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L	<0.05	0.625 µg/L	105	70.0	130
EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.02	µg/L	<0.02	0.25 µg/L	99.0	65.0	136
EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.02	µg/L	<0.02	0.25 µg/L	99.0	61.0	135
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 4264535)								
EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L	<0.05	0.234 µg/L	96.6	63.0	143
EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.05	µg/L	<0.05	0.238 µg/L	98.3	64.0	140
EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.05	µg/L	<0.05	0.24 µg/L	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	98.1	70.0	130
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 4264537)								
EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L	<0.05	0.234 µg/L	92.2	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	106	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	109	67.0	138
EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.05	µg/L	<0.05	0.242 µg/L	88.9	70.0	130
EP231P: PFAS Sums (QCLot: 4264535)								
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: 4264537)								
EP231X: Sum of PFAS	----	0.01	µg/L	<0.01	----	----	----	----
EP231X: Sum of PFHxS and PFOS	355-46-4/17 63-23-1	0.01	µg/L	<0.01	----	----	----	----
EP231X: Sum of PFAS (WA DER List)	----	0.01	µg/L	<0.01	----	----	----	----

Matrix Spike (MS) Report

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

Sub-Matrix: **SOIL**

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Acceptable Limits (%)	
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Concentration	MS	Low	High
EG005(ED093)T: Total Metals by ICP-AES (QCLot: 4262047)							
EM2205583-001	SX_IB_20220328_07_41_SS_Primary_ALS	EG005T: Arsenic	7440-38-2	50 mg/kg	80.7	78.0	124
		EG005T: Cadmium	7440-43-9	50 mg/kg	97.9	79.7	116
		EG005T: Chromium	7440-47-3	50 mg/kg	93.9	79.0	121
		EG005T: Copper	7440-50-8	250 mg/kg	103	80.0	120
		EG005T: Lead	7439-92-1	250 mg/kg	94.6	80.0	120
		EG005T: Nickel	7440-02-0	50 mg/kg	102	78.0	120
		EG005T: Zinc	7440-66-6	250 mg/kg	85.2	80.0	120
EG035T: Total Recoverable Mercury by FIMS (QCLot: 4262048)							
EM2205583-001	SX_IB_20220328_07_41_SS_Primary_ALS	EG035T: Mercury	7439-97-6	0.5 mg/kg	83.3	76.0	116
EG048: Hexavalent Chromium (Alkaline Digest) (QCLot: 4262070)							
EM2205434-001	Anonymous	EG048G: Hexavalent Chromium	18540-29-9	20 mg/kg	82.8	58.0	114
EM2205434-001	Anonymous	EG048G: Hexavalent Chromium	18540-29-9	20 mg/kg	91.0	58.0	114
EG048: Hexavalent Chromium (Alkaline Digest) (QCLot: 4262071)							
EM2205583-003	SX_IB_20220328_11_59_SS_Primary_ALS	EG048G: Hexavalent Chromium	18540-29-9	20 mg/kg	81.4	58.0	114
EM2205583-003	SX_IB_20220328_11_59_SS_Primary_ALS	EG048G: Hexavalent Chromium	18540-29-9	20 mg/kg	89.9	58.0	114
EK026SF: Total CN by Segmented Flow Analyser (QCLot: 4263025)							
EM2205522-019	Anonymous	EK026SF: Total Cyanide	57-12-5	20 mg/kg	93.7	70.0	130
EK040T: Fluoride Total (QCLot: 4262230)							
EM2205487-005	Anonymous	EK040T: Fluoride	16984-48-8	400 mg/kg	72.6	70.0	130
EP066: Polychlorinated Biphenyls (PCB) (QCLot: 4262137)							
EM2205522-007	Anonymous	EP066-EM: Total Polychlorinated biphenyls	----	1 mg/kg	124	59.6	152
EP074A: Monocyclic Aromatic Hydrocarbons (QCLot: 4259605)							
EM2205583-002	SX_IB_20220328_07_45_SS_Duplicate_ALS	EP074-UT: Benzene	71-43-2	2 mg/kg	92.4	53.7	130
		EP074-UT: Toluene	108-88-3	2 mg/kg	93.0	55.1	124
EP074I: Volatile Halogenated Compounds (QCLot: 4259605)							
EM2205583-002	SX_IB_20220328_07_45_SS_Duplicate_ALS	EP074-UT: 1.1-Dichloroethene	75-35-4	2 mg/kg	81.5	38.4	145
		EP074-UT: Trichloroethene	79-01-6	2 mg/kg	82.4	48.1	128
		EP074-UT: Chlorobenzene	108-90-7	2 mg/kg	87.8	55.5	122
EP075A: Phenolic Compounds (Halogenated) (QCLot: 4262135)							
EM2205499-002	Anonymous	EP075-EM: 2-Chlorophenol	95-57-8	3 mg/kg	80.6	44.0	143
		EP075-EM: 4-Chloro-3-methylphenol	59-50-7	3 mg/kg	78.3	41.5	139
		EP075-EM: Pentachlorophenol	87-86-5	3 mg/kg	70.6	10.0	144
EP075A: Phenolic Compounds (Non-halogenated) (QCLot: 4262135)							
EM2205499-002	Anonymous	EP075-EM: Phenol	108-95-2	3 mg/kg	81.5	44.2	134

