



Acid Sulfate Soil Management Plan

28-32 Bourke Road, Alexandria, NSW, 2015

Prepared for: Alexandria Property Development Pty Ltd c/- Johnstaff Projects (NSW) Pty Ltd

EP2515.003_v4 | 24 November 2022



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Acid Sulfate Soil Management Plan

28-32 Bourke Road, Alexandria, NSW, 2015

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24 November 2023

LIMITATIONS

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It is not possible in an Acid Sulfate Soil Management Plan to present all data, which could be of interest to all readers of this report. Readers are referred to any referenced investigation reports for further data.

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Executive Summary

This Acid Sulfate Soils Management Plan (ASSMP) has been prepared by EP Risk Management Pty Ltd to accompany a detailed State Significant Development Application (SSDA) for the proposed mental health hospital and medical centre at 28-32 Bourke Road, Alexandria, NSW 2015 in the City of Sydney Local Government Area (LGA). The Site is legally described as Lot 1-3 of SP324707.

Alexandria Property Development Pty Ltd c/- Johnstaff Projects (NSW) Pty Ltd (Johnstaff) engaged EP Risk to prepare this updated ASSMP (the Assessment) for the Site, following finalisation of the proposed concept development plans. This report has been prepared to address the Secretary's Environmental Assessment Requirements (SEARs) issued for the project (SSD-59006709) dated 8 June 2023.

It is understood that Johnstaff are planning to redevelop the Site from its current industrial land use. The SSDA seeks consent for the following in accordance with the Concept SSDA approval:

- Site establishment including earthworks.
- Construction of the Alexandria Health Centre:
 - o Total Gross Floor Area (GFA) of 11,436sqm
 - o Maximum Floor Space Ratio (FSR) of 3.85:1
 - o Maximum height of 34.95m, Maximum Reduced Level (RL). 45.4
- Ancillary development including:
 - o Car parking – 77 car parking spaces distributed across basement, ground, and ground mezzanine levels.
 - o Utility infrastructure and services connections.
 - o Building identification signage and wayfinding signage.
 - o Stormwater management.
 - o Landscaping.
- Laneway for vehicle and pedestrian access along with western boundary of the site
- Operation of the Alexandria Health Centre as a mental health hospital and medical centre with ancillary uses.

Previous investigations at the Site identified Potential Acid Sulfate Soils (PASS) in both FILL and natural soils. This ASSMP outlines suitable methods for treatment and construction management controls of PASS during construction of the Proposed Works. Previous investigations at the Site further identified significant contamination to be present, warranting remediation via the chemical fixation of Lead within the south-eastern portion of the Site. The proposed Lead treatment is considered sufficient to neutralise soils without further treatment to address PASS.

For soils proposed for disturbance that do not require treatment to immobilise lead concentrations, treatment of PASS involves neutralisation of disturbed materials via the application and mixing of a sufficient quantity of alkaline material into the soil. To account for the proposed development, neutralisation will involve the excavation of affected material, and subsequent treatment and storage within a contained area. The optimised treatment process is considered to comprise the application of fine agricultural lime (aglime) with a minimum of 95% fine grained calcium carbonate (CaCO_3) through continuous processing via a mixing machine. Based on the findings of the CRS testing in Phase 2 of this DSI, an adopted dosing rate of 1.8 kg CaCO_3 /t for FILL, and a rate of 1.0 kg CaCO_3 /t for natural material is considered appropriate.

This report concludes that the proposed mental health hospital and medical centre is suitable and warrants approval subject to the implementation of the management measures outlined within this ASSMP. Following the implementation of the mitigation and management measures specified, the remaining impacts are appropriate.

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1 Introduction

EP Risk Management Pty Ltd (EP Risk) was engaged by Alexandria Property Development Pty Ltd c/- Johnstaff Projects (NSW) Pty Ltd (Johnstaff) to prepare this Acid Sulfate Soil Management Plan (ASSMP) to accompany a SSDA for the mental health hospital and medical centre proposed for development at 28-32 Bourke Road, Alexandria, NSW 2015 (SSD-59006709).

The Site comprises three (3) lots, defined as Lots 1-3 in Deposited Plan (DP) 324707 and is currently zoned as E3: Productivity Support under the Sydney Local Environmental Plan (2012), and State Environmental Planning Policy Amendment (Land Use Zones) 2023, currency (08 September 2023).

This report has been prepared to address the Secretary's Environmental Assessment Requirements (SEARs) issued for the project (SSD-59006709) dated 08 June 2023. Specifically, this report has been prepared to respond to the SEARs requirement issued below.

Table 1 – SEARs Requirement		
Item	Description	Section Reference
Ground and Water Conditions	Assess potential impacts on soil resources and related infrastructure and riparian lands on and near the Site, including soil erosion, salinity and acid sulfate soils.	Conclusions regarding management requirements are provided in Section 8 .

Based on existing plans and information provided to EP Risk by Johnstaff, it is understood that the proposed development will be a State Significant Development (SSD) under Clause 14 of Schedule 1 of State Environmental Planning Policy (SEPP) (Planning Systems) 2021 with the Minister for Planning appointed as the consent authority.

1.1 Background

Development consent is sought for a concept proposal for the 'Alexandria Health Centre' comprising medical centre uses and anchored by a mental health hospital. Specifically, the application seeks concept approval for:

- In principle arrangements for the demolition of existing structures on the site and excavation to accommodate a single level of basement car parking (partially below ground level).
- A building envelope to a maximum height of 34.95 m and (Reduced Level (RL) height 45.4 m.
- A maximum gross floor area of 11,436 m², which equates to a maximum Floor Space Ratio (FSR) of 3.85:1.
- Ancillary Development including:
 - o Car parking of 77 car parking spaces distributed across the basement, ground floor and mezzanine levels.
 - o Utility infrastructure and services connections.
 - o Building identification signage and wayfinding signage.
 - o Stormwater management.
 - o Landscaping.
- Laneway for vehicle and pedestrian access along the western boundary of the Site.

- Operation of the Alexandria Health Centre as a mental health hospital and medical centre with ancillary uses.

EP Risk understands that the planned Site development extent includes excavation depths to an average of 1.6 metres below ground level (mBGL), with a maximum excavation depth of 3.4 mBGL (assuming an existing ground level of 8.8 mAHD with a nominal slab depth of 150 mm).

1.2 Previous Investigations

A list of previous/additional investigations undertaken at the Site are listed as follows:

- Non-Destructive Hazardous Materials Assessment (EP Risk 2021¹);
- Soil Contamination Assessment (EP Risk 2021a²);
- Detailed Site Investigation (EP Risk 2022³);
- Groundwater Impact Assessment (EP Risk 2022b⁴);
- Pre-Demolition Hazardous Materials Assessment (EP Risk 2023⁵);
- Detailed Site Investigation (Phase 2) (EP Risk 2023a⁶); and
- Remediation Action Plan (EP Risk 2023b⁷)

Previous investigations at the Site identified Potential Acid Sulfate Soils (PASS) within the FILL and natural soils, the findings of which are presented in **Section 0**. Details pertinent to the preparation of this ASSMP are summarised within the relevant sections of this report, however, readers are directed to the individual reports of interest for further information.

1.3 Objective

The objective of the ASSMP is to assess the nature and extent of acid sulfate soil (ASS) at the Site and to ensure that water quality, soil runoff, site wastewater, potential water contamination associated with ASS are considered and effectively managed during the Proposed Development.

¹ EP Risk, *Non-Destructive Hazardous Materials (HAZMAT) Assessment, 28-32 Bourke Road, Alexandria, NSW, 2015*, report ref: EP2460.001, 22 December 2021 (EP Risk 2021).

² EP Risk, *Soil Contamination Assessment, 28-32 Bourke Road, Alexandria, NSW 2305*, report ref: EP2460.002, 23 December 2021 (EP Risk 2021a).

³ EP Risk, *Detailed Site Investigation, 28-32 Bourke Road, Alexandria, NSW, 2015*, ref: EP2515.001_v3, dated July 2022 (EP Risk 2022).

⁴ EP Risk, *Groundwater Impact Assessment, 28-32 Bourke Road, Alexandria NSW 2015*, ref: EP2515.004_v4, dated 04 July 2022 (EP Risk, 2022b).

⁵ EP Risk, *Pre-Demolition Hazardous Materials (HAZMAT) Assessment, 28-32 Bourke Road, Alexandria, NSW, 2015*, report ref: EP3072.001_v1, 21 April 2023 (EP Risk 2023).

⁶ EP Risk, *Detailed Site Investigation, 28-32 Bourke Road, Alexandria, NSW, 2015*, report ref: EP2515.001_v6, 10 September 2023 (EP Risk 2023).

⁷ EP Risk, *Remediation Action Plan, 28-32 Bourke Road, Alexandria, NSW, 2015*, report ref: EP3072.002_v1, 30 June 2023 (EP Risk 2023a).

1.4 Site Identification

Pertinent Site identification details are presented in **Table 2**.

Table 2 – Site Identification	
Item	Description
Site Address	28-32 Bourke Road, Alexandria, NSW, 2015 (as shown in Figure 1)
Legal Description	Lots 1, 2 and 3 in DP 324707
Approximate Site Area	2,972 m ²
Municipality	Council of the City of Sydney (Council)
Zoning	E3 – Productivity Support under Sydney Local Environmental Plan 2012 (currency 28.04.2023)
Proposed Land Use	Hospital and Medical Centre
Proposed Land Classification*	Commercial / Industrial
Current Land Use	Vehicle and tyre storage and workshop
Current Land Classification*	Commercial / Industrial

* Land classification as defined in the National Environment Protection Council (NEPC) National Environment Protection (Assessment of Site Contamination) Measure 1999 (2013 amendment).

1.5 Scope of Work

The scope of work to satisfy the objective comprises:

1. A review of the existing Site documentation pertaining to the Site, including but not limited to:
 - EP Risk investigations;
 - External investigations supplied to EP Risk;
 - Existing development plans and proposals;
 - Observations from previous Site inspections;
 - National Association of Testing Authorities (NATA) Accredited laboratory analyses from previous investigations;
 - Field results analyses undertaken during previous Site investigations;
2. Address the requirements of the relevant environmental legislation and statutory requirements as it applies to the Proposed Development.
3. Summarise potential impacts on the environment from the works for the Proposed Development.
4. Document environmental procedures that must be followed to control potential environmental impacts.
5. Confirmation of the effectiveness of the adopted control measures by validation testing and documentation.

2 Legal and Other Requirements

The following statutory provisions and guidelines are applicable to the Proposed Works, with regards to the ASSMP:

1. Sydney Local Environment Plan (LEP) 2012 (accessed 30 May 2022), Part 7.14 Acid Sulfate Soils.
2. Planning Secretary's Environmental Assessment Requirements (SEARs) Secretary's Environmental Assessment Requirements (SEARs) issued for the project (SSD-59006709) dated 8 June 2023.
3. Stone, Y, Ahern C R, and Blunden N (1998). Acid Sulfate Soil Manual 1998. Acid Sulfate Soil Management Advisory Committee, Wollongbar, NSW, Australia (NSW ASS Manual 1998).
4. Dear, S-E, Ahern, C R, O'Brien, L E, Dobos, S K, McElnea, A E, Moore, N G and Watling, K M (2014) Queensland Acid Sulfate Soil Technical Manual: Soil Management Guidelines (QLD ASS Technical Manual 2014).
5. *Contaminated Land Management Act 1997* (CLM Act).
6. *Protection of the Environment Operations Act 1997* (POEO Act).
7. National Acid Sulfate Soils Guidance (2018) *National Acid Sulfate Soils Sampling and Identification Methods Manual* (National ASS Guidance 2018).
8. National Acid Sulfate Soils Guidance (2018): *National Acid Sulfate Soils Sampling and Identification and Laboratory Methods Manual* (National ASS Laboratory Guidance 2018).
9. NSW Acid Sulfate Soils Management Advisory Committee (1998) *Acid Sulfate Soils Assessment Guidelines* (NSW ASS Assessment Guidelines 1998).
10. NSW Environment Protection Authority (EPA) (2014) *Waste Classification Guidelines: Part 4; Acid Sulfate Soils* (NSW EPA 2014).

3 Site Condition and Surrounding Environment

The Site is located at 28-32 Bourke Road, Alexandria, NSW, 2015 and currently consists of three adjoining warehouses with a small outdoor area. The Site is approximately 2,972 m² and is covered entirely by a concrete slab. The Site is flat and level throughout.

The NSW Department of Primary Industries – Water NSW lists 405 registered boreholes within 2,000m of the Site. These are predominantly utilised for monitoring and industrial purposes, with some domestic boreholes.

3.1 Topography and Drainage

The topography of the Site was observed to be relatively flat with a downward gradient towards the north of the Site from the south. The Site appeared consistent and level with the surrounding properties. The elevation was between approximately 8 and 12 mAHD.

3.2 Geology

According to the NSW Department of Industry, Resources & Energy, 1:100,000 scale map, the Site is underlain by Quaternary medium to fine-grained marine sand with podosols.

3.3 Hydrogeology

According to the Geoscience Australia Hydrogeology Map of Australia, Aquifers on-site are anticipated to be porous, extensive with high productivity.

Several groundwater wells were identified within 2 km of the Site, with the closest located approximately 94 m to the northeast of the Site. Within the 2 km boundary of the Site, standing water levels (SWL) ranged from 0.79 m below ground level (mBGL) (409 m west) to 90.0 mBGL (960 m, south). The borehole closest to the Site with available SWL data (227 m southeast) recorded a standing water level of 5.10 mBGL.

The Site is located within the unconfined Botany Sands aquifer. The Botany Sand Beds dominate the sedimentary column of the geological Botany Basin and comprise up to 30 m of uniformly graded, well-sorted, clean and poorly cemented fine- to medium-grained quartz sands, with an average of 15 m saturated sand (Hatley, 2004). These sand beds are underlain by clay and clay-rich quartz sand lenses and a basal unit consisting of fluvial and aeolian medium-grained sands with gravel lenses, together having a maximum thickness of around 45 m (Hatley, 2004⁸). This sequence of unconsolidated sands of the geological Botany Basin generally makes for a productive aquifer.

Groundwater recharge to the Botany Sands is primarily from rainfall and averages approximately 22 and 44 ML/day for dry and wet periods, respectively (Badenhop and Timms, 2009⁹).

Groundwater flow in the Botany Sands follows the topographic gradient and is mainly inward towards Botany Bay. Water levels vary between 0 and 25 m depth below the surface, with the majority of the geological Botany Basin showing a mean depth of around 9 m. The groundwater flow direction is from the recharge areas in the north-east towards Botany Bay at a rate of about 150 m/year (Badenhop and Timms, 2009).

The Botany Sands has a mean thickness of about 20 m, with up to 53 m depth in paleochannels incised in the basement rocks. Hydraulic gradients range from 0.003 to 0.01; hydraulic conductivities range between 1.4 and

⁸ Hatley RK (2004) Hydrogeology of the Botany Basin. Australian Geomechanics 39(3), 73–90.

⁹ Badenhop AM and Timms WA (2009) Managed aquifer recharge in Sydney coastal sand aquifers. In: Milne-Home WA (ed.) Groundwater in the Sydney Basin Symposium. International Association of Hydrogeologists NSW, 13–25.

85 m/day; porosities range between 0.33 and 0.40; transmissivities vary between 230 and 630 m²/day; and the storage coefficient varies between 0.17 and 0.26 (Hatley, 2004).

3.4 Soil Landscapes

According to the NSW Department of Planning, Industry & Environment Soil Landscapes of the Penrith 1:100,000 Sheet10, the Site is dominated by medium to very coarse-grained quartz sandstone, minor laminated mudstone and siltstone lenses of alluvial floodplain origin.

3.5 Salinity

According to the National Land and Water Resources Audit, no salinity data is available for the Site.

3.6 Acid Sulfate Soils

The Commonwealth Scientific and Industrial Research Organisation (CSIRO) Atlas of Australian Acid Sulfate Soils (2013) indicates the Site is located in an area of Acid Sulfate Soil Class 3. Under a Class 3, works more than 1.0 m below the natural ground surface and works that may lower the water table by 1.0 m below natural ground surface presents an environmental risk.

According to the CSIRO Atlas of Acid Sulfate Soils, there is a low (6%-70%) probability that the Site is affected by Acid Sulfate Soils (ASS).

¹⁰ NSW Department of Planning, Industry & Environment, Soil Landscapes of the Penrith 1:100,000 Sheet map 9030, Department of Environment, Climate Change and Water, accessed on 13 December 2021.

4 Potential Disturbance Activity

The proposed development construction is likely to include but not be limited to, the following:

- Removal of Hazardous Materials from the existing Site buildings and subsequent demolition of the buildings.
- Removal of the existing concrete slab.
- Excavation of the soil as required for the basement.
- Further localised excavation or piling for the installation of the development footings and below-ground infrastructure.

The Proposed Development consists of the demolition of the existing warehouses, on-site remediation of the soil within the Site for off-site disposal and construction of the proposed development, which will involve the excavation of the soil within the Site to a maximum depth of 5.25 mAHD, measured at approximately 3.55 meters below the existing ground level (mBGL) (adopted as 8.8 mAHD from the upper surface of the slab), for the purposes of the construction of a semi-underground car park and subservices. The proposed basement is noted to have a floor level of 7.35 mAHD (excluding subservices) below the existing slab level (8.65 mAHD – bottom of the existing slab), measuring approximately 1.6 mBGL (assuming a nominal slab depth of 150mm and 150 mm subgrade stabilisation).

Under the proposed development concept design, a 440 m² area is proposed to remain unexcavated. It is understood that the approximate height of the ground floor is proposed to be 10.4 mAHD, which would require an approximate infill of 638 m³ when assuming a slab depth of 150mm and subgrade level of 150mm. This ASSMP relates to the excavation required for the Proposed Development relating to the basement construction. At the time of writing this ASSMP, the anticipated volume of disturbed soil was understood to be approximately 3,000 – 4,500 m³, however the extent of the excavation is likely to change as a result of the design excellence competition. Once final design is achieved, this ASSMP will be reviewed and updated where required.

5 Sampling and Analysis Methodology

5.1 Soil Sampling Methodology

A total of five (5) sampling locations within the Proposed Development were chosen to assess the presence of ASS in natural soils at the Site, in accordance with the minimum recommended sampling density in the National ASS Guidance 2018, which requires four (4) sampling locations for a site less than one (1) Ha in size. Additional samples were collected during the Phase 2 assessment to assess the presence of ASS in FILL at the Site. The sample locations are provided in **Figure 2**.

Soil sampling was conducted as follows:

1. Phase 1 soil samples were collected from five (5) borehole locations across the Site (BH01 – BH05) advanced to a maximum depth of 8.5 mBGL.
2. Phase 2 soil samples were collected from four (4) borehole locations across the Site (BH25, BH28, BH33 & BH44) advanced to a maximum depth of 2.0 mBGL.
3. Soil samples were collected at a range of depths in both fill material and natural soil.
4. Soil was logged in accordance with the Unified Soil Classification System (USCS): Field Method as presented in the bore logs attached as **Appendix A**.
5. Soil samples were collected using dedicated, disposable nitrile gloves and assessed for visual and olfactory signs of ASS (incl. grey staining, iron oxide and hydrogen sulphide odour).
6. Samples were collected into sealable bags, double bagged with the sample details and an individual identification added to the label. The samples were then frozen at the laboratory in accordance with lab protocol.
7. The sample containers were preserved on ice immediately after sampling and during shipment to a NATA accredited laboratory under appropriate chain-of-custody documentation.

5.2 Analytical Testing

EP Risk used ALS Global as the project laboratory, which is NATA accredited for the required analysis. The laboratory analysis was undertaken in accordance with **Table 3**.

Table 3 – Analytical Testing	
Sample Location	Analytical Testing
BH01 – BH05	- pH_F/pH_{FOX} – 9 - Suspension Peroxide Oxidation Combined Acidity and Sulphur (SPOCAS) suite – 5
BH25 BH28 BH33 BH44	Chromium Reducible Sulfur - 4

Additionally, field pH_F/pH_{FOX} sampling was undertaken as a screening tool for the NATA accredited laboratory sampling. A total of 18 field screenings were undertaken across five (5) borehole locations.

6 Acid Sulfate Soil Indicators and Assessment Criteria

The following ASS indicators and assessment criteria are adopted from the NSW ASS Assessment Guidelines 1998 and the National ASS Guidance 2018.

6.1 Field Screening

Acid sulfate soils generally consist of clays and sands containing pyritic material and are usually found in estuarine areas. The field indicators of Actual Acid Sulfate Soils (AASS) include:

- pH readings measured in the field of less than 4;
- Iron staining on any drain surfaces;
- Unusually clear or milky green water discharge;
- Iron mottling of soil in the subsurface; and
- Corrosion of concrete or steel structures.

Undisturbed soil which contains iron sulfides or sulfidic material, which have not been exposed to air and oxidised, generally waterlogged, and have a pH of 4 or more and may be neutral or slightly alkaline are known as Potential Acid Sulfate Soils (PASS). The following may also be indicators of PASS:

- Presence of any sulfurous odours;
- pH following oxidation with 30% hydrogen peroxide (H_2O_2) is less than 3;
- Effervescence following oxidation with 30% H_2O_2 ;
- Release of sulfurous gasses following oxidation with 30% H_2O_2 ;
- Strength of the oxidation reaction; and
- Lowering of the pH by at least 1 unit.

6.2 Soil Analytical Testing

The above field screening observations are used to guide selection of samples for laboratory analysis. Soil samples submitted for laboratory analysis are tested for the Chromium Reducible Sulfur analysis, SPOCAS suite of analytes as well as pH_F and pH_FOX and the results assessed against the criteria shown in **Table 4** for the disturbance of <1,000 or >1,000 tonnes (National ASS Guidance 2018).

Table 4 – Soil Assessment Criteria

Texture Range	Approximate Clay Content (%)	1-1,000 tonne Material Disturbed		>1,000 tonne Material Disturbed	
		Net Acidity		Net Acidity	
		% S oxidisable ¹¹ (oven-dry basis)	mol H ⁺ /tonne ¹² (oven-dry basis)	% S oxidisable (oven-dry basis)	mol H ⁺ /tonne (oven-dry basis)
Coarse and Peats Sands to loamy sands	< 5	≥ 0.03	≥ 18	≥ 0.03	≥ 18
Medium Clayey sand to light clays	5-40	≥ 0.06	≥ 36		
Fine Light medium to heavy clays	> 40	≥ 0.1	≥ 62		

¹¹ % S – measure of reduced inorganic sulfur (using the S_{Cr} or peroxide oxidisable sulfur (S_{POS}) methods) expressed as a percentage of the weight of dry soil analysed. Can also be used as an 'equivalent sulfur unit' when comparing the results of tests expressed in other units e.g. peroxide oxidisable sulfur (S_{POS}) or total oxidisable sulfur (S_{TOS}).

¹² mol H⁺/tonne – measure of acidity, expressed as the number of moles of hydrogen cations per tonne of oven-dry soil material. A mole is 6.022x10²³ atoms of a given substance.

7 Results

To assess site conditions and whether ASS exist on the Site, soil analytical results were compared to published investigation and screening criteria. The adopted framework against which the soil analytical results are compared, is detailed in **Table 4**.

7.1 Field Observations

A Sulfurous odour and greyish soil was observed in borehole location BH05, and a sample was collected at this location at 4.0 mBGL. A sulfurous odour was detected in one (1) other borehole location on-site as part of the DSI (EP Risk 2022), however ASS samples were not collected from this borehole.

As the Site has no soil surfaces, there was no pooled liquid or stressed vegetation within the Site. No evidence of corrosion of the concrete or steel structures was observed, and no other visual or olfactory evidence of PASS was detected at the Site or surrounding area.

7.2 Soil Lithology

The soil lithology in the majority of the Site generally comprised:

- A concrete slab covering the entire Site.
- FILL: Gravelly sand or gravelly silty sand, medium to coarse grained, angular to subangular gravels, black to brown with some grey mottling, moist.
- Silty SAND: fine grained, beige / pale brown, very moist.
- Sandy CLAY: fine grained, light brown / pale white with red mottling, moist, firm.

7.3 Soil Analytical Results

The soil investigation has been conducted to assess the presence of AASS and PASS in natural soils at the Site. Soil results are summarised below and in the attached **Analytical Tables**. The NATA certified laboratory reports are included as **Appendix B**.

Field ASS Indicators – pH_F/pH_{FOX}

All samples from test pits (BH01 – BH05) were analysed for the ASS indicator parameters pH_F and pH_{FOX}. The results of the sampling are shown in **Table 5**.

One (1) field screening sample (BH03_6.0) reported a pH_{FOX} value of <3.0 with a qualitative reactivity rating of 3-4. It was also noted that the temperature of the mixture significantly increased upon reaction. These are indicators of the potential presence of ASS. It is noted the pH_F values of the natural soil samples were all >4.

Additionally, seven (7) of the eighteen (18) field screening samples showed a drop in pH of greater than 1 between the pH_F and pH_{FOX} samples, which is an indicator of PASS.

Five (5) selected soil samples (BH01_4.0, BH02_4.0, BH03_3.0, BH04_5.0 and BH05_4.0) were additionally analysed for the SPOCAS suite of analytes in order to assess if ASS were present.

Additionally, the release of sulfurous gasses and effervescence during reaction with H₂O₂ is an indicator of PASS. This was observed within samples taken from two (2) of the five (5) boreholes.

Table 5 – ASS Field test results

Location	Depth (mBGL)	pH _F	pH _{FOX}	Reactivity (1-5)	pH _{fox} -pH _f
BH01	1.5	4.51	5.86	1-2	1.35
	2	6.07	5.72	1	-0.35
	4	6.84	6.17	1	-0.67
	5.5	6.71	5.8	1	-0.91
	7	5.78	4.4	3 - effervescence	-1.38
	8.5	5.92	5.89	2-3 - effervescence	-0.03
BH02	1	5.75	4.81	1-3	-0.94
	2.7	7.11	6.25	1	-0.86
	4	6.35	5.3	1-2	-1.05
	5.5	7.02	6.24	1-2	-0.78
	7.2	5.55	3.8	1-2	-1.75
	8.2	4.97	4.09	1-2	-0.88
BH03	3	7.14	4.98	1	-2.16
	4.5	5.1	4.09	1	-1.01
	6	5.69	2.72	3-4 - effervescence	-2.97
BH04	1.5	5.92	5.9	1	-0.02
	4.5	6.3	5.92	1	-0.38
BH05	2	7.22	4.73	1-3	-2.49
Key:					Indicator of PASS

Laboratory Analysis – pH_F/pH_{FOX}

The laboratory analysis for ASS involved a SPOCAS suite of analytes, which was undertaken on five (5) samples, and analysis for laboratory pH_F and pH_{FOX} was undertaken on a total of nine (9) samples.

The most significant result showed a pH_F value of 7.3 along with a pH_{FOX} value of 3.2. All five (5) boreholes showed at least one sample where pH_{FOX} was greater than 1 pH unit below the pH_F reading.

The National ASS Guidance 2018 states that PASS is considered when the pH_F value is greater than 4 while the pH_{FOX} value is less than 3 (for a Site where >1000 tonnes of material is to be disturbed), or when the pH_{FOX} is greater than 1 pH unit below the pH_F.

Laboratory Analysis –SPOCAS Suite

One (1) sample (BH03_3.0) reported a concentration of 0.03, which is equal to the adopted criteria from the National ASS Guidance 2018, Table 5.4; Coarse and Peats sands to loamy sands.

Laboratory Analysis –Chromium Reducible Suite

Two (2) samples (BH28_2.0 & BH33_0.3) reported concentrations greater than the adopted criteria for the National ASS Guidance 2018 Table 5.4; Coarse and Peats sands to loamy sands.

Analysis for Chromium Reducible Sulfur was scheduled for four (4) samples during the Phase 2 investigation with results summarised in **Table 6** below.

Table 6 – Chromium Reducible Sulfur Analysis Summary					
Sample	Acid Sulfate Soils – Net Acidity		Potential Acidity		Liming Rate
	Mol H ⁺ /t	%S	Mol H ⁺ /t	%S	kg CaCO ₃ /t
BH25_0.3	<10	<0.02	5.8	0.009	<1
BH28_2.0	19	0.03	4.3	0.007	1.4
BH33_0.3	24	0.04	17	0.027	1.8
BH41_0.3	<10	<0.02	4.2	0.007	<1

Notes: Shading denotes an exceedance of the adopted trigger levels for additional management requirements.

Based on the National ASS Guidance 2018, if the results are equal to or greater than the adopted criteria then an ASSMP is required, outlining suitable methods for liming application and construction methods for future development for ASS within the natural sandy soil.

Results Summary

Field testing for ASS resulted in reaction rates indicative of actual or potential ASS. The Phase 2 NATA accredited laboratory analytical results show the presence of PASS within the soil at a minimum depth of 0.3 mBGL (BH33). It is noted that in most boreholes from the Phase 1 assessment the indicators of ASS are present within deeper samples.

The results provided an indication of Potential ASS in both FILL and Natural material and should be considered in the development of the proposed immobilisation strategy for soils disturbed on-site.

8 Acid Sulfate Soil Management Plan

8.1 Assigning Roles and Responsibilities

The key stakeholders responsible for the implementation of the control measures outlined in the ASSMP are presented in **Table 7**.

Table 7 – Roles and Responsibilities		
Role	Party	Responsibilities
Principal	Alexandria Property Development c/- Johnstaff	To engage the consultants and contractors and undertake all stakeholder management.
Environmental Consultant	EP Risk	To validate all stockpiles and managed soils by sampling and analytical testing to prepare a validation report.
Contractor	TBA	To carry out the civil works associated with the Proposed Works and ensure compliance with the ASSMP any work health and safety controls and construction environment management plan (CEMP). The Contractor must maintain written records of activities undertaken each day and manage any unexpected finds.
Sub-contractors	TBA	Toolbox meetings will be conducted with all subcontractors which will include an ASS component outlining the adopted management measures to address ASS.

8.2 Application of the ASSMP

The results of the field screening and the NATA accredited laboratory results show that Potential ASS are present in surficial soils at a minimum depth of 0.3 mBGL.

It is the understanding of EP Risk that the excavation for the construction will be to a maximum depth of 3.4 mBGL. For any such excavations, the requirements of the ASSMP (as per Sections 8.4 to 8.7) must be followed. This includes, but is not limited to, any excavation works outside of the treatment boundary, piling installation and trenching for service installation.

8.3 Environmental Impacts

The potential impacts of ASS from the proposed commercial / industrial development include:

- Exposing ASS to air in the vicinity of surface drains, basins or sensitive receptors causing oxidation and a release of acid into the environment.
- Leaching of acid into the environment at treatment sites.
- Excavations and bulk earthworks to design subgrade level.
- Installation of piles for the developments foundations through the ASS impacted soil layers.
- Any activities that have potential to lower the water table may enhance the oxidation of sediments. Where excavation is below the water table and into ASS material, drawdown of the water table may expose ASS material. This can result in the oxidation of ASS and acid generation.

Elements of the Proposed Development will be designed to minimise excavations where practicable, however, excavations will be required and do have potential to intercept PASS.

8.4 Minimisation of Disturbance

Where disturbance of ASS cannot be avoided, there are a number of strategies that can be implemented to minimise disturbance to ASS. These strategies include:

- Designing earthworks to consider areas containing low or negligible levels of existing and potential acidity.
- Keeping earthworks shallow (viable when PASS is located within deeper soil profiles).
- Minimising groundwater fluctuations by avoiding the following:
 - o Deep drains/canals/artificial water bodies that may change the water table;
 - o Installation of groundwater extraction bores or continuing the use of existing groundwater bores;
 - o Dewatering for installation of infrastructure such as road, water and sewerage mains and underground cabling; and
 - o Filling (under the supervision of a geotechnical consultant) to compress and dewater saturated ASS material before construction but keeping the soil in anoxic conditions.
- When practicable, excavation works in ASS areas and soil treatment should be conducted during dry periods to minimise risk of overflow from heavy or sudden rain events.

8.5 Neutralisation and Treatment

Neutralisation involves the application and mixing of sufficient volumes of alkaline materials into the soil to neutralise all existing acidity that may be present, and all potential acidity that could be generated from complete oxidation. Usually, neutralisation involves the excavation of ASS which must be stored and treated in a contained area. There can be significant risks to the environment if neutralisation is poorly managed.

There are a several different methods for carrying out neutralisation of ASS, including:

- Batch processing where the excavated ASS is spread out in a thin layer and the neutralising material is spread on top. The two materials are then mechanically mixed together.
- Continuous processing where a mixing machine (such as a pug mill) is used, and the soil and neutralising agent is fed into the machine.

The preferred neutralising agent is fine agricultural lime (aglime) with not less than 95% fine grained calcium carbonate (CaCO_3). Other common neutralising agents include hydrated lime, quick lime and sodium bicarbonate. Sandy soil can be mixed with neutralising agents with ease, but high plasticity clay soil requires significant areas to allow adequate mixing and reaction.