Sub-Matrix: **SOIL**

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Acceptable Limits (%)	
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Concentration	MS	Low	High
EP075A: Phenolic Compounds (Non-halogenated) (QCLot: 4262135) - continued							
EM2205499-002	Anonymous	EP075-EM: 2-Nitrophenol	88-75-5	3 mg/kg	75.2	34.2	129
EP075B: Polynuclear Aromatic Hydrocarbons (QCLot: 4262135)							
EM2205499-002	Anonymous	EP075-EM: Acenaphthene	83-32-9	3 mg/kg	71.1	42.6	138
		EP075-EM: Pyrene	129-00-0	3 mg/kg	72.1	37.8	152
EP080/071: Total Petroleum Hydrocarbons (QCLot: 4259605)							
EM2205583-002	SX_IB_20220328_07_45_SS_Duplicate_ALS	EP074-UT: C6 - C9 Fraction	----	28 mg/kg	87.2	42.3	111
EP080/071: Total Petroleum Hydrocarbons (QCLot: 4262136)							
EM2205501-003	Anonymous	EP071-EM: C10 - C14 Fraction	----	760 mg/kg	77.2	71.3	126
		EP071-EM: C15 - C28 Fraction	----	3270 mg/kg	87.4	75.1	123
		EP071-EM: C29 - C36 Fraction	----	1550 mg/kg	91.2	78.1	120
		EP071-EM: C10 - C36 Fraction (sum)	----	5580 mg/kg	85.1	70.0	130
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 4259605)							
EM2205583-002	SX_IB_20220328_07_45_SS_Duplicate_ALS	EP074-UT: C6 - C10 Fraction	C6_C10	33 mg/kg	81.6	39.9	109
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 4262136)							
EM2205501-003	Anonymous	EP071-EM: >C10 - C16 Fraction	----	1110 mg/kg	83.1	71.5	130
		EP071-EM: >C16 - C34 Fraction	----	4180 mg/kg	88.1	76.9	119
		EP071-EM: >C34 - C40 Fraction	----	290 mg/kg	84.5	65.3	139
		EP071-EM: >C10 - C40 Fraction (sum)	----	5580 mg/kg	85.3	70.0	130
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 4264546)							
EM2205492-006	Anonymous	EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.00111 mg/kg	113	72.0	128
		EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.00118 mg/kg	84.4	73.0	123
		EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.00114 mg/kg	96.1	67.0	130
		EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.00119 mg/kg	120	70.0	132
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.00116 mg/kg	111	68.0	136
		EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.00121 mg/kg	132	59.0	134
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4264546)							
EM2205492-006	Anonymous	EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.00625 mg/kg	104	71.0	135
		EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.00125 mg/kg	104	69.0	132
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.00125 mg/kg	110	70.0	132
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.00125 mg/kg	107	71.0	131
		EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.00125 mg/kg	108	69.0	133
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.00125 mg/kg	107	72.0	129
		EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.00125 mg/kg	107	69.0	133
		EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.00125 mg/kg	81.0	64.0	136
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.00125 mg/kg	104	69.0	135
		EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.00125 mg/kg	85.4	66.0	139
		EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.00312 mg/kg	118	69.0	133

Sub-Matrix: **SOIL**

Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Matrix Spike (MS) Report: Spike Concentration	Matrix Spike (MS) Report: SpikeRecovery(%) MS	Acceptable Limits (%) Low	Acceptable Limits (%) High
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 4264546)							
EM2205492-006	Anonymous	EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.00125 mg/kg	117	67.0	137
		EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.00312 mg/kg	103	70.0	130
		EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.00312 mg/kg	101	70.0	130
		EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.00312 mg/kg	106	70.0	130
		EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.00312 mg/kg	124	70.0	130
		EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.00125 mg/kg	120	63.0	144
		EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.00125 mg/kg	122	61.0	139
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 4264546)							
EM2205492-006	Anonymous	EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.00117 mg/kg	106	62.0	145
		EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.00119 mg/kg	123	64.0	140
		EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.0012 mg/kg	128	65.0	137
		EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.00121 mg/kg	73.0	70.0	130

Sub-Matrix: **WATER**

Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Matrix Spike (MS) Report: Spike Concentration	Matrix Spike (MS) Report: SpikeRecovery(%) MS	Acceptable Limits (%) Low	Acceptable Limits (%) High
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 4264535)							
EM2205583-010	SX_IB_20220328_07_45_SS_Duplicate_ALS DI	EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.222 µg/L	92.9	72.0	130
		EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.235 µg/L	104	71.0	127
		EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.228 µg/L	102	68.0	131
		EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.238 µg/L	103	69.0	134
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.232 µg/L	95.8	65.0	140
		EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.241 µg/L	85.1	53.0	142
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 4264537)							
EM2205583-002	SX_IB_20220328_07_45_SS_Duplicate_ALS	EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.222 µg/L	98.1	72.0	130
		EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.235 µg/L	102	71.0	127
		EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.228 µg/L	96.2	68.0	131
		EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.238 µg/L	98.1	69.0	134
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.232 µg/L	94.5	65.0	140
		EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.241 µg/L	81.6	53.0	142
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4264535)							
EM2205583-010	SX_IB_20220328_07_45_SS_Duplicate_ALS DI	EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	1.25 µg/L	98.2	73.0	129
		EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.25 µg/L	104	72.0	129
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.25 µg/L	102	72.0	129

Sub-Matrix: **WATER**

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Acceptable Limits (%)	
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Concentration	MS	Low	High
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4264535) - continued							
EM2205583-010	SX_IB_20220328_07_45_SS_Duplicate_ALS DI	EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.25 µg/L	97.6	72.0	130
		EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.25 µg/L	96.0	71.0	133
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.25 µg/L	94.8	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	95.8	69.0	133
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.25 µg/L	107	72.0	134
		EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.25 µg/L	95.0	65.0	144
		EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.625 µg/L	111	71.0	132
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4264537)							
EM2205583-002	SX_IB_20220328_07_45_SS_Duplicate_ALS	EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	1.25 µg/L	92.5	73.0	129
		EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.25 µg/L	105	72.0	129
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.25 µg/L	104	72.0	129
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.25 µg/L	97.9	72.0	130
		EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.25 µg/L	95.0	71.0	133
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.25 µg/L	98.0	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	89.3	69.0	133
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.25 µg/L	111	72.0	134
		EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.25 µg/L	87.9	65.0	144
		EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.625 µg/L	110	71.0	132
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 4264535)							
EM2205583-010	SX_IB_20220328_07_45_SS_Duplicate_ALS DI	EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.25 µg/L	99.3	67.0	137
		EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.625 µg/L	91.6	68.0	141
		EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.625 µg/L	98.5	70.0	130
		EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.625 µg/L	100	70.0	130
		EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.625 µg/L	111	70.0	130
		EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.25 µg/L	114	65.0	136
		EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.25 µg/L	98.9	61.0	135
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 4264537)							
EM2205583-002	SX_IB_20220328_07_45_SS_Duplicate_ALS	EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.25 µg/L	103	67.0	137
		EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.625 µg/L	89.6	68.0	141
		EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.625 µg/L	98.1	70.0	130

Sub-Matrix: **WATER**

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Acceptable Limits (%)	
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Concentration	MS	Low	High
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 4264537) - continued							
EM2205583-002	SX_IB_20220328_07_45_SS_Duplicate_ALS	EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.625 µg/L	90.0	70.0	130
		EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.625 µg/L	110	70.0	130
		EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.25 µg/L	108	65.0	136
		EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.25 µg/L	107	61.0	135
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 4264535)							
EM2205583-010	SX_IB_20220328_07_45_SS_Duplicate_ALS DI	EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.234 µg/L	93.0	63.0	143
		EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.238 µg/L	111	64.0	140
		EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.24 µg/L	99.8	67.0	138
		EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.242 µg/L	72.0	70.0	130
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 4264537)							
EM2205583-002	SX_IB_20220328_07_45_SS_Duplicate_ALS	EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.234 µg/L	96.8	63.0	143
		EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.238 µg/L	104	64.0	140
		EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.24 µg/L	109	67.0	138
		EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.242 µg/L	83.8	70.0	130

QA/QC Compliance Assessment to assist with Quality Review

Work Order	: **EM2205583**	Page	: 1 of 12
Client	: **AGON ENVIRONMENTAL PTY LTD**	Laboratory	: Environmental Division Melbourne
Contact	: Craig Trimbur	Telephone	: +6138549 9600
Project	: JC0927	Date Samples Received	: 29-Mar-2022
Site	: 20220329050622-ALS-14	Issue Date	: 05-Apr-2022
Sampler	: BRANDON CLARKE, WILLIAM O'HAIRE	No. of samples received	: 16
Order number	: ----	No. of samples analysed	: 16

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

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

Summary of Outliers

Outliers : Quality Control Samples

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

- **NO Method Blank value outliers occur.**
- **NO Laboratory Control outliers occur.**
- **NO Matrix Spike outliers occur.**
- **Duplicate 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
Duplicate (DUP) RPDs							
EG035T: Total Recoverable Mercury by FIMS	EM2205589--001	Anonymous	**Mercury**	7439-97-6	22.5 %	0% - 20%	**RPD exceeds LOR based limits**

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_20220328_07_41_SS_Primary_ALS,	SX_IB_20220328_07_45_SS_Duplicate_ALS,	**28-Mar-2022**	**01-Apr-2022**	04-Apr-2022	✓	**01-Apr-2022**	02-Apr-2022	✓
SX_IB_20220328_11_59_SS_Primary_ALS,	SX_IB_20220328_15_48_SS_Triplicate_ALS,							
SX_IB_20220328_15_50_SS_Primary_ALS,	SX_IB_20220328_20_19_SS_Primary_ALS							
Soil Glass Jar - Unpreserved (EA001)								
SX_IB_20220329_00_09_SS_Primary_ALS,	SX_IB_20220329_04_21_SS_Primary_ALS	**29-Mar-2022**	**01-Apr-2022**	05-Apr-2022	✓	**01-Apr-2022**	02-Apr-2022	✓
EA055: Moisture Content (Dried @ 105-110°C)								
Soil Glass Jar - Unpreserved (EA055)								
SX_IB_20220328_07_41_SS_Primary_ALS,	SX_IB_20220328_07_45_SS_Duplicate_ALS,	**28-Mar-2022**	**----**	----	----	**01-Apr-2022**	11-Apr-2022	✓
SX_IB_20220328_11_59_SS_Primary_ALS,	SX_IB_20220328_15_48_SS_Triplicate_ALS,							
SX_IB_20220328_15_50_SS_Primary_ALS,	SX_IB_20220328_20_19_SS_Primary_ALS							
Soil Glass Jar - Unpreserved (EA055)								
SX_IB_20220329_00_09_SS_Primary_ALS,	SX_IB_20220329_04_21_SS_Primary_ALS	**29-Mar-2022**	**----**	----	----	**01-Apr-2022**	12-Apr-2022	✓
EG005(ED093)T: Total Metals by ICP-AES								
Soil Glass Jar - Unpreserved (EG005T)								
SX_IB_20220328_07_41_SS_Primary_ALS,	SX_IB_20220328_07_45_SS_Duplicate_ALS,	**28-Mar-2022**	**01-Apr-2022**	24-Sep-2022	✓	**04-Apr-2022**	24-Sep-2022	✓
SX_IB_20220328_11_59_SS_Primary_ALS,	SX_IB_20220328_15_48_SS_Triplicate_ALS,							
SX_IB_20220328_15_50_SS_Primary_ALS,	SX_IB_20220328_20_19_SS_Primary_ALS							
Soil Glass Jar - Unpreserved (EG005T)								
SX_IB_20220329_00_09_SS_Primary_ALS,	SX_IB_20220329_04_21_SS_Primary_ALS	**29-Mar-2022**	**01-Apr-2022**	25-Sep-2022	✓	**04-Apr-2022**	25-Sep-2022	✓