The Remediation Optimisation Assessment presented in the DSI prepared by EP Risk (2023) outlines the preferred treatment process and validation processes for the remediation of identified contaminants on-site. The proposed treatment process includes the addition of chemicals to fixate Lead in soils. In order to achieve immobilisation of lead, treatment includes the application of a phosphate fertiliser, as well as the addition of Magnesium Oxide to neutralise excess acidity generated within the reaction produced. Acidic soils, such as those present on-site, may be suitably neutralised by the proposed treatment, without the further need for addition of aglime to address PASS. It is therefore considered that soils proposed to undergo chemical fixation for Lead

do not require further treatment for ASS, subject to the findings of the validation testing proposed within the Remediation Action Plan (EP Risk 2023b).

8.5.1 Construction of the Soil Treatment Area

Prior to commencing the neutralisation works, a soil treatment area will be constructed in the vicinity of the earthworks. The soil treatment area should be:

- Constructed as far as practicable from any drainage channels.
- Designed and sized to accommodate the anticipated volumes of spoil produced from the excavation works.
- Barricaded and appropriate signage erected.
- Bunded to a height of approximately 0.3 m and appropriate sediment controls installed to prevent runoff and sediment migration.
- Designed such that overland flow is diverted.
- Constructed with a guard layer comprising of a neutralising agent as described in the QLD ASS Technical Manual (2014).

The minimum guard layer rate will be 5 kg aglime/m² per vertical meter of fill material. If the highest detected sum of existing and potential acidity is greater than 1% S-equivalent, the guard layer rate will be a minimum of 10 kg aglime/m² per vertical metre of fill.

8.5.2 Stockpiling Soils

It is recommended on-site monitoring is carried out during any deeper excavation earthworks (such as piling works) carried out on Site so that disturbance of ASS can be identified, and ASS soils can be segregated, stockpiled and treated. The management of stockpiled soils within the soil treatment area will be required as follows:

- All excavated soils containing ASS should be segregated from the spoil and stockpiled separately.
- Stockpiles should be limited to a maximum volume of 40 m³.
- The recommended maximum time for short-term stockpiling of soils within the soil treatment area should not exceed recommended periods detailed in the QLD ASS Technical Manual (2014) as presented in **Table 8**.
- If ASS is required to be stockpiled for longer time frames, then those presented in **Table 8**, then it must be fully treated.

Table 8 – Indicative Residence Time for Soil in Soil Treatment Area		
Texture	Approximate Clay Content (%)	Duration of Stockpiling (hours)
Coarse and Peats Sands to loamy sands	<5	18
Medium Clayey sand to light clays	5-40	42
Fine Light medium to heavy clays	>40	66

Additional measures to minimise short term effects of oxidation of stockpiles during the Proposed Development works include:

- Spreading aglime over the surface of the stockpile to limit the generation of acidity from the surface of the stockpile where it is considered likely the stockpile will contain ASS. The results of previous validation testing can be used as a guide to the likely presence of existing or potential ASS within the stockpile.
- Soils within the soil treatment area should be kept moist, but not saturated to minimise oxidation prior to treatment.
- All soils should be covered with tarpaulins or geomembrane to mitigate generation of leachate within the soil treatment area.

The volume of aglime is shown in the NATA Accredited Laboratory Certificates (**Appendix B**) and summarised in the **Table A1** within the **Tables** section of this report. This describes the volume of CaCO_3 to be added to the soils for neutralisation. The concentration of CaCO_3 within the aglime should be accounted for. The liming rate for all nine (9) samples is either 1.8 or <1 kg CaCO_3 /tonne of soil. 1.8 kg/tonne should therefore be considered the appropriate concentration for neutralisation of the extracted FILL and 1.0 kg CaCO_3 /tonne for natural soils, with the exception of soils proposed for treatment to immobilise lead concentrations.

8.5.3 Monitoring

If disturbance of ASS is suspected to have occurred, parameters may need to be monitored daily. More frequent monitoring may also be required to assess the impact of events such as heavy rainfall. The monitoring program should be developed by the Environmental Consultant in conjunction with the Project Contractor. Measurement and testing equipment should be operated by personnel experienced in water and soil sampling using appropriately maintained and calibrated test equipment. The action criteria for treatment are summarised in **Table 9**.

Table 9 – Monitoring Program Action Criteria		
Media	Indicator	Action
Water	$6.5 < \text{pH} < 8.5$ or ± 0.2 units of adjacent surface water bodies	pH outside this range is not suitable for discharge to the surrounding environment and requires treatment prior to discharge.
Soil	$\text{pH} < 4$	Indicates the excavated material is oxidising and would require treatment with lime to neutralise the acidity.

8.5.4 Soil Treatment

The proposed Lead treatment is sufficient to neutralise soils to a depth of 3.4 mBGL. The treatment option for soil neutralisation at depths >3.4 mBGL or at depths >0.3 mBGL outside the proposed remediation treatment boundary is as follows:

- Stockpile the excavated spoil on the central portion of the guard layer.
- Mechanically break up any clods, add aglime and mix. The aglime should be thoroughly mixed with the soil using an appropriate mechanical device such as an excavator (or other alternatives as appropriate).
- Dosing rates of aglime to be in accordance with the results of chromium reducible sulfur testing. Based on the laboratory calculations, dosing rates generally ranged from <1.0 kg $\text{CaCO}_3/\text{t}^{13}$ to 1.8 kg CaCO_3/t , with an adopted dosing rate of **1.8 kg CaCO_3/t** for FILL and **1.0 kg CaCO_3/t** for natural soils.

¹³ The maximum liming rate was adopted as a conservative measure, despite the calculated rate likely to be representative of naturally occurring acidity of the soils. This calculation assumes that an aglime with a neutralising value (NV) of 98% will be used and a safety factor of 1.5 has been applied. Should an aglime with an alternative NV be adopted then the dosing rate will need to be recalculated.

- It is recommended progressive neutralisation of stockpiled soil is undertaken to minimise the size of the soil treatment area.
- Additional liming may be required should the results indicate the neutralisation has not been achieved.

8.5.5 Water Treatment

Surface water (i.e. water pooled within bunded/treatment areas) with the potential to become acidic as a result of interaction with the treatment area or excavations will be treated and monitored as follows:

- Surface water accumulated in excavations or treatment area will be tested for pH. If the pH is outside the range of 6.5 – 8.5 then the water will be neutralised with the addition of agricultural lime or hydrated lime.
- Records of water discharged from Site shall be maintained.
- Backfilling excavations, completion of footings as soon as possible to minimise the oxidation of in-situ soils exposed within the excavations.
- Minimise the drainage of soils by limiting any groundwater drawdown within excavations to the absolute minimum required to complete the excavation safely. Seepage entering the excavation should be minimised through the use of physical barriers. Treatment of water from dewatering activities may be required subject to further testing.
- Where material is to be transported to the treatment area via public roads, wheel cleaning facilities will be established at site exits to prevent offsite contamination during transport.
- Material will be transported within trucks with secure tailgates.
- Records of transport including individual truck details and quantity transport will be retained at the Project Office.
- At the end of each transport shift an inspection of the transport route will be undertaken by the Supervisor to determine if material has been spilt. Where material has been spilt on public roads it will be removed immediately.

When run-off accumulates, water quality will be monitored regularly during the construction period, particularly following substantial rainfall events. Retained water will be sampled, tested and treated prior to discharge.

8.6 Sampling and Testing

It is recommended the following inspections and testing should be undertaken:

- Inspections and testing of stockpile spoil within the treatment area at least every 1-2 days (depending upon the soil type and with reference to **Table 8** to determine whether the addition of aglime is required.
- If it is determined aglime application is required, it is to be done so as per the dosing rates determined from proposed testing. Mixing the treated soil is to be undertaken in accordance with the timelines provided in **Table 8**.
- Inspections of stockpiles for visual signs of seepage impacted by ASS including milky waters, iron staining and sulfur odour should be undertaken daily.
- Collection of verification soil samples per the following sampling density in accordance with the National ASS Guidance 2018:
 - o volume of stockpile < 250 m³ – 2 samples;

- o volume of stockpile 251 - 500 m³ – 3 samples;
 - o volume of stockpile 1000 m³ – 4 samples; and
 - o volume of stockpile > 1000 m³ – 4 samples plus one per additional 500 m³.
- Verification testing for the success of the soil neutralisation is to be carried out in accordance with the National ASS Guidance 2018, including testing of each sample for the chromium reducible sulfur suite by a NATA accredited laboratory.

8.7 Off-site Disposal

After on-site treatment, the treated ASS should be removed to a facility licensed to accept treated ASS in accordance with the NSW EPA Waste Classification Guidelines – Part 4: Acid Sulfate Soils (2014). It should also be noted that other classifications are present on the soil within the Site which may include Restricted Solid Waste, Hazardous Waste and Special Waste (asbestos). These classifications should also be applied to the soil and removal of these materials should be undertaken as per the RAP (EP Risk 2023b).

8.8 Performance Criteria

The performance criteria outlined in **Table 4** was adopted for assessment of the neutralisation of treated soil. Soil that has been treated by neutralisation techniques and has not met these criteria must be re-treated and re-tested until the above performance criteria are met. These performance criteria equate to there being no positive calculated net acidity in the soil above the adopted criteria following treatment.

The neutralisation management strategy is most effective when soil and neutralising agents are completely homogenised, which may not be fully achievable for large volumes of soil, especially when moist and/or clayey.

8.9 Reporting

The following details should be recorded during the soil treatment process and reported in a final Validation Report:

- Total final volumes and dimensions of disturbed ASS.
- Where dewatering was involved, final location, extent and duration of dewatering and details of testing and groundwater management strategies applied.
- Details of soil management strategies undertaken at the site (including evidence of specific management measures such as waste tracking, photographic evidence of neutralisation and of bunded treatment pads).
- Details of surface water management strategies undertaken at the Site.
- Location of any offsite disposal of ASS and evidence of treatment onsite prior to disposal.
- Summary of verification testing results for material treated.
- Location and maps of areas used for strategic burial of treated ASS, with depth below finished surface and details of safety margin below the permanent water table.
- Summary of monitoring results for surface water and groundwater (with an emphasis on trends in water quality).
- In appendices, full results of monitoring and verification testing regimes.
- A discussion of the effectiveness of management strategies employed at the Site.

- Details of any incidence of nonconformity with the Environment Management plan and corrective actions taken.
- A discussion of any potential risks to the environment or human health.
- Proposed future monitoring and/or reporting programs.
- Proposed remediation measures if needed.

A record of these observations, calculations and soil monitoring results should be provided to the client for each day an inspection is undertaken. At the completion of works a final closure report will be prepared detailing the above information.

9 Contingency Plan

A number of contingency measures for the soil treatment works have been provided in **Table 10**.

Table 10 – Contingency Plan		
Scenario	Consequence	Contingency Measures
Under liming of ASS	Potential for acid generation and impact to sensitive receptors	Addition of more aglime with additional chromium reducible sulfur testing to determine additional liming rate (if required)
Over liming of ASS	High pH may cause environmental impact	Mix over limed soil with ASS to reduce pH levels to within adopted criteria
Volume of ASS exceeds treatment area	Delays to earthwork	Increase size of soil treatment area
Observations of ASS leachate production in soil treatment area	Loss of containment of leachate	Conduct aglime treatment and apply leachate back to stockpile
Heavy rain causing ponding of water within treatment area	Damage to bunding and sediment controls	Testing of water for adopted action criteria and treatment if exceedance of relevant criteria. Irrigation of validated water to adjacent areas
pH values increase in surrounding water bodies	Potential for acid generation and impact to sensitive receptors	Increase monitoring frequency and submit samples to laboratory for analysis. If continues, notify relevant statutory authority

10 Conclusion

This ASSMP outlines suitable methods for treatment and construction management controls of ASS during construction of the Proposed Works. Previous investigations at the Site identified significant contamination to be present, warranting remediation via the chemical fixation of Lead within the south-eastern portion of the Site. The proposed Lead treatment is considered sufficient to neutralise soils without further treatment to address ASS.

For soils proposed for disturbance that do not require treatment to immobilise lead concentrations, treatment of PASS involves neutralisation of disturbed materials via the application and mixing of a sufficient quantity of alkaline material into the soil. To account for the proposed development, neutralisation will involve the excavation of affected material, and subsequent treatment and storage within a contained area. The optimised treatment process is considered to comprise the application of fine agricultural lime (aglime) with a minimum of 95% fine grained calcium carbonate (CaCO_3) through continuous processing via a mixing machine. Based on the findings of the CRS testing in Phase 2 of this DSI, an adopted dosing rate of **1.8 kg CaCO_3 /t** for FILL, and a rate of **1.0 kg CaCO_3 /t** for natural material is considered appropriate. Monitoring and verification should be conducted as per the ASSMP and liming adjusted as required based on screening and testing results.

This report concludes that the proposed mental health hospital and medical centre is suitable and warrants approval subject to the implementation of the management measures outlined within this ASSMP. Following the implementation of the mitigation and management measures specified, the remaining impacts are appropriate.

Figures



Legend
[Red outline box] Site boundary

Acid Sulfate Soils Management Plan
28-32 Bourke Road, Alexandria, NSW, 2015

Job No: EP2515
Date: 01/06/2022
Drawing Ref: EP2515.003 Fig. 1
Version No: v1



0 10 20 30 40 m
[Scale bar]
Approximate Scale Only

Coordinate System: WGS 84
Drawn by: HB Checked by: OG
Scale of regional map not shown
Source: Nearmap / OpenStreetMap

Figure 1 - Site Location

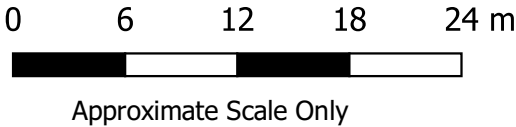


Figure 2 - Sampling Locations



Tables

			SPOCAS	Acid Sulphate Soils					Acid Sulphate Soils - Acid Base Accounting				Acid Sulphate Soils - Acidity Trail					
			HCl Extractable Sulfur Correction Factor	Net Acidity (Acidity Units) - CRS Suite	Net Acidity (Sulfur Units) - CRS Suite	Reaction Rate	s-Net Acidity without ANCE	pH (KCl)	a-Net Acidity without ANCE	ANC Fineness Factor	Net Acidity (acidity units)	Net Acidity (sulfur units)	Titratable Actual Acidity (sulfur units)	Titratable Peroxide Acidity (sulfur units)	Titratable Sulfidic Acidity (sulfur units)	Titratable Actual Acidity	Titratable Peroxide Acidity	Titratable Sulfidic Acidity
FACTOR	MOL H+/T	% S	-	% S	-	moles H+/t	-	mole H+/t	%S	%S	%S	mole H+/t	mole H+/t	mole H+/t				
EQL			1	10	0.02	1	0.02	0.1	10	0.5	10	0.02	0.02	0.02	0.02	2	2	2
National ASS Guidelines Table 5.1 Potential ASS																		
National ASS Guidelines Table 5.1 Actual ASS																		
National ASS Guidelines Table 5.4 Course and Peats sands to loamy sands				18	0.03						18	0.03						
Field ID						Matrix Type			Date									
Phase 1																		
BH01_4.0	Natural Sand	8/02/22				2	<0.02	6.5	<10	1.5	<10	<0.02	<0.020	<0.020	<0.020	<2	5	5
BH01_5.5	Natural Sand	8/02/22				2												
BH02_2.0	Natural Sand	9/02/22				2												
BH02_4.0	Natural Sand	9/02/22				2	0.02	4.9	12	1.5	12	0.02	0.020	<0.020	<0.020	12	<2	<2
BH03_3.0	Natural Sand	9/02/22				2	0.02	7.6	15	1.5	18	0.03	<0.020	0.031	0.031	<2	19	19
BH04_5.0	Natural Sand	10/02/22				2	<0.02	7.1	<10	1.5	<10	<0.02	<0.020	<0.020	<0.020	<2	2	2
BH04_7.5	Natural Sand	10/02/22				2												
BH05_2.0	Natural Sand	10/02/22				3												
BH05_4.0	Natural Sand	10/02/22				3	<0.02	6.4	<10	1.5	<10	<0.02	<0.020	<0.020	<0.020	<2	<2	<2
Phase 2																		
BH25_0.3	FILL	3/03/23	2	<10	<0.02			6.3		1.5			0.004			2.4		
BH28_2.0	FILL	3/03/23	2	19	0.03			5.5		1.5			0.024			15		
BH33_0.3	FILL	3/03/23	2	24	0.04			5.9		1.5			0.011			7.1		
BH41_0.3	FILL	2/03/23	2	<10	<0.02			7.3		1.5			<0.003			<2		

Environmental Standards

National Acid Sulfate Soils Guidance, Table 5.1 Potential ASS

National Acid Sulfate Soils Guidance, Table 5.1 Actual ASS

National Acid Sulfate Soils Guidance, Table 5.4

			Acid Sulphate Soils - ANC			Acid Sulphate Soils - Calcium Values					Acid Sulphate Soils - Field		Acid Sulphate Soils - Liming Rate			Acid Sulphate Soils - Magnesium Values				
			Acid Neutralising Capacity (acidity units)	Acid Neutralising Capacity	Acid Neutralising Capacity (sulfur units)	acidity - Acid Reacted Calcium	Acid Reacted Calcium	KCl Extractable Calcium	Calcium in Peroxide	sulfidic - Acid Reacted Calcium	pHF	pHFox	CRS Suite - Liming Rate	Liming Rate	Liming Rate excluding ANC	Acid Reacted Magnesium (acidity units)	Acid Reacted Magnesium	KCl Extractable Magnesium	Magnesium in Peroxide	Acid Reacted Magnesium (sulfur units)
			mole H+/t	%CaCO3	%S	mole H+/t	%	%	%	% S	-	-	KG CaCO3/T	kg CaCO3/t	kg CaCO3/t	mole H+/t	%	%	%	%S
EQL			2	0.01	0.02	10	0.02	0.02	0.02		0.1	0.1	1	1	1	10	0.02	0.02	0.02	0.02
National ASS Guidelines Table 5.1 Potential ASS											>4	<3								
National ASS Guidelines Table 5.1 Actual ASS											<4									
National ASS Guidelines Table 5.4 Course and Peats sands to loamy sands																				
Field ID	Matrix Type	Date																		
Phase 1																				
BH01_4.0	Natural Sand	8/02/22				<10	<0.020	<0.020	<0.020	<0.020	7.2	4.2		<1	<1	<10	<0.020	<0.020	<0.020	<0.020
BH01_5.5	Natural Sand	8/02/22									7.6	4.6								
BH02_2.0	Natural Sand	9/02/22									7.0	4.4								
BH02_4.0	Natural Sand	9/02/22				<10	<0.020	<0.020	<0.020	<0.020	6.4	4.6		<1	<1	<10	<0.020	<0.020	<0.020	<0.020
BH03_3.0	Natural Sand	9/02/22				<10	<0.020	0.053	0.055	<0.020	7.6	4.2		1	1	<10	<0.020	<0.020	<0.020	<0.020
BH04_5.0	Natural Sand	10/02/22				<10	<0.020	<0.020	<0.020	<0.020	7.5	4.7		<1	<1	<10	<0.020	<0.020	<0.020	<0.020
BH04_7.5	Natural Sand	10/02/22									7.6	4.7								
BH05_2.0	Natural Sand	10/02/22									7.3	3.4								
BH05_4.0	Natural Sand	10/02/22				<10	<0.020	0.032	0.033	<0.020	7.3	3.2		<1	<1	<10	<0.020	<0.020	<0.020	<0.020
Phase 2																				
BH25_0.3	FILL	3/03/23											<1							
BH28_2.0	FILL	3/03/23											1.4							
BH33_0.3	FILL	3/03/23											1.8							
BH41_0.3	FILL	2/03/23	73	0.36	0.12								<1							

Environmental Standards

National Acid Sulfate Soils Guidance, Table 5.1 Potential ASS

National Acid Sulfate Soils Guidance, Table 5.1 Actual ASS

National Acid Sulfate Soils Guidance, Table 5.4

			Acid Sulphate Soils - Potential Acidity		Acid Sulphate Soils - pH	Acid Sulphate Soils - Sulfur Trail			
			Chromium Reducible Sulphur (acidity units)	Chromium Reducible Sulfur	pH-OX	Peroxide Oxidisable Sulfur (acidity units)	KCl Extractable Sulfur	Peroxide Sulfur	Peroxide Oxidisable Sulfur
			mole H+/t	%S	-	mole H+/t	%	%	%
EQL			3	0.005	0.1	10	0.02	0.02	0.02
National ASS Guidelines Table 5.1 Potential ASS									
National ASS Guidelines Table 5.1 Actual ASS									
National ASS Guidelines Table 5.4 Course and Peats sands to loamy sands									
Field ID	Matrix Type	Date							
Phase 1									
BH01_4.0	Natural Sand	8/02/22			5.6	<10	<0.020	<0.020	<0.020
BH01_5.5	Natural Sand	8/02/22							
BH02_2.0	Natural Sand	9/02/22							
BH02_4.0	Natural Sand	9/02/22			5.1	<10	<0.020	<0.020	<0.020
BH03_3.0	Natural Sand	9/02/22			4.9	15	<0.020	0.024	0.024
BH04_5.0	Natural Sand	10/02/22			5.8	<10	<0.020	<0.020	<0.020
BH04_7.5	Natural Sand	10/02/22							
BH05_2.0	Natural Sand	10/02/22							
BH05_4.0	Natural Sand	10/02/22			4.9	<10	<0.020	<0.020	<0.020
Phase 2									
BH25_0.3	FILL	3/03/23	5.8	0.009					
BH28_2.0	FILL	3/03/23	4.3	0.007					
BH33_0.3	FILL	3/03/23	17	0.027					
BH41_0.3	FILL	2/03/23	4.2	0.007					

Environmental Standards
National Acid Sulfate Soils Guidance, Table 5.1 Potential ASS
National Acid Sulfate Soils Guidance, Table 5.1 Actual ASS
National Acid Sulfate Soils Guidance, Table 5.4

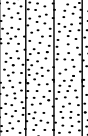
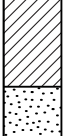
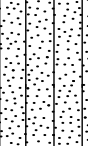
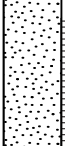
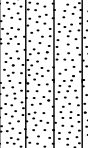
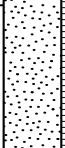
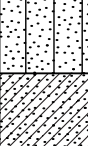
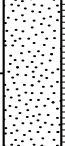
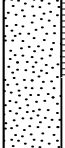
Appendix A

BORE LOGS

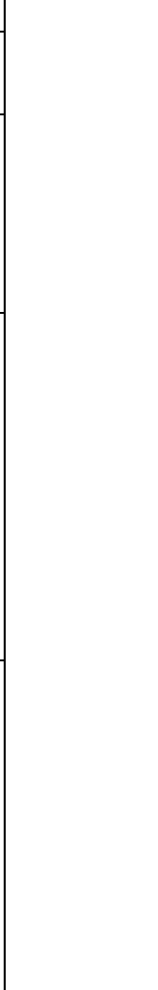
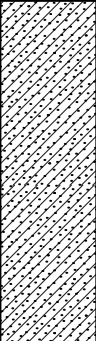
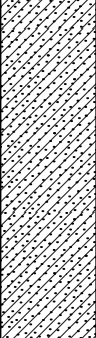
Borehole Log

PROJECT NUMBER EP2515			DRILLING DATE 08.02.2022			DRILLING METHOD Solid Flight Auger		
PROJECT NAME Johnstaff Bourke Road DSI			TOTAL DEPTH 8.5 mBGL					
ADDRESS 28 Bourke Road, Alexandria			BOREHOLE BH01/MW01					
COMMENTS						LOGGED BY TD CHECKED BY HB		
PID	Samples	Depth (m)	Graphic Log	Material Description	Well Diagram		Additional Observations	
27.0 ppm	0.2 mBGL			Concrete.				
29.1 ppm	0.6 mBGL	0.5		FILL: gravelly sand, medium to coarse grained, angular to subangular gravels, black to brown, slightly moist.				
35.0 ppm	1.0 mBGL	1		Silty SAND, grey/black in colour, medium to coarse grained, moist.				Small sample volume @ 0.6 mBGL.
		1.5						Minor clay content. Becoming more brown at 1.5 mBGL.
24.0 ppm	2.0 mBGL	2						Water strike at 2.3 mBGL.
		2.5						
		3						
		3.5						
0.0 ppm	4.0 mBGL	4		SAND, fine grained, beige, saturated.				
	4.5 mBGL	4.5		Clayey SAND, fine grained, pale, moist.				
		5						
0.0 ppm	5.5 mBGL	5.5						
		6						
		6.5						
0.3 ppm	7.0 mBGL	7		Sandy CLAY, fine grained, white with reddish mottling, moist, firm.				
		7.5						
		8						
		8.5		End of Hole at 8.5 mBGL due to Bedrock Reached.				

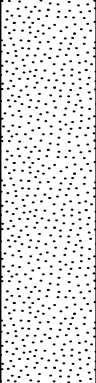
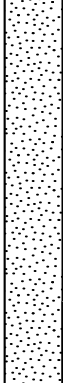
Borehole Log

PROJECT NUMBER EP2515 PROJECT NAME Johnstaff Bourke Road DSI ADDRESS 28 Bourke Road, Alexandria			DRILLING DATE 09.02.2022 TOTAL DEPTH 8.2 mBGL BOREHOLE BH02/MW02			DRILLING METHOD Solid Flight Auger
COMMENTS					LOGGED BY TD CHECKED BY HB	
PID	Samples	Depth (m)	Graphic Log	Material Description	Well Diagram	Additional Observations
414.7 ppm	0.1 mBGL	0.5		Concrete		
230.0 ppm	1.0 mBGL	1		FILL: gravelly sandy silt, sub-angular gravels, black/brown, moist.		
		1.5		Silty SAND, fine grained, dark brown/black, moist.		Colour becomes lighter and is saturated at 2.0 mBGL.
393.2 ppm	2.0 mBGL	2				Water strike at 2.4 mBGL.
	2.7 mBGL	2.5				
		3		Silty SAND, fine grained, pale brown, very moist.		
		3.5				
		4		Sandy CLAY, medium plasticity, medium grained, light brown/pale with red mottling, dense.		
		4.5				
		5				
5.9 ppm	5.5 mBGL	5.5		Clayey SAND, low plasticity, medium grained, light brown/pale, moist.		
		6				
		6.5				
0.3 ppm	7.2 mBGL	7		Sandy CLAY, high plasticity, fine grained, grey with red mottling, dense.		
		7.5				
		8				
		8.5		End of Hole at 8.2 mBGL due to Bedrock Reached.		

Borehole Log

PROJECT NUMBER EP2515			DRILLING DATE 09.02.2022		DRILLING METHOD Solid Flight Auger	
PROJECT NAME Johnstaff Bourke Road DSI			TOTAL DEPTH 6.0 mBGL			
ADDRESS 28 Bourke Road, Alexandria			BOREHOLE BH03			
COMMENTS Groundwater samples for MW03 are taken from location BH05					LOGGED BY TD CHECKED BY HB	
PID	Samples	Depth (m)	Graphic Log	Material Description	Well Diagram	Additional Observations
0.6 ppm	0.2 mBGL	0.5		Concrete.		
0.9 ppm	0.5 mBGL			FILL: silty sand, fine grained, brown, moist.		
2.8 ppm	0.7 mBGL			FILL: clayey silt, low plasticity, brown.		
1.1 ppm	1.5 mBGL	1				
		1.5				
		2		Silty CLAY, low plasticity, black/brown.		
2.8 ppm	3.0 mBGL	3				
		3.5				
		4		Sandy CLAY, medium plasticity, medium grained, light brown/pale with red mottling, dense.		
	4.5 mBGL	4.5				
		5				
		5.5				
	6.0 mBGL	6				
		6		End of Hole at 6.0 mBGL due to Refusal.		
		6.5				
		7				
		7.5				
		8				
		8.5				

Borehole Log

PROJECT NUMBER EP2515			DRILLING DATE 10.02.2022			DRILLING METHOD Solid Flight Auger		
PROJECT NAME Johnstaff Bourke Road DSI			TOTAL DEPTH 7.6 m					
ADDRESS 28 Bourke Road, Alexandria			BOREHOLE BH04/MW04					
COMMENTS						LOGGED BY TD CHECKED BY HB		
PID	Samples	Depth (m)	Graphic Log	Material Description	Well Diagram	Additional Observations		
4.2 ppm	0.2 mBGL	0.5		Concrete.				
				FILL: silty sand, medium to coarse grained, dark brown, slightly moist, loose.		Bits of ceramic and gravels present.		
3.0 ppm	1.0 mBGL	1		Concrete.				
				SAND, medium to coarse grained, dark brown, slightly moist, loose.		Becoming darker at 3.0 mBGL.		
3.4 ppm	2.0 mBGL	2						
		2.5						
		3						
		3.5						
		4						
	4.5 mBGL	4.5		SAND, medium to coarse grained, grey to light grey, saturated, loose.		Grey at 5.0 mBGL		
		5				Light grey at 7.0 mBGL		
		5.5						
		6						
		6.5						
		7						
2.6 ppm	7.5 mBGL	7.5		Sandy CLAY, medium plasticity, medium grained, greyish brown, saturated, soft.				
		8		End of Hole at 7.6 mBGL due to Refusal.				
		8.5						

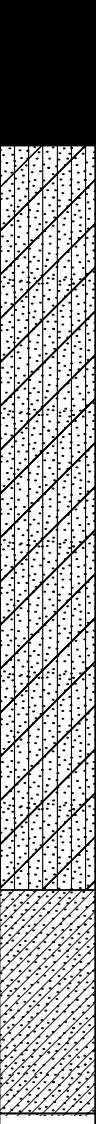
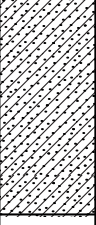
Borehole Log

PROJECT NUMBER EP2515		DRILLING DATE 10.02.2022		DRILLING METHOD Solid Flight Auger		
PROJECT NAME Johnstaff Bourke Road DSI		TOTAL DEPTH 7.0 m				
ADDRESS 28 Bourke Road, Alexandria		BOREHOLE BH05/MW03				
COMMENTS			LOGGED BY TD CHECKED BY HB			
PID	Samples	Depth (m)	Graphic Log	Material Description	Well Diagram	Additional Observations
26.7 ppm	0.2 mBGL			Concrete.		
		0.5		FILL: gravelly sand, coarse grained, angular to subangular gravels, black with grey mottling, dry, loose.		Mild hydrocarbon odour.
		1				Dup01 and Trp01 @ 0.2 mBGL.
7.0 ppm	1.5 mBGL	1.5		FILL: silty sand, coarse grained, black, dry, loose.		
5.2 ppm	2.0 mBGL	2		SAND, fine grained, dark grey, moist, loose.		Potential water strike at 1.8 mBGL
		2.5				
4.4 ppm	3.0 mBGL	3				
		3.5				
3.6 ppm	4.0 mBGL	4				
		4.5				
4.2 ppm	5.0 mBGL	5				
		5.5				
8.7 ppm	6.0 mBGL	6		SAND, fine grained, light grey, moist, loose.		
		6.5		Sandy CLAY, low plasticity, fine grained, grey with brown mottling, saturated, soft clay, loose.		
	7.0 mBGL	7				
		7.5		End of Hole at 7.0 mBGL due to Refusal.		
		8				
		8.5				

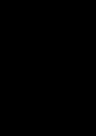
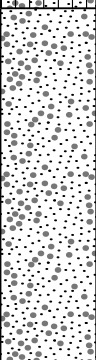
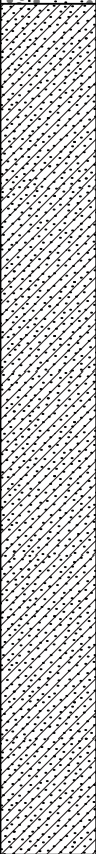
Borehole Log

PROJECT NUMBER EP2515 PROJECT NAME Johnstaff Bourke Road DSI ADDRESS 28 Bourke Road, Alexandria			DRILLING DATE 14.02.2022 TOTAL DEPTH 2.0 mBGL BOREHOLE BH06			DRILLING METHOD Solid Flight Auger		
COMMENTS						LOGGED BY TD CHECKED BY HB		
PID	Samples	Depth (m)	Graphic Log	Material Description	Well Diagram	Additional Observations		
2.6 ppm	0.4 mBGL	0.1		Concrete.				
		0.2		FILL: sandy gravel, fine grained, angular gravels, grey, dry.		Anthropogenic gravel with bits of concrete. Dup08 and Trp08 @ 0.4 mBGL		
1.2 ppm	0.9 mBGL	0.8			Silty SAND, fine grained, dark grey, slightly moist, loose.		Dup and Trp 09 at 0.9 mBGL	
		1.4	Silty SAND, fine grained, black with grey mottling, moist, loose.					
4.7 ppm	1.8 mBGL	1.8						
		1.9						
		2		End of Hole at 2.0 mBGL due to Target Depth Reached.				