Matrix: **SOIL**

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

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EG035T: Total Recoverable Mercury by FIMS							
Soil Glass Jar - Unpreserved (EG035T)							
SX_IB_20220328_07_41_SS_Primary_ALS, SX_IB_20220328_07_45_SS_Duplicate_ALS, SX_IB_20220328_11_59_SS_Primary_ALS, SX_IB_20220328_15_48_SS_Triplicate_ALS, SX_IB_20220328_15_50_SS_Primary_ALS, SX_IB_20220328_20_19_SS_Primary_ALS	**28-Mar-2022**	**01-Apr-2022**	25-Apr-2022	✓	**04-Apr-2022**	25-Apr-2022	✓
Soil Glass Jar - Unpreserved (EG035T)							
SX_IB_20220329_00_09_SS_Primary_ALS, SX_IB_20220329_04_21_SS_Primary_ALS	**29-Mar-2022**	**01-Apr-2022**	26-Apr-2022	✓	**04-Apr-2022**	26-Apr-2022	✓
EG048: Hexavalent Chromium (Alkaline Digest)							
Soil Glass Jar - Unpreserved (EG048G)							
SX_IB_20220328_07_41_SS_Primary_ALS, SX_IB_20220328_07_45_SS_Duplicate_ALS, SX_IB_20220328_11_59_SS_Primary_ALS, SX_IB_20220328_15_48_SS_Triplicate_ALS, SX_IB_20220328_15_50_SS_Primary_ALS, SX_IB_20220328_20_19_SS_Primary_ALS	**28-Mar-2022**	**01-Apr-2022**	25-Apr-2022	✓	**02-Apr-2022**	08-Apr-2022	✓
Soil Glass Jar - Unpreserved (EG048G)							
SX_IB_20220329_00_09_SS_Primary_ALS, SX_IB_20220329_04_21_SS_Primary_ALS	**29-Mar-2022**	**01-Apr-2022**	26-Apr-2022	✓	**02-Apr-2022**	08-Apr-2022	✓
EK026SF: Total CN by Segmented Flow Analyser							
Soil Glass Jar - Unpreserved (EK026SF)							
SX_IB_20220328_07_41_SS_Primary_ALS, SX_IB_20220328_07_45_SS_Duplicate_ALS, SX_IB_20220328_11_59_SS_Primary_ALS, SX_IB_20220328_15_48_SS_Triplicate_ALS, SX_IB_20220328_15_50_SS_Primary_ALS, SX_IB_20220328_20_19_SS_Primary_ALS	**28-Mar-2022**	**01-Apr-2022**	11-Apr-2022	✓	**02-Apr-2022**	15-Apr-2022	✓
Soil Glass Jar - Unpreserved (EK026SF)							
SX_IB_20220329_00_09_SS_Primary_ALS, SX_IB_20220329_04_21_SS_Primary_ALS	**29-Mar-2022**	**01-Apr-2022**	12-Apr-2022	✓	**02-Apr-2022**	15-Apr-2022	✓
EK040T: Fluoride Total							
Soil Glass Jar - Unpreserved (EK040T)							
SX_IB_20220328_07_41_SS_Primary_ALS, SX_IB_20220328_07_45_SS_Duplicate_ALS, SX_IB_20220328_11_59_SS_Primary_ALS, SX_IB_20220328_15_48_SS_Triplicate_ALS, SX_IB_20220328_15_50_SS_Primary_ALS, SX_IB_20220328_20_19_SS_Primary_ALS	**28-Mar-2022**	**01-Apr-2022**	25-Apr-2022	✓	**05-Apr-2022**	25-Apr-2022	✓
Soil Glass Jar - Unpreserved (EK040T)							
SX_IB_20220329_00_09_SS_Primary_ALS, SX_IB_20220329_04_21_SS_Primary_ALS	**29-Mar-2022**	**01-Apr-2022**	26-Apr-2022	✓	**05-Apr-2022**	26-Apr-2022	✓
EN60: ASLP Leaching Procedure - Inorganics/PFAS (Plastic Vessel)							
Non-Volatile Leach: 180 day HT (e.g. PFAS, metals ex.Hg) (EN60a-P)							
SX_IB_20220328_07_41_SS_Primary_ALS, SX_IB_20220328_07_45_SS_Duplicate_ALS, SX_IB_20220328_11_59_SS_Primary_ALS, SX_IB_20220328_15_48_SS_Triplicate_ALS, SX_IB_20220328_15_50_SS_Primary_ALS, SX_IB_20220328_20_19_SS_Primary_ALS	**28-Mar-2022**	**01-Apr-2022**	24-Sep-2022	✓	**----**	----	----
Non-Volatile Leach: 180 day HT (e.g. PFAS, metals ex.Hg) (EN60a-P)							
SX_IB_20220329_00_09_SS_Primary_ALS, SX_IB_20220329_04_21_SS_Primary_ALS	**29-Mar-2022**	**01-Apr-2022**	25-Sep-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_20220328_07_41_SS_Primary_ALS - DI, SX_IB_20220328_07_45_SS_Duplicate_ALS - DI, SX_IB_20220328_11_59_SS_Primary_ALS - DI, SX_IB_20220328_15_48_SS_Triplicate_ALS - DI, SX_IB_20220328_15_50_SS_Primary_ALS - DI, SX_IB_20220328_20_19_SS_Primary_ALS - DI	**28-Mar-2022**	**01-Apr-2022**	24-Sep-2022	✓	**----**	----	----
Non-Volatile Leach: 180 day HT (e.g. PFAS, metals ex.Hg) (EN60-DIa-P)							
SX_IB_20220329_00_09_SS_Primary_ALS - DI, SX_IB_20220329_04_21_SS_Primary_ALS - DI	**29-Mar-2022**	**01-Apr-2022**	25-Sep-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
EP066: Polychlorinated Biphenyls (PCB)							
Soil Glass Jar - Unpreserved (EP066-EM)							
SX_IB_20220328_07_41_SS_Primary_ALS, SX_IB_20220328_07_45_SS_Duplicate_ALS, SX_IB_20220328_11_59_SS_Primary_ALS, SX_IB_20220328_15_48_SS_Triplicate_ALS, SX_IB_20220328_15_50_SS_Primary_ALS, SX_IB_20220328_20_19_SS_Primary_ALS	**28-Mar-2022**	**01-Apr-2022**	11-Apr-2022	✓	**01-Apr-2022**	11-May-2022	✓
Soil Glass Jar - Unpreserved (EP066-EM)							
SX_IB_20220329_00_09_SS_Primary_ALS, SX_IB_20220329_04_21_SS_Primary_ALS	**29-Mar-2022**	**01-Apr-2022**	12-Apr-2022	✓	**01-Apr-2022**	11-May-2022	✓
EP074A: Monocyclic Aromatic Hydrocarbons							
Soil Glass Jar - Unpreserved (EP074-UT)							
SX_IB_20220328_07_41_SS_Primary_ALS, SX_IB_20220328_07_45_SS_Duplicate_ALS, SX_IB_20220328_11_59_SS_Primary_ALS, SX_IB_20220328_15_48_SS_Triplicate_ALS, SX_IB_20220328_15_50_SS_Primary_ALS, SX_IB_20220328_20_19_SS_Primary_ALS	**28-Mar-2022**	**01-Apr-2022**	04-Apr-2022	✓	**01-Apr-2022**	04-Apr-2022	✓
Soil Glass Jar - Unpreserved (EP074-UT)							
SX_IB_20220329_00_09_SS_Primary_ALS, SX_IB_20220329_04_21_SS_Primary_ALS	**29-Mar-2022**	**01-Apr-2022**	05-Apr-2022	✓	**01-Apr-2022**	05-Apr-2022	✓
EP074H: Naphthalene							
Soil Glass Jar - Unpreserved (EP074-UT)							
SX_IB_20220328_07_41_SS_Primary_ALS, SX_IB_20220328_07_45_SS_Duplicate_ALS, SX_IB_20220328_11_59_SS_Primary_ALS, SX_IB_20220328_15_48_SS_Triplicate_ALS, SX_IB_20220328_15_50_SS_Primary_ALS, SX_IB_20220328_20_19_SS_Primary_ALS	**28-Mar-2022**	**01-Apr-2022**	04-Apr-2022	✓	**01-Apr-2022**	04-Apr-2022	✓
Soil Glass Jar - Unpreserved (EP074-UT)							
SX_IB_20220329_00_09_SS_Primary_ALS, SX_IB_20220329_04_21_SS_Primary_ALS	**29-Mar-2022**	**01-Apr-2022**	05-Apr-2022	✓	**01-Apr-2022**	05-Apr-2022	✓
EP074I: Volatile Halogenated Compounds							
Soil Glass Jar - Unpreserved (EP074-UT)							
SX_IB_20220328_07_41_SS_Primary_ALS, SX_IB_20220328_07_45_SS_Duplicate_ALS, SX_IB_20220328_11_59_SS_Primary_ALS, SX_IB_20220328_15_48_SS_Triplicate_ALS, SX_IB_20220328_15_50_SS_Primary_ALS, SX_IB_20220328_20_19_SS_Primary_ALS	**28-Mar-2022**	**01-Apr-2022**	04-Apr-2022	✓	**01-Apr-2022**	04-Apr-2022	✓
Soil Glass Jar - Unpreserved (EP074-UT)							
SX_IB_20220329_00_09_SS_Primary_ALS, SX_IB_20220329_04_21_SS_Primary_ALS	**29-Mar-2022**	**01-Apr-2022**	05-Apr-2022	✓	**01-Apr-2022**	05-Apr-2022	✓
EP075A: Phenolic Compounds (Halogenated)							
Soil Glass Jar - Unpreserved (EP075-EM)							
SX_IB_20220328_07_41_SS_Primary_ALS, SX_IB_20220328_07_45_SS_Duplicate_ALS, SX_IB_20220328_11_59_SS_Primary_ALS, SX_IB_20220328_15_48_SS_Triplicate_ALS, SX_IB_20220328_15_50_SS_Primary_ALS, SX_IB_20220328_20_19_SS_Primary_ALS	**28-Mar-2022**	**01-Apr-2022**	11-Apr-2022	✓	**01-Apr-2022**	11-May-2022	✓
Soil Glass Jar - Unpreserved (EP075-EM)							
SX_IB_20220329_00_09_SS_Primary_ALS, SX_IB_20220329_04_21_SS_Primary_ALS	**29-Mar-2022**	**01-Apr-2022**	12-Apr-2022	✓	**01-Apr-2022**	11-May-2022	✓
EP075A: Phenolic Compounds (Non-halogenated)							
Soil Glass Jar - Unpreserved (EP075-EM)							
SX_IB_20220328_07_41_SS_Primary_ALS, SX_IB_20220328_07_45_SS_Duplicate_ALS, SX_IB_20220328_11_59_SS_Primary_ALS, SX_IB_20220328_15_48_SS_Triplicate_ALS, SX_IB_20220328_15_50_SS_Primary_ALS, SX_IB_20220328_20_19_SS_Primary_ALS	**28-Mar-2022**	**01-Apr-2022**	11-Apr-2022	✓	**01-Apr-2022**	11-May-2022	✓
Soil Glass Jar - Unpreserved (EP075-EM)							
SX_IB_20220329_00_09_SS_Primary_ALS, SX_IB_20220329_04_21_SS_Primary_ALS	**29-Mar-2022**	**01-Apr-2022**	12-Apr-2022	✓	**01-Apr-2022**	11-May-2022	✓

Matrix: **SOIL**

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

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP075B: Polynuclear Aromatic Hydrocarbons							
Soil Glass Jar - Unpreserved (EP075-EM)							
SX_IB_20220328_07_41_SS_Primary_ALS, SX_IB_20220328_07_45_SS_Duplicate_ALS, SX_IB_20220328_11_59_SS_Primary_ALS, SX_IB_20220328_15_48_SS_Triplicate_ALS, SX_IB_20220328_15_50_SS_Primary_ALS, SX_IB_20220328_20_19_SS_Primary_ALS	**28-Mar-2022**	**01-Apr-2022**	11-Apr-2022	✓	**01-Apr-2022**	11-May-2022	✓
Soil Glass Jar - Unpreserved (EP075-EM)							
SX_IB_20220329_00_09_SS_Primary_ALS, SX_IB_20220329_04_21_SS_Primary_ALS	**29-Mar-2022**	**01-Apr-2022**	12-Apr-2022	✓	**01-Apr-2022**	11-May-2022	✓
EP075I: Organochlorine Pesticides							
Soil Glass Jar - Unpreserved (EP075-EM)							
SX_IB_20220328_07_41_SS_Primary_ALS, SX_IB_20220328_07_45_SS_Duplicate_ALS, SX_IB_20220328_11_59_SS_Primary_ALS, SX_IB_20220328_15_48_SS_Triplicate_ALS, SX_IB_20220328_15_50_SS_Primary_ALS, SX_IB_20220328_20_19_SS_Primary_ALS	**28-Mar-2022**	**01-Apr-2022**	11-Apr-2022	✓	**01-Apr-2022**	11-May-2022	✓
Soil Glass Jar - Unpreserved (EP075-EM)							
SX_IB_20220329_00_09_SS_Primary_ALS, SX_IB_20220329_04_21_SS_Primary_ALS	**29-Mar-2022**	**01-Apr-2022**	12-Apr-2022	✓	**01-Apr-2022**	11-May-2022	✓
EP080/071: Total Petroleum Hydrocarbons							
Soil Glass Jar - Unpreserved (EP074-UT)							
SX_IB_20220328_07_41_SS_Primary_ALS, SX_IB_20220328_07_45_SS_Duplicate_ALS, SX_IB_20220328_11_59_SS_Primary_ALS, SX_IB_20220328_15_48_SS_Triplicate_ALS, SX_IB_20220328_15_50_SS_Primary_ALS, SX_IB_20220328_20_19_SS_Primary_ALS	**28-Mar-2022**	**01-Apr-2022**	04-Apr-2022	✓	**01-Apr-2022**	04-Apr-2022	✓
Soil Glass Jar - Unpreserved (EP074-UT)							
SX_IB_20220329_00_09_SS_Primary_ALS, SX_IB_20220329_04_21_SS_Primary_ALS	**29-Mar-2022**	**01-Apr-2022**	05-Apr-2022	✓	**01-Apr-2022**	05-Apr-2022	✓
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions							
Soil Glass Jar - Unpreserved (EP074-UT)							
SX_IB_20220328_07_41_SS_Primary_ALS, SX_IB_20220328_07_45_SS_Duplicate_ALS, SX_IB_20220328_11_59_SS_Primary_ALS, SX_IB_20220328_15_48_SS_Triplicate_ALS, SX_IB_20220328_15_50_SS_Primary_ALS, SX_IB_20220328_20_19_SS_Primary_ALS	**28-Mar-2022**	**01-Apr-2022**	04-Apr-2022	✓	**01-Apr-2022**	04-Apr-2022	✓
Soil Glass Jar - Unpreserved (EP074-UT)							
SX_IB_20220329_00_09_SS_Primary_ALS, SX_IB_20220329_04_21_SS_Primary_ALS	**29-Mar-2022**	**01-Apr-2022**	05-Apr-2022	✓	**01-Apr-2022**	05-Apr-2022	✓
EP231A: Perfluoroalkyl Sulfonic Acids							
HDPE Soil Jar (EP231X)							
SX_IB_20220328_07_41_SS_Primary_ALS, SX_IB_20220328_07_45_SS_Duplicate_ALS, SX_IB_20220328_11_59_SS_Primary_ALS, SX_IB_20220328_15_48_SS_Triplicate_ALS, SX_IB_20220328_15_50_SS_Primary_ALS, SX_IB_20220328_20_19_SS_Primary_ALS	**28-Mar-2022**	**04-Apr-2022**	24-Sep-2022	✓	**04-Apr-2022**	14-May-2022	✓
HDPE Soil Jar (EP231X)							
SX_IB_20220329_00_09_SS_Primary_ALS, SX_IB_20220329_04_21_SS_Primary_ALS	**29-Mar-2022**	**04-Apr-2022**	25-Sep-2022	✓	**04-Apr-2022**	14-May-2022	✓
EP231B: Perfluoroalkyl Carboxylic Acids							
HDPE Soil Jar (EP231X)							
SX_IB_20220328_07_41_SS_Primary_ALS, SX_IB_20220328_07_45_SS_Duplicate_ALS, SX_IB_20220328_11_59_SS_Primary_ALS, SX_IB_20220328_15_48_SS_Triplicate_ALS, SX_IB_20220328_15_50_SS_Primary_ALS, SX_IB_20220328_20_19_SS_Primary_ALS	**28-Mar-2022**	**04-Apr-2022**	24-Sep-2022	✓	**04-Apr-2022**	14-May-2022	✓
HDPE Soil Jar (EP231X)							
SX_IB_20220329_00_09_SS_Primary_ALS, SX_IB_20220329_04_21_SS_Primary_ALS	**29-Mar-2022**	**04-Apr-2022**	25-Sep-2022	✓	**04-Apr-2022**	14-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
EP231C: Perfluoroalkyl Sulfonamides							
HDPE Soil Jar (EP231X)							
SX_IB_20220328_07_41_SS_Primary_ALS, SX_IB_20220328_07_45_SS_Duplicate_ALS, SX_IB_20220328_11_59_SS_Primary_ALS, SX_IB_20220328_15_48_SS_Triplicate_ALS, SX_IB_20220328_15_50_SS_Primary_ALS, SX_IB_20220328_20_19_SS_Primary_ALS	**28-Mar-2022**	**04-Apr-2022**	24-Sep-2022	✓	**04-Apr-2022**	14-May-2022	✓
HDPE Soil Jar (EP231X)							
SX_IB_20220329_00_09_SS_Primary_ALS, SX_IB_20220329_04_21_SS_Primary_ALS	**29-Mar-2022**	**04-Apr-2022**	25-Sep-2022	✓	**04-Apr-2022**	14-May-2022	✓
EP231D: (n:2) Fluorotelomer Sulfonic Acids							
HDPE Soil Jar (EP231X)							
SX_IB_20220328_07_41_SS_Primary_ALS, SX_IB_20220328_07_45_SS_Duplicate_ALS, SX_IB_20220328_11_59_SS_Primary_ALS, SX_IB_20220328_15_48_SS_Triplicate_ALS, SX_IB_20220328_15_50_SS_Primary_ALS, SX_IB_20220328_20_19_SS_Primary_ALS	**28-Mar-2022**	**04-Apr-2022**	24-Sep-2022	✓	**04-Apr-2022**	14-May-2022	✓
HDPE Soil Jar (EP231X)							
SX_IB_20220329_00_09_SS_Primary_ALS, SX_IB_20220329_04_21_SS_Primary_ALS	**29-Mar-2022**	**04-Apr-2022**	25-Sep-2022	✓	**04-Apr-2022**	14-May-2022	✓
EP231P: PFAS Sums							
HDPE Soil Jar (EP231X)							
SX_IB_20220328_07_41_SS_Primary_ALS, SX_IB_20220328_07_45_SS_Duplicate_ALS, SX_IB_20220328_11_59_SS_Primary_ALS, SX_IB_20220328_15_48_SS_Triplicate_ALS, SX_IB_20220328_15_50_SS_Primary_ALS, SX_IB_20220328_20_19_SS_Primary_ALS	**28-Mar-2022**	**04-Apr-2022**	24-Sep-2022	✓	**04-Apr-2022**	14-May-2022	✓
HDPE Soil Jar (EP231X)							
SX_IB_20220329_00_09_SS_Primary_ALS, SX_IB_20220329_04_21_SS_Primary_ALS	**29-Mar-2022**	**04-Apr-2022**	25-Sep-2022	✓	**04-Apr-2022**	14-May-2022	✓