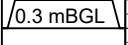
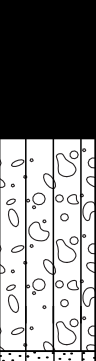
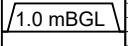
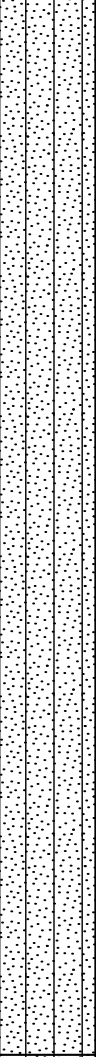
Borehole Log

PROJECT NUMBER EP2515 PROJECT NAME Johnstaff Bourke Road DSI ADDRESS 28 Bourke Road, Alexandria		DRILLING DATE 11.02.2022 TOTAL DEPTH 2.0 mBGL BOREHOLE BH07		DRILLING METHOD Solid Flight Auger		
COMMENTS				LOGGED BY TD CHECKED BY HB		
PID	Samples	Depth (m)	Graphic Log	Material Description	Well Diagram	Additional Observations
4.8 ppm	0.5 mBGL	0.1		Concrete.		Anthropogenic material including bricks, concrete, and some gravels present. Dup06 @ 0.5 mBGL
		0.2				
		0.3				
		0.4				
		0.5				
		0.6				
		0.7				
		0.8				
		0.9				
		1.0				
4.3 ppm	1.3 mBGL	1.1		FILL: clayey silty SAND, medium plasticity, black, soft clay.		
		1.2				
		1.3				
		1.4				
		1.5				
		1.6		End of Hole at 1.5 mBGL due to refusal (hard clay).		
		1.7				
		1.8				
		1.9				
		2.0				

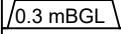
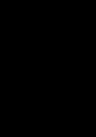
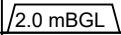
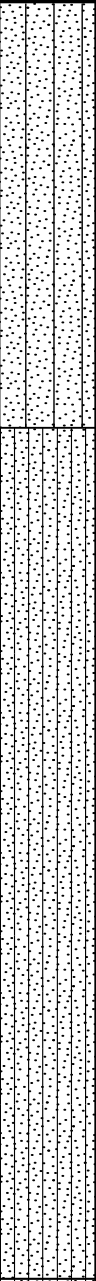
Borehole Log

PROJECT NUMBER EP2515		DRILLING DATE 11.02.2022		DRILLING METHOD Solid Flight Auger		
PROJECT NAME Johnstaff Bourke Road DSI		TOTAL DEPTH 2.0 mBGL				
ADDRESS 28 Bourke Road, Alexandria		BOREHOLE BH08				
COMMENTS				LOGGED BY TD CHECKED BY HB		
PID	Samples	Depth (m)	Graphic Log	Material Description	Well Diagram	Additional Observations
6.8 ppm	0.2 mBGL	0.1		Concrete.		
		0.2		FILL: silty sand, fine grained, dark grey, slightly moist.		
5.6 ppm	0.5 mBGL	0.3		SAND, medium grained, grey, slightly moist.		
		0.4				
4.9 ppm	1.5 mBGL	0.5		Sandy silty CLAY, low plasticity, medium grained, grey, slightly moist.		Some gravels present. Getting wetter at 1.7 mBGL.
		0.6				
		0.7				
		0.8				
		0.9				
		1				
		1.1				
		1.2				
		1.3				
		1.4				
		1.5				
		1.6				
		1.7				
		1.8				
		1.9				
		2		End of Hole at 2.0 mBGL due to Target Depth Reached.		

Borehole Log

PROJECT NUMBER EP2515 PROJECT NAME Johnstaff Bourke Road DSI ADDRESS 28 Bourke Road, Alexandria		DRILLING DATE 11.02.2022 TOTAL DEPTH 2.0 mBGL BOREHOLE BH09		DRILLING METHOD Solid Flight Auger		
COMMENTS				LOGGED BY TD CHECKED BY HB		
PID	Samples	Depth (m)	Graphic Log	Material Description	Well Diagram	Additional Observations
3.2 ppm		0.1		Concrete.		Some anthropogenic material present.
		0.2		FILL: sandy gravelly silt, black to brown, moist.		
1.4 ppm		0.3		Silty SAND, medium grained, beige, moist.		Increasingly darker with depth. Becoming lighter at 1.8 mBGL.
		0.4				
		0.5				
		0.6				
		0.7				
		0.8				
		0.9				
		1.0				
		1.1				
		1.2				
		1.3				
		1.4				
		1.5				
		1.6				
		1.7				
		1.8				
		1.9				

Borehole Log

PROJECT NUMBER EP2515 PROJECT NAME Johnstaff Bourke Road DSI ADDRESS 28 Bourke Road, Alexandria		DRILLING DATE 11.02.2022 TOTAL DEPTH 2.0 mBGL BOREHOLE BH10		DRILLING METHOD Solid Flight Auger		
COMMENTS				LOGGED BY TD CHECKED BY HB		
PID	Samples	Depth (m)	Graphic Log	Material Description	Well Diagram	Additional Observations
1.3 ppm	 0.3 mBGL	0.1		Concrete.		Some anthropogenic material present including gravels and bricks.
		0.2		FILL: sandy silt, medium grained, subangular gravels, orange, very moist.		
2.9 ppm	 2.0 mBGL	0.3				Water at 1.8 mBGL.
		0.4				
		0.5				
		0.6				
		0.7				
		0.8				
		0.9				
		1				
		1.1				
		1.2				
		1.3				
		1.4				
		1.5				
		1.6				
		1.7				
		1.8				
		1.9				

Borehole Log

PROJECT NUMBER EP2515 PROJECT NAME Johnstaff Bourke Road DSI ADDRESS 28 Bourke Road, Alexandria		DRILLING DATE 11.02.2022 TOTAL DEPTH 2.0 mBGL BOREHOLE BH11		DRILLING METHOD Solid Flight Auger		
COMMENTS				LOGGED BY TD CHECKED BY HB		
PID	Samples	Depth (m)	Graphic Log	Material Description	Well Diagram	Additional Observations
6.2 ppm	0.2 mBGL	0.1		Concrete.		
		0.2		FILL: sandy silt, medium grained, dark grey with orange mottling, slightly moist, loose sand.		
		0.3				
		0.4				
		0.5				
		0.6				
		0.7				
		0.8				
		0.9				
		1.0	Gravelly silty SAND, medium grained, angular to subangular gravels, black, slightly moist, loose.			
1.1						
1.2						
1.3						
1.4						
1.5						
1.6	Gravelly silty SAND, medium grained, angular to subangular gravels, brown/black, moist, loose sand.	Becoming more moist at 1.8 mBGL.				
1.7						
1.8						
1.9						
2.0			End of Hole at 2.0 mBGL due to Target Depth Reached.			

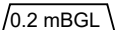
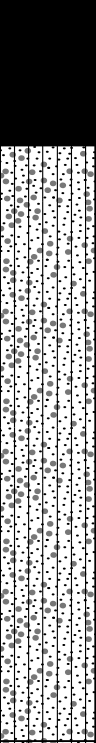
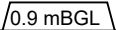
Borehole Log

PROJECT NUMBER EP2515		DRILLING DATE 14.02.2022		DRILLING METHOD Solid Flight Auger		
PROJECT NAME Johnstaff Bourke Road DSI		TOTAL DEPTH 1.5 mBGL				
ADDRESS 28 Bourke Road, Alexandria		BOREHOLE BH12				
COMMENTS				LOGGED BY TD CHECKED BY HB		
PID	Samples	Depth (m)	Graphic Log	Material Description	Well Diagram	Additional Observations
		0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1 1.1 1.2 1.3 1.4 1.5		Concrete (2 slabs).		No samples collected. It is assumed that this borehole is located on a building footing.
		1.5 1.6 1.7 1.8 1.9		End of Hole at 1.5 mBGL due to drilling into concrete footing. Soil not reached.		

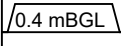
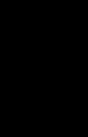
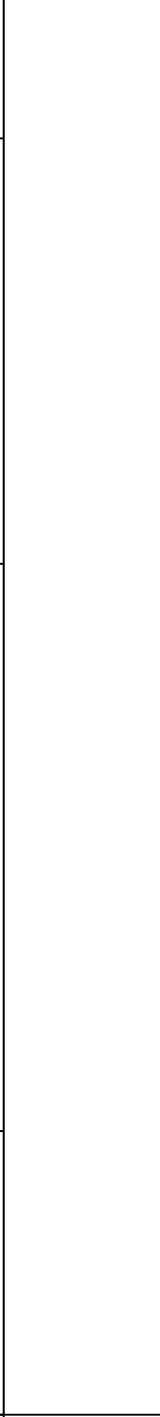
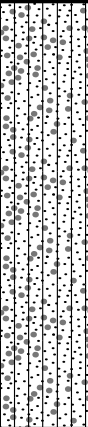
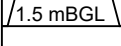
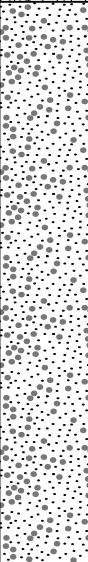
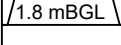
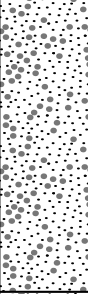
Borehole Log

PROJECT NUMBER EP2515		DRILLING DATE 11.02.2022		DRILLING METHOD Solid Flight Auger		
PROJECT NAME Johnstaff Bourke Road DSI		TOTAL DEPTH 2.0 mBGL				
ADDRESS 28 Bourke Road, Alexandria		BOREHOLE BH13				
COMMENTS BH dug to bedrock for geotechnical purposes. No sampling after 2.0 mBGL.				LOGGED BY TD CHECKED BY HB		
PID	Samples	Depth (m)	Graphic Log	Material Description	Well Diagram	Additional Observations
7.6 ppm	0.3 mBGL	0.1		Concrete.		
		0.2		FILL: sandy silt, medium grained, subangular gravels, brown, very moist.		Some anthropogenic materials including gravels, brick and concrete.
4.8 ppm	1.5 mBGL	0.3			Silty clayey SAND, low plasticity, medium grained, black to brown, very moist.	
		0.4				
		0.5				
		0.6				
		0.7				
		0.8				
		0.9				
		1				
		1.1				
		1.2				
		1.3				
		1.4				
		1.5				
		1.6				
		1.7				
		1.8				
		1.9				
		2		End of Hole at 2.0 mBGL due to Target Depth Reached.		

Borehole Log

PROJECT NUMBER EP2515 PROJECT NAME Johnstaff Bourke Road DSI ADDRESS 28 Bourke Road, Alexandria		DRILLING DATE 11.02.2022 TOTAL DEPTH 1.0 mBGL BOREHOLE BH14		DRILLING METHOD Solid Flight Auger		
COMMENTS				LOGGED BY TD CHECKED BY HB		
PID	Samples	Depth (m)	Graphic Log	Material Description	Well Diagram	Additional Observations
2.8 ppm		0.1		Concrete.		
		0.2		FILL: silty sand, medium grained, brown.		Anthropogenic materials including gravels present. Mud was also present. Dup05 at 0.2 mBGL
4.0 ppm		0.9	FILL: silty sand, medium grained, grey.	Anthropogenic materials present		
		1		End of Hole at 1.0 mBGL due to Refusal on Concrete.		
		1.1				
		1.2				
		1.3				
		1.4				
		1.5				
		1.6				
		1.7				
		1.8				
		1.9				

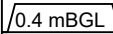
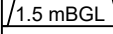
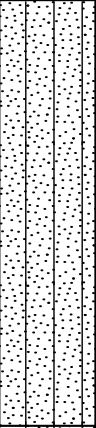
Borehole Log

PROJECT NUMBER EP2515 PROJECT NAME Johnstaff Bourke Road DSI ADDRESS 28 Bourke Road, Alexandria		DRILLING DATE 14.02.2022 TOTAL DEPTH 2.0 mBGL BOREHOLE BH15		DRILLING METHOD Solid Flight Auger		
COMMENTS				LOGGED BY TD CHECKED BY HB		
PID	Samples	Depth (m)	Graphic Log	Material Description	Well Diagram	Additional Observations
2.8 ppm		0.1		Concrete.		
		0.2				FILL: sandy gravelly silt, black, slightly moist.
		0.3				
		0.4				
		0.5				
		0.6				
		0.7				
		0.8				
		0.9				
		2.4 ppm		1.0		
1.1						
1.2						
1.3						
1.4						
1.5						
1.6						
1.7						
1.8						
1.9						
0.5 ppm		2.0		Silty SAND, light brown with black mottling, slightly moist.		

Borehole Log

PROJECT NUMBER EP2515 PROJECT NAME Johnstaff Bourke Road DSI ADDRESS 28 Bourke Road, Alexandria		DRILLING DATE 14.02.2022 TOTAL DEPTH 2.0 mBGL BOREHOLE BH16		DRILLING METHOD Solid Flight Auger		
COMMENTS				LOGGED BY TD CHECKED BY HB		
PID	Samples	Depth (m)	Graphic Log	Material Description	Well Diagram	Additional Observations
1.3 ppm	0.4 mBGL	0.1		Concrete.		Large rocks and concrete at 1.0 mBGL. Also getting darker at 1.0 mBGL.
		0.2		FILL: gravelly sandy silt, medium grained, black to light brown, moist.		
9.0 ppm	1.8 mBGL	0.3				Sulphur smell.
		0.4				
		0.5				
		0.6				
		0.7				
		0.8				
		0.9				
		1.0				
		1.1				
		1.2				
		1.3		Sandy gravelly CLAY, low plasticity, black.		
		1.4				
		1.5				
		1.6				
		1.7				
		1.8				
		1.9				
		2.0		End of Hole at 2.0 mBGL due to Target Depth Reached.		

Borehole Log

PROJECT NUMBER EP2515 PROJECT NAME Johnstaff Bourke Road DSI ADDRESS 28 Bourke Road, Alexandria		DRILLING DATE 14.02.2022 TOTAL DEPTH 2.0 mBGL BOREHOLE BH17		DRILLING METHOD Solid Flight Auger		
COMMENTS				LOGGED BY TD CHECKED BY HB		
PID	Samples	Depth (m)	Graphic Log	Material Description	Well Diagram	Additional Observations
5.7 ppm		0.1		Concrete.		Some anthropogenic materials present. Little sand present.
		0.2		FILL: sandy gravelly silt, medium grained, angular to subangular gravels, brown.		
7.1 ppm		0.3		Silty SAND, medium grained, brown/black.		Becoming increasingly darker with depth.
		0.4				
		0.5				
		0.6				
		0.7				
		0.8				
		0.9				
		1				
		1.1				
		1.2				
1.3						
1.4						
1.5						
1.6						
1.7						
1.8						
1.9						
2						
				End of Hole at 2.0 mBGL due to Target Depth Reached.		

PROJECT NUMBER EP3072	DRILLING DATE 06/03/2023	LOGGED BY TC & ZB
PROJECT NAME Johnstaff, Alexandria	DRILLING METHOD Drill Rig	CHECKED BY TC
ADDRESS 28-32 Bourke Road, Alexandria	TOTAL DEPTH 1.0 m BGL	LOCATION BH19

COMMENTS						
Depth (m)	Samples	PID Reading (ppm)	Graphic Log	USCS	Material Description	Additional Observations
					FILL: gravelly sand, coarse grained, angular to sub-angular gravels, brown, dry, loose.	
	BH19_0.3					
0.5	BH19_0.5				FILL: gravelly sand, fine grained, angular to sub-angular gravels, brown, dry, loose.	
1	BH19_1.0					Metal scraps observed.
					EOH @ 1.0 mBGL, refusal.	

PROJECT NUMBER EP3072			DRILLING DATE 06/03/2023			LOGGED BY TC & ZB		
PROJECT NAME Johnstaff, Alexandria			DRILLING METHOD Drill Rig			CHECKED BY TC		
ADDRESS 28-32 Bourke Road, Alexandria			TOTAL DEPTH 2.0 m BGL			LOCATION BH20		
COMMENTS								
Depth (m)	Samples	PID Reading (ppm)	Graphic Log	USCS	Material Description	Additional Observations		
0.5	BH20_0.3				FILL: gravelly sand, course to medium grained, angular to sub-angular gravels, dark brown, dry, loose.	Anthropogenic material observed including brick and glass. Minor CLay observed at 0.5 mBGL.		
	BH20_0.5				FILL: sand, medium, grey-black, slightly moist, medium dense.			
	BH20_1.0				SAND, medium-fine, fine, brown, slightly moist, dense.			
1.5								
2	BH20_2.0				EOH @ 2.0 mBGL Target Depth			

PROJECT NUMBER EP3072	DRILLING DATE 06/03/2023	LOGGED BY TC & ZB
PROJECT NAME Johnstaff, Alexandria	DRILLING METHOD Drill Rig	CHECKED BY TC
ADDRESS 28-32 Bourke Road, Alexandria	TOTAL DEPTH 2.0 m BGL	LOCATION BH21

COMMENTS

Depth (m)	Samples	PID Reading (ppm)	Graphic Log	USCS	Material Description	Additional Observations
					FILL: sand, fine, dark brown, dry, loose.	
	BH21_0.3					
0.5	BH21_0.5				FILL: sand, fine, white, grey and orange, dry, loose.	
1	BH21_1.0				FILL: sand, fine, brown mottled with white, dry, loose.	
1.5					SAND, fine, brown, slightly moist, loose.	
2	BH21_2.0				EOH @ 2.0 mBGL Target Depth.	

PROJECT NUMBER EP3072	DRILLING DATE 03/03/2023	LOGGED BY TC & ZB
PROJECT NAME Johnstaff, Alexandria	DRILLING METHOD Drill Rig	CHECKED BY TC
ADDRESS 28-32 Bourke Road, Alexandria	TOTAL DEPTH 2.0 m BGL	LOCATION BH22

COMMENTS

Depth (m)	Samples	PID Reading (ppm)	Graphic Log	USCS	Material Description	Additional Observations
	BH22_0.1				FILL: sand, coarse, black, moist, dense.	
					FILL: gravelly sand, coarse to medium grained, black, moist, dense.	
0.5	BH22_0.5					
					SAND, fine, black, slightly moist, dense. Colour transitions from black to brown @ approximately 1.5 mBGL.	
1	BH22_1.0					
1.5						
2	BH22_2.0					
					EOH @ 2.0 mBGL Target Depth.	

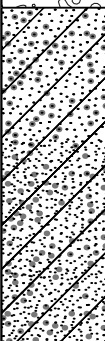
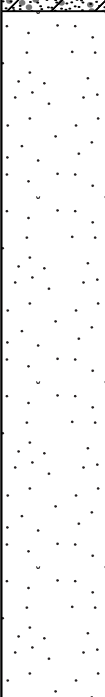
PROJECT NUMBER EP3072	DRILLING DATE 02/03/2023	LOGGED BY TC & ZB
PROJECT NAME Johnstaff, Alexandria	DRILLING METHOD Drill Rig	CHECKED BY TC
ADDRESS 28-32 Bourke Road, Alexandria	TOTAL DEPTH 1.2 m BGL	LOCATION BH23

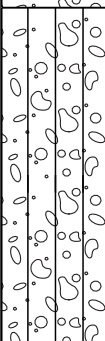
COMMENTS						
Depth (m)	Samples	PID Reading (ppm)	Graphic Log	USCS	Material Description	Additional Observations
0.5	BH23_0.1				FILL, gravelly sand, medium grained, angular to sub-angular gravels, dark brown, dry.	
	BH23_0.3					Glass and asbestos observed.
1	BH23_1.0				FILL, gravelly sand, medium grained, angular to sub-angular gravels, brown and orange , dry to slightly moist and loose.	Layer transitioning to a darker colour and increasing in moisture at 1.2m.
1.5					FILL: gravelly sand, fine to medium grained, angular to sub-angular gravels, black, moist and medium dense.	
2	BH23_2.0				EOH @ 2.0 mBGL Target depth.	

PROJECT NUMBER EP3072	DRILLING DATE 02/03/2023	LOGGED BY TC & ZB
PROJECT NAME Johnstaff, Alexandria	DRILLING METHOD Drill Rig	CHECKED BY TC
ADDRESS 28-32 Bourke Road, Alexandria	TOTAL DEPTH 1.5 m BGL	LOCATION BH24

COMMENTS

Depth (m)	Samples	PID Reading (ppm)	Graphic Log	USCS	Material Description	Additional Observations
					FILL, gravelly sand, medium grained, angular to sub-angular gravels, dark brown, dry.	Layer of orange sand (underneath concrete)
	BH24_0.3					
0.5	BH24_0.5					Slight Hydrocarbon Odour.
1	BH24_1.0					
					FILL, gravelly sand, fine to medium grained, angular to sub-angular gravels, black, dry, moist and medium dense.	
1.5	BH24_1.5					Mild Hydrocarbon Odour, Black Staining (Sludge)
					EOH @ 1.5 mBGL refusal.	

PROJECT NUMBER EP3072			DRILLING DATE 03/03/2023			LOGGED BY TC & ZB		
PROJECT NAME Johnstaff, Alexandria			DRILLING METHOD Drill Rig			CHECKED BY TC		
ADDRESS 28-32 Bourke Road, Alexandria			TOTAL DEPTH 2.0 m BGL			LOCATION BH25		
COMMENTS								
Depth (m)	Samples	PID Reading (ppm)	Graphic Log	USCS	Material Description	Additional Observations		
0.5	BH25_0.3				FILL, sandy gravel, coarse grained, angular to sub-angular gravels, black, dry and loose.			
	BH25_0.5				FILL, gravelly clayey sand, low plasticity, coarse grained, angular to sub-angular gravels, dark brown, dry and dense.			
	1	BH25_1.0				SAND, fine grained, black with orange, slightly moist to moist, dense.	Slightly moist @ 1.0 mBGL - sandstone gravels increase in size.	
1.5								
2	BH25_2.0							
					EOH @ 2.0 mBGL Target Depth.			

PROJECT NUMBER EP3072				DRILLING DATE 06/03/2023		LOGGED BY TC & ZB	
PROJECT NAME Johnstaff, Alexandria				DRILLING METHOD Drill Rig		CHECKED BY TC	
ADDRESS 28-32 Bourke Road, Alexandria				TOTAL DEPTH 2.0 m BGL		LOCATION BH26	
COMMENTS							
Depth (m)	Samples	PID Reading (ppm)	Graphic Log	USCS	Material Description	Additional Observations	
0.5	BH26_0.3				FILL: gravelly sand, course grained, angular to sub-angular gravels, dark brown, dry, loose.		
	BH26_0.5					Strong Odour	
1	BH26_1.0				FILL: gravelly clayey sand, medium plasticity, course to medium grained, angular to sub-angular gravels, brown, white and red, dry, loose.		
1.5					SAND, medium to fine grained, dark brown, dry, loose.		
							Colour transitions from dark brown to brown and increases from slightly moist @ 1.5 mBGL to moist @ approximately 2.0 mBGL.
2	BH26_2.0				End of Investigation @ 2.0m BGL Target Depth Achieved		

PROJECT NUMBER EP3072	DRILLING DATE 03/03/2023	LOGGED BY TC & ZB
PROJECT NAME Johnstaff, Alexandria	DRILLING METHOD Drill Rig	CHECKED BY TC
ADDRESS 28-32 Bourke Road, Alexandria	TOTAL DEPTH 2.0 m BGL	LOCATION BH27

COMMENTS

Depth (m)	Samples	PID Reading (ppm)	Graphic Log	USCS	Material Description	Additional Observations
0.5	BH27_0.3 BH27_0.5				FILL: silty gravelly sand, coarse grained, angular to sub-angular gravels, grey-white, dry.	
1	BH27_1.0				FILL: gravelly sand, fine to medium grained, angular to sub-angular gravels, dry.	Minor sandstone gravels observed.
1.5						
2	BH27_2.0				SAND, fine grained, black and brown, moist, dense.	Sewage odour
					End of Investigation @ 2.0m BGL Target Depth Achieved	

PROJECT NUMBER EP3072	DRILLING DATE 03/03/2023	LOGGED BY TC & ZB
PROJECT NAME Johnstaff, Alexandria	DRILLING METHOD Drill Rig	CHECKED BY TC
ADDRESS 28-32 Bourke Road, Alexandria	TOTAL DEPTH 2.0 m BGL	LOCATION BH28

COMMENTS						
Depth (m)	Samples	PID Reading (ppm)	Graphic Log	USCS	Material Description	Additional Observations
0.5					FILL: sand, orange, dry, loose.	
	BH28_0.3				FILL: clayey gravelly sand, low plasticity, coarse grained, angular to sub-angular gravels, black, dry.	
	BH28_0.5				FILL: gravel, angular to sub-angular gravels, black, dry.	Crushed Gravel and metal shavings with metallic odour.
					SAND, fine grained, brown with minor orange, slightly moist, dense.	
1	BH28_1.0					
1.5						Natural material appears approximately 1.5 mBGL with minor clay.
2	BH28_2.0				End of Investigation @ 2.0m BGL Target Depth Achieved	

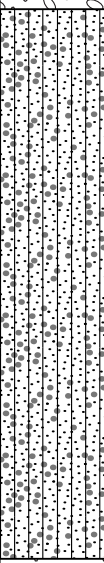
PROJECT NUMBER EP3072	DRILLING DATE 06/03/2023	LOGGED BY TC & ZB
PROJECT NAME Johnstaff, Alexandria	DRILLING METHOD Drill Rig	CHECKED BY TC
ADDRESS 28-32 Bourke Road, Alexandria	TOTAL DEPTH 2.0 m BGL	LOCATION BH29

COMMENTS

Depth (m)	Samples	PID Reading (ppm)	Graphic Log	USCS	Material Description	Additional Observations
0.5	BH29_0.3 BH29_0.5				FILL: gravely sand, fine to medium grained, angular to sub-angular gravels, dark brown, dry, loose.	
1	BH29_1.0					Wood observed @ 1.0 mBGL.
1.5						
2	BH29_2.0					
					End of Investigation @ 2.0m BGL Target Depth Achieved	

PROJECT NUMBER EP3072		DRILLING DATE 02/03/2023		DRILLING METHOD	
PROJECT NAME Johnstaff		TOTAL DEPTH 4.5		Hand Auger:	
ADDRESS 28-32 Bourke Road, Alexandria		BOREHOLE MW05		Push Tube:	
				Solid Flight Auger: 0.0 - 5 mBGL.	
COMMENTS				LOGGED BY TC CHECKED BY LM	
Samples	Depth (m)	Graphic Log	Material Description	Well Diagram	Additional Observations
				MW05	
BH30_0.1			Concrete		
	0.2		FILL: gravelly sand, medium grained, angular to sub-angular gravels, dark brown/black, dry and loose.		
BH30_0.5	0.4		FILL: gravelly sand, medium grained, grey, moist and medium dense.		
BH30_0.7	0.6				
	0.8				Hydrocarbon odour
	1				
	1.2				
	1.4				
	1.6				
	1.8				
BH30_2.0	2		NATURAL: sand, fine to medium grained, black, moist and dense		
	2.2				Potential groundwater strike at 2.15 mBGL.
	2.4				
	2.6				
	2.8				
	3				
	3.2				
	3.4				
	3.6				
	3.8				
	4		NATURAL: sandy clay, high plasticity, fine grained, grey with red and orange mottling, saturated and soft.		
	4.2				
	4.4				
	4.6				
	4.8				
	5		End of hole at 5.0 mBGL. Target depth.		
	5.2				

PROJECT NUMBER EP3072	DRILLING DATE 03/03/2023	LOGGED BY TC & ZB
PROJECT NAME Johnstaff, Alexandria	DRILLING METHOD Drill Rig	CHECKED BY TC
ADDRESS 28-32 Bourke Road, Alexandria	TOTAL DEPTH 2.0 m BGL	LOCATION BH31

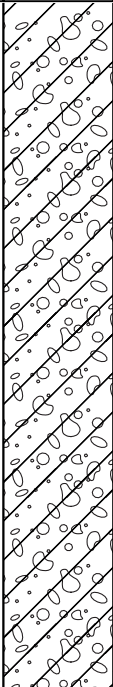
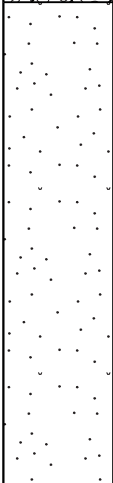
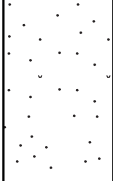
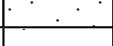
COMMENTS						
Depth (m)	Samples	PID Reading (ppm)	Graphic Log	USCS	Material Description	Additional Observations
0.5	BH31_0.3				FILL: gravelly sand, coarse grained, angular to sub-angular gravels, orange and brown, dry.	
	BH31_0.5					
	BH31_1.0					
1.5					FILL: gravelly sand, coarse sand, black, dry	
					SAND, fine grained, black, moist, dense.	
2	BH31_2.0				End of Investigation @ 2.0m BGL Target Depth Achieved	

PROJECT NUMBER EP3072	DRILLING DATE 03/03/2023	LOGGED BY TC & ZB
PROJECT NAME Johnstaff, Alexandria	DRILLING METHOD Drill Rig	CHECKED BY TC
ADDRESS 28-32 Bourke Road, Alexandria	TOTAL DEPTH 2.0 m BGL	LOCATION BH32

COMMENTS						
Depth (m)	Samples	PID Reading (ppm)	Graphic Log	USCS	Material Description	Additional Observations
0.5	BH32_0.1				FILL: gravelly sand, fine grained, angular to sub-angular gravels, dark brown, dry, loose.	
	BH32_0.5				FILL: clayey gravelly sand, fine grained, angular to sub-angular gravels, dark brown, dry, loose.	
	BH32_1.0				FILL: gravelly sand, fine grained, angular to sub-angular gravels, dark brown, dry, loose.	
1.5						
2	BH32_2.0				SAND, fine grained, brown, slightly moist, dense.	
					EOH @ 2.0 mBGL Target Depth	

PROJECT NUMBER EP3072	DRILLING DATE 03/03/2023	LOGGED BY TC & ZB
PROJECT NAME Johnstaff, Alexandria	DRILLING METHOD Drill Rig	CHECKED BY TC
ADDRESS 28-32 Bourke Road, Alexandria	TOTAL DEPTH 2.0 m BGL	LOCATION BH33

COMMENTS

Depth (m)	Samples	PID Reading (ppm)	Graphic Log	USCS	Material Description	Additional Observations
0.5	BH33_0.3 BH33_0.5				FILL: clayey gravel-sand, low plasticity, coarse sands, angular-subangular gravels, black with red mottling, dry	
1	BH33_1.0				FILL: sand, fine grained, black, dry.	
1.5					SAND, fine grained, black, moist, dense.	Mild bog odour. Moisture increases from dry to moist approximately 1.5-1.8 mBGL.
2	BH33_2.0				End of Investigation @ 2.0m BGL Target Depth Achieved	

PROJECT NUMBER EP3072		DRILLING DATE 02/03/2023		DRILLING METHOD			
PROJECT NAME Johnstaff		TOTAL DEPTH 4.5		Hand Auger:			
ADDRESS 28-32 Bourke Road, Alexandria		BOREHOLE MW06		Push Tube:			
				Solid Flight Auger: 0.0 - 4.5 mBGL.			
COMMENTS				LOGGED BY TC			
				CHECKED BY LM			
PID	Samples	Depth (m)	Graphic Log	Material Description	Well Diagram	Additional Observations	Elevation (m)
				Concrete			45
	BH34_0.3	0.2		FILL: sand, fine to medium grained, dark brown, dry and loose. minor angular to sub-angular gravels.			44.8
	BH34_0.5	0.4					44.6
		0.6					44.4
		0.8					44.2
	BH34_1.0	1					44
		1.2					43.8
		1.4		SAND, fine grained, grey with orange mottling, very moist and dense.			43.6
		1.6					43.4
		1.8					43.2
	BH34_2.0	2					43
		2.2					Potential groundwater strike at 2.31 mBGL.
		2.4					42.8
		2.6					42.6
		2.8					42.4
		3					42.2
		3.2					42
		3.4					41.8
		3.6					41.6
		3.8					41.4
		4					41.2
		4.2					41
		4.4					40.8
		4.6					40.6
		4.8					40.4
	BH34_5.0	5		End of hole at 5.0 mBGL, target depth.			40.2
		5.2					40

PROJECT NUMBER EP3072	DRILLING DATE 03/03/2023	LOGGED BY TC & ZB
PROJECT NAME Johnstaff, Alexandria	DRILLING METHOD Drill Rig	CHECKED BY TC
ADDRESS 28-32 Bourke Road, Alexandria	TOTAL DEPTH 2.0 m BGL	LOCATION BH35

COMMENTS						
Depth (m)	Samples	PID Reading (ppm)	Graphic Log	USCS	Material Description	Additional Observations
0.5	BH35_0.1				FILL: gravelly sand, coarse grained, angular to sub-angular gravels, orange and black, dry and loose.	Colour transitions to black approximately 0.5 mBGL. Plastic was observed at 0.5 m BGL.
	BH35_0.5					
	BH35_0.7					
1						
1.5						
2					SAND, fine grained, black, slightly moist, dense.	
					EOH @ 2.0 mBGL Target Depth	

PROJECT NUMBER EP3072	DRILLING DATE 03/03/2023	LOGGED BY TC & ZB
PROJECT NAME Johnstaff, Alexandria	DRILLING METHOD Drill Rig	CHECKED BY TC
ADDRESS 28-32 Bourke Road, Alexandria	TOTAL DEPTH 2.0 m BGL	LOCATION BH36

COMMENTS

Depth (m)	Samples	PID Reading (ppm)	Graphic Log	USCS	Material Description	Additional Observations
	BH36_0.1				FILL: gravelly sand, coarse grained, angular to sub-angular gravels, brown, dry and loose.	
	BH36_0.3				FILL: sand, medium grained, grey, dry, loose.	
0.5						
1	BH36_1.0				FILL: sand, medium to fine grained, brown, slightly moist, loose. Minor gravels.	
1.5						
					SAND, fine grained, orange and brown, moist, dense.	
2	BH36_2.0					
					EOH @ 2.0 mBGL Target Depth	

PROJECT NUMBER EP3072 PROJECT NAME Johnstaff, Alexandria ADDRESS 28-32 Bourke Road, Alexandria			DRILLING DATE 03/03/2023 DRILLING METHOD Drill Rig TOTAL DEPTH 2.0 m BGL			LOGGED BY TC & ZB CHECKED BY TC LOCATION BH38		
COMMENTS								
Depth (m)	Samples	PID Reading (ppm)	Graphic Log	USCS	Material Description	Additional Observations		
	BH38_0.1				FILL: gravelly sand, coarse grained, angular to sub-angular gravels, orange, dry and loose.			
					FILL: gravelly sand, coarse grained, angular to sub-angular gravels, black, dry and loose. Minor sandstone gravels observed.			
0.5	BH38_0.5							
	BH38_0.7				EOH @ 0.7 mBGL refusal.			