Matrix: **WATER**

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

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP231A: Perfluoroalkyl Sulfonic Acids							
HDPE (no PTFE) (EP231X)							
SX_IB_20220328_07_41_SS_Primary_ALS, SX_IB_20220328_07_45_SS_Duplicate_ALS, SX_IB_20220328_11_59_SS_Primary_ALS, SX_IB_20220328_15_48_SS_Triplicate_ALS, SX_IB_20220328_15_50_SS_Primary_ALS, SX_IB_20220328_20_19_SS_Primary_ALS, SX_IB_20220329_00_09_SS_Primary_ALS, SX_IB_20220329_04_21_SS_Primary_ALS, SX_IB_20220328_07_41_SS_Primary_ALS - DI, SX_IB_20220328_07_45_SS_Duplicate_ALS - DI, SX_IB_20220328_11_59_SS_Primary_ALS - DI, SX_IB_20220328_15_48_SS_Triplicate_ALS - DI, SX_IB_20220328_15_50_SS_Primary_ALS - DI, SX_IB_20220328_20_19_SS_Primary_ALS - DI, SX_IB_20220329_00_09_SS_Primary_ALS - DI, SX_IB_20220329_04_21_SS_Primary_ALS - DI	**01-Apr-2022**	**04-Apr-2022**	28-Sep-2022	✓	**04-Apr-2022**	28-Sep-2022	✓