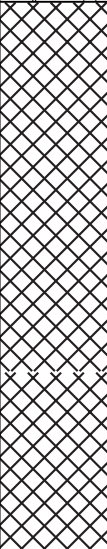
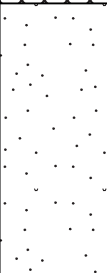
PROJECT NUMBER EP3072			DRILLING DATE 03/03/2023			LOGGED BY TC & ZB		
PROJECT NAME Johnstaff, Alexandria			DRILLING METHOD Drill Rig			CHECKED BY TC		
ADDRESS 28-32 Bourke Road, Alexandria			TOTAL DEPTH 2.0 m BGL			LOCATION BH39		
COMMENTS								
Depth (m)	Samples	PID Reading (ppm)	Graphic Log	USCS	Material Description	Additional Observations		
0.5	BH39_0.1				FILL: gravelly sand, coarse grained, angular to sub-angular gravels, brown, dry and loose.			
	BH39_0.5							
	BH39_1.0							
	1.5				gravelly clayey sand, low plasticity, coarse grained, angular to sub-angular gravels, dark brown, dry, dense.			
				SAND, fine to medium to fine grained, black, slightly moist, dense.				
2	BH39_2.0				EOH @ 2.0 mBGL Target Depth			

PROJECT NUMBER EP3072	DRILLING DATE 03/03/2023	LOGGED BY TC & ZB
PROJECT NAME Johnstaff, Alexandria	DRILLING METHOD Drill Rig	CHECKED BY TC
ADDRESS 28-32 Bourke Road, Alexandria	TOTAL DEPTH 2.0 m BGL	LOCATION BH40

COMMENTS

Depth (m)	Samples	PID Reading (ppm)	Graphic Log	USCS	Material Description	Additional Observations
	BH40_0.1				FILL: gravelly sand, coarse grained, angular to sub-angular gravels, brown, dry and loose.	
0.5	BH40_0.5					Anthropogenic material observed in the form of glass and bricks.
1	BH40_1.0					
1.5						
2	BH40_2.0				SAND, medium to fine grained, orange and brown, slightly moist, dense.	
					End of Investigation @ 2.0m BGL Target Depth Achieved	

PROJECT NUMBER EP3072			DRILLING DATE 02/03/2023			DRILLING METHOD		
PROJECT NAME Johnstaff			TOTAL DEPTH 4.5			Hand Auger:		
ADDRESS 28-32 Bourke Road, Alexandria			BOREHOLE MW07			Push Tube:		
						Solid Flight Auger: 0.0 - 4.5 mBGL.		
COMMENTS						LOGGED BY TC		
						CHECKED BY LM		
PID	Samples	Depth (m)	Graphic Log	Material Description	Well Diagram	Additional Observations	Elevation (m)	
				Concrete			45	
	BH41_0.3	0.2		FILL: gravelly sand, fine to medium grained, angular to sub-angular gravels, dark brown, dry and loose.			44.8	
	BH41_0.5	0.4					44.6	
		0.6					44.4	
		0.8					44.2	
	BH41_1.0	1					44	
		1.2		SAND, fine grained, grey with orange mottling, very moist and dense.			43.8	
		1.4					43.6	
		1.6					43.4	
		1.8					43.2	
	BH41_2.0	2					43	
		2.2				Potential groundwater strike at 2.22 mBGL.	42.8	
		2.4					42.6	
		2.6					42.4	
		2.8					42.2	
		3					42	
		3.2					41.8	
		3.4					41.6	
		3.6					41.4	
		3.8					41.2	
		4					41	
		4.2					40.8	
		4.4					40.6	
		4.6					40.4	
		4.8					40.2	
	BH41_5.0	5		End of hole at 5.0 mBGL, target depth.			40	
		5.2					40	

PROJECT NUMBER EP3072			DRILLING DATE 03/03/2023			LOGGED BY TC & ZB		
PROJECT NAME Johnstaff, Alexandria			DRILLING METHOD Drill Rig			CHECKED BY TC		
ADDRESS 28-32 Bourke Road, Alexandria			TOTAL DEPTH 2.0 m BGL			LOCATION BH42		
COMMENTS								
Depth (m)	Samples	PID Reading (ppm)	Graphic Log	USCS	Material Description	Additional Observations		
0.5	BH42_0.1				FILL: gravelly sand, coarse grained, angular to sub-angular gravels, brown, dry and loose.	Material increasing in moisture from dry to slightly moist @ 0.5 mBGL.		
	BH42_0.5							
	BH42_1.0				FILL: silty clay, low plasticity, black, moist.	Material was consistent of a muddy slop. Wood was observed with a mild boggy odour.		
1.5					SAND, medium to fine grained, dark brown, moist, dense.			
2	BH42_2.0				End of Investigation @ 2.0m BGL Target Depth Achieved			

PROJECT NUMBER EP3072	DRILLING DATE 03/03/2023	LOGGED BY TC & ZB
PROJECT NAME Johnstaff, Alexandria	DRILLING METHOD Drill Rig	CHECKED BY TC
ADDRESS 28-32 Bourke Road, Alexandria	TOTAL DEPTH 2.0 m BGL	LOCATION BH43

COMMENTS						
Depth (m)	Samples	PID Reading (ppm)	Graphic Log	USCS	Material Description	Additional Observations
					FILL: gravelly sand, coarse grained, angular to sub-angular gravels, brown, dry and loose.	
	BH43_0.3					
0.5	BH43_0.5				FILL: clayey sand, low plasticity, medium grained, brown, dry, loose.	Material increasing in moisture from dry to slightly moist @ 0.5 mBGL.
1	BH43_1.0				FILL: gravelly, clayey sand, low plasticity, medium grained, angular to sub-angular gravels, brown, dry, loose.	Material was consistent of a muddy slop. Wood was observed with a mild boggy odour.
1.5						
					gravelly sand, medium grained, angular to sub-angular gravels, brown, dry and loose.	
2	BH43_2.0					
					End of Investigation @ 2.0m BGL Target Depth Achieved	

PROJECT NUMBER EP3072		DRILLING DATE 02/03/2023		DRILLING METHOD	
PROJECT NAME Johnstaff		TOTAL DEPTH 4.5		Hand Auger:	
ADDRESS 28-32 Bourke Road, Alexandria		BOREHOLE MW05		Push Tube:	
				Solid Flight Auger: 0.0 - 5 mBGL.	
COMMENTS				LOGGED BY TC CHECKED BY LM	
Samples	Depth (m)	Graphic Log	Material Description	Well Diagram	Additional Observations
				MW05	
BH30_0.1			Concrete		
	0.2		FILL: gravelly sand, medium grained, angular to sub-angular gravels, dark brown/black, dry and loose.		
BH30_0.5	0.4		FILL: gravelly sand, medium grained, grey, moist and medium dense.		
BH30_0.7	0.6				
	0.8				Hydrocarbon odour
	1				
	1.2				
	1.4				
	1.6				
	1.8				
BH30_2.0	2		NATURAL: sand, fine to medium grained, black, moist and dense		
	2.2				Potential groundwater strike at 2.15 mBGL.
	2.4				
	2.6				
	2.8				
	3				
	3.2				
	3.4				
	3.6				
	3.8				
	4		NATURAL: sandy clay, high plasticity, fine grained, grey with red and orange mottling, saturated and soft.		
	4.2				
	4.4				
	4.6				
	4.8				
	5		End of hole at 5.0 mBGL. Target depth.		
	5.2				

PROJECT NUMBER EP3072		DRILLING DATE 02/03/2023		DRILLING METHOD			
PROJECT NAME Johnstaff		TOTAL DEPTH 4.5		Hand Auger:			
ADDRESS 28-32 Bourke Road, Alexandria		BOREHOLE MW06		Push Tube:			
				Solid Flight Auger: 0.0 - 4.5 mBGL.			
COMMENTS				LOGGED BY TC			
				CHECKED BY LM			
PID	Samples	Depth (m)	Graphic Log	Material Description	Well Diagram	Additional Observations	Elevation (m)
		0.2		Concrete			45
	BH34_0.3	0.4		FILL: sand, fine to medium grained, dark brown, dry and loose. minor angular to sub-angular gravels.			44.8
	BH34_0.5	0.6					44.6
		0.8					44.4
	BH34_1.0	1.0					44.2
		1.2					44
		1.4					43.8
		1.6					43.6
		1.8					43.4
	BH34_2.0	2.0					43.2
		2.2		SAND, fine grained, grey with orange mottling, very moist and dense.		Potential groundwater strike at 2.31 mBGL.	43
		2.4					42.8
		2.6					42.6
		2.8					42.4
		3.0					42.2
		3.2					42
		3.4					41.8
		3.6					41.6
		3.8					41.4
		4.0					41.2
		4.2					41
		4.4					40.8
		4.6					40.6
		4.8					40.4
	BH34_5.0	5.0		End of hole at 5.0 mBGL, target depth.			40.2
		5.2					40

PROJECT NUMBER EP3072			DRILLING DATE 02/03/2023			DRILLING METHOD		
PROJECT NAME Johnstaff			TOTAL DEPTH 4.5			Hand Auger:		
ADDRESS 28-32 Bourke Road, Alexandria			BOREHOLE MW07			Push Tube:		
						Solid Flight Auger: 0.0 - 4.5 mBGL.		
COMMENTS						LOGGED BY TC		
						CHECKED BY LM		
PID	Samples	Depth (m)	Graphic Log	Material Description	Well Diagram	Additional Observations	Elevation (m)	
				Concrete			45	
	BH41_0.3	0.2		FILL: gravelly sand, fine to medium grained, angular to sub-angular gravels, dark brown, dry and loose.			44.8	
	BH41_0.5	0.4					44.6	
		0.6					44.4	
		0.8					44.2	
	BH41_1.0	1					44	
		1.2		SAND, fine grained, grey with orange mottling, very moist and dense.			43.8	
		1.4					43.6	
		1.6					43.4	
		1.8					43.2	
	BH41_2.0	2					43	
		2.2				Potential groundwater strike at 2.22 mBGL.	42.8	
		2.4					42.6	
		2.6					42.4	
		2.8					42.2	
		3					42	
		3.2					41.8	
		3.4					41.6	
		3.6					41.4	
		3.8					41.2	
		4					41	
		4.2					40.8	
		4.4					40.6	
		4.6					40.4	
		4.8					40.2	
	BH41_5.0	5		End of hole at 5.0 mBGL, target depth.			40	
		5.2					40	

Appendix B

NATA ACCREDITED LABORATORY CERTIFICATES

CERTIFICATE OF ANALYSIS

Work Order : **ES2204270**
Client : **EP RISK MANAGEMENT**
Contact : HARRISON BLAKE
Address : Level 4 73 Walker St
 North Sydney 2060
Telephone : ----
Project : EP2515
Order number : ----
C-O-C number : ----
Sampler : HARRISON BLAKE
Site : ----
Quote number : SY/497/20 Primary analysis only
No. of samples received : 8
No. of samples analysed : 5

Page : 1 of 17
Laboratory : Environmental Division Sydney
Contact : Tyler Anderson
Address : 277-289 Woodpark Road Smithfield NSW Australia 2164
Telephone : +61 2 8784 8555
Date Samples Received : 08-Feb-2022 18:00
Date Analysis Commenced : 09-Feb-2022
Issue Date : 16-Feb-2022 21:58



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
- Descriptive Results
- Surrogate Control Limits

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

Signatories

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

<i>Signatories</i>	<i>Position</i>	<i>Accreditation Category</i>
Ben Felgendrejeris	Senior Acid Sulfate Soil Chemist	Brisbane Acid Sulphate Soils, Stafford, QLD
Brendan Schrader	Laboratory Technician	Newcastle - Asbestos, Mayfield West, NSW
Edwandy Fadjjar	Organic Coordinator	Sydney Organics, Smithfield, NSW
Franco Lentini	LCMS Coordinator	Sydney Inorganics, Smithfield, NSW
Franco Lentini	LCMS Coordinator	Sydney Organics, Smithfield, NSW
Ivan Taylor	Analyst	Sydney Inorganics, Smithfield, NSW



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.
- EP080: Where reported, Total Xylenes is the sum of the reported concentrations of m&p-Xylene and o-Xylene at or above the LOR.
- EP068: Where reported, Total Chlordane (sum) is the sum of the reported concentrations of cis-Chlordane and trans-Chlordane at or above the LOR.
- EP068: Where reported, Total OCP is the sum of the reported concentrations of all Organochlorine Pesticides at or above LOR.
- EP074: Where reported, Total Trihalomethanes is the sum of the reported concentrations of all Trihalomethanes at or above the LOR.
- EP074: Where reported, Total Xylenes is the sum of the reported concentrations of m&p-Xylene and o-Xylene at or above the LOR.
- EP074: Where reported, Sum of chlorinated hydrocarbons includes carbon tetrachloride, chlorobenzene, chloroform, 1,2-dichlorobenzene, 1,4-dichlorobenzene, 1,2-dichloroethane, 1,1-dichloroethene, cis-1,2-dichloroethene, trans-1,2-dichloroethene, 1,1,1,2-tetrachloroethane, 1,1,2,2-tetrachloroethane, 1,2,4-trichlorobenzene, 1,1,1-trichloroethane, 1,1,2-trichloroethane, trichloroethene, vinyl chloride, hexachlorobutadiene and methylene chloride.
- EP074: Where reported, Total Trimethylbenzenes is the sum of the reported concentrations of 1.2.3-Trimethylbenzene, 1.2.4-Trimethylbenzene and 1.3.5-Trimethylbenzene at or above the LOR.
- EP075(SIM): Where reported, Total Cresol is the sum of the reported concentrations of 2-Methylphenol and 3- & 4-Methylphenol at or above the LOR.
- ASS: EA029 (SPOCAS): Retained Acidity not required because pH KCl greater than or equal to 4.5
- EP075(SIM): Poor duplicate precision due to sample heterogeneity.
- ASS: EA029 (SPOCAS): Excess ANC not required because pH OX less than 6.5.
- EP075: Where reported, 'Sum of PAH' is the sum of the USEPA 16 priority PAHs
- ASS: EA029 (SPOCAS): Liming rate is calculated and reported on a dry weight basis assuming use of fine agricultural lime (CaCO₃) and using a safety factor of 1.5 to allow for non-homogeneous mixing and poor reactivity of lime. For conversion of Liming Rate from kg/t dry weight to kg/m³ in-situ soil, multiply reported results x wet bulk density of soil in t/m³.
- ASS: EA003 (NATA Field and F(ox) screening): pH F(ox) Reaction Rate: 1 - Slight; 2 - Moderate; 3 - Strong; 4 - Extreme
- EA200 'Am' Amosite (brown asbestos)
- EA200 'Cr' Crocidolite (blue asbestos)
- EA200 'Trace' - Asbestos fibres ("Free Fibres") detected by trace analysis per AS4964. The result can be interpreted that the sample contains detectable 'respirable' asbestos fibres
- EA200: Asbestos Identification Samples were analysed by Polarised Light Microscopy including dispersion staining.
- EA200 Legend



- EA200 'Ch' Chrysotile (white asbestos)
- EA200: 'UMF' Unknown Mineral Fibres. "-" indicates fibres detected may or may not be asbestos fibres. Confirmation by alternative techniques is recommended.
- Benzo(a)pyrene Toxicity Equivalent Quotient (TEQ) 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.
- EA200: For samples larger than 30g, the <2mm fraction may be sub-sampled prior to trace analysis as outlined in ISO23909:2008(E) Sect 6.3.2-2
- EA200: 'Yes' - Asbestos detected by polarised light microscopy including dispersion staining.
- EA200: 'No*' - No asbestos found, at the reporting limit of 0.1g/kg, by polarised light microscopy including dispersion staining. Asbestos material was detected and positively identified at concentrations estimated to be below 0.1g/kg.
- EA200: 'No' - No asbestos found at the reporting limit 0.1g/kg, by polarised light microscopy including dispersion staining.
- 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.

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	BH01_0.2	BH01_1.0	BH01_2.0	BH01_4.0	BH01_5.5
Sampling date / time				08-Feb-2022 00:00	08-Feb-2022 00:00	08-Feb-2022 00:00	08-Feb-2022 00:00	08-Feb-2022 00:00	
Compound	CAS Number	LOR	Unit	ES2204270-001	ES2204270-003	ES2204270-004	ES2204270-006	ES2204270-007	
				Result	Result	Result	Result	Result	
EA003 :pH (field/fox)									
pH (F)	----	0.1	pH Unit	----	----	----	7.2	7.6	
pH (Fox)	----	0.1	pH Unit	----	----	----	4.2	4.6	
Reaction Rate	----	1	Reaction Unit	----	----	----	2	2	
EA029-A: pH Measurements									
pH KCl (23A)	----	0.1	pH Unit	----	----	----	6.5	----	
pH OX (23B)	----	0.1	pH Unit	----	----	----	5.6	----	
EA029-B: Acidity Trail									
Titratable Actual Acidity (23F)	----	2	mole H+ / t	----	----	----	<2	----	
Titratable Peroxide Acidity (23G)	----	2	mole H+ / t	----	----	----	5	----	
Titratable Sulfidic Acidity (23H)	----	2	mole H+ / t	----	----	----	5	----	
sulfidic - Titratable Actual Acidity (s-23F)	----	0.020	% pyrite S	----	----	----	<0.020	----	
sulfidic - Titratable Peroxide Acidity (s-23G)	----	0.020	% pyrite S	----	----	----	<0.020	----	
sulfidic - Titratable Sulfidic Acidity (s-23H)	----	0.020	% pyrite S	----	----	----	<0.020	----	
EA029-C: Sulfur Trail									
KCl Extractable Sulfur (23Ce)	----	0.020	% S	----	----	----	<0.020	----	
Peroxide Sulfur (23De)	----	0.020	% S	----	----	----	<0.020	----	
Peroxide Oxidisable Sulfur (23E)	----	0.020	% S	----	----	----	<0.020	----	
acidity - Peroxide Oxidisable Sulfur (a-23E)	----	10	mole H+ / t	----	----	----	<10	----	
EA029-D: Calcium Values									
KCl Extractable Calcium (23Vh)	----	0.020	% Ca	----	----	----	<0.020	----	
Peroxide Calcium (23Wh)	----	0.020	% Ca	----	----	----	<0.020	----	
Acid Reacted Calcium (23X)	----	0.020	% Ca	----	----	----	<0.020	----	
acidity - Acid Reacted Calcium (a-23X)	----	10	mole H+ / t	----	----	----	<10	----	
sulfidic - Acid Reacted Calcium (s-23X)	----	0.020	% S	----	----	----	<0.020	----	
EA029-E: Magnesium Values									
KCl Extractable Magnesium (23Sm)	----	0.020	% Mg	----	----	----	<0.020	----	
Peroxide Magnesium (23Tm)	----	0.020	% Mg	----	----	----	<0.020	----	
Acid Reacted Magnesium (23U)	----	0.020	% Mg	----	----	----	<0.020	----	
Acidity - Acid Reacted Magnesium (a-23U)	----	10	mole H+ / t	----	----	----	<10	----	
sulfidic - Acid Reacted Magnesium (s-23U)	----	0.020	% S	----	----	----	<0.020	----	
EA029-H: Acid Base Accounting									



Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	BH01_0.2	BH01_1.0	BH01_2.0	BH01_4.0	BH01_5.5
Sampling date / time					08-Feb-2022 00:00	08-Feb-2022 00:00	08-Feb-2022 00:00	08-Feb-2022 00:00	08-Feb-2022 00:00
Compound	CAS Number	LOR	Unit		ES2204270-001	ES2204270-003	ES2204270-004	ES2204270-006	ES2204270-007
					Result	Result	Result	Result	Result
EA029-H: Acid Base Accounting - Continued									
ANC Fineness Factor	----	0.5	-	----	----	----	----	1.5	----
Net Acidity (sulfur units)	----	0.02	% S	----	----	----	----	<0.02	----
Net Acidity (acidity units)	----	10	mole H+ / t	----	----	----	----	<10	----
Liming Rate	----	1	kg CaCO3/t	----	----	----	----	<1	----
Net Acidity excluding ANC (sulfur units)	----	0.02	% S	----	----	----	----	<0.02	----
Net Acidity excluding ANC (acidity units)	----	10	mole H+ / t	----	----	----	----	<10	----
Liming Rate excluding ANC	----	1	kg CaCO3/t	----	----	----	----	<1	----
EA055: Moisture Content (Dried @ 105-110°C)									
Moisture Content	----	0.1	%	----	----	----	16.9	----	----
Moisture Content	----	1.0	%	----	11.6	6.0	----	----	17.9
EA200: AS 4964 - 2004 Identification of Asbestos in Soils									
Asbestos Detected	1332-21-4	0.1	g/kg	No	----	----	----	----	----
Asbestos (Trace)	1332-21-4	5	Fibres	No	----	----	----	----	----
Asbestos Type	1332-21-4	-	--	-	----	----	----	----	----
Synthetic Mineral Fibre	----	0.1	g/kg	No	----	----	----	----	----
Organic Fibre	----	0.1	g/kg	No	----	----	----	----	----
Sample weight (dry)	----	0.01	g	168	----	----	----	----	----
APPROVED IDENTIFIER:	----	-	--	B.SCHRADER	----	----	----	----	----
EG005(ED093)T: Total Metals by ICP-AES									
Arsenic	7440-38-2	5	mg/kg	17	<5	----	----	----	<5
Cadmium	7440-43-9	1	mg/kg	<1	<1	----	----	----	<1
Chromium	7440-47-3	2	mg/kg	15	3	----	----	----	14
Copper	7440-50-8	5	mg/kg	293	18	----	----	----	12
Lead	7439-92-1	5	mg/kg	772	36	----	----	----	5
Nickel	7440-02-0	2	mg/kg	37	3	----	----	----	8
Zinc	7440-66-6	5	mg/kg	242	46	----	----	----	34
EG035T: Total Recoverable Mercury by FIMS									
Mercury	7439-97-6	0.1	mg/kg	0.3	<0.1	----	----	----	<0.1
EP066: Polychlorinated Biphenyls (PCB)									
Total Polychlorinated biphenyls	----	0.1	mg/kg	<0.1	<0.1	----	----	----	<0.1
EP068A: Organochlorine Pesticides (OC)									
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



Analytical Results

Sub-Matrix: SOIL
 (Matrix: SOIL)

Sample ID

				BH01_0.2	BH01_1.0	BH01_2.0	BH01_4.0	BH01_5.5
Sampling date / time				08-Feb-2022 00:00	08-Feb-2022 00:00	08-Feb-2022 00:00	08-Feb-2022 00:00	08-Feb-2022 00:00
Compound	CAS Number	LOR	Unit	ES2204270-001	ES2204270-003	ES2204270-004	ES2204270-006	ES2204270-007
				Result	Result	Result	Result	Result
EP068A: Organochlorine Pesticides (OC) - Continued								
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
^ Total Chlordane (sum)	----	0.05	mg/kg	<0.05	<0.05	----	----	<0.05
trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	<0.05	----	----	<0.05
alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	<0.05	----	----	<0.05
cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	<0.05	----	----	<0.05
Dieldrin	60-57-1	0.05	mg/kg	<0.05	<0.05	----	----	<0.05
4,4'-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	----	----	<0.05
Endrin	72-20-8	0.05	mg/kg	<0.05	<0.05	----	----	<0.05
beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	<0.05	----	----	<0.05
^ Endosulfan (sum)	115-29-7	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
Endrin aldehyde	7421-93-4	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	0.2	mg/kg	<0.2	<0.2	----	----	<0.2
Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	<0.05	----	----	<0.05
Methoxychlor	72-43-5	0.2	mg/kg	<0.2	<0.2	----	----	<0.2
^ Sum of Aldrin + Dieldrin	309-00-2/60-57-1	0.05	mg/kg	<0.05	<0.05	----	----	<0.05
^ Sum of DDD + DDE + DDT	72-54-8/72-55-9/50-2	0.05	mg/kg	<0.05	<0.05	----	----	<0.05
EP068B: Organophosphorus Pesticides (OP)								
Dichlorvos	62-73-7	0.05	mg/kg	<0.05	<0.05	----	----	<0.05
Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	<0.05	----	----	<0.05
Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	<0.2	----	----	<0.2
Dimethoate	60-51-5	0.05	mg/kg	<0.05	<0.05	----	----	<0.05
Diazinon	333-41-5	0.05	mg/kg	<0.05	<0.05	----	----	<0.05
Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	<0.05	----	----	<0.05
Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	<0.2	----	----	<0.2
Malathion	121-75-5	0.05	mg/kg	<0.05	<0.05	----	----	<0.05
Fenthion	55-38-9	0.05	mg/kg	<0.05	<0.05	----	----	<0.05
Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	<0.05	----	----	<0.05
Parathion	56-38-2	0.2	mg/kg	<0.2	<0.2	----	----	<0.2



Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	BH01_0.2	BH01_1.0	BH01_2.0	BH01_4.0	BH01_5.5
Sampling date / time					08-Feb-2022 00:00	08-Feb-2022 00:00	08-Feb-2022 00:00	08-Feb-2022 00:00	08-Feb-2022 00:00
Compound	CAS Number	LOR	Unit		ES2204270-001	ES2204270-003	ES2204270-004	ES2204270-006	ES2204270-007
					Result	Result	Result	Result	Result
EP068B: Organophosphorus Pesticides (OP) - Continued									
Pirimphos-ethyl	23505-41-1	0.05	mg/kg		<0.05	<0.05	----	----	<0.05
Chlorfenvinphos	470-90-6	0.05	mg/kg		<0.05	<0.05	----	----	<0.05
Bromophos-ethyl	4824-78-6	0.05	mg/kg		<0.05	<0.05	----	----	<0.05
Fenamiphos	22224-92-6	0.05	mg/kg		<0.05	<0.05	----	----	<0.05
Prothiofos	34643-46-4	0.05	mg/kg		<0.05	<0.05	----	----	<0.05
Ethion	563-12-2	0.05	mg/kg		<0.05	<0.05	----	----	<0.05
Carbophenothion	786-19-6	0.05	mg/kg		<0.05	<0.05	----	----	<0.05
Azinphos Methyl	86-50-0	0.05	mg/kg		<0.05	<0.05	----	----	<0.05
EP074A: Monocyclic Aromatic Hydrocarbons									
Styrene	100-42-5	0.5	mg/kg		<0.5	<0.5	----	----	----
Isopropylbenzene	98-82-8	0.5	mg/kg		<0.5	<0.5	----	----	----
n-Propylbenzene	103-65-1	0.5	mg/kg		<0.5	<0.5	----	----	----
1,3,5-Trimethylbenzene	108-67-8	0.5	mg/kg		<0.5	<0.5	----	----	----
sec-Butylbenzene	135-98-8	0.5	mg/kg		<0.5	<0.5	----	----	----
1,2,4-Trimethylbenzene	95-63-6	0.5	mg/kg		<0.5	<0.5	----	----	----
tert-Butylbenzene	98-06-6	0.5	mg/kg		<0.5	<0.5	----	----	----
p-Isopropyltoluene	99-87-6	0.5	mg/kg		<0.5	<0.5	----	----	----
n-Butylbenzene	104-51-8	0.5	mg/kg		<0.5	<0.5	----	----	----
EP074B: Oxygenated Compounds									
Vinyl Acetate	108-05-4	5	mg/kg		<5	<5	----	----	----
2-Butanone (MEK)	78-93-3	5	mg/kg		<5	<5	----	----	----
4-Methyl-2-pentanone (MIBK)	108-10-1	5	mg/kg		<5	<5	----	----	----
2-Hexanone (MBK)	591-78-6	5	mg/kg		<5	<5	----	----	----
EP074C: Sulfonated Compounds									
Carbon disulfide	75-15-0	0.5	mg/kg		<0.5	<0.5	----	----	----
EP074D: Fumigants									
2,2-Dichloropropane	594-20-7	0.5	mg/kg		<0.5	<0.5	----	----	----
1,2-Dichloropropane	78-87-5	0.5	mg/kg		<0.5	<0.5	----	----	----
cis-1,3-Dichloropropylene	10061-01-5	0.5	mg/kg		<0.5	<0.5	----	----	----
trans-1,3-Dichloropropylene	10061-02-6	0.5	mg/kg		<0.5	<0.5	----	----	----
1,2-Dibromoethane (EDB)	106-93-4	0.5	mg/kg		<0.5	<0.5	----	----	----
EP074E: Halogenated Aliphatic Compounds									
Dichlorodifluoromethane	75-71-8	5	mg/kg		<5	<5	----	----	----
Chloromethane	74-87-3	5	mg/kg		<5	<5	----	----	----



Analytical Results

Sub-Matrix: SOIL
 (Matrix: SOIL)

Sample ID

				BH01_0.2	BH01_1.0	BH01_2.0	BH01_4.0	BH01_5.5
Sampling date / time				08-Feb-2022 00:00	08-Feb-2022 00:00	08-Feb-2022 00:00	08-Feb-2022 00:00	08-Feb-2022 00:00
Compound	CAS Number	LOR	Unit	ES2204270-001	ES2204270-003	ES2204270-004	ES2204270-006	ES2204270-007
				Result	Result	Result	Result	Result
EP074E: Halogenated Aliphatic Compounds - Continued								
Vinyl chloride	75-01-4	5	mg/kg	<5	<5	----	----	----
Bromomethane	74-83-9	5	mg/kg	<5	<5	----	----	----
Chloroethane	75-00-3	5	mg/kg	<5	<5	----	----	----
Trichlorofluoromethane	75-69-4	5	mg/kg	<5	<5	----	----	----
1,1-Dichloroethene	75-35-4	0.5	mg/kg	<0.5	<0.5	----	----	----
Iodomethane	74-88-4	0.5	mg/kg	<0.5	<0.5	----	----	----
trans-1,2-Dichloroethene	156-60-5	0.5	mg/kg	<0.5	<0.5	----	----	----
1,1-Dichloroethane	75-34-3	0.5	mg/kg	<0.5	<0.5	----	----	----
cis-1,2-Dichloroethene	156-59-2	0.5	mg/kg	<0.5	<0.5	----	----	----
1,1,1-Trichloroethane	71-55-6	0.5	mg/kg	<0.5	<0.5	----	----	----
1,1-Dichloropropylene	563-58-6	0.5	mg/kg	<0.5	<0.5	----	----	----
Carbon Tetrachloride	56-23-5	0.5	mg/kg	<0.5	<0.5	----	----	----
1,2-Dichloroethane	107-06-2	0.5	mg/kg	<0.5	<0.5	----	----	----
Trichloroethene	79-01-6	0.5	mg/kg	<0.5	<0.5	----	----	----
Dibromomethane	74-95-3	0.5	mg/kg	<0.5	<0.5	----	----	----
1,1,2-Trichloroethane	79-00-5	0.5	mg/kg	<0.5	<0.5	----	----	----
1,3-Dichloropropane	142-28-9	0.5	mg/kg	<0.5	<0.5	----	----	----
Tetrachloroethene	127-18-4	0.5	mg/kg	<0.5	<0.5	----	----	----
1,1,1,2-Tetrachloroethane	630-20-6	0.5	mg/kg	<0.5	<0.5	----	----	----
trans-1,4-Dichloro-2-butene	110-57-6	0.5	mg/kg	<0.5	<0.5	----	----	----
cis-1,4-Dichloro-2-butene	1476-11-5	0.5	mg/kg	<0.5	<0.5	----	----	----
1,1,2,2-Tetrachloroethane	79-34-5	0.5	mg/kg	<0.5	<0.5	----	----	----
1,2,3-Trichloropropane	96-18-4	0.5	mg/kg	<0.5	<0.5	----	----	----
Pentachloroethane	76-01-7	0.5	mg/kg	<0.5	<0.5	----	----	----
1,2-Dibromo-3-chloropropane	96-12-8	0.5	mg/kg	<0.5	<0.5	----	----	----
EP074F: Halogenated Aromatic Compounds								
Chlorobenzene	108-90-7	0.5	mg/kg	<0.5	<0.5	----	----	----
Bromobenzene	108-86-1	0.5	mg/kg	<0.5	<0.5	----	----	----
2-Chlorotoluene	95-49-8	0.5	mg/kg	<0.5	<0.5	----	----	----
4-Chlorotoluene	106-43-4	0.5	mg/kg	<0.5	<0.5	----	----	----
1,2,3-Trichlorobenzene	87-61-6	0.5	mg/kg	<0.5	<0.5	----	----	----
EP074G: Trihalomethanes								
Chloroform	67-66-3	0.5	mg/kg	<0.5	<0.5	----	----	----
Bromodichloromethane	75-27-4	0.5	mg/kg	<0.5	<0.5	----	----	----



Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	BH01_0.2	BH01_1.0	BH01_2.0	BH01_4.0	BH01_5.5
Sampling date / time					08-Feb-2022 00:00	08-Feb-2022 00:00	08-Feb-2022 00:00	08-Feb-2022 00:00	08-Feb-2022 00:00
Compound	CAS Number	LOR	Unit		ES2204270-001	ES2204270-003	ES2204270-004	ES2204270-006	ES2204270-007
					Result	Result	Result	Result	Result
EP074G: Trihalomethanes - Continued									
Dibromochloromethane	124-48-1	0.5	mg/kg		<0.5	<0.5	----	----	----
Bromoform	75-25-2	0.5	mg/kg		<0.5	<0.5	----	----	----
EP075(SIM)A: Phenolic Compounds									
Phenol	108-95-2	0.5	mg/kg		<0.5	<0.5	----	----	<0.5
2-Chlorophenol	95-57-8	0.5	mg/kg		<0.5	<0.5	----	----	<0.5
2-Methylphenol	95-48-7	0.5	mg/kg		<0.5	<0.5	----	----	<0.5
3- & 4-Methylphenol	1319-77-3	1	mg/kg		<1	<1	----	----	<1
2-Nitrophenol	88-75-5	0.5	mg/kg		<0.5	<0.5	----	----	<0.5
2,4-Dimethylphenol	105-67-9	0.5	mg/kg		<0.5	<0.5	----	----	<0.5
2,4-Dichlorophenol	120-83-2	0.5	mg/kg		<0.5	<0.5	----	----	<0.5
2,6-Dichlorophenol	87-65-0	0.5	mg/kg		<0.5	<0.5	----	----	<0.5
4-Chloro-3-methylphenol	59-50-7	0.5	mg/kg		<0.5	<0.5	----	----	<0.5
2,4,6-Trichlorophenol	88-06-2	0.5	mg/kg		<0.5	<0.5	----	----	<0.5
2,4,5-Trichlorophenol	95-95-4	0.5	mg/kg		<0.5	<0.5	----	----	<0.5
Pentachlorophenol	87-86-5	2	mg/kg		<2	<2	----	----	<2
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons									
Naphthalene	91-20-3	0.5	mg/kg		<0.5	<0.5	----	----	<0.5
Acenaphthylene	208-96-8	0.5	mg/kg		<0.5	<0.5	----	----	<0.5
Acenaphthene	83-32-9	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		0.9	<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		1.9	0.6	----	----	<0.5
Pyrene	129-00-0	0.5	mg/kg		2.0	0.5	----	----	<0.5
Benz(a)anthracene	56-55-3	0.5	mg/kg		1.4	<0.5	----	----	<0.5
Chrysene	218-01-9	0.5	mg/kg		1.2	<0.5	----	----	<0.5
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg		2.0	<0.5	----	----	<0.5
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg		0.8	<0.5	----	----	<0.5
Benzo(a)pyrene	50-32-8	0.5	mg/kg		1.5	<0.5	----	----	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg		1.0	<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		0.9	<0.5	----	----	<0.5
^ Sum of polycyclic aromatic hydrocarbons	-----	0.5	mg/kg		13.6	1.1	----	----	<0.5
^ Benzo(a)pyrene TEQ (zero)	-----	0.5	mg/kg		2.0	<0.5	----	----	<0.5



Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	BH01_0.2	BH01_1.0	BH01_2.0	BH01_4.0	BH01_5.5
Sampling date / time					08-Feb-2022 00:00	08-Feb-2022 00:00	08-Feb-2022 00:00	08-Feb-2022 00:00	08-Feb-2022 00:00
Compound	CAS Number	LOR	Unit		ES2204270-001	ES2204270-003	ES2204270-004	ES2204270-006	ES2204270-007
					Result	Result	Result	Result	Result
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued									
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg		2.3	0.6	----	----	0.6
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg		2.5	1.2	----	----	1.2
EP075B: Polynuclear Aromatic Hydrocarbons									
2-Methylnaphthalene	91-57-6	0.5	mg/kg		<0.5	<0.5	----	----	----
2-Chloronaphthalene	91-58-7	0.5	mg/kg		<0.5	<0.5	----	----	----
N-2-Fluorenyl Acetamide	53-96-3	0.5	mg/kg		<0.5	<0.5	----	----	----
7.12-Dimethylbenz(a)anthracene	57-97-6	0.5	mg/kg		<0.5	<0.5	----	----	----
3-Methylcholanthrene	56-49-5	0.5	mg/kg		<0.5	<0.5	----	----	----
EP075C: Phthalate Esters									
Dimethyl phthalate	131-11-3	0.5	mg/kg		<0.5	<0.5	----	----	----
Diethyl phthalate	84-66-2	0.5	mg/kg		<0.5	<0.5	----	----	----
Di-n-butyl phthalate	84-74-2	0.5	mg/kg		1.0	<0.5	----	----	----
Butyl benzyl phthalate	85-68-7	0.5	mg/kg		<0.5	<0.5	----	----	----
bis(2-ethylhexyl) phthalate	117-81-7	5.0	mg/kg		<5.0	<5.0	----	----	----
Di-n-octylphthalate	117-84-0	0.5	mg/kg		<0.5	<0.5	----	----	----
EP075D: Nitrosamines									
N-Nitrosomethylethylamine	10595-95-6	0.5	mg/kg		<0.5	<0.5	----	----	----
N-Nitrosodiethylamine	55-18-5	0.5	mg/kg		<0.5	<0.5	----	----	----
N-Nitrosopyrrolidine	930-55-2	1.0	mg/kg		<1.0	<1.0	----	----	----
N-Nitrosomorpholine	59-89-2	0.5	mg/kg		<0.5	<0.5	----	----	----
N-Nitrosodi-n-propylamine	621-64-7	0.5	mg/kg		<0.5	<0.5	----	----	----
N-Nitrosopiperidine	100-75-4	0.5	mg/kg		<0.5	<0.5	----	----	----
N-Nitrosodibutylamine	924-16-3	0.5	mg/kg		<0.5	<0.5	----	----	----
N-Nitrosodiphenyl & Diphenylamine	86-30-6 122-39-4	1.0	mg/kg		<1.0	<1.0	----	----	----
Methapyrilene	91-80-5	0.5	mg/kg		<0.5	<0.5	----	----	----
EP075E: Nitroaromatics and Ketones									
2-Picoline	109-06-8	0.5	mg/kg		<0.5	<0.5	----	----	----
Acetophenone	98-86-2	0.5	mg/kg		<0.5	<0.5	----	----	----
Nitrobenzene	98-95-3	0.5	mg/kg		<0.5	<0.5	----	----	----
Isophorone	78-59-1	0.5	mg/kg		<0.5	<0.5	----	----	----
2,6-Dinitrotoluene	606-20-2	1.0	mg/kg		<1.0	<1.0	----	----	----
2,4-Dinitrotoluene	121-14-2	1.0	mg/kg		<1.0	<1.0	----	----	----
1-Naphthylamine	134-32-7	0.5	mg/kg		<0.5	<0.5	----	----	----



Analytical Results

Sub-Matrix: SOIL
 (Matrix: SOIL)

Sample ID

				BH01_0.2	BH01_1.0	BH01_2.0	BH01_4.0	BH01_5.5
Sampling date / time				08-Feb-2022 00:00	08-Feb-2022 00:00	08-Feb-2022 00:00	08-Feb-2022 00:00	08-Feb-2022 00:00
Compound	CAS Number	LOR	Unit	ES2204270-001	ES2204270-003	ES2204270-004	ES2204270-006	ES2204270-007
				Result	Result	Result	Result	Result
EP075E: Nitroaromatics and Ketones - Continued								
4-Nitroquinoline-N-oxide	56-57-5	0.5	mg/kg	<0.5	<0.5	----	----	----
5-Nitro-o-toluidine	99-55-8	0.5	mg/kg	<0.5	<0.5	----	----	----
Azobenzene	103-33-3	1	mg/kg	<1	<1	----	----	----
1,3,5-Trinitrobenzene	99-35-4	0.5	mg/kg	<0.5	<0.5	----	----	----
Phenacetin	62-44-2	0.5	mg/kg	<0.5	<0.5	----	----	----
4-Aminobiphenyl	92-67-1	0.5	mg/kg	<0.5	<0.5	----	----	----
Pentachloronitrobenzene	82-68-8	0.5	mg/kg	<0.5	<0.5	----	----	----
Pronamide	23950-58-5	0.5	mg/kg	<0.5	<0.5	----	----	----
Dimethylaminoazobenzene	60-11-7	0.5	mg/kg	<0.5	<0.5	----	----	----
Chlorobenzilate	510-15-6	0.5	mg/kg	<0.5	<0.5	----	----	----
EP075F: Haloethers								
Bis(2-chloroethyl) ether	111-44-4	0.5	mg/kg	<0.5	<0.5	----	----	----
Bis(2-chloroethoxy) methane	111-91-1	0.5	mg/kg	<0.5	<0.5	----	----	----
4-Chlorophenyl phenyl ether	7005-72-3	0.5	mg/kg	<0.5	<0.5	----	----	----
4-Bromophenyl phenyl ether	101-55-3	0.5	mg/kg	<0.5	<0.5	----	----	----
EP075G: Chlorinated Hydrocarbons								
1,3-Dichlorobenzene	541-73-1	0.5	mg/kg	<0.5	<0.5	----	----	----
1,4-Dichlorobenzene	106-46-7	0.5	mg/kg	<0.5	<0.5	----	----	----
1,2-Dichlorobenzene	95-50-1	0.5	mg/kg	<0.5	<0.5	----	----	----
Hexachloroethane	67-72-1	0.5	mg/kg	<0.5	<0.5	----	----	----
1,2,4-Trichlorobenzene	120-82-1	0.5	mg/kg	<0.5	<0.5	----	----	----
Hexachloropropylene	1888-71-7	0.5	mg/kg	<0.5	<0.5	----	----	----
Hexachlorobutadiene	87-68-3	0.5	mg/kg	<0.5	<0.5	----	----	----
Hexachlorocyclopentadiene	77-47-4	2.5	mg/kg	<2.5	<2.5	----	----	----
Pentachlorobenzene	608-93-5	0.5	mg/kg	<0.5	<0.5	----	----	----
Hexachlorobenzene (HCB)	118-74-1	1.0	mg/kg	<1.0	<1.0	----	----	----
EP075H: Anilines and Benzidines								
Aniline	62-53-3	0.5	mg/kg	<0.5	<0.5	----	----	----
4-Chloroaniline	106-47-8	0.5	mg/kg	<0.5	<0.5	----	----	----
2-Nitroaniline	88-74-4	1.0	mg/kg	<1.0	<1.0	----	----	----
3-Nitroaniline	99-09-2	1.0	mg/kg	<1.0	<1.0	----	----	----
Dibenzofuran	132-64-9	0.5	mg/kg	<0.5	<0.5	----	----	----
4-Nitroaniline	100-01-6	0.5	mg/kg	<0.5	<0.5	----	----	----
Carbazole	86-74-8	0.5	mg/kg	<0.5	<0.5	----	----	----



Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	BH01_0.2	BH01_1.0	BH01_2.0	BH01_4.0	BH01_5.5
Sampling date / time					08-Feb-2022 00:00	08-Feb-2022 00:00	08-Feb-2022 00:00	08-Feb-2022 00:00	08-Feb-2022 00:00
Compound	CAS Number	LOR	Unit		ES2204270-001	ES2204270-003	ES2204270-004	ES2204270-006	ES2204270-007
					Result	Result	Result	Result	Result
EP075H: Anilines and Benzidines - Continued									
3,3'-Dichlorobenzidine	91-94-1	0.5	mg/kg		<0.5	<0.5	----	----	----
EP075I: Organochlorine Pesticides									
alpha-BHC	319-84-6	0.5	mg/kg		<0.5	<0.5	----	----	----
beta-BHC	319-85-7	0.5	mg/kg		<0.5	<0.5	----	----	----
gamma-BHC	58-89-9	0.5	mg/kg		<0.5	<0.5	----	----	----
delta-BHC	319-86-8	0.5	mg/kg		<0.5	<0.5	----	----	----
Heptachlor	76-44-8	0.5	mg/kg		<0.5	<0.5	----	----	----
Aldrin	309-00-2	0.5	mg/kg		<0.5	<0.5	----	----	----
Heptachlor epoxide	1024-57-3	0.5	mg/kg		<0.5	<0.5	----	----	----
alpha-Endosulfan	959-98-8	0.5	mg/kg		<0.5	<0.5	----	----	----
4,4'-DDE	72-55-9	0.5	mg/kg		<0.5	<0.5	----	----	----
Dieldrin	60-57-1	0.5	mg/kg		<0.5	<0.5	----	----	----
Endrin	72-20-8	0.5	mg/kg		<0.5	<0.5	----	----	----
beta-Endosulfan	33213-65-9	0.5	mg/kg		<0.5	<0.5	----	----	----
4,4'-DDD	72-54-8	0.5	mg/kg		<0.5	<0.5	----	----	----
Endosulfan sulfate	1031-07-8	0.5	mg/kg		<0.5	<0.5	----	----	----
4,4'-DDT	50-29-3	1.0	mg/kg		<1.0	<1.0	----	----	----
EP075J: Organophosphorus Pesticides									
Dichlorvos	62-73-7	0.5	mg/kg		<0.5	<0.5	----	----	----
Dimethoate	60-51-5	0.5	mg/kg		<0.5	<0.5	----	----	----
Diazinon	333-41-5	0.5	mg/kg		<0.5	<0.5	----	----	----
Chlorpyrifos-methyl	5598-13-0	0.5	mg/kg		<0.5	<0.5	----	----	----
Malathion	121-75-5	0.5	mg/kg		<0.5	<0.5	----	----	----
Fenthion	55-38-9	0.5	mg/kg		<0.5	<0.5	----	----	----
Chlorpyrifos	2921-88-2	0.5	mg/kg		<0.5	<0.5	----	----	----
Pirimphos-ethyl	23505-41-1	0.5	mg/kg		<0.5	<0.5	----	----	----
Chlorfenvinphos	470-90-6	0.5	mg/kg		<0.5	<0.5	----	----	----
Prothiofos	34643-46-4	0.5	mg/kg		<0.5	<0.5	----	----	----
Ethion	563-12-2	0.5	mg/kg		<0.5	<0.5	----	----	----
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	----	10	mg/kg		<10	<10	----	----	<10
C10 - C14 Fraction	----	50	mg/kg		<50	<50	----	----	<50
C15 - C28 Fraction	----	100	mg/kg		<100	<100	----	----	<100
C29 - C36 Fraction	----	100	mg/kg		<100	<100	----	----	<100

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	BH01_0.2	BH01_1.0	BH01_2.0	BH01_4.0	BH01_5.5
Sampling date / time				08-Feb-2022 00:00	08-Feb-2022 00:00	08-Feb-2022 00:00	08-Feb-2022 00:00	08-Feb-2022 00:00	
Compound	CAS Number	LOR	Unit	ES2204270-001	ES2204270-003	ES2204270-004	ES2204270-006	ES2204270-007	
				Result	Result	Result	Result	Result	
EP080/071: Total Petroleum Hydrocarbons - Continued									
^ C10 - C36 Fraction (sum)				----	50	mg/kg	<50	<50	
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
C6 - C10 Fraction				C6_C10	10	mg/kg	<10	<10	
^ C6 - C10 Fraction minus BTEX (F1)				C6_C10-BTEX	10	mg/kg	<10	<10	
>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	
EP080: BTEXN									
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	
ortho-Xylene				95-47-6	0.5	mg/kg	<0.5	<0.5	
^ Sum of BTEX				----	0.2	mg/kg	<0.2	<0.2	
^ Total Xylenes				----	0.5	mg/kg	<0.5	<0.5	
Naphthalene				91-20-3	1	mg/kg	<1	<1	
EP231A: Perfluoroalkyl Sulfonic Acids									
Perfluorobutane sulfonic acid (PFBS)				375-73-5	0.0002	mg/kg	<0.0002	<0.0002	
Perfluorohexane sulfonic acid (PFHxS)				355-46-4	0.0002	mg/kg	<0.0002	<0.0002	
Perfluorooctane sulfonic acid (PFOS)				1763-23-1	0.0002	mg/kg	<0.0002	<0.0002	
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	
EP231D: (n:2) Fluorotelomer Sulfonic Acids									



Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	BH01_0.2	BH01_1.0	BH01_2.0	BH01_4.0	BH01_5.5
Sampling date / time					08-Feb-2022 00:00	08-Feb-2022 00:00	08-Feb-2022 00:00	08-Feb-2022 00:00	08-Feb-2022 00:00
Compound	CAS Number	LOR	Unit		ES2204270-001	ES2204270-003	ES2204270-004	ES2204270-006	ES2204270-007
					Result	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	----	<0.0005
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.0005	mg/kg		<0.0005	----	<0.0005	----	<0.0005
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.0005	mg/kg		<0.0005	----	<0.0005	----	<0.0005
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.0005	mg/kg		<0.0005	----	<0.0005	----	<0.0005
EP231P: PFAS Sums									
Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.0002	mg/kg		<0.0002	----	<0.0002	----	<0.0002
Sum of PFAS (WA DER List)	----	0.0002	mg/kg		<0.0002	----	<0.0002	----	<0.0002
EP066S: PCB Surrogate									
Decachlorobiphenyl	2051-24-3	0.1	%		110	98.1	----	----	98.0
EP068S: Organochlorine Pesticide Surrogate									
Dibromo-DDE	21655-73-2	0.05	%		104	87.0	----	----	93.1
EP068T: Organophosphorus Pesticide Surrogate									
DEF	78-48-8	0.05	%		121	95.8	----	----	95.2
EP074S: VOC Surrogates									
1,2-Dichloroethane-D4	17060-07-0	0.5	%		108	108	----	----	----
Toluene-D8	2037-26-5	0.5	%		108	112	----	----	----
4-Bromofluorobenzene	460-00-4	0.5	%		110	117	----	----	----
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	0.5	%		90.6	93.2	----	----	80.2
2-Chlorophenol-D4	93951-73-6	0.5	%		105	91.3	----	----	89.2
2,4,6-Tribromophenol	118-79-6	0.5	%		82.1	79.6	----	----	61.9
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	0.5	%		112	109	----	----	97.0
Anthracene-d10	1719-06-8	0.5	%		102	101	----	----	99.5
4-Terphenyl-d14	1718-51-0	0.5	%		103	93.7	----	----	79.1
EP075S: Acid Extractable Surrogates									
2-Fluorophenol	367-12-4	0.5	%		116	74.8	----	----	----
Phenol-d6	13127-88-3	0.5	%		122	82.3	----	----	----
2-Chlorophenol-D4	93951-73-6	0.5	%		126	86.1	----	----	----



Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	BH01_0.2	BH01_1.0	BH01_2.0	BH01_4.0	BH01_5.5
Sampling date / time					08-Feb-2022 00:00	08-Feb-2022 00:00	08-Feb-2022 00:00	08-Feb-2022 00:00	08-Feb-2022 00:00
Compound	CAS Number	LOR	Unit		ES2204270-001	ES2204270-003	ES2204270-004	ES2204270-006	ES2204270-007
					Result	Result	Result	Result	Result
EP075S: Acid Extractable Surrogates - Continued									
2,4,6-Tribromophenol	118-79-6	0.5	%		113	91.9	----	----	----
EP075T: Base/Neutral Extractable Surrogates									
Nitrobenzene-D5	4165-60-0	0.5	%		110	80.9	----	----	----
1,2-Dichlorobenzene-D4	2199-69-1	0.5	%		105	74.8	----	----	----
2-Fluorobiphenyl	321-60-8	0.5	%		116	71.9	----	----	----
Anthracene-d10	1719-06-8	0.5	%		126	107	----	----	----
4-Terphenyl-d14	1718-51-0	0.5	%		111	85.9	----	----	----
EP080S: TPH(V)/BTEX Surrogates									
1,2-Dichloroethane-D4	17060-07-0	0.2	%		79.4	79.4	----	----	93.1
Toluene-D8	2037-26-5	0.2	%		86.4	89.5	----	----	94.6
4-Bromofluorobenzene	460-00-4	0.2	%		81.5	86.9	----	----	96.2
EP231S: PFAS Surrogate									
13C4-PFOS	----	0.0002	%		114	----	96.5	----	99.0
13C8-PFOA	----	0.0002	%		93.5	----	89.0	----	95.0

Analytical Results

Descriptive Results

Sub-Matrix: SOIL		
Method: Compound	Sample ID - Sampling date / time	Analytical Results
EA200: AS 4964 - 2004 Identification of Asbestos in Soils		
EA200: Description	BH01_0.2 - 08-Feb-2022 00:00	A soil sample.



Surrogate Control Limits

Sub-Matrix: SOIL		Recovery Limits (%)	
Compound	CAS Number	Low	High
EP066S: PCB Surrogate			
Decachlorobiphenyl	2051-24-3	39	149
EP068S: Organochlorine Pesticide Surrogate			
Dibromo-DDE	21655-73-2	49	147
EP068T: Organophosphorus Pesticide Surrogate			
DEF	78-48-8	35	143
EP074S: VOC Surrogates			
1,2-Dichloroethane-D4	17060-07-0	64	130
Toluene-D8	2037-26-5	66	136
4-Bromofluorobenzene	460-00-4	60	122
EP075(SIM)S: Phenolic Compound Surrogates			
Phenol-d6	13127-88-3	63	123
2-Chlorophenol-D4	93951-73-6	66	122
2,4,6-Tribromophenol	118-79-6	40	138
EP075(SIM)T: PAH Surrogates			
2-Fluorobiphenyl	321-60-8	70	122
Anthracene-d10	1719-06-8	66	128
4-Terphenyl-d14	1718-51-0	65	129
EP075S: Acid Extractable Surrogates			
2-Fluorophenol	367-12-4	29	149
Phenol-d6	13127-88-3	32	128
2-Chlorophenol-D4	93951-73-6	32	128
2,4,6-Tribromophenol	118-79-6	13	121
EP075T: Base/Neutral Extractable Surrogates			
Nitrobenzene-D5	4165-60-0	33	125
1,2-Dichlorobenzene-D4	2199-69-1	34	108
2-Fluorobiphenyl	321-60-8	35	121
Anthracene-d10	1719-06-8	35	123
4-Terphenyl-d14	1718-51-0	33	125
EP080S: TPH(V)/BTEX Surrogates			
1,2-Dichloroethane-D4	17060-07-0	73	133
Toluene-D8	2037-26-5	74	132
4-Bromofluorobenzene	460-00-4	72	130
EP231S: PFAS Surrogate			
13C4-PFOS	----	60	120
13C8-PFOA	----	60	120



Inter-Laboratory Testing

Analysis conducted by ALS Brisbane, NATA accreditation no. 825, site no. 818 (Chemistry) 18958 (Biology).

(SOIL) EA003 :pH (field/fox)

(SOIL) EA029-D: Calcium Values

(SOIL) EA029-E: Magnesium Values

(SOIL) EA029-F: Excess Acid Neutralising Capacity

(SOIL) EA029-H: Acid Base Accounting

(SOIL) EA029-G: Retained Acidity

(SOIL) EA029-A: pH Measurements

(SOIL) EA029-C: Sulfur Trail

(SOIL) EA029-B: Acidity Trail

Analysis conducted by ALS Newcastle, NATA accreditation no. 825, site no. 1656 (Chemistry) 9854 (Biology).

(SOIL) EA200: AS 4964 - 2004 Identification of Asbestos in Soils

CERTIFICATE OF ANALYSIS

Work Order	: ES2204462	Page	: 1 of 21
Client	: EP RISK MANAGEMENT	Laboratory	: Environmental Division Sydney
Contact	: HARRISON BLAKE	Contact	: Tyler Anderson
Address	: Level 4 73 Walker St North Sydney 2060	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
Telephone	: ----	Telephone	: +61 2 8784 8555
Project	: EP2515	Date Samples Received	: 09-Feb-2022 18:00
Order number	: ----	Date Analysis Commenced	: 14-Feb-2022
C-O-C number	: ----	Issue Date	: 23-Feb-2022 10:51
Sampler	: HARRISON BLAKE		
Site	: ----		
Quote number	: SYBQ/401/21		
No. of samples received	: 12		
No. of samples analysed	: 6		



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
- Descriptive Results
- Surrogate Control Limits

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

Signatories

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

<i>Signatories</i>	<i>Position</i>	<i>Accreditation Category</i>
Alana Smylie	Team Leader - Asbestos	Newcastle - Asbestos, Mayfield West, NSW
Ben Felgendrejeris	Senior Acid Sulfate Soil Chemist	Brisbane Acid Sulphate Soils, Stafford, QLD
Edwandy Fadjjar	Organic Coordinator	Sydney Organics, Smithfield, NSW
Franco Lentini	LCMS Coordinator	Sydney Inorganics, Smithfield, NSW
Franco Lentini	LCMS Coordinator	Sydney Organics, Smithfield, NSW
Ivan Taylor	Analyst	Sydney Inorganics, Smithfield, NSW
Sanjeshni Jyoti	Senior Chemist Volatiles	Sydney Organics, Smithfield, NSW



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.
- EP080: Where reported, Total Xylenes is the sum of the reported concentrations of m&p-Xylene and o-Xylene at or above the LOR.
- EP068: Where reported, Total Chlordane (sum) is the sum of the reported concentrations of cis-Chlordane and trans-Chlordane at or above the LOR.
- EP068: Where reported, Total OCP is the sum of the reported concentrations of all Organochlorine Pesticides at or above LOR.
- EP074: Where reported, Total Trihalomethanes is the sum of the reported concentrations of all Trihalomethanes at or above the LOR.
- EP074: Where reported, Total Xylenes is the sum of the reported concentrations of m&p-Xylene and o-Xylene at or above the LOR.
- EP074: Where reported, Sum of chlorinated hydrocarbons includes carbon tetrachloride, chlorobenzene, chloroform, 1,2-dichlorobenzene, 1,4-dichlorobenzene, 1,2-dichloroethane, 1,1-dichloroethene, cis-1,2-dichloroethene, trans-1,2-dichloroethene, 1,1,1,2-tetrachloroethane, 1,1,2,2-tetrachloroethane, 1,2,4-trichlorobenzene, 1,1,1-trichloroethane, 1,1,2-trichloroethane, trichloroethene, vinyl chloride, hexachlorobutadiene and methylene chloride.
- EP074: Where reported, Total Trimethylbenzenes is the sum of the reported concentrations of 1.2.3-Trimethylbenzene, 1.2.4-Trimethylbenzene and 1.3.5-Trimethylbenzene at or above the LOR.
- EP075(SIM): Where reported, Total Cresol is the sum of the reported concentrations of 2-Methylphenol and 3- & 4-Methylphenol at or above the LOR.
- EP231X: Sample ES2204462_001 required dilution due to sample matrix interferences. LOR values have been adjusted accordingly.
- EP075(SIM): Results of BH03_0.2 & BH03_0.2 Dup have been confirmed by re-extraction & re-analysis.
- ASS: EA029 (SPOCAS): Retained Acidity not required because pH KCl greater than or equal to 4.5
- ASS: EA029 (SPOCAS): Excess ANC not required because pH OX less than 6.5.
- EP075: Where reported, 'Sum of PAH' is the sum of the USEPA 16 priority PAHs
- ASS: EA029 (SPOCAS): Liming rate is calculated and reported on a dry weight basis assuming use of fine agricultural lime (CaCO₃) and using a safety factor of 1.5 to allow for non-homogeneous mixing and poor reactivity of lime. For conversion of Liming Rate from kg/t dry weight to kg/m³ in-situ soil, multiply reported results x wet bulk density of soil in t/m³.
- ASS: EA003 (NATA Field and F(ox) screening): pH F(ox) Reaction Rate: 1 - Slight; 2 - Moderate; 3 - Strong; 4 - Extreme
- EA200 'Am' Amosite (brown asbestos)
- EA200 'Cr' Crocidolite (blue asbestos)
- EA200 'Trace' - Asbestos fibres ("Free Fibres") detected by trace analysis per AS4964. The result can be interpreted that the sample contains detectable 'respirable' asbestos fibres
- EA200: Asbestos Identification Samples were analysed by Polarised Light Microscopy including dispersion staining.



- EA200 Legend
- EA200 'Ch' Chrysotile (white asbestos)
- EA200: 'UMF' Unknown Mineral Fibres. "-" indicates fibres detected may or may not be asbestos fibres. Confirmation by alternative techniques is recommended.
- Benzo(a)pyrene Toxicity Equivalent Quotient (TEQ) 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.
- EA200: For samples larger than 30g, the <2mm fraction may be sub-sampled prior to trace analysis as outlined in ISO23909:2008(E) Sect 6.3.2-2
- EA200: 'Yes' - Asbestos detected by polarised light microscopy including dispersion staining.
- EA200: 'No*' - No asbestos found, at the reporting limit of 0.1g/kg, by polarised light microscopy including dispersion staining. Asbestos material was detected and positively identified at concentrations estimated to be below 0.1g/kg.
- EA200: 'No' - No asbestos found at the reporting limit 0.1g/kg, by polarised light microscopy including dispersion staining.
- 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.