Matrix: **WATER**

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

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP231B: Perfluoroalkyl Carboxylic Acids							
HDPE (no PTFE) (EP231X)							
SX_IB_20220328_07_41_SS_Primary_ALS, SX_IB_20220328_07_45_SS_Duplicate_ALS, SX_IB_20220328_11_59_SS_Primary_ALS, SX_IB_20220328_15_48_SS_Triplicate_ALS, SX_IB_20220328_15_50_SS_Primary_ALS, SX_IB_20220328_20_19_SS_Primary_ALS, SX_IB_20220329_00_09_SS_Primary_ALS, SX_IB_20220329_04_21_SS_Primary_ALS, SX_IB_20220328_07_41_SS_Primary_ALS - DI, SX_IB_20220328_07_45_SS_Duplicate_ALS - DI, SX_IB_20220328_11_59_SS_Primary_ALS - DI, SX_IB_20220328_15_48_SS_Triplicate_ALS - DI, SX_IB_20220328_15_50_SS_Primary_ALS - DI, SX_IB_20220328_20_19_SS_Primary_ALS - DI, SX_IB_20220329_00_09_SS_Primary_ALS - DI, SX_IB_20220329_04_21_SS_Primary_ALS - DI	**01-Apr-2022**	**04-Apr-2022**	28-Sep-2022	✓	**04-Apr-2022**	28-Sep-2022	✓
EP231C: Perfluoroalkyl Sulfonamides							
HDPE (no PTFE) (EP231X)							
SX_IB_20220328_07_41_SS_Primary_ALS, SX_IB_20220328_07_45_SS_Duplicate_ALS, SX_IB_20220328_11_59_SS_Primary_ALS, SX_IB_20220328_15_48_SS_Triplicate_ALS, SX_IB_20220328_15_50_SS_Primary_ALS, SX_IB_20220328_20_19_SS_Primary_ALS, SX_IB_20220329_00_09_SS_Primary_ALS, SX_IB_20220329_04_21_SS_Primary_ALS, SX_IB_20220328_07_41_SS_Primary_ALS - DI, SX_IB_20220328_07_45_SS_Duplicate_ALS - DI, SX_IB_20220328_11_59_SS_Primary_ALS - DI, SX_IB_20220328_15_48_SS_Triplicate_ALS - DI, SX_IB_20220328_15_50_SS_Primary_ALS - DI, SX_IB_20220328_20_19_SS_Primary_ALS - DI, SX_IB_20220329_00_09_SS_Primary_ALS - DI, SX_IB_20220329_04_21_SS_Primary_ALS - DI	**01-Apr-2022**	**04-Apr-2022**	28-Sep-2022	✓	**04-Apr-2022**	28-Sep-2022	✓
EP231D: (n:2) Fluorotelomer Sulfonic Acids							
HDPE (no PTFE) (EP231X)							
SX_IB_20220328_07_41_SS_Primary_ALS, SX_IB_20220328_07_45_SS_Duplicate_ALS, SX_IB_20220328_11_59_SS_Primary_ALS, SX_IB_20220328_15_48_SS_Triplicate_ALS, SX_IB_20220328_15_50_SS_Primary_ALS, SX_IB_20220328_20_19_SS_Primary_ALS, SX_IB_20220329_00_09_SS_Primary_ALS, SX_IB_20220329_04_21_SS_Primary_ALS, SX_IB_20220328_07_41_SS_Primary_ALS - DI, SX_IB_20220328_07_45_SS_Duplicate_ALS - DI, SX_IB_20220328_11_59_SS_Primary_ALS - DI, SX_IB_20220328_15_48_SS_Triplicate_ALS - DI, SX_IB_20220328_15_50_SS_Primary_ALS - DI, SX_IB_20220328_20_19_SS_Primary_ALS - DI, SX_IB_20220329_00_09_SS_Primary_ALS - DI, SX_IB_20220329_04_21_SS_Primary_ALS - DI	**01-Apr-2022**	**04-Apr-2022**	28-Sep-2022	✓	**04-Apr-2022**	28-Sep-2022	✓
EP231P: PFAS Sums							
HDPE (no PTFE) (EP231X)							
SX_IB_20220328_07_41_SS_Primary_ALS, SX_IB_20220328_07_45_SS_Duplicate_ALS, SX_IB_20220328_11_59_SS_Primary_ALS, SX_IB_20220328_15_48_SS_Triplicate_ALS, SX_IB_20220328_15_50_SS_Primary_ALS, SX_IB_20220328_20_19_SS_Primary_ALS, SX_IB_20220329_00_09_SS_Primary_ALS, SX_IB_20220329_04_21_SS_Primary_ALS, SX_IB_20220328_07_41_SS_Primary_ALS - DI, SX_IB_20220328_07_45_SS_Duplicate_ALS - DI, SX_IB_20220328_11_59_SS_Primary_ALS - DI, SX_IB_20220328_15_48_SS_Triplicate_ALS - DI, SX_IB_20220328_15_50_SS_Primary_ALS - DI, SX_IB_20220328_20_19_SS_Primary_ALS - DI, SX_IB_20220329_00_09_SS_Primary_ALS - DI, SX_IB_20220329_04_21_SS_Primary_ALS - DI	**01-Apr-2022**	**04-Apr-2022**	28-Sep-2022	✓	**04-Apr-2022**	28-Sep-2022	✓

Quality Control Parameter Frequency Compliance

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

Matrix: **SOIL**

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

Quality Control Sample Type		Count		Rate (%)			Quality Control Specification
Analytical Methods	*Method*	*QC*	*Regular*	***Actual***	***Expected***	*Evaluation*	
Laboratory Duplicates (DUP)							
Hexavalent Chromium by Alkaline Digestion and DA Finish	EG048G	4	40	**10.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Moisture Content	EA055	2	20	**10.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
PCB - VIC EPA 448.3 Screen	EP066-EM	2	19	**10.53**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	2	12	**16.67**	**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	19	**10.53**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Cyanide by Segmented Flow Analyser	EK026SF	2	16	**12.50**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Fluoride	EK040T	2	20	**10.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	2	20	**10.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	3	20	**15.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071-EM	2	19	**10.53**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Volatile Organic Compounds - Ultra-trace	EP074-UT	1	8	**12.50**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Laboratory Control Samples (LCS)							
Hexavalent Chromium by Alkaline Digestion and DA Finish	EG048G	4	40	**10.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
PCB - VIC EPA 448.3 Screen	EP066-EM	1	19	**5.26**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	1	12	**8.33**	**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	19	**5.26**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Cyanide by Segmented Flow Analyser	EK026SF	1	16	**6.25**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Fluoride	EK040T	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071-EM	1	19	**5.26**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Volatile Organic Compounds - Ultra-trace	EP074-UT	1	8	**12.50**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Method Blanks (MB)							
Deionised Water Leach - Plastic Leaching Vessel	EN60-Dla-P	1	14	**7.14**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Hexavalent Chromium by Alkaline Digestion and DA Finish	EG048G	2	40	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
PCB - VIC EPA 448.3 Screen	EP066-EM	1	19	**5.26**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	1	12	**8.33**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Semivolatile Organic Compounds - Waste Classification	EP075-EM	1	19	**5.26**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Cyanide by Segmented Flow Analyser	EK026SF	1	16	**6.25**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Fluoride	EK040T	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071-EM	1	19	**5.26**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Volatile Organic Compounds - Ultra-trace	EP074-UT	1	8	**12.50**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard

Matrix: **SOIL**

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

Quality Control Sample Type		Count		Rate (%)			Quality Control Specification
Analytical Methods	Method	QC	Regular	Actual	Expected	Evaluation	
Matrix Spikes (MS)							
Hexavalent Chromium by Alkaline Digestion and DA Finish	EG048G	4	40	**10.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
PCB - VIC EPA 448.3 Screen	EP066-EM	1	19	**5.26**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	1	12	**8.33**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Semivolatile Organic Compounds - Waste Classification	EP075-EM	1	19	**5.26**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Cyanide by Segmented Flow Analyser	EK026SF	1	16	**6.25**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Fluoride	EK040T	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071-EM	1	19	**5.26**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Volatile Organic Compounds - Ultra-trace	EP074-UT	1	8	**12.50**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard

Matrix: **WATER**

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

Quality Control Sample Type		Count		Rate (%)			Quality Control Specification
Analytical Methods	Method	QC	Regular	Actual	Expected	Evaluation	
Laboratory Duplicates (DUP)							
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	4	28	**14.29**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Laboratory Control Samples (LCS)							
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	2	28	**7.14**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Method Blanks (MB)							
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	2	28	**7.14**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Matrix Spikes (MS)							
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	2	28	**7.14**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard

Brief Method Summaries

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

Analytical Methods	Method	Matrix	Method Descriptions
pH in soil using a 0.01M CaCl2 extract	EA001	SOIL	In house: Referenced to Rayment and Lyons 4B3 (mod.) or 4B4 (mod.) 10 g of soil is mixed with 50 mL of 0.01M CaCl2 and tumbled end over end for 1 hour. pH is measured from the continuous suspension. This method is compliant with NEPM Schedule B(3).
Moisture Content	EA055	SOIL	In house: A gravimetric procedure based on weight loss over a 12 hour drying period at 105-110 degrees C. This method is compliant with NEPM Schedule B(3).
Total Metals by ICP-AES	EG005T	SOIL	In house: Referenced to APHA 3120; USEPA SW 846 - 6010. Metals are determined following an appropriate acid digestion of the soil. The ICPAES technique ionises samples in a plasma, emitting a characteristic spectrum based on metals present. Intensities at selected wavelengths are compared against those of matrix matched standards. This method is compliant with NEPM Schedule B(3)
Total Mercury by FIMS	EG035T	SOIL	In house: Referenced to APHA 3112 Hg - B (Flow-injection (SnCl2) (Cold Vapour generation) AAS) FIM-AAS is an automated flameless atomic absorption technique. Mercury in solids are determined following an appropriate acid digestion. Ionic mercury is reduced online to atomic mercury vapour by SnCl2 which is then purged into a heated quartz cell. Quantification is by comparing absorbance against a calibration curve. This method is compliant with NEPM Schedule B(3)
Hexavalent Chromium by Alkaline Digestion and DA Finish	EG048G	SOIL	In house: Referenced to USEPA SW846, Method 3060. Hexavalent chromium is extracted by alkaline digestion. The digest is determined by photometrically by automatic discrete analyser, following pH adjustment. The instrument uses colour development using dephenylcarbazide. Each run of samples is measured against a five-point calibration curve. This method is compliant with NEPM Schedule B(3)
Total Cyanide by Segmented Flow Analyser	EK026SF	SOIL	In house: Referenced to APHA 4500-CN C / ASTM D7511 / ISO 14403. Caustic leachates of soil samples are introduced into an automated segmented flow analyser. Complex bound cyanide is decomposed in a continuously flowing stream, at a pH of 3.8, by the effect of UV light. A UV-B lamp (312 nm) and a decomposition spiral of borosilicate glass are used to filter out UV light with a wavelength of less than 290 nm thus preventing the conversion of thiocyanate into cyanide. The hydrogen cyanide present at a pH of 3.8 is separated by gas dialysis. The hydrogen cyanide is then determined photometrically, based on the reaction of cyanide with chloramine-T to form cyanogen chloride. This then reacts with 4-pyridine carboxylic acid and 1,3-dimethylbarbituric acid to give a red colour which is measured at 600 nm. This method is compliant with NEPM Schedule B(3).
Total Fluoride	EK040T	SOIL	(In-house) Total fluoride is determined by ion specific electrode (ISE) in a solution obtained after a Sodium Carbonate / Potassium Carbonate fusion dissolution.
PCB - VIC EPA 448.3 Screen	EP066-EM	SOIL	In house: Referenced to USEPA SW 846 - 8270 Extracts are analysed by Capillary GC/MS and quantification is by comparison against an established 5 point calibration curve. This method is compliant with NEPM Schedule B(3).
TRH - Semivolatile Fraction	EP071-EM	SOIL	In house: Referenced to USEPA SW 846 - 8015A Sample extracts are analysed by Capillary GC/FID and quantified against alkane standards over the range C10 - C40.
Volatile Organic Compounds - Ultra-trace	EP074-UT	SOIL	In house: Referenced to USEPA SW 846 - 8260 Extracts are analysed by Purge and Trap, Capillary GC/MS in partial SIM/Scan mode. Quantification is by comparison against an established multi-point calibration curves. This method is compliant with NEPM Schedule B(3).

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

Preparation Methods	Method	Matrix	Method Descriptions
NaOH leach for CN in Soils	CN-PR	SOIL	In house: APHA 4500 CN. Samples are extracted by end-over-end tumbling with NaOH.
pH in soil using a 0.01M CaCl2 extract	EA001-PR	SOIL	In house: Referenced to Rayment and Lyons 4B1, 10 g of soil is mixed with 50 mL of 0.01M CaCl2 and tumbled end over end for 1 hour. pH is measured from the continuous suspension. This method is compliant with NEPM Schedule B(3).
Alkaline digestion for Hexavalent Chromium	EG048PR	SOIL	In house: Referenced to USEPA SW846, Method 3060A.
Total Fluoride	EK040T-PR	SOIL	In house: Samples are fused with Sodium Carbonate / Potassium Carbonate flux.
ASLP for Non & Semivolatile Analytes - Plastic Leaching Vessel	EN60a-P	SOIL	In house QWI-EN/60 referenced to AS4439.3 Preparation of Leachates.
Deionised Water Leach - Plastic Leaching Vessel	EN60-DIa-P	SOIL	In house QWI-EN/60 referenced to AS4439.3 Preparation of Leachates
Hot Block Digest for metals in soils sediments and sludges	EN69	SOIL	In house: Referenced to USEPA 200.2. Hot Block Acid Digestion 1.0g of sample is heated with Nitric and Hydrochloric acids, then cooled. Peroxide is added and samples heated and cooled again before being filtered and bulked to volume for analysis. Digest is appropriate for determination of selected metals in sludge, sediments, and soils. This method is compliant with NEPM Schedule B(3).
Methanolic Extraction of Soils - Ultra-trace.	ORG16-UT	SOIL	In house: Referenced to USEPA SW 846 - 5030A. 5g of solid is shaken with surrogate and 10mL methanol prior to analysis by Purge and Trap - GC/MS.
Tumbler Extraction of Solids - VIC EPA Screen	ORG17-EM	SOIL	In house: Mechanical agitation (tumbler). 10g of sample, Na2SO4 and surrogate are extracted with 30mL 1:1 DCM/Acetone by end over end tumble. The solvent is decanted, dehydrated and concentrated (by KD) to the desired volume for analysis.
QuECheRS Extraction of Solids	ORG71	SOIL	In house: Sequential extractions with Acetonitrile/Methanol by shaking. Extraction efficiency aided by the addition of salts under acidic conditions. Where relevant, interferences from co-extracted organics are removed with dispersive clean-up media (dSPE). The extract is either diluted or concentrated and exchanged into the analytical solvent.

Preparation Methods	Method	Matrix	Method Descriptions
Solid Phase Extraction (SPE) for PFAS in water	ORG72	SOIL	In-house: Isotopically labelled analogues of target analytes used as internal standards and surrogates are added to the sample container. The entire contents are transferred to a solid phase extraction (SPE) cartridge. The sample container is successively rinsed with aliquots of the elution solvent. The eluted extract is combined with an equal volume of reagent water and a portion is filtered for analysis. Method procedures conform to US DoD QSM 5.3, table B-15 requirements.