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	BH03_0.2	BH03_0.5	BH03_1.5	BH03_3.0	BH03_0.2 Dup
Sampling date / time				09-Feb-2022 00:00	09-Feb-2022 00:00	09-Feb-2022 00:00	09-Feb-2022 00:00	09-Feb-2022 00:00	
Compound	CAS Number	LOR	Unit	ES2204462-001	ES2204462-003	ES2204462-006	ES2204462-007	ES2204462-010	
				Result	Result	Result	Result	Result	
EA003 :pH (field/fox)									
pH (F)	----	0.1	pH Unit	----	----	----	7.6	----	
pH (Fox)	----	0.1	pH Unit	----	----	----	4.2	----	
Reaction Rate	----	1	Reaction Unit	----	----	----	2	----	
EA029-A: pH Measurements									
pH KCl (23A)	----	0.1	pH Unit	----	----	----	7.6	----	
pH OX (23B)	----	0.1	pH Unit	----	----	----	4.9	----	
EA029-B: Acidity Trail									
Titratable Actual Acidity (23F)	----	2	mole H+ / t	----	----	----	<2	----	
Titratable Peroxide Acidity (23G)	----	2	mole H+ / t	----	----	----	19	----	
Titratable Sulfidic Acidity (23H)	----	2	mole H+ / t	----	----	----	19	----	
sulfidic - Titratable Actual Acidity (s-23F)	----	0.020	% pyrite S	----	----	----	<0.020	----	
sulfidic - Titratable Peroxide Acidity (s-23G)	----	0.020	% pyrite S	----	----	----	0.031	----	
sulfidic - Titratable Sulfidic Acidity (s-23H)	----	0.020	% pyrite S	----	----	----	0.031	----	
EA029-C: Sulfur Trail									
KCl Extractable Sulfur (23Ce)	----	0.020	% S	----	----	----	<0.020	----	
Peroxide Sulfur (23De)	----	0.020	% S	----	----	----	0.024	----	
Peroxide Oxidisable Sulfur (23E)	----	0.020	% S	----	----	----	0.024	----	
acidity - Peroxide Oxidisable Sulfur (a-23E)	----	10	mole H+ / t	----	----	----	15	----	
EA029-D: Calcium Values									
KCl Extractable Calcium (23Vh)	----	0.020	% Ca	----	----	----	0.053	----	
Peroxide Calcium (23Wh)	----	0.020	% Ca	----	----	----	0.055	----	
Acid Reacted Calcium (23X)	----	0.020	% Ca	----	----	----	<0.020	----	
acidity - Acid Reacted Calcium (a-23X)	----	10	mole H+ / t	----	----	----	<10	----	
sulfidic - Acid Reacted Calcium (s-23X)	----	0.020	% S	----	----	----	<0.020	----	
EA029-E: Magnesium Values									
KCl Extractable Magnesium (23Sm)	----	0.020	% Mg	----	----	----	<0.020	----	
Peroxide Magnesium (23Tm)	----	0.020	% Mg	----	----	----	<0.020	----	
Acid Reacted Magnesium (23U)	----	0.020	% Mg	----	----	----	<0.020	----	
Acidity - Acid Reacted Magnesium (a-23U)	----	10	mole H+ / t	----	----	----	<10	----	
sulfidic - Acid Reacted Magnesium (s-23U)	----	0.020	% S	----	----	----	<0.020	----	
EA029-H: Acid Base Accounting									



Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	BH03_0.2	BH03_0.5	BH03_1.5	BH03_3.0	BH03_0.2 Dup
Sampling date / time					09-Feb-2022 00:00	09-Feb-2022 00:00	09-Feb-2022 00:00	09-Feb-2022 00:00	09-Feb-2022 00:00
Compound	CAS Number	LOR	Unit		ES2204462-001	ES2204462-003	ES2204462-006	ES2204462-007	ES2204462-010
					Result	Result	Result	Result	Result
EA029-H: Acid Base Accounting - Continued									
ANC Fineness Factor	----	0.5	-	----	----	----	----	1.5	----
Net Acidity (sulfur units)	----	0.02	% S	----	----	----	----	0.03	----
Net Acidity (acidity units)	----	10	mole H+ / t	----	----	----	----	18	----
Liming Rate	----	1	kg CaCO3/t	----	----	----	----	1	----
Net Acidity excluding ANC (sulfur units)	----	0.02	% S	----	----	----	----	0.02	----
Net Acidity excluding ANC (acidity units)	----	10	mole H+ / t	----	----	----	----	15	----
Liming Rate excluding ANC	----	1	kg CaCO3/t	----	----	----	----	1	----
EA055: Moisture Content (Dried @ 105-110°C)									
Moisture Content	----	1.0	%	----	13.0	9.6	23.0	19.9	12.7
EA200: AS 4964 - 2004 Identification of Asbestos in Soils									
Asbestos Detected	1332-21-4	0.1	g/kg	No	No	No	No	----	----
Asbestos (Trace)	1332-21-4	5	Fibres	No	No	No	No	----	----
Asbestos Type	1332-21-4	-	--	-	-	-	-	----	----
Synthetic Mineral Fibre	----	0.1	g/kg	No	No	No	No	----	----
Organic Fibre	----	0.1	g/kg	No	No	No	No	----	----
Sample weight (dry)	----	0.01	g	65.2	171	68.6	----	----	----
APPROVED IDENTIFIER:	----	-	--	A. SMYLIE	A. SMYLIE	A. SMYLIE	----	----	----
EG005(ED093)T: Total Metals by ICP-AES									
Arsenic	7440-38-2	5	mg/kg	85	29	41	<5	32	
Cadmium	7440-43-9	1	mg/kg	28	9	12	<1	9	
Chromium	7440-47-3	2	mg/kg	79	48	37	<2	41	
Copper	7440-50-8	5	mg/kg	3510	493	382	<5	374	
Lead	7439-92-1	5	mg/kg	196000	125000	6590	39	170000	
Nickel	7440-02-0	2	mg/kg	139	58	71	<2	48	
Zinc	7440-66-6	5	mg/kg	13900	6280	1640	11	7130	
EG035T: Total Recoverable Mercury by FIMS									
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	0.2	<0.1	<0.1	
EP066: Polychlorinated Biphenyls (PCB)									
Total Polychlorinated biphenyls	----	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1	
EP068A: Organochlorine Pesticides (OC)									
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	



Analytical Results

Sub-Matrix: SOIL
 (Matrix: SOIL)

Sample ID

				BH03_0.2	BH03_0.5	BH03_1.5	BH03_3.0	BH03_0.2 Dup
Sampling date / time				09-Feb-2022 00:00	09-Feb-2022 00:00	09-Feb-2022 00:00	09-Feb-2022 00:00	09-Feb-2022 00:00
Compound	CAS Number	LOR	Unit	ES2204462-001	ES2204462-003	ES2204462-006	ES2204462-007	ES2204462-010
				Result	Result	Result	Result	Result

EP068A: Organochlorine Pesticides (OC) - Continued

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
^ Total Chlordane (sum)	----	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
cis-Chlordane	5103-71-9	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
4,4'-DDE	72-55-9	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
beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
^ Endosulfan (sum)	115-29-7	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
Endrin aldehyde	7421-93-4	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	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Methoxychlor	72-43-5	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
^ Sum of Aldrin + Dieldrin	309-00-2/60-57-1	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
^ Sum of DDD + DDE + DDT	72-54-8/72-55-9/50-29-3	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05

EP068B: Organophosphorus Pesticides (OP)

Dichlorvos	62-73-7	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Dimethoate	60-51-5	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Diazinon	333-41-5	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	121-75-5	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Fenthion	55-38-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Parathion	56-38-2	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05



Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	BH03_0.2	BH03_0.5	BH03_1.5	BH03_3.0	BH03_0.2 Dup
Sampling date / time					09-Feb-2022 00:00	09-Feb-2022 00:00	09-Feb-2022 00:00	09-Feb-2022 00:00	09-Feb-2022 00:00
Compound	CAS Number	LOR	Unit		ES2204462-001	ES2204462-003	ES2204462-006	ES2204462-007	ES2204462-010
					Result	Result	Result	Result	Result
EP068B: Organophosphorus Pesticides (OP) - Continued									
Chlorfenvinphos	470-90-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Bromophos-ethyl	4824-78-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Fenamiphos	22224-92-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Prothiofos	34643-46-4	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Ethion	563-12-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Carbophenothion	786-19-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Azinphos Methyl	86-50-0	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
EP074A: Monocyclic Aromatic Hydrocarbons									
Styrene	100-42-5	0.5	mg/kg		<0.5	----	----	<0.5	----
Isopropylbenzene	98-82-8	0.5	mg/kg		<0.5	----	----	<0.5	----
n-Propylbenzene	103-65-1	0.5	mg/kg		<0.5	----	----	<0.5	----
1,3,5-Trimethylbenzene	108-67-8	0.5	mg/kg		<0.5	----	----	<0.5	----
sec-Butylbenzene	135-98-8	0.5	mg/kg		<0.5	----	----	<0.5	----
1,2,4-Trimethylbenzene	95-63-6	0.5	mg/kg		<0.5	----	----	<0.5	----
tert-Butylbenzene	98-06-6	0.5	mg/kg		<0.5	----	----	<0.5	----
p-Isopropyltoluene	99-87-6	0.5	mg/kg		<0.5	----	----	<0.5	----
n-Butylbenzene	104-51-8	0.5	mg/kg		<0.5	----	----	<0.5	----
EP074B: Oxygenated Compounds									
Vinyl Acetate	108-05-4	5	mg/kg		<5	----	----	<5	----
2-Butanone (MEK)	78-93-3	5	mg/kg		<5	----	----	<5	----
4-Methyl-2-pentanone (MIBK)	108-10-1	5	mg/kg		<5	----	----	<5	----
2-Hexanone (MBK)	591-78-6	5	mg/kg		<5	----	----	<5	----
EP074C: Sulfonated Compounds									
Carbon disulfide	75-15-0	0.5	mg/kg		<0.5	----	----	<0.5	----
EP074D: Fumigants									
2,2-Dichloropropane	594-20-7	0.5	mg/kg		<0.5	----	----	<0.5	----
1,2-Dichloropropane	78-87-5	0.5	mg/kg		<0.5	----	----	<0.5	----
cis-1,3-Dichloropropylene	10061-01-5	0.5	mg/kg		<0.5	----	----	<0.5	----
trans-1,3-Dichloropropylene	10061-02-6	0.5	mg/kg		<0.5	----	----	<0.5	----
1,2-Dibromoethane (EDB)	106-93-4	0.5	mg/kg		<0.5	----	----	<0.5	----
EP074E: Halogenated Aliphatic Compounds									
Dichlorodifluoromethane	75-71-8	5	mg/kg		<5	----	----	<5	----
Chloromethane	74-87-3	5	mg/kg		<5	----	----	<5	----
Vinyl chloride	75-01-4	5	mg/kg		<5	----	----	<5	----



Analytical Results

Sub-Matrix: SOIL
 (Matrix: SOIL)

Sample ID

				BH03_0.2	BH03_0.5	BH03_1.5	BH03_3.0	BH03_0.2 Dup
Sampling date / time				09-Feb-2022 00:00	09-Feb-2022 00:00	09-Feb-2022 00:00	09-Feb-2022 00:00	09-Feb-2022 00:00
Compound	CAS Number	LOR	Unit	ES2204462-001	ES2204462-003	ES2204462-006	ES2204462-007	ES2204462-010
				Result	Result	Result	Result	Result
EP074E: Halogenated Aliphatic Compounds - Continued								
Bromomethane	74-83-9	5	mg/kg	<5	----	----	<5	----
Chloroethane	75-00-3	5	mg/kg	<5	----	----	<5	----
Trichlorofluoromethane	75-69-4	5	mg/kg	<5	----	----	<5	----
1,1-Dichloroethene	75-35-4	0.5	mg/kg	<0.5	----	----	<0.5	----
Iodomethane	74-88-4	0.5	mg/kg	<0.5	----	----	<0.5	----
trans-1,2-Dichloroethene	156-60-5	0.5	mg/kg	<0.5	----	----	<0.5	----
1,1-Dichloroethane	75-34-3	0.5	mg/kg	<0.5	----	----	<0.5	----
cis-1,2-Dichloroethene	156-59-2	0.5	mg/kg	<0.5	----	----	<0.5	----
1,1,1-Trichloroethane	71-55-6	0.5	mg/kg	<0.5	----	----	<0.5	----
1,1-Dichloropropylene	563-58-6	0.5	mg/kg	<0.5	----	----	<0.5	----
Carbon Tetrachloride	56-23-5	0.5	mg/kg	<0.5	----	----	<0.5	----
1,2-Dichloroethane	107-06-2	0.5	mg/kg	<0.5	----	----	<0.5	----
Trichloroethene	79-01-6	0.5	mg/kg	<0.5	----	----	<0.5	----
Dibromomethane	74-95-3	0.5	mg/kg	<0.5	----	----	<0.5	----
1,1,2-Trichloroethane	79-00-5	0.5	mg/kg	<0.5	----	----	<0.5	----
1,3-Dichloropropane	142-28-9	0.5	mg/kg	<0.5	----	----	<0.5	----
Tetrachloroethene	127-18-4	0.5	mg/kg	<0.5	----	----	<0.5	----
1,1,1,2-Tetrachloroethane	630-20-6	0.5	mg/kg	<0.5	----	----	<0.5	----
trans-1,4-Dichloro-2-butene	110-57-6	0.5	mg/kg	<0.5	----	----	<0.5	----
cis-1,4-Dichloro-2-butene	1476-11-5	0.5	mg/kg	<0.5	----	----	<0.5	----
1,1,2,2-Tetrachloroethane	79-34-5	0.5	mg/kg	<0.5	----	----	<0.5	----
1,2,3-Trichloropropane	96-18-4	0.5	mg/kg	<0.5	----	----	<0.5	----
Pentachloroethane	76-01-7	0.5	mg/kg	<0.5	----	----	<0.5	----
1,2-Dibromo-3-chloropropane	96-12-8	0.5	mg/kg	<0.5	----	----	<0.5	----
EP074F: Halogenated Aromatic Compounds								
Chlorobenzene	108-90-7	0.5	mg/kg	<0.5	----	----	<0.5	----
Bromobenzene	108-86-1	0.5	mg/kg	<0.5	----	----	<0.5	----
2-Chlorotoluene	95-49-8	0.5	mg/kg	<0.5	----	----	<0.5	----
4-Chlorotoluene	106-43-4	0.5	mg/kg	<0.5	----	----	<0.5	----
1,2,3-Trichlorobenzene	87-61-6	0.5	mg/kg	<0.5	----	----	<0.5	----
EP074G: Trihalomethanes								
Chloroform	67-66-3	0.5	mg/kg	<0.5	----	----	<0.5	----
Bromodichloromethane	75-27-4	0.5	mg/kg	<0.5	----	----	<0.5	----
Dibromochloromethane	124-48-1	0.5	mg/kg	<0.5	----	----	<0.5	----



Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	BH03_0.2	BH03_0.5	BH03_1.5	BH03_3.0	BH03_0.2 Dup
Sampling date / time					09-Feb-2022 00:00	09-Feb-2022 00:00	09-Feb-2022 00:00	09-Feb-2022 00:00	09-Feb-2022 00:00
Compound	CAS Number	LOR	Unit		ES2204462-001	ES2204462-003	ES2204462-006	ES2204462-007	ES2204462-010
					Result	Result	Result	Result	Result
EP074G: Trihalomethanes - Continued									
Bromoform	75-25-2	0.5	mg/kg		<0.5	----	----	<0.5	----
EP075(SIM)A: Phenolic Compounds									
Phenol	108-95-2	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
2-Chlorophenol	95-57-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
2-Methylphenol	95-48-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
3- & 4-Methylphenol	1319-77-3	1	mg/kg		<1	<1	<1	<1	<1
2-Nitrophenol	88-75-5	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
2,4-Dimethylphenol	105-67-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
2,4-Dichlorophenol	120-83-2	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
2,6-Dichlorophenol	87-65-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
4-Chloro-3-methylphenol	59-50-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
2,4,6-Trichlorophenol	88-06-2	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
2,4,5-Trichlorophenol	95-95-4	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Pentachlorophenol	87-86-5	2	mg/kg		<2	<2	<2	<2	<2
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons									
Naphthalene	91-20-3	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
Acenaphthene	83-32-9	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		1.4	1.4	1.0	<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		2.2	2.0	1.9	<0.5	0.6
Pyrene	129-00-0	0.5	mg/kg		2.2	2.0	1.9	<0.5	0.6
Benz(a)anthracene	56-55-3	0.5	mg/kg		1.1	1.0	1.1	<0.5	<0.5
Chrysene	218-01-9	0.5	mg/kg		1.0	0.9	1.0	<0.5	<0.5
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg		1.4	1.2	1.5	<0.5	<0.5
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg		<0.5	<0.5	0.6	<0.5	<0.5
Benzo(a)pyrene	50-32-8	0.5	mg/kg		1.2	1.0	1.3	<0.5	<0.5
Indeno(1,2,3-cd)pyrene	193-39-5	0.5	mg/kg		0.7	0.6	0.7	<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		0.8	0.8	0.9	<0.5	<0.5
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg		12.5	11.4	11.9	<0.5	1.2
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg		1.5	1.3	1.7	<0.5	<0.5
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg		1.8	1.6	2.0	0.6	0.6



Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	BH03_0.2	BH03_0.5	BH03_1.5	BH03_3.0	BH03_0.2 Dup
Sampling date / time					09-Feb-2022 00:00	09-Feb-2022 00:00	09-Feb-2022 00:00	09-Feb-2022 00:00	09-Feb-2022 00:00
Compound	CAS Number	LOR	Unit		ES2204462-001	ES2204462-003	ES2204462-006	ES2204462-007	ES2204462-010
					Result	Result	Result	Result	Result
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued									
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg		2.1	1.8	2.2	1.2	1.2
EP075A: Phenolic Compounds									
Phenol	108-95-2	0.5	mg/kg		<0.5	----	----	<0.5	----
2-Chlorophenol	95-57-8	0.5	mg/kg		<0.5	----	----	<0.5	----
2-Methylphenol	95-48-7	0.5	mg/kg		<0.5	----	----	<0.5	----
3- & 4-Methylphenol	1319-77-3	0.5	mg/kg		<0.5	----	----	<0.5	----
2-Nitrophenol	88-75-5	0.5	mg/kg		<0.5	----	----	<0.5	----
2,4-Dimethylphenol	105-67-9	0.5	mg/kg		<0.5	----	----	<0.5	----
2,4-Dichlorophenol	120-83-2	0.5	mg/kg		<0.5	----	----	<0.5	----
2,6-Dichlorophenol	87-65-0	0.5	mg/kg		<0.5	----	----	<0.5	----
4-Chloro-3-methylphenol	59-50-7	0.5	mg/kg		<0.5	----	----	<0.5	----
2,4,6-Trichlorophenol	88-06-2	0.5	mg/kg		<0.5	----	----	<0.5	----
2,4,5-Trichlorophenol	95-95-4	0.5	mg/kg		<0.5	----	----	<0.5	----
Pentachlorophenol	87-86-5	1	mg/kg		<1	----	----	<1	----
EP075B: Polynuclear Aromatic Hydrocarbons									
Naphthalene	91-20-3	0.5	mg/kg		<0.5	----	----	<0.5	----
2-Methylnaphthalene	91-57-6	0.5	mg/kg		<0.5	----	----	<0.5	----
2-Chloronaphthalene	91-58-7	0.5	mg/kg		<0.5	----	----	<0.5	----
Acenaphthylene	208-96-8	0.5	mg/kg		<0.5	----	----	<0.5	----
Acenaphthene	83-32-9	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		2.1	----	----	<0.5	----
Anthracene	120-12-7	0.5	mg/kg		0.7	----	----	<0.5	----
Fluoranthene	206-44-0	0.5	mg/kg		3.2	----	----	<0.5	----
Pyrene	129-00-0	0.5	mg/kg		3.2	----	----	<0.5	----
N-2-Fluorenyl Acetamide	53-96-3	0.5	mg/kg		<0.5	----	----	<0.5	----
Benz(a)anthracene	56-55-3	0.5	mg/kg		1.6	----	----	<0.5	----
Chrysene	218-01-9	0.5	mg/kg		1.4	----	----	<0.5	----
Benzo(b+j) & Benzo(k)fluoranthene	205-99-2 207-08-9	1	mg/kg		3	----	----	<1	----
7,12-Dimethylbenz(a)anthracene	57-97-6	0.5	mg/kg		<0.5	----	----	<0.5	----
Benzo(a)pyrene	50-32-8	0.5	mg/kg		1.9	----	----	<0.5	----
3-Methylcholanthrene	56-49-5	0.5	mg/kg		<0.5	----	----	<0.5	----
Indeno(1,2,3.cd)pyrene	193-39-5	0.5	mg/kg		1.1	----	----	<0.5	----
Dibenz(a,h)anthracene	53-70-3	0.5	mg/kg		<0.5	----	----	<0.5	----



Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	BH03_0.2	BH03_0.5	BH03_1.5	BH03_3.0	BH03_0.2 Dup
Sampling date / time					09-Feb-2022 00:00	09-Feb-2022 00:00	09-Feb-2022 00:00	09-Feb-2022 00:00	09-Feb-2022 00:00
Compound	CAS Number	LOR	Unit		ES2204462-001	ES2204462-003	ES2204462-006	ES2204462-007	ES2204462-010
					Result	Result	Result	Result	Result
EP075B: Polynuclear Aromatic Hydrocarbons - Continued									
Benzo(g,h,i)perylene	191-24-2	0.5	mg/kg		1.3	----	----	<0.5	----
^ Sum of PAHs	----	0.5	mg/kg		19.5	----	----	<0.5	----
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg		2.5	----	----	<0.5	----
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg		2.7	----	----	0.6	----
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg		3.0	----	----	1.2	----
EP075C: Phthalate Esters									
Dimethyl phthalate	131-11-3	0.5	mg/kg		<0.5	----	----	<0.5	----
Diethyl phthalate	84-66-2	0.5	mg/kg		<0.5	----	----	<0.5	----
Di-n-butyl phthalate	84-74-2	0.5	mg/kg		<0.5	----	----	<0.5	----
Butyl benzyl phthalate	85-68-7	0.5	mg/kg		<0.5	----	----	<0.5	----
bis(2-ethylhexyl) phthalate	117-81-7	5.0	mg/kg		<5.0	----	----	<5.0	----
Di-n-octylphthalate	117-84-0	0.5	mg/kg		<0.5	----	----	<0.5	----
EP075D: Nitrosamines									
N-Nitrosomethylethylamine	10595-95-6	0.5	mg/kg		<0.5	----	----	<0.5	----
N-Nitrosodiethylamine	55-18-5	0.5	mg/kg		<0.5	----	----	<0.5	----
N-Nitrosopyrrolidine	930-55-2	1.0	mg/kg		<1.0	----	----	<1.0	----
N-Nitrosomorpholine	59-89-2	0.5	mg/kg		<0.5	----	----	<0.5	----
N-Nitrosodi-n-propylamine	621-64-7	0.5	mg/kg		<0.5	----	----	<0.5	----
N-Nitrosopiperidine	100-75-4	0.5	mg/kg		<0.5	----	----	<0.5	----
N-Nitrosodibutylamine	924-16-3	0.5	mg/kg		<0.5	----	----	<0.5	----
N-Nitrosodiphenyl & Diphenylamine	86-30-6 122-39-4	1.0	mg/kg		<1.0	----	----	<1.0	----
Methapyrilene	91-80-5	0.5	mg/kg		<0.5	----	----	<0.5	----
EP075E: Nitroaromatics and Ketones									
2-Picoline	109-06-8	0.5	mg/kg		<0.5	----	----	<0.5	----
Acetophenone	98-86-2	0.5	mg/kg		<0.5	----	----	<0.5	----
Nitrobenzene	98-95-3	0.5	mg/kg		<0.5	----	----	<0.5	----
Isophorone	78-59-1	0.5	mg/kg		<0.5	----	----	<0.5	----
2,6-Dinitrotoluene	606-20-2	1.0	mg/kg		<1.0	----	----	<1.0	----
2,4-Dinitrotoluene	121-14-2	1.0	mg/kg		<1.0	----	----	<1.0	----
1-Naphthylamine	134-32-7	0.5	mg/kg		<0.5	----	----	<0.5	----
4-Nitroquinoline-N-oxide	56-57-5	0.5	mg/kg		<0.5	----	----	<0.5	----
5-Nitro-o-toluidine	99-55-8	0.5	mg/kg		<0.5	----	----	<0.5	----
Azobenzene	103-33-3	1	mg/kg		<1	----	----	<1	----



Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	BH03_0.2	BH03_0.5	BH03_1.5	BH03_3.0	BH03_0.2 Dup
Sampling date / time					09-Feb-2022 00:00	09-Feb-2022 00:00	09-Feb-2022 00:00	09-Feb-2022 00:00	09-Feb-2022 00:00
Compound	CAS Number	LOR	Unit		ES2204462-001	ES2204462-003	ES2204462-006	ES2204462-007	ES2204462-010
					Result	Result	Result	Result	Result
EP075E: Nitroaromatics and Ketones - Continued									
1,3,5-Trinitrobenzene	99-35-4	0.5	mg/kg		<0.5	----	----	<0.5	----
Phenacetin	62-44-2	0.5	mg/kg		<0.5	----	----	<0.5	----
4-Aminobiphenyl	92-67-1	0.5	mg/kg		<0.5	----	----	<0.5	----
Pentachloronitrobenzene	82-68-8	0.5	mg/kg		<0.5	----	----	<0.5	----
Pronamide	23950-58-5	0.5	mg/kg		<0.5	----	----	<0.5	----
Dimethylaminoazobenzene	60-11-7	0.5	mg/kg		<0.5	----	----	<0.5	----
Chlorobenzilate	510-15-6	0.5	mg/kg		<0.5	----	----	<0.5	----
EP075F: Haloethers									
Bis(2-chloroethyl) ether	111-44-4	0.5	mg/kg		<0.5	----	----	<0.5	----
Bis(2-chloroethoxy) methane	111-91-1	0.5	mg/kg		<0.5	----	----	<0.5	----
4-Chlorophenyl phenyl ether	7005-72-3	0.5	mg/kg		<0.5	----	----	<0.5	----
4-Bromophenyl phenyl ether	101-55-3	0.5	mg/kg		<0.5	----	----	<0.5	----
EP075G: Chlorinated Hydrocarbons									
1,3-Dichlorobenzene	541-73-1	0.5	mg/kg		<0.5	----	----	<0.5	----
1,4-Dichlorobenzene	106-46-7	0.5	mg/kg		<0.5	----	----	<0.5	----
1,2-Dichlorobenzene	95-50-1	0.5	mg/kg		<0.5	----	----	<0.5	----
Hexachloroethane	67-72-1	0.5	mg/kg		<0.5	----	----	<0.5	----
1,2,4-Trichlorobenzene	120-82-1	0.5	mg/kg		<0.5	----	----	<0.5	----
Hexachloropropylene	1888-71-7	0.5	mg/kg		<0.5	----	----	<0.5	----
Hexachlorobutadiene	87-68-3	0.5	mg/kg		<0.5	----	----	<0.5	----
Hexachlorocyclopentadiene	77-47-4	2.5	mg/kg		<2.5	----	----	<2.5	----
Pentachlorobenzene	608-93-5	0.5	mg/kg		<0.5	----	----	<0.5	----
Hexachlorobenzene (HCB)	118-74-1	1.0	mg/kg		<1.0	----	----	<1.0	----
EP075H: Anilines and Benzidines									
Aniline	62-53-3	0.5	mg/kg		<0.5	----	----	<0.5	----
4-Chloroaniline	106-47-8	0.5	mg/kg		<0.5	----	----	<0.5	----
2-Nitroaniline	88-74-4	1.0	mg/kg		<1.0	----	----	<1.0	----
3-Nitroaniline	99-09-2	1.0	mg/kg		<1.0	----	----	<1.0	----
Dibenzofuran	132-64-9	0.5	mg/kg		<0.5	----	----	<0.5	----
4-Nitroaniline	100-01-6	0.5	mg/kg		<0.5	----	----	<0.5	----
Carbazole	86-74-8	0.5	mg/kg		<0.5	----	----	<0.5	----
3,3'-Dichlorobenzidine	91-94-1	0.5	mg/kg		<0.5	----	----	<0.5	----
EP075I: Organochlorine Pesticides									
alpha-BHC	319-84-6	0.5	mg/kg		<0.5	----	----	<0.5	----



Analytical Results

Sub-Matrix: SOIL
 (Matrix: SOIL)

Sample ID

				BH03_0.2	BH03_0.5	BH03_1.5	BH03_3.0	BH03_0.2 Dup
Sampling date / time				09-Feb-2022 00:00	09-Feb-2022 00:00	09-Feb-2022 00:00	09-Feb-2022 00:00	09-Feb-2022 00:00
Compound	CAS Number	LOR	Unit	ES2204462-001	ES2204462-003	ES2204462-006	ES2204462-007	ES2204462-010
				Result	Result	Result	Result	Result
EP075I: Organochlorine Pesticides - Continued								
beta-BHC	319-85-7	0.5	mg/kg	<0.5	----	----	<0.5	----
gamma-BHC	58-89-9	0.5	mg/kg	<0.5	----	----	<0.5	----
delta-BHC	319-86-8	0.5	mg/kg	<0.5	----	----	<0.5	----
Heptachlor	76-44-8	0.5	mg/kg	<0.5	----	----	<0.5	----
Aldrin	309-00-2	0.5	mg/kg	<0.5	----	----	<0.5	----
Heptachlor epoxide	1024-57-3	0.5	mg/kg	<0.5	----	----	<0.5	----
alpha-Endosulfan	959-98-8	0.5	mg/kg	<0.5	----	----	<0.5	----
4,4'-DDE	72-55-9	0.5	mg/kg	<0.5	----	----	<0.5	----
Dieldrin	60-57-1	0.5	mg/kg	<0.5	----	----	<0.5	----
Endrin	72-20-8	0.5	mg/kg	<0.5	----	----	<0.5	----
beta-Endosulfan	33213-65-9	0.5	mg/kg	<0.5	----	----	<0.5	----
4,4'-DDD	72-54-8	0.5	mg/kg	<0.5	----	----	<0.5	----
Endosulfan sulfate	1031-07-8	0.5	mg/kg	<0.5	----	----	<0.5	----
4,4'-DDT	50-29-3	1.0	mg/kg	<1.0	----	----	<1.0	----
EP075J: Organophosphorus Pesticides								
Dichlorvos	62-73-7	0.5	mg/kg	<0.5	----	----	<0.5	----
Dimethoate	60-51-5	0.5	mg/kg	<0.5	----	----	<0.5	----
Diazinon	333-41-5	0.5	mg/kg	<0.5	----	----	<0.5	----
Chlorpyrifos-methyl	5598-13-0	0.5	mg/kg	<0.5	----	----	<0.5	----
Malathion	121-75-5	0.5	mg/kg	<0.5	----	----	<0.5	----
Fenthion	55-38-9	0.5	mg/kg	<0.5	----	----	<0.5	----
Chlorpyrifos	2921-88-2	0.5	mg/kg	<0.5	----	----	<0.5	----
Pirimphos-ethyl	23505-41-1	0.5	mg/kg	<0.5	----	----	<0.5	----
Chlorfenvinphos	470-90-6	0.5	mg/kg	<0.5	----	----	<0.5	----
Prothiofos	34643-46-4	0.5	mg/kg	<0.5	----	----	<0.5	----
Ethion	563-12-2	0.5	mg/kg	<0.5	----	----	<0.5	----
EP080/071: Total Petroleum Hydrocarbons								
C6 - C9 Fraction	----	10	mg/kg	<10	<10	<10	<10	<10
C10 - C14 Fraction	----	50	mg/kg	<50	<50	<50	<50	<50
C15 - C28 Fraction	----	100	mg/kg	<100	160	120	<100	<100
C29 - C36 Fraction	----	100	mg/kg	<100	130	110	<100	<100
^ C10 - C36 Fraction (sum)	----	50	mg/kg	<50	290	230	<50	<50
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions								
C6 - C10 Fraction	C6_C10	10	mg/kg	<10	<10	<10	<10	<10



Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	BH03_0.2	BH03_0.5	BH03_1.5	BH03_3.0	BH03_0.2 Dup
Sampling date / time					09-Feb-2022 00:00	09-Feb-2022 00:00	09-Feb-2022 00:00	09-Feb-2022 00:00	09-Feb-2022 00:00
Compound	CAS Number	LOR	Unit		ES2204462-001	ES2204462-003	ES2204462-006	ES2204462-007	ES2204462-010
					Result	Result	Result	Result	Result
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions - Continued									
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg		<10	<10	<10	<10	<10
>C10 - C16 Fraction	----	50	mg/kg		<50	<50	<50	<50	<50
>C16 - C34 Fraction	----	100	mg/kg		<100	250	190	<100	<100
>C34 - C40 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
^ >C10 - C40 Fraction (sum)	----	50	mg/kg		<50	250	190	<50	<50
^ >C10 - C16 Fraction minus Naphthalene (F2)	----	50	mg/kg		<50	<50	<50	<50	<50
EP080: BTEXN									
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
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
ortho-Xylene	95-47-6	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Sum of BTEX	----	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
^ Total Xylenes	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Naphthalene	91-20-3	1	mg/kg		<1	<1	<1	<1	<1
EP231A: Perfluoroalkyl Sulfonic Acids									
Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.0002	mg/kg		<0.0005	<0.0002	----	----	----
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.0002	mg/kg		<0.0005	<0.0002	----	----	----
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.0002	mg/kg		<0.0005	<0.0002	----	----	----
EP231B: Perfluoroalkyl Carboxylic Acids									
Perfluorobutanoic acid (PFBA)	375-22-4	0.001	mg/kg		<0.002	<0.001	----	----	----
Perfluoropentanoic acid (PFPeA)	2706-90-3	0.0002	mg/kg		<0.0005	<0.0002	----	----	----
Perfluorohexanoic acid (PFHxA)	307-24-4	0.0002	mg/kg		<0.0005	<0.0002	----	----	----
Perfluoroheptanoic acid (PFHpA)	375-85-9	0.0002	mg/kg		<0.0005	<0.0002	----	----	----
Perfluorooctanoic acid (PFOA)	335-67-1	0.0002	mg/kg		<0.0005	<0.0002	----	----	----
EP231D: (n:2) Fluorotelomer Sulfonic Acids									
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	----	----	----



Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	BH03_0.2	BH03_0.5	BH03_1.5	BH03_3.0	BH03_0.2 Dup
Sampling date / time					09-Feb-2022 00:00	09-Feb-2022 00:00	09-Feb-2022 00:00	09-Feb-2022 00:00	09-Feb-2022 00:00
Compound	CAS Number	LOR	Unit		ES2204462-001	ES2204462-003	ES2204462-006	ES2204462-007	ES2204462-010
					Result	Result	Result	Result	Result
EP231D: (n:2) Fluorotelomer Sulfonic Acids - Continued									
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 PFHxS and PFOS	355-46-4/1763-23-1	0.0002	mg/kg		<0.0005	<0.0002	----	----	----
Sum of PFAS (WA DER List)	----	0.0002	mg/kg		<0.0005	<0.0002	----	----	----
EP066S: PCB Surrogate									
Decachlorobiphenyl	2051-24-3	0.1	%		98.0	102	109	93.5	99.0
EP068S: Organochlorine Pesticide Surrogate									
Dibromo-DDE	21655-73-2	0.05	%		88.6	101	91.8	76.6	87.0
EP068T: Organophosphorus Pesticide Surrogate									
DEF	78-48-8	0.05	%		75.0	100	83.6	71.4	73.7
EP074S: VOC Surrogates									
1,2-Dichloroethane-D4	17060-07-0	0.5	%		93.9	----	----	91.1	----
Toluene-D8	2037-26-5	0.5	%		91.3	----	----	91.6	----
4-Bromofluorobenzene	460-00-4	0.5	%		80.9	----	----	82.6	----
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	0.5	%		85.9	91.6	88.0	82.1	102
2-Chlorophenol-D4	93951-73-6	0.5	%		92.1	94.2	94.0	88.8	104
2,4,6-Tribromophenol	118-79-6	0.5	%		73.8	78.7	84.1	73.3	95.7
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	0.5	%		95.5	103	96.2	90.3	118
Anthracene-d10	1719-06-8	0.5	%		95.3	102	99.0	93.8	115
4-Terphenyl-d14	1718-51-0	0.5	%		90.5	101	94.1	88.2	119
EP075S: Acid Extractable Surrogates									
2-Fluorophenol	367-12-4	0.5	%		119	----	----	91.4	----
Phenol-d6	13127-88-3	0.5	%		112	----	----	86.6	----
2-Chlorophenol-D4	93951-73-6	0.5	%		109	----	----	85.4	----
2,4,6-Tribromophenol	118-79-6	0.5	%		95.3	----	----	73.3	----
EP075T: Base/Neutral Extractable Surrogates									
Nitrobenzene-D5	4165-60-0	0.5	%		106	----	----	78.7	----
1,2-Dichlorobenzene-D4	2199-69-1	0.5	%		101	----	----	81.8	----



Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	BH03_0.2	BH03_0.5	BH03_1.5	BH03_3.0	BH03_0.2 Dup
Sampling date / time					09-Feb-2022 00:00	09-Feb-2022 00:00	09-Feb-2022 00:00	09-Feb-2022 00:00	09-Feb-2022 00:00
Compound	CAS Number	LOR	Unit		ES2204462-001	ES2204462-003	ES2204462-006	ES2204462-007	ES2204462-010
					Result	Result	Result	Result	Result
EP075T: Base/Neutral Extractable Surrogates - Continued									
2-Fluorobiphenyl	321-60-8	0.5	%		105	----	----	97.9	----
Anthracene-d10	1719-06-8	0.5	%		99.4	----	----	95.1	----
4-Terphenyl-d14	1718-51-0	0.5	%		113	----	----	76.8	----
EP080S: TPH(V)/BTEX Surrogates									
1,2-Dichloroethane-D4	17060-07-0	0.2	%		104	79.9	96.3	100	90.6
Toluene-D8	2037-26-5	0.2	%		88.0	79.4	99.6	88.5	93.1
4-Bromofluorobenzene	460-00-4	0.2	%		86.3	81.3	97.3	90.2	91.4
EP231S: PFAS Surrogate									
13C4-PFOS	----	0.0002	%		95.0	103	----	----	----
13C8-PFOA	----	0.0002	%		100	100	----	----	----



Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)		Sample ID		BH03_0.5 Dup	----	----	----	----
Sampling date / time		09-Feb-2022 00:00		----	----	----	----	----
Compound	CAS Number	LOR	Unit	ES2204462-011	-----	-----	-----	-----
Result				----	----	----	----	----
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	----	0.1	%	8.6	----	----	----	----
EP231A: Perfluoroalkyl Sulfonic Acids								
Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.0002	mg/kg	<0.0002	----	----	----	----
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.0002	mg/kg	<0.0002	----	----	----	----
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.0002	mg/kg	<0.0002	----	----	----	----
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.0002	mg/kg	<0.0002	----	----	----	----
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.0002	mg/kg	<0.0002	----	----	----	----
Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.0002	mg/kg	<0.0002	----	----	----	----
EP231B: Perfluoroalkyl Carboxylic Acids								
Perfluorobutanoic acid (PFBA)	375-22-4	0.001	mg/kg	<0.001	----	----	----	----
Perfluoropentanoic acid (PFPeA)	2706-90-3	0.0002	mg/kg	<0.0002	----	----	----	----
Perfluorohexanoic acid (PFHxA)	307-24-4	0.0002	mg/kg	<0.0002	----	----	----	----
Perfluoroheptanoic acid (PFHpA)	375-85-9	0.0002	mg/kg	<0.0002	----	----	----	----
Perfluorooctanoic acid (PFOA)	335-67-1	0.0002	mg/kg	<0.0002	----	----	----	----
Perfluorononanoic acid (PFNA)	375-95-1	0.0002	mg/kg	<0.0002	----	----	----	----
Perfluorodecanoic acid (PFDA)	335-76-2	0.0002	mg/kg	<0.0002	----	----	----	----
Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.0002	mg/kg	<0.0002	----	----	----	----
Perfluorododecanoic acid (PFDoDA)	307-55-1	0.0002	mg/kg	<0.0002	----	----	----	----
Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.0002	mg/kg	<0.0002	----	----	----	----
Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.0005	mg/kg	<0.0005	----	----	----	----
EP231C: Perfluoroalkyl Sulfonamides								
Perfluorooctane sulfonamide (FOSA)	754-91-6	0.0002	mg/kg	<0.0002	----	----	----	----
N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.0005	mg/kg	<0.0005	----	----	----	----



Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	BH03_0.5 Dup	----	----	----	----
				Sampling date / time	09-Feb-2022 00:00	----	----	----	----
Compound	CAS Number	LOR	Unit		ES2204462-011	-----	-----	-----	-----
				Result	----	----	----	----	----
EP231C: Perfluoroalkyl Sulfonamides - Continued									
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.0005	mg/kg		<0.0005	----	----	----	----
N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.0005	mg/kg		<0.0005	----	----	----	----
N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.0005	mg/kg		<0.0005	----	----	----	----
N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.0002	mg/kg		<0.0002	----	----	----	----
N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.0002	mg/kg		<0.0002	----	----	----	----
EP231D: (n:2) Fluorotelomer Sulfonic Acids									
4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.0005	mg/kg		<0.0005	----	----	----	----
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.0005	mg/kg		<0.0005	----	----	----	----
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.0005	mg/kg		<0.0005	----	----	----	----
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.0005	mg/kg		<0.0005	----	----	----	----
EP231P: PFAS Sums									
Sum of PFAS	----	0.0002	mg/kg		<0.0002	----	----	----	----
Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.0002	mg/kg		<0.0002	----	----	----	----
Sum of PFAS (WA DER List)	----	0.0002	mg/kg		<0.0002	----	----	----	----
EP231S: PFAS Surrogate									
13C4-PFOS	----	0.0002	%		91.0	----	----	----	----
13C8-PFOA	----	0.0002	%		98.5	----	----	----	----



Analytical Results

Descriptive Results

Sub-Matrix: **SOIL**

Method: Compound	Sample ID - Sampling date / time	Analytical Results
EA200: AS 4964 - 2004 Identification of Asbestos in Soils		
EA200: Description	BH03_0.2 - 09-Feb-2022 00:00	Soil sample.
EA200: Description	BH03_0.5 - 09-Feb-2022 00:00	Soil sample.
EA200: Description	BH03_1.5 - 09-Feb-2022 00:00	Soil sample.



Surrogate Control Limits

Sub-Matrix: SOIL		Recovery Limits (%)	
Compound	CAS Number	Low	High
EP066S: PCB Surrogate			
Decachlorobiphenyl	2051-24-3	39	149
EP068S: Organochlorine Pesticide Surrogate			
Dibromo-DDE	21655-73-2	49	147
EP068T: Organophosphorus Pesticide Surrogate			
DEF	78-48-8	35	143
EP074S: VOC Surrogates			
1,2-Dichloroethane-D4	17060-07-0	64	130
Toluene-D8	2037-26-5	66	136
4-Bromofluorobenzene	460-00-4	60	122
EP075(SIM)S: Phenolic Compound Surrogates			
Phenol-d6	13127-88-3	63	123
2-Chlorophenol-D4	93951-73-6	66	122
2,4,6-Tribromophenol	118-79-6	40	138
EP075(SIM)T: PAH Surrogates			
2-Fluorobiphenyl	321-60-8	70	122
Anthracene-d10	1719-06-8	66	128
4-Terphenyl-d14	1718-51-0	65	129
EP075S: Acid Extractable Surrogates			
2-Fluorophenol	367-12-4	29	149
Phenol-d6	13127-88-3	32	128
2-Chlorophenol-D4	93951-73-6	32	128
2,4,6-Tribromophenol	118-79-6	13	121
EP075T: Base/Neutral Extractable Surrogates			
Nitrobenzene-D5	4165-60-0	33	125
1,2-Dichlorobenzene-D4	2199-69-1	34	108
2-Fluorobiphenyl	321-60-8	35	121
Anthracene-d10	1719-06-8	35	123
4-Terphenyl-d14	1718-51-0	33	125
EP080S: TPH(V)/BTEX Surrogates			
1,2-Dichloroethane-D4	17060-07-0	73	133
Toluene-D8	2037-26-5	74	132
4-Bromofluorobenzene	460-00-4	72	130
EP231S: PFAS Surrogate			
13C4-PFOS	----	60	120
13C8-PFOA	----	60	120



Inter-Laboratory Testing

Analysis conducted by ALS Brisbane, NATA accreditation no. 825, site no. 818 (Chemistry) 18958 (Biology).

(SOIL) EA003 :pH (field/fox)

(SOIL) EA029-D: Calcium Values

(SOIL) EA029-E: Magnesium Values

(SOIL) EA029-F: Excess Acid Neutralising Capacity

(SOIL) EA029-H: Acid Base Accounting

(SOIL) EA029-G: Retained Acidity

(SOIL) EA029-A: pH Measurements

(SOIL) EA029-C: Sulfur Trail

(SOIL) EA029-B: Acidity Trail

Analysis conducted by ALS Newcastle, NATA accreditation no. 825, site no. 1656 (Chemistry) 9854 (Biology).

(SOIL) EA200: AS 4964 - 2004 Identification of Asbestos in Soils

CERTIFICATE OF ANALYSIS

Work Order	: ES2204627	Page	: 1 of 18
Client	: EP RISK MANAGEMENT	Laboratory	: Environmental Division Sydney
Contact	: HARRISON BLAKE	Contact	: Tyler Anderson
Address	: Level 4 73 Walker St North Sydney 2060	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
Telephone	: ----	Telephone	: +61 2 8784 8555
Project	: EP2515	Date Samples Received	: 10-Feb-2022 10:30
Order number	: ----	Date Analysis Commenced	: 14-Feb-2022
C-O-C number	: ----	Issue Date	: 22-Feb-2022 17:02
Sampler	: HARRISON BLAKE		
Site	: ----		
Quote number	: SYBQ/401/21		
No. of samples received	: 8		
No. of samples analysed	: 5		



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
- Descriptive Results
- Surrogate Control Limits

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

Signatories

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

<i>Signatories</i>	<i>Position</i>	<i>Accreditation Category</i>
Alana Smylie	Team Leader - Asbestos	Newcastle - Asbestos, Mayfield West, NSW
Ben Felgendrejeris	Senior Acid Sulfate Soil Chemist	Brisbane Acid Sulphate Soils, Stafford, QLD
Edwandy Fadjjar	Organic Coordinator	Sydney Inorganics, Smithfield, NSW
Edwandy Fadjjar	Organic Coordinator	Sydney Organics, Smithfield, NSW
Franco Lentini	LCMS Coordinator	Sydney Inorganics, Smithfield, NSW
Franco Lentini	LCMS Coordinator	Sydney Organics, Smithfield, NSW
Ivan Taylor	Analyst	Sydney Inorganics, Smithfield, NSW



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.
- EP080: Where reported, Total Xylenes is the sum of the reported concentrations of m&p-Xylene and o-Xylene at or above the LOR.
- EP068: Where reported, Total Chlordane (sum) is the sum of the reported concentrations of cis-Chlordane and trans-Chlordane at or above the LOR.
- EP068: Where reported, Total OCP is the sum of the reported concentrations of all Organochlorine Pesticides at or above LOR.
- EP074: Where reported, Total Trihalomethanes is the sum of the reported concentrations of all Trihalomethanes at or above the LOR.
- EP074: Where reported, Total Xylenes is the sum of the reported concentrations of m&p-Xylene and o-Xylene at or above the LOR.
- EP074: Where reported, Sum of chlorinated hydrocarbons includes carbon tetrachloride, chlorobenzene, chloroform, 1,2-dichlorobenzene, 1,4-dichlorobenzene, 1,2-dichloroethane, 1,1-dichloroethene, cis-1,2-dichloroethene, trans-1,2-dichloroethene, 1,1,1,2-tetrachloroethane, 1,1,2,2-tetrachloroethane, 1,2,4-trichlorobenzene, 1,1,1-trichloroethane, 1,1,2-trichloroethane, trichloroethene, vinyl chloride, hexachlorobutadiene and methylene chloride.
- EP074: Where reported, Total Trimethylbenzenes is the sum of the reported concentrations of 1.2.3-Trimethylbenzene, 1.2.4-Trimethylbenzene and 1.3.5-Trimethylbenzene at or above the LOR.
- EP075(SIM): Where reported, Total Cresol is the sum of the reported concentrations of 2-Methylphenol and 3- & 4-Methylphenol at or above the LOR.
- ASS: EA029 (SPOCAS): Retained Acidity not required because pH KCl greater than or equal to 4.5
- ASS: EA029 (SPOCAS): Excess ANC not required because pH OX less than 6.5.
- EP075: Where reported, 'Sum of PAH' is the sum of the USEPA 16 priority PAHs
- ASS: EA029 (SPOCAS): Liming rate is calculated and reported on a dry weight basis assuming use of fine agricultural lime (CaCO₃) and using a safety factor of 1.5 to allow for non-homogeneous mixing and poor reactivity of lime. For conversion of Liming Rate from kg/t dry weight to kg/m³ in-situ soil, multiply reported results x wet bulk density of soil in t/m³.
- ASS: EA003 (NATA Field and F(ox) screening): pH F(ox) Reaction Rate: 1 - Slight; 2 - Moderate; 3 - Strong; 4 - Extreme
- EA200 'Am' Amosite (brown asbestos)
- EA200 'Cr' Crocidolite (blue asbestos)
- EA200 'Trace' - Asbestos fibres ("Free Fibres") detected by trace analysis per AS4964. The result can be interpreted that the sample contains detectable 'respirable' asbestos fibres
- EA200: Asbestos Identification Samples were analysed by Polarised Light Microscopy including dispersion staining.
- EA200 Legend
- EA200 'Ch' Chrysotile (white asbestos)



- EA200: 'UMF' Unknown Mineral Fibres. "-" indicates fibres detected may or may not be asbestos fibres. Confirmation by alternative techniques is recommended.
- Benzo(a)pyrene Toxicity Equivalent Quotient (TEQ) 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.
- EA200: For samples larger than 30g, the <2mm fraction may be sub-sampled prior to trace analysis as outlined in ISO23909:2008(E) Sect 6.3.2-2
- EA200: 'Yes' - Asbestos detected by polarised light microscopy including dispersion staining.
- EA200: 'No*' - No asbestos found, at the reporting limit of 0.1g/kg, by polarised light microscopy including dispersion staining. Asbestos material was detected and positively identified at concentrations estimated to be below 0.1g/kg.
- EA200: 'No' - No asbestos found at the reporting limit 0.1g/kg, by polarised light microscopy including dispersion staining.
- 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.

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	BH02_0.1	BH02_1.0	BH02_2.0	BH02_4.0	BH02_5.5
Sampling date / time				09-Feb-2022 00:00	09-Feb-2022 00:00	09-Feb-2022 00:00	09-Feb-2022 00:00	09-Feb-2022 00:00	
Compound	CAS Number	LOR	Unit	ES2204627-001	ES2204627-002	ES2204627-003	ES2204627-005	ES2204627-006	
				Result	Result	Result	Result	Result	
EA003 :pH (field/fox)									
pH (F)	----	0.1	pH Unit	----	----	7.0	6.4	----	
pH (Fox)	----	0.1	pH Unit	----	----	4.4	4.6	----	
Reaction Rate	----	1	Reaction Unit	----	----	2	2	----	
EA029-A: pH Measurements									
pH KCl (23A)	----	0.1	pH Unit	----	----	----	4.9	----	
pH OX (23B)	----	0.1	pH Unit	----	----	----	5.1	----	
EA029-B: Acidity Trail									
Titratable Actual Acidity (23F)	----	2	mole H+ / t	----	----	----	12	----	
Titratable Peroxide Acidity (23G)	----	2	mole H+ / t	----	----	----	<2	----	
Titratable Sulfidic Acidity (23H)	----	2	mole H+ / t	----	----	----	<2	----	
sulfidic - Titratable Actual Acidity (s-23F)	----	0.020	% pyrite S	----	----	----	0.020	----	
sulfidic - Titratable Peroxide Acidity (s-23G)	----	0.020	% pyrite S	----	----	----	<0.020	----	
sulfidic - Titratable Sulfidic Acidity (s-23H)	----	0.020	% pyrite S	----	----	----	<0.020	----	
EA029-C: Sulfur Trail									
KCl Extractable Sulfur (23Ce)	----	0.020	% S	----	----	----	<0.020	----	
Peroxide Sulfur (23De)	----	0.020	% S	----	----	----	<0.020	----	
Peroxide Oxidisable Sulfur (23E)	----	0.020	% S	----	----	----	<0.020	----	
acidity - Peroxide Oxidisable Sulfur (a-23E)	----	10	mole H+ / t	----	----	----	<10	----	
EA029-D: Calcium Values									
KCl Extractable Calcium (23Vh)	----	0.020	% Ca	----	----	----	<0.020	----	
Peroxide Calcium (23Wh)	----	0.020	% Ca	----	----	----	<0.020	----	
Acid Reacted Calcium (23X)	----	0.020	% Ca	----	----	----	<0.020	----	
acidity - Acid Reacted Calcium (a-23X)	----	10	mole H+ / t	----	----	----	<10	----	
sulfidic - Acid Reacted Calcium (s-23X)	----	0.020	% S	----	----	----	<0.020	----	
EA029-E: Magnesium Values									
KCl Extractable Magnesium (23Sm)	----	0.020	% Mg	----	----	----	<0.020	----	
Peroxide Magnesium (23Tm)	----	0.020	% Mg	----	----	----	<0.020	----	
Acid Reacted Magnesium (23U)	----	0.020	% Mg	----	----	----	<0.020	----	
Acidity - Acid Reacted Magnesium (a-23U)	----	10	mole H+ / t	----	----	----	<10	----	
sulfidic - Acid Reacted Magnesium (s-23U)	----	0.020	% S	----	----	----	<0.020	----	
EA029-H: Acid Base Accounting									



Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	BH02_0.1	BH02_1.0	BH02_2.0	BH02_4.0	BH02_5.5
Sampling date / time					09-Feb-2022 00:00	09-Feb-2022 00:00	09-Feb-2022 00:00	09-Feb-2022 00:00	09-Feb-2022 00:00
Compound	CAS Number	LOR	Unit		ES2204627-001	ES2204627-002	ES2204627-003	ES2204627-005	ES2204627-006
					Result	Result	Result	Result	Result
EA029-H: Acid Base Accounting - Continued									
ANC Fineness Factor	----	0.5	-	----	----	----	----	1.5	----
Net Acidity (sulfur units)	----	0.02	% S	----	----	----	----	0.02	----
Net Acidity (acidity units)	----	10	mole H+ / t	----	----	----	----	12	----
Liming Rate	----	1	kg CaCO3/t	----	----	----	----	<1	----
Net Acidity excluding ANC (sulfur units)	----	0.02	% S	----	----	----	----	0.02	----
Net Acidity excluding ANC (acidity units)	----	10	mole H+ / t	----	----	----	----	12	----
Liming Rate excluding ANC	----	1	kg CaCO3/t	----	----	----	----	<1	----
EA055: Moisture Content (Dried @ 105-110°C)									
Moisture Content	----	0.1	%	----	----	----	----	----	18.5
Moisture Content	----	1.0	%	----	28.0	7.3	20.6	----	----
EA200: AS 4964 - 2004 Identification of Asbestos in Soils									
Asbestos Detected	1332-21-4	0.1	g/kg	No	----	----	----	----	----
Asbestos (Trace)	1332-21-4	5	Fibres	No	----	----	----	----	----
Asbestos Type	1332-21-4	-	--	-	----	----	----	----	----
Synthetic Mineral Fibre	----	0.1	g/kg	No	----	----	----	----	----
Organic Fibre	----	0.1	g/kg	No	----	----	----	----	----
Sample weight (dry)	----	0.01	g	49.5	----	----	----	----	----
APPROVED IDENTIFIER:	----	-	--	A. SMYLIE	----	----	----	----	----
EG005(ED093)T: Total Metals by ICP-AES									
Arsenic	7440-38-2	5	mg/kg	7	9	<5	----	----	----
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	----	----	----
Chromium	7440-47-3	2	mg/kg	15	7	3	----	----	----
Copper	7440-50-8	5	mg/kg	717	106	18	----	----	----
Lead	7439-92-1	5	mg/kg	819	245	27	----	----	----
Nickel	7440-02-0	2	mg/kg	85	19	3	----	----	----
Zinc	7440-66-6	5	mg/kg	1330	320	84	----	----	----
EG035T: Total Recoverable Mercury by FIMS									
Mercury	7439-97-6	0.1	mg/kg	0.2	0.2	<0.1	----	----	----
EP066: Polychlorinated Biphenyls (PCB)									
Total Polychlorinated biphenyls	----	0.1	mg/kg	<0.1	<0.1	<0.1	----	----	----
EP068A: Organochlorine Pesticides (OC)									
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	----	----	----



Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	BH02_0.1	BH02_1.0	BH02_2.0	BH02_4.0	BH02_5.5
Sampling date / time					09-Feb-2022 00:00	09-Feb-2022 00:00	09-Feb-2022 00:00	09-Feb-2022 00:00	09-Feb-2022 00:00
Compound	CAS Number	LOR	Unit		ES2204627-001	ES2204627-002	ES2204627-003	ES2204627-005	ES2204627-006
					Result	Result	Result	Result	Result
EP068A: Organochlorine Pesticides (OC) - Continued									
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	----	----
^ Total Chlordane (sum)	----	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
trans-Chlordane	5103-74-2	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
alpha-Endosulfan	959-98-8	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
cis-Chlordane	5103-71-9	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
Dieldrin	60-57-1	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
4,4'-DDE	72-55-9	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
Endrin	72-20-8	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
beta-Endosulfan	33213-65-9	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
^ Endosulfan (sum)	115-29-7	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	----	----
Endrin aldehyde	7421-93-4	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	0.2	mg/kg		<0.2	<0.2	<0.2	----	----
Endrin ketone	53494-70-5	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
Methoxychlor	72-43-5	0.2	mg/kg		<0.2	<0.2	<0.2	----	----
^ Sum of Aldrin + Dieldrin	309-00-2/60-57-1	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
^ Sum of DDD + DDE + DDT	72-54-8/72-55-9/50-29-3	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
EP068B: Organophosphorus Pesticides (OP)									
Dichlorvos	62-73-7	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
Demeton-S-methyl	919-86-8	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
Monocrotophos	6923-22-4	0.2	mg/kg		<0.2	<0.2	<0.2	----	----
Dimethoate	60-51-5	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
Diazinon	333-41-5	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
Parathion-methyl	298-00-0	0.2	mg/kg		<0.2	<0.2	<0.2	----	----
Malathion	121-75-5	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
Fenthion	55-38-9	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
Chlorpyrifos	2921-88-2	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
Parathion	56-38-2	0.2	mg/kg		<0.2	<0.2	<0.2	----	----



Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	BH02_0.1	BH02_1.0	BH02_2.0	BH02_4.0	BH02_5.5
Sampling date / time					09-Feb-2022 00:00	09-Feb-2022 00:00	09-Feb-2022 00:00	09-Feb-2022 00:00	09-Feb-2022 00:00
Compound	CAS Number	LOR	Unit		ES2204627-001	ES2204627-002	ES2204627-003	ES2204627-005	ES2204627-006
					Result	Result	Result	Result	Result
EP068B: Organophosphorus Pesticides (OP) - Continued									
Pirimphos-ethyl	23505-41-1	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
Chlorfenvinphos	470-90-6	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
Bromophos-ethyl	4824-78-6	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
Fenamiphos	22224-92-6	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
Prothiofos	34643-46-4	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
Ethion	563-12-2	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
Carbophenothion	786-19-6	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
Azinphos Methyl	86-50-0	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
EP074A: Monocyclic Aromatic Hydrocarbons									
Styrene	100-42-5	0.5	mg/kg		<0.5	<0.5	----	----	----
Isopropylbenzene	98-82-8	0.5	mg/kg		<0.5	<0.5	----	----	----
n-Propylbenzene	103-65-1	0.5	mg/kg		<0.5	<0.5	----	----	----
1,3,5-Trimethylbenzene	108-67-8	0.5	mg/kg		<0.5	<0.5	----	----	----
sec-Butylbenzene	135-98-8	0.5	mg/kg		<0.5	<0.5	----	----	----
1,2,4-Trimethylbenzene	95-63-6	0.5	mg/kg		<0.5	<0.5	----	----	----
tert-Butylbenzene	98-06-6	0.5	mg/kg		<0.5	<0.5	----	----	----
p-Isopropyltoluene	99-87-6	0.5	mg/kg		<0.5	<0.5	----	----	----
n-Butylbenzene	104-51-8	0.5	mg/kg		<0.5	<0.5	----	----	----
EP074B: Oxygenated Compounds									
Vinyl Acetate	108-05-4	5	mg/kg		<5	<5	----	----	----
2-Butanone (MEK)	78-93-3	5	mg/kg		<5	<5	----	----	----
4-Methyl-2-pentanone (MIBK)	108-10-1	5	mg/kg		<5	<5	----	----	----
2-Hexanone (MBK)	591-78-6	5	mg/kg		<5	<5	----	----	----
EP074C: Sulfonated Compounds									
Carbon disulfide	75-15-0	0.5	mg/kg		<0.5	<0.5	----	----	----
EP074D: Fumigants									
2,2-Dichloropropane	594-20-7	0.5	mg/kg		<0.5	<0.5	----	----	----
1,2-Dichloropropane	78-87-5	0.5	mg/kg		<0.5	<0.5	----	----	----
cis-1,3-Dichloropropylene	10061-01-5	0.5	mg/kg		<0.5	<0.5	----	----	----
trans-1,3-Dichloropropylene	10061-02-6	0.5	mg/kg		<0.5	<0.5	----	----	----
1,2-Dibromoethane (EDB)	106-93-4	0.5	mg/kg		<0.5	<0.5	----	----	----
EP074E: Halogenated Aliphatic Compounds									
Dichlorodifluoromethane	75-71-8	5	mg/kg		<5	<5	----	----	----
Chloromethane	74-87-3	5	mg/kg		<5	<5	----	----	----



Analytical Results

Sub-Matrix: SOIL
 (Matrix: SOIL)

Sample ID

				BH02_0.1	BH02_1.0	BH02_2.0	BH02_4.0	BH02_5.5
Sampling date / time				09-Feb-2022 00:00	09-Feb-2022 00:00	09-Feb-2022 00:00	09-Feb-2022 00:00	09-Feb-2022 00:00
Compound	CAS Number	LOR	Unit	ES2204627-001	ES2204627-002	ES2204627-003	ES2204627-005	ES2204627-006
				Result	Result	Result	Result	Result
EP074E: Halogenated Aliphatic Compounds - Continued								
Vinyl chloride	75-01-4	5	mg/kg	<5	<5	----	----	----
Bromomethane	74-83-9	5	mg/kg	<5	<5	----	----	----
Chloroethane	75-00-3	5	mg/kg	<5	<5	----	----	----
Trichlorofluoromethane	75-69-4	5	mg/kg	<5	<5	----	----	----
1,1-Dichloroethene	75-35-4	0.5	mg/kg	<0.5	<0.5	----	----	----
Iodomethane	74-88-4	0.5	mg/kg	<0.5	<0.5	----	----	----
trans-1,2-Dichloroethene	156-60-5	0.5	mg/kg	<0.5	<0.5	----	----	----
1,1-Dichloroethane	75-34-3	0.5	mg/kg	<0.5	<0.5	----	----	----
cis-1,2-Dichloroethene	156-59-2	0.5	mg/kg	<0.5	<0.5	----	----	----
1,1,1-Trichloroethane	71-55-6	0.5	mg/kg	<0.5	<0.5	----	----	----
1,1-Dichloropropylene	563-58-6	0.5	mg/kg	<0.5	<0.5	----	----	----
Carbon Tetrachloride	56-23-5	0.5	mg/kg	<0.5	<0.5	----	----	----
1,2-Dichloroethane	107-06-2	0.5	mg/kg	<0.5	<0.5	----	----	----
Trichloroethene	79-01-6	0.5	mg/kg	<0.5	<0.5	----	----	----
Dibromomethane	74-95-3	0.5	mg/kg	<0.5	<0.5	----	----	----
1,1,2-Trichloroethane	79-00-5	0.5	mg/kg	<0.5	<0.5	----	----	----
1,3-Dichloropropane	142-28-9	0.5	mg/kg	<0.5	<0.5	----	----	----
Tetrachloroethene	127-18-4	0.5	mg/kg	<0.5	<0.5	----	----	----
1,1,1,2-Tetrachloroethane	630-20-6	0.5	mg/kg	<0.5	<0.5	----	----	----
trans-1,4-Dichloro-2-butene	110-57-6	0.5	mg/kg	<0.5	<0.5	----	----	----
cis-1,4-Dichloro-2-butene	1476-11-5	0.5	mg/kg	<0.5	<0.5	----	----	----
1,1,2,2-Tetrachloroethane	79-34-5	0.5	mg/kg	<0.5	<0.5	----	----	----
1,2,3-Trichloropropane	96-18-4	0.5	mg/kg	<0.5	<0.5	----	----	----
Pentachloroethane	76-01-7	0.5	mg/kg	<0.5	<0.5	----	----	----
1,2-Dibromo-3-chloropropane	96-12-8	0.5	mg/kg	<0.5	<0.5	----	----	----
EP074F: Halogenated Aromatic Compounds								
Chlorobenzene	108-90-7	0.5	mg/kg	<0.5	<0.5	----	----	----
Bromobenzene	108-86-1	0.5	mg/kg	<0.5	<0.5	----	----	----
2-Chlorotoluene	95-49-8	0.5	mg/kg	<0.5	<0.5	----	----	----
4-Chlorotoluene	106-43-4	0.5	mg/kg	<0.5	<0.5	----	----	----
1,2,3-Trichlorobenzene	87-61-6	0.5	mg/kg	<0.5	<0.5	----	----	----
EP074G: Trihalomethanes								
Chloroform	67-66-3	0.5	mg/kg	<0.5	<0.5	----	----	----
Bromodichloromethane	75-27-4	0.5	mg/kg	<0.5	<0.5	----	----	----



Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	BH02_0.1	BH02_1.0	BH02_2.0	BH02_4.0	BH02_5.5
Sampling date / time					09-Feb-2022 00:00	09-Feb-2022 00:00	09-Feb-2022 00:00	09-Feb-2022 00:00	09-Feb-2022 00:00
Compound	CAS Number	LOR	Unit		ES2204627-001	ES2204627-002	ES2204627-003	ES2204627-005	ES2204627-006
					Result	Result	Result	Result	Result
EP074G: Trihalomethanes - Continued									
Dibromochloromethane	124-48-1	0.5	mg/kg		<0.5	<0.5	----	----	----
Bromoform	75-25-2	0.5	mg/kg		<0.5	<0.5	----	----	----
EP075(SIM)A: Phenolic Compounds									
Phenol	108-95-2	0.5	mg/kg		<0.5	<0.5	<0.5	----	----
2-Chlorophenol	95-57-8	0.5	mg/kg		<0.5	<0.5	<0.5	----	----
2-Methylphenol	95-48-7	0.5	mg/kg		<0.5	<0.5	<0.5	----	----
3- & 4-Methylphenol	1319-77-3	1	mg/kg		<1	<1	<1	----	----
2-Nitrophenol	88-75-5	0.5	mg/kg		<0.5	<0.5	<0.5	----	----
2,4-Dimethylphenol	105-67-9	0.5	mg/kg		<0.5	<0.5	<0.5	----	----
2,4-Dichlorophenol	120-83-2	0.5	mg/kg		<0.5	<0.5	<0.5	----	----
2,6-Dichlorophenol	87-65-0	0.5	mg/kg		<0.5	<0.5	<0.5	----	----
4-Chloro-3-methylphenol	59-50-7	0.5	mg/kg		<0.5	<0.5	<0.5	----	----
2,4,6-Trichlorophenol	88-06-2	0.5	mg/kg		<0.5	<0.5	<0.5	----	----
2,4,5-Trichlorophenol	95-95-4	0.5	mg/kg		<0.5	<0.5	<0.5	----	----
Pentachlorophenol	87-86-5	2	mg/kg		<2	<2	<2	----	----
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons									
Naphthalene	91-20-3	0.5	mg/kg		<0.5	<0.5	<0.5	----	----
Acenaphthylene	208-96-8	0.5	mg/kg		<0.5	<0.5	<0.5	----	----
Acenaphthene	83-32-9	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	1.3	<0.5	----	----
Pyrene	129-00-0	0.5	mg/kg		<0.5	1.3	<0.5	----	----
Benz(a)anthracene	56-55-3	0.5	mg/kg		<0.5	0.6	<0.5	----	----
Chrysene	218-01-9	0.5	mg/kg		<0.5	0.6	<0.5	----	----
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg		<0.5	0.9	<0.5	----	----
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg		<0.5	<0.5	<0.5	----	----
Benzo(a)pyrene	50-32-8	0.5	mg/kg		<0.5	0.7	<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	5.4	<0.5	----	----
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg		<0.5	0.8	<0.5	----	----



Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	BH02_0.1	BH02_1.0	BH02_2.0	BH02_4.0	BH02_5.5
Sampling date / time					09-Feb-2022 00:00	09-Feb-2022 00:00	09-Feb-2022 00:00	09-Feb-2022 00:00	09-Feb-2022 00:00
Compound	CAS Number	LOR	Unit		ES2204627-001	ES2204627-002	ES2204627-003	ES2204627-005	ES2204627-006
					Result	Result	Result	Result	Result
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued									
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg		0.6	1.2	0.6	----	----
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg		1.2	1.5	1.2	----	----
EP075A: Phenolic Compounds									
Phenol	108-95-2	0.5	mg/kg		<0.5	<0.5	----	----	----
2-Chlorophenol	95-57-8	0.5	mg/kg		<0.5	<0.5	----	----	----
2-Methylphenol	95-48-7	0.5	mg/kg		<0.5	<0.5	----	----	----
3- & 4-Methylphenol	1319-77-3	0.5	mg/kg		<0.5	<0.5	----	----	----
2-Nitrophenol	88-75-5	0.5	mg/kg		<0.5	<0.5	----	----	----
2,4-Dimethylphenol	105-67-9	0.5	mg/kg		<0.5	<0.5	----	----	----
2,4-Dichlorophenol	120-83-2	0.5	mg/kg		<0.5	<0.5	----	----	----
2,6-Dichlorophenol	87-65-0	0.5	mg/kg		<0.5	<0.5	----	----	----
4-Chloro-3-methylphenol	59-50-7	0.5	mg/kg		<0.5	<0.5	----	----	----
2,4,6-Trichlorophenol	88-06-2	0.5	mg/kg		<0.5	<0.5	----	----	----
2,4,5-Trichlorophenol	95-95-4	0.5	mg/kg		<0.5	<0.5	----	----	----
Pentachlorophenol	87-86-5	1	mg/kg		<1	<1	----	----	----
EP075B: Polynuclear Aromatic Hydrocarbons									
Naphthalene	91-20-3	0.5	mg/kg		<0.5	<0.5	----	----	----
2-Methylnaphthalene	91-57-6	0.5	mg/kg		<0.5	<0.5	----	----	----
2-Chloronaphthalene	91-58-7	0.5	mg/kg		<0.5	<0.5	----	----	----
Acenaphthylene	208-96-8	0.5	mg/kg		<0.5	<0.5	----	----	----
Acenaphthene	83-32-9	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	1.2	----	----	----
Pyrene	129-00-0	0.5	mg/kg		<0.5	1.2	----	----	----
N-2-Fluorenyl Acetamide	53-96-3	0.5	mg/kg		<0.5	<0.5	----	----	----
Benz(a)anthracene	56-55-3	0.5	mg/kg		<0.5	0.7	----	----	----
Chrysene	218-01-9	0.5	mg/kg		<0.5	0.6	----	----	----
Benzo(b+j) & Benzo(k)fluoranthene	205-99-2 207-08-9	1	mg/kg		<1	1	----	----	----
7,12-Dimethylbenz(a)anthracene	57-97-6	0.5	mg/kg		<0.5	<0.5	----	----	----
Benzo(a)pyrene	50-32-8	0.5	mg/kg		<0.5	0.7	----	----	----
3-Methylcholanthrene	56-49-5	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	----	----	----



Analytical Results

Sub-Matrix: SOIL
 (Matrix: SOIL)

Sample ID

				BH02_0.1	BH02_1.0	BH02_2.0	BH02_4.0	BH02_5.5
Sampling date / time				09-Feb-2022 00:00	09-Feb-2022 00:00	09-Feb-2022 00:00	09-Feb-2022 00:00	09-Feb-2022 00:00
Compound	CAS Number	LOR	Unit	ES2204627-001	ES2204627-002	ES2204627-003	ES2204627-005	ES2204627-006
				Result	Result	Result	Result	Result
EP075B: Polynuclear Aromatic Hydrocarbons - Continued								
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 PAHs	----	0.5	mg/kg	<0.5	5.4	----	----	----
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg	<0.5	0.9	----	----	----
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg	0.6	1.2	----	----	----
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg	1.2	1.4	----	----	----
EP075C: Phthalate Esters								
Dimethyl phthalate	131-11-3	0.5	mg/kg	<0.5	<0.5	----	----	----
Diethyl phthalate	84-66-2	0.5	mg/kg	<0.5	<0.5	----	----	----
Di-n-butyl phthalate	84-74-2	0.5	mg/kg	<0.5	<0.5	----	----	----
Butyl benzyl phthalate	85-68-7	0.5	mg/kg	<0.5	<0.5	----	----	----
bis(2-ethylhexyl) phthalate	117-81-7	5.0	mg/kg	<5.0	<5.0	----	----	----
Di-n-octylphthalate	117-84-0	0.5	mg/kg	<0.5	<0.5	----	----	----
EP075D: Nitrosamines								
N-Nitrosomethylethylamine	10595-95-6	0.5	mg/kg	<0.5	<0.5	----	----	----
N-Nitrosodiethylamine	55-18-5	0.5	mg/kg	<0.5	<0.5	----	----	----
N-Nitrosopyrrolidine	930-55-2	1.0	mg/kg	<1.0	<1.0	----	----	----
N-Nitrosomorpholine	59-89-2	0.5	mg/kg	<0.5	<0.5	----	----	----
N-Nitrosodi-n-propylamine	621-64-7	0.5	mg/kg	<0.5	<0.5	----	----	----
N-Nitrosopiperidine	100-75-4	0.5	mg/kg	<0.5	<0.5	----	----	----
N-Nitrosodibutylamine	924-16-3	0.5	mg/kg	<0.5	<0.5	----	----	----
N-Nitrosodiphenyl & Diphenylamine	86-30-6 122-39-4	1.0	mg/kg	<1.0	<1.0	----	----	----
Methapyrilene	91-80-5	0.5	mg/kg	<0.5	<0.5	----	----	----
EP075E: Nitroaromatics and Ketones								
2-Picoline	109-06-8	0.5	mg/kg	<0.5	<0.5	----	----	----
Acetophenone	98-86-2	0.5	mg/kg	<0.5	<0.5	----	----	----
Nitrobenzene	98-95-3	0.5	mg/kg	<0.5	<0.5	----	----	----
Isophorone	78-59-1	0.5	mg/kg	<0.5	<0.5	----	----	----
2,6-Dinitrotoluene	606-20-2	1.0	mg/kg	<1.0	<1.0	----	----	----
2,4-Dinitrotoluene	121-14-2	1.0	mg/kg	<1.0	<1.0	----	----	----
1-Naphthylamine	134-32-7	0.5	mg/kg	<0.5	<0.5	----	----	----
4-Nitroquinoline-N-oxide	56-57-5	0.5	mg/kg	<0.5	<0.5	----	----	----
5-Nitro-o-toluidine	99-55-8	0.5	mg/kg	<0.5	<0.5	----	----	----

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	BH02_0.1	BH02_1.0	BH02_2.0	BH02_4.0	BH02_5.5
Sampling date / time				09-Feb-2022 00:00	09-Feb-2022 00:00	09-Feb-2022 00:00	09-Feb-2022 00:00	09-Feb-2022 00:00	
Compound	CAS Number	LOR	Unit	ES2204627-001	ES2204627-002	ES2204627-003	ES2204627-005	ES2204627-006	
				Result	Result	Result	Result	Result	
EP075E: Nitroaromatics and Ketones - Continued									
Azobenzene	103-33-3	1	mg/kg	<1	<1	----	----	----	
1.3.5-Trinitrobenzene	99-35-4	0.5	mg/kg	<0.5	<0.5	----	----	----	
Phenacetin	62-44-2	0.5	mg/kg	<0.5	<0.5	----	----	----	
4-Aminobiphenyl	92-67-1	0.5	mg/kg	<0.5	<0.5	----	----	----	
Pentachloronitrobenzene	82-68-8	0.5	mg/kg	<0.5	<0.5	----	----	----	
Pronamide	23950-58-5	0.5	mg/kg	<0.5	<0.5	----	----	----	
Dimethylaminoazobenzene	60-11-7	0.5	mg/kg	<0.5	<0.5	----	----	----	
Chlorobenzilate	510-15-6	0.5	mg/kg	<0.5	<0.5	----	----	----	
EP075F: Haloethers									
Bis(2-chloroethyl) ether	111-44-4	0.5	mg/kg	<0.5	<0.5	----	----	----	
Bis(2-chloroethoxy) methane	111-91-1	0.5	mg/kg	<0.5	<0.5	----	----	----	
4-Chlorophenyl phenyl ether	7005-72-3	0.5	mg/kg	<0.5	<0.5	----	----	----	
4-Bromophenyl phenyl ether	101-55-3	0.5	mg/kg	<0.5	<0.5	----	----	----	
EP075G: Chlorinated Hydrocarbons									
1.3-Dichlorobenzene	541-73-1	0.5	mg/kg	<0.5	<0.5	----	----	----	
1.4-Dichlorobenzene	106-46-7	0.5	mg/kg	<0.5	<0.5	----	----	----	
1.2-Dichlorobenzene	95-50-1	0.5	mg/kg	<0.5	<0.5	----	----	----	
Hexachloroethane	67-72-1	0.5	mg/kg	<0.5	<0.5	----	----	----	
1.2.4-Trichlorobenzene	120-82-1	0.5	mg/kg	<0.5	<0.5	----	----	----	
Hexachloropropylene	1888-71-7	0.5	mg/kg	<0.5	<0.5	----	----	----	
Hexachlorobutadiene	87-68-3	0.5	mg/kg	<0.5	<0.5	----	----	----	
Hexachlorocyclopentadiene	77-47-4	2.5	mg/kg	<2.5	<2.5	----	----	----	
Pentachlorobenzene	608-93-5	0.5	mg/kg	<0.5	<0.5	----	----	----	
Hexachlorobenzene (HCB)	118-74-1	1.0	mg/kg	<1.0	<1.0	----	----	----	
EP075H: Anilines and Benzidines									
Aniline	62-53-3	0.5	mg/kg	<0.5	<0.5	----	----	----	
4-Chloroaniline	106-47-8	0.5	mg/kg	<0.5	<0.5	----	----	----	
2-Nitroaniline	88-74-4	1.0	mg/kg	<1.0	<1.0	----	----	----	
3-Nitroaniline	99-09-2	1.0	mg/kg	<1.0	<1.0	----	----	----	
Dibenzofuran	132-64-9	0.5	mg/kg	<0.5	<0.5	----	----	----	
4-Nitroaniline	100-01-6	0.5	mg/kg	<0.5	<0.5	----	----	----	
Carbazole	86-74-8	0.5	mg/kg	<0.5	<0.5	----	----	----	
3.3`-Dichlorobenzidine	91-94-1	0.5	mg/kg	<0.5	<0.5	----	----	----	
EP075I: Organochlorine Pesticides									

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	BH02_0.1	BH02_1.0	BH02_2.0	BH02_4.0	BH02_5.5
Sampling date / time				09-Feb-2022 00:00	09-Feb-2022 00:00	09-Feb-2022 00:00	09-Feb-2022 00:00	09-Feb-2022 00:00	
Compound	CAS Number	LOR	Unit	ES2204627-001	ES2204627-002	ES2204627-003	ES2204627-005	ES2204627-006	
				Result	Result	Result	Result	Result	
EP075I: Organochlorine Pesticides - Continued									
alpha-BHC	319-84-6	0.5	mg/kg	<0.5	<0.5	----	----	----	
beta-BHC	319-85-7	0.5	mg/kg	<0.5	<0.5	----	----	----	
gamma-BHC	58-89-9	0.5	mg/kg	<0.5	<0.5	----	----	----	
delta-BHC	319-86-8	0.5	mg/kg	<0.5	<0.5	----	----	----	
Heptachlor	76-44-8	0.5	mg/kg	<0.5	<0.5	----	----	----	
Aldrin	309-00-2	0.5	mg/kg	<0.5	<0.5	----	----	----	
Heptachlor epoxide	1024-57-3	0.5	mg/kg	<0.5	<0.5	----	----	----	
alpha-Endosulfan	959-98-8	0.5	mg/kg	<0.5	<0.5	----	----	----	
4,4'-DDE	72-55-9	0.5	mg/kg	<0.5	<0.5	----	----	----	
Dieldrin	60-57-1	0.5	mg/kg	<0.5	<0.5	----	----	----	
Endrin	72-20-8	0.5	mg/kg	<0.5	<0.5	----	----	----	
beta-Endosulfan	33213-65-9	0.5	mg/kg	<0.5	<0.5	----	----	----	
4,4'-DDD	72-54-8	0.5	mg/kg	<0.5	<0.5	----	----	----	
Endosulfan sulfate	1031-07-8	0.5	mg/kg	<0.5	<0.5	----	----	----	
4,4'-DDT	50-29-3	1.0	mg/kg	<1.0	<1.0	----	----	----	
EP075J: Organophosphorus Pesticides									
Dichlorvos	62-73-7	0.5	mg/kg	<0.5	<0.5	----	----	----	
Dimethoate	60-51-5	0.5	mg/kg	<0.5	<0.5	----	----	----	
Diazinon	333-41-5	0.5	mg/kg	<0.5	<0.5	----	----	----	
Chlorpyrifos-methyl	5598-13-0	0.5	mg/kg	<0.5	<0.5	----	----	----	
Malathion	121-75-5	0.5	mg/kg	<0.5	<0.5	----	----	----	
Fenthion	55-38-9	0.5	mg/kg	<0.5	<0.5	----	----	----	
Chlorpyrifos	2921-88-2	0.5	mg/kg	<0.5	<0.5	----	----	----	
Pirimphos-ethyl	23505-41-1	0.5	mg/kg	<0.5	<0.5	----	----	----	
Chlorfenvinphos	470-90-6	0.5	mg/kg	<0.5	<0.5	----	----	----	
Prothiofos	34643-46-4	0.5	mg/kg	<0.5	<0.5	----	----	----	
Ethion	563-12-2	0.5	mg/kg	<0.5	<0.5	----	----	----	
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	----	10	mg/kg	<10	<10	<10	----	----	
C10 - C14 Fraction	----	50	mg/kg	<50	<50	<50	----	----	
C15 - C28 Fraction	----	100	mg/kg	130	<100	<100	----	----	
C29 - C36 Fraction	----	100	mg/kg	<100	<100	<100	----	----	
^ C10 - C36 Fraction (sum)	----	50	mg/kg	130	<50	<50	----	----	
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									



Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	BH02_0.1	BH02_1.0	BH02_2.0	BH02_4.0	BH02_5.5
Sampling date / time					09-Feb-2022 00:00	09-Feb-2022 00:00	09-Feb-2022 00:00	09-Feb-2022 00:00	09-Feb-2022 00:00
Compound	CAS Number	LOR	Unit		ES2204627-001	ES2204627-002	ES2204627-003	ES2204627-005	ES2204627-006
					Result	Result	Result	Result	Result
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions - Continued									
C6 - C10 Fraction	C6_C10	10	mg/kg		<10	<10	<10	----	----
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg		<10	<10	<10	----	----
>C10 - C16 Fraction	----	50	mg/kg		<50	<50	<50	----	----
>C16 - C34 Fraction	----	100	mg/kg		180	140	<100	----	----
>C34 - C40 Fraction	----	100	mg/kg		<100	<100	<100	----	----
^ >C10 - C40 Fraction (sum)	----	50	mg/kg		180	140	<50	----	----
^ >C10 - C16 Fraction minus Naphthalene (F2)	----	50	mg/kg		<50	<50	<50	----	----
EP080: BTEXN									
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	----	----
ortho-Xylene	95-47-6	0.5	mg/kg		<0.5	<0.5	<0.5	----	----
^ Sum of BTEX	----	0.2	mg/kg		<0.2	<0.2	<0.2	----	----
^ Total Xylenes	----	0.5	mg/kg		<0.5	<0.5	<0.5	----	----
Naphthalene	91-20-3	1	mg/kg		<1	<1	<1	----	----
EP231A: Perfluoroalkyl Sulfonic Acids									
Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.0002	mg/kg		<0.0002	----	----	----	<0.0002
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.0002	mg/kg		<0.0002	----	----	----	<0.0002
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.0002	mg/kg		<0.0002	----	----	----	<0.0002
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
EP231D: (n:2) Fluorotelomer Sulfonic Acids									
4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.0005	mg/kg		<0.0005	----	----	----	<0.0005

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	BH02_0.1	BH02_1.0	BH02_2.0	BH02_4.0	BH02_5.5
Sampling date / time				09-Feb-2022 00:00	09-Feb-2022 00:00	09-Feb-2022 00:00	09-Feb-2022 00:00	09-Feb-2022 00:00	
Compound	CAS Number	LOR	Unit	ES2204627-001	ES2204627-002	ES2204627-003	ES2204627-005	ES2204627-006	
				Result	Result	Result	Result	Result	
EP231D: (n:2) Fluorotelomer Sulfonic Acids - Continued									
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 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	%	105	103	101	----	----	
EP068S: Organochlorine Pesticide Surrogate									
Dibromo-DDE	21655-73-2	0.05	%	86.5	82.3	77.2	----	----	
EP068T: Organophosphorus Pesticide Surrogate									
DEF	78-48-8	0.05	%	79.4	72.8	77.3	----	----	
EP074S: VOC Surrogates									
1,2-Dichloroethane-D4	17060-07-0	0.5	%	95.0	84.8	----	----	----	
Toluene-D8	2037-26-5	0.5	%	96.8	87.2	----	----	----	
4-Bromofluorobenzene	460-00-4	0.5	%	93.8	86.4	----	----	----	
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	0.5	%	89.6	84.9	86.8	----	----	
2-Chlorophenol-D4	93951-73-6	0.5	%	88.7	85.4	87.9	----	----	
2,4,6-Tribromophenol	118-79-6	0.5	%	49.6	66.2	69.4	----	----	
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	0.5	%	102	88.4	89.6	----	----	
Anthracene-d10	1719-06-8	0.5	%	102	90.7	92.3	----	----	
4-Terphenyl-d14	1718-51-0	0.5	%	99.0	87.0	88.1	----	----	
EP075S: Acid Extractable Surrogates									
2-Fluorophenol	367-12-4	0.5	%	102	107	----	----	----	
Phenol-d6	13127-88-3	0.5	%	96.4	101	----	----	----	
2-Chlorophenol-D4	93951-73-6	0.5	%	88.8	89.4	----	----	----	
2,4,6-Tribromophenol	118-79-6	0.5	%	52.8	83.1	----	----	----	
EP075T: Base/Neutral Extractable Surrogates									



Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	BH02_0.1	BH02_1.0	BH02_2.0	BH02_4.0	BH02_5.5
Sampling date / time					09-Feb-2022 00:00	09-Feb-2022 00:00	09-Feb-2022 00:00	09-Feb-2022 00:00	09-Feb-2022 00:00
Compound	CAS Number	LOR	Unit		ES2204627-001	ES2204627-002	ES2204627-003	ES2204627-005	ES2204627-006
					Result	Result	Result	Result	Result
EP075T: Base/Neutral Extractable Surrogates - Continued									
Nitrobenzene-D5	4165-60-0	0.5	%		94.5	95.8	----	----	----
1,2-Dichlorobenzene-D4	2199-69-1	0.5	%		87.3	90.0	----	----	----
2-Fluorobiphenyl	321-60-8	0.5	%		83.0	93.0	----	----	----
Anthracene-d10	1719-06-8	0.5	%		102	106	----	----	----
4-Terphenyl-d14	1718-51-0	0.5	%		84.1	87.4	----	----	----
EP080S: TPH(V)/BTEX Surrogates									
1,2-Dichloroethane-D4	17060-07-0	0.2	%		90.3	80.3	91.4	----	----
Toluene-D8	2037-26-5	0.2	%		94.5	85.6	90.4	----	----
4-Bromofluorobenzene	460-00-4	0.2	%		90.4	84.5	89.4	----	----
EP231S: PFAS Surrogate									
13C4-PFOS	----	0.0002	%		104	----	----	----	88.5
13C8-PFOA	----	0.0002	%		107	----	----	----	105

Analytical Results

Descriptive Results

Sub-Matrix: SOIL		
Method: Compound	Sample ID - Sampling date / time	Analytical Results
EA200: AS 4964 - 2004 Identification of Asbestos in Soils		
EA200: Description	BH02_0.1 - 09-Feb-2022 00:00	Soil sample.



Surrogate Control Limits

Sub-Matrix: SOIL		Recovery Limits (%)	
Compound	CAS Number	Low	High
EP066S: PCB Surrogate			
Decachlorobiphenyl	2051-24-3	39	149
EP068S: Organochlorine Pesticide Surrogate			
Dibromo-DDE	21655-73-2	49	147
EP068T: Organophosphorus Pesticide Surrogate			
DEF	78-48-8	35	143
EP074S: VOC Surrogates			
1,2-Dichloroethane-D4	17060-07-0	64	130
Toluene-D8	2037-26-5	66	136
4-Bromofluorobenzene	460-00-4	60	122
EP075(SIM)S: Phenolic Compound Surrogates			
Phenol-d6	13127-88-3	63	123
2-Chlorophenol-D4	93951-73-6	66	122
2,4,6-Tribromophenol	118-79-6	40	138
EP075(SIM)T: PAH Surrogates			
2-Fluorobiphenyl	321-60-8	70	122
Anthracene-d10	1719-06-8	66	128
4-Terphenyl-d14	1718-51-0	65	129
EP075S: Acid Extractable Surrogates			
2-Fluorophenol	367-12-4	29	149
Phenol-d6	13127-88-3	32	128
2-Chlorophenol-D4	93951-73-6	32	128
2,4,6-Tribromophenol	118-79-6	13	121
EP075T: Base/Neutral Extractable Surrogates			
Nitrobenzene-D5	4165-60-0	33	125
1,2-Dichlorobenzene-D4	2199-69-1	34	108
2-Fluorobiphenyl	321-60-8	35	121
Anthracene-d10	1719-06-8	35	123
4-Terphenyl-d14	1718-51-0	33	125
EP080S: TPH(V)/BTEX Surrogates			
1,2-Dichloroethane-D4	17060-07-0	73	133
Toluene-D8	2037-26-5	74	132
4-Bromofluorobenzene	460-00-4	72	130
EP231S: PFAS Surrogate			
13C4-PFOS	----	60	120
13C8-PFOA	----	60	120



Inter-Laboratory Testing

Analysis conducted by ALS Brisbane, NATA accreditation no. 825, site no. 818 (Chemistry) 18958 (Biology).

(SOIL) EA003 :pH (field/fox)

(SOIL) EA029-D: Calcium Values

(SOIL) EA029-E: Magnesium Values

(SOIL) EA029-F: Excess Acid Neutralising Capacity

(SOIL) EA029-H: Acid Base Accounting

(SOIL) EA029-G: Retained Acidity

(SOIL) EA029-A: pH Measurements

(SOIL) EA029-C: Sulfur Trail

(SOIL) EA029-B: Acidity Trail

Analysis conducted by ALS Newcastle, NATA accreditation no. 825, site no. 1656 (Chemistry) 9854 (Biology).

(SOIL) EA200: AS 4964 - 2004 Identification of Asbestos in Soils

CERTIFICATE OF ANALYSIS

Work Order : **ES2204644**
Client : **EP RISK MANAGEMENT**
Contact : HARRISON BLAKE
Address : Level 4 73 Walker St
 North Sydney 2060
Telephone : ----
Project : EP2515
Order number : ----
C-O-C number : ----
Sampler : HARRISON BLAKE
Site : ----
Quote number : SY/497/20 Primary analysis only
No. of samples received : 7
No. of samples analysed : 5

Page : 1 of 16
Laboratory : Environmental Division Sydney
Contact : Tyler Anderson
Address : 277-289 Woodpark Road Smithfield NSW Australia 2164
Telephone : +61 2 8784 8555
Date Samples Received : 10-Feb-2022 16:50
Date Analysis Commenced : 14-Feb-2022
Issue Date : 22-Feb-2022 17:06



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
- Descriptive Results
- Surrogate Control Limits

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

Signatories

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

<i>Signatories</i>	<i>Position</i>	<i>Accreditation Category</i>
Alana Smylie	Team Leader - Asbestos	Newcastle - Asbestos, Mayfield West, NSW
Ben Felgendrejeris	Senior Acid Sulfate Soil Chemist	Brisbane Acid Sulphate Soils, Stafford, QLD
Edwandy Fadjjar	Organic Coordinator	Sydney Inorganics, Smithfield, NSW
Edwandy Fadjjar	Organic Coordinator	Sydney Organics, Smithfield, NSW
Franco Lentini	LCMS Coordinator	Sydney Organics, Smithfield, NSW
Ivan Taylor	Analyst	Sydney Inorganics, Smithfield, NSW



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.
- EP080: Where reported, Total Xylenes is the sum of the reported concentrations of m&p-Xylene and o-Xylene at or above the LOR.
- EP068: Where reported, Total Chlordane (sum) is the sum of the reported concentrations of cis-Chlordane and trans-Chlordane at or above the LOR.
- EP068: Where reported, Total OCP is the sum of the reported concentrations of all Organochlorine Pesticides at or above LOR.
- EP074: Where reported, Total Trihalomethanes is the sum of the reported concentrations of all Trihalomethanes at or above the LOR.
- EP074: Where reported, Total Xylenes is the sum of the reported concentrations of m&p-Xylene and o-Xylene at or above the LOR.
- EP074: Where reported, Sum of chlorinated hydrocarbons includes carbon tetrachloride, chlorobenzene, chloroform, 1,2-dichlorobenzene, 1,4-dichlorobenzene, 1,2-dichloroethane, 1,1-dichloroethene, cis-1,2-dichloroethene, trans-1,2-dichloroethene, 1,1,1,2-tetrachloroethane, 1,1,2,2-tetrachloroethane, 1,2,4-trichlorobenzene, 1,1,1-trichloroethane, 1,1,2-trichloroethane, trichloroethene, vinyl chloride, hexachlorobutadiene and methylene chloride.
- EP074: Where reported, Total Trimethylbenzenes is the sum of the reported concentrations of 1.2.3-Trimethylbenzene, 1.2.4-Trimethylbenzene and 1.3.5-Trimethylbenzene at or above the LOR.
- EP075(SIM): Where reported, Total Cresol is the sum of the reported concentrations of 2-Methylphenol and 3- & 4-Methylphenol at or above the LOR.
- ASS: EA029 (SPOCAS): Retained Acidity not required because pH KCl greater than or equal to 4.5
- ASS: EA029 (SPOCAS): Excess ANC not required because pH OX less than 6.5.
- EP075: Where reported, 'Sum of PAH' is the sum of the USEPA 16 priority PAHs
- ASS: EA029 (SPOCAS): Liming rate is calculated and reported on a dry weight basis assuming use of fine agricultural lime (CaCO₃) and using a safety factor of 1.5 to allow for non-homogeneous mixing and poor reactivity of lime. For conversion of Liming Rate from kg/t dry weight to kg/m³ in-situ soil, multiply reported results x wet bulk density of soil in t/m³.
- ASS: EA003 (NATA Field and F(ox) screening): pH F(ox) Reaction Rate: 1 - Slight; 2 - Moderate; 3 - Strong; 4 - Extreme
- EA200 'Am' Amosite (brown asbestos)
- EA200 'Cr' Crocidolite (blue asbestos)
- EA200 'Trace' - Asbestos fibres ("Free Fibres") detected by trace analysis per AS4964. The result can be interpreted that the sample contains detectable 'respirable' asbestos fibres
- EA200: Asbestos Identification Samples were analysed by Polarised Light Microscopy including dispersion staining.
- EA200 Legend
- EA200 'Ch' Chrysotile (white asbestos)



- EA200: 'UMF' Unknown Mineral Fibres. "-" indicates fibres detected may or may not be asbestos fibres. Confirmation by alternative techniques is recommended.
- Benzo(a)pyrene Toxicity Equivalent Quotient (TEQ) 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.
- EA200: For samples larger than 30g, the <2mm fraction may be sub-sampled prior to trace analysis as outlined in ISO23909:2008(E) Sect 6.3.2-2
- EA200: 'Yes' - Asbestos detected by polarised light microscopy including dispersion staining.
- EA200: 'No*' - No asbestos found, at the reporting limit of 0.1g/kg, by polarised light microscopy including dispersion staining. Asbestos material was detected and positively identified at concentrations estimated to be below 0.1g/kg.
- EA200: 'No' - No asbestos found at the reporting limit 0.1g/kg, by polarised light microscopy including dispersion staining.
- 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.

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	BH04_0.2	BH04_1.0	BH04_2.0	BH04_5.0	BH04_7.5
Sampling date / time				10-Feb-2022 00:00	10-Feb-2022 00:00	10-Feb-2022 00:00	10-Feb-2022 00:00	10-Feb-2022 00:00	
Compound	CAS Number	LOR	Unit	ES2204644-001	ES2204644-002	ES2204644-003	ES2204644-005	ES2204644-006	
				Result	Result	Result	Result	Result	
EA003 :pH (field/fox)									
pH (F)	----	0.1	pH Unit	----	----	----	7.5	7.6	
pH (Fox)	----	0.1	pH Unit	----	----	----	4.7	4.7	
Reaction Rate	----	1	Reaction Unit	----	----	----	2	2	
EA029-A: pH Measurements									
pH KCl (23A)	----	0.1	pH Unit	----	----	----	7.1	----	
pH OX (23B)	----	0.1	pH Unit	----	----	----	5.8	----	
EA029-B: Acidity Trail									
Titratable Actual Acidity (23F)	----	2	mole H+ / t	----	----	----	<2	----	
Titratable Peroxide Acidity (23G)	----	2	mole H+ / t	----	----	----	2	----	
Titratable Sulfidic Acidity (23H)	----	2	mole H+ / t	----	----	----	2	----	
sulfidic - Titratable Actual Acidity (s-23F)	----	0.020	% pyrite S	----	----	----	<0.020	----	
sulfidic - Titratable Peroxide Acidity (s-23G)	----	0.020	% pyrite S	----	----	----	<0.020	----	
sulfidic - Titratable Sulfidic Acidity (s-23H)	----	0.020	% pyrite S	----	----	----	<0.020	----	
EA029-C: Sulfur Trail									
KCl Extractable Sulfur (23Ce)	----	0.020	% S	----	----	----	<0.020	----	
Peroxide Sulfur (23De)	----	0.020	% S	----	----	----	<0.020	----	
Peroxide Oxidisable Sulfur (23E)	----	0.020	% S	----	----	----	<0.020	----	
acidity - Peroxide Oxidisable Sulfur (a-23E)	----	10	mole H+ / t	----	----	----	<10	----	
EA029-D: Calcium Values									
KCl Extractable Calcium (23Vh)	----	0.020	% Ca	----	----	----	<0.020	----	
Peroxide Calcium (23Wh)	----	0.020	% Ca	----	----	----	<0.020	----	
Acid Reacted Calcium (23X)	----	0.020	% Ca	----	----	----	<0.020	----	
acidity - Acid Reacted Calcium (a-23X)	----	10	mole H+ / t	----	----	----	<10	----	
sulfidic - Acid Reacted Calcium (s-23X)	----	0.020	% S	----	----	----	<0.020	----	
EA029-E: Magnesium Values									
KCl Extractable Magnesium (23Sm)	----	0.020	% Mg	----	----	----	<0.020	----	
Peroxide Magnesium (23Tm)	----	0.020	% Mg	----	----	----	<0.020	----	
Acid Reacted Magnesium (23U)	----	0.020	% Mg	----	----	----	<0.020	----	
Acidity - Acid Reacted Magnesium (a-23U)	----	10	mole H+ / t	----	----	----	<10	----	
sulfidic - Acid Reacted Magnesium (s-23U)	----	0.020	% S	----	----	----	<0.020	----	
EA029-H: Acid Base Accounting									



Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	BH04_0.2	BH04_1.0	BH04_2.0	BH04_5.0	BH04_7.5
Sampling date / time					10-Feb-2022 00:00	10-Feb-2022 00:00	10-Feb-2022 00:00	10-Feb-2022 00:00	10-Feb-2022 00:00
Compound	CAS Number	LOR	Unit		ES2204644-001	ES2204644-002	ES2204644-003	ES2204644-005	ES2204644-006
					Result	Result	Result	Result	Result
EA029-H: Acid Base Accounting - Continued									
ANC Fineness Factor	----	0.5	-	----	----	----	----	1.5	----
Net Acidity (sulfur units)	----	0.02	% S	----	----	----	----	<0.02	----
Net Acidity (acidity units)	----	10	mole H+ / t	----	----	----	----	<10	----
Liming Rate	----	1	kg CaCO3/t	----	----	----	----	<1	----
Net Acidity excluding ANC (sulfur units)	----	0.02	% S	----	----	----	----	<0.02	----
Net Acidity excluding ANC (acidity units)	----	10	mole H+ / t	----	----	----	----	<10	----
Liming Rate excluding ANC	----	1	kg CaCO3/t	----	----	----	----	<1	----
EA055: Moisture Content (Dried @ 105-110°C)									
Moisture Content	----	1.0	%	----	5.8	5.6	13.8	----	----
EA200: AS 4964 - 2004 Identification of Asbestos in Soils									
Asbestos Detected	1332-21-4	0.1	g/kg	----	No	No	----	----	----
Asbestos (Trace)	1332-21-4	5	Fibres	----	No	No	----	----	----
Asbestos Type	1332-21-4	-	--	----	-	-	----	----	----
Sample weight (dry)	----	0.01	g	----	86.6	43.5	----	----	----
APPROVED IDENTIFIER:	----	-	--	----	A. SMYLIE	A. SMYLIE	----	----	----
Synthetic Mineral Fibre	----	0.1	g/kg	----	No	No	----	----	----
Organic Fibre	----	0.1	g/kg	----	No	No	----	----	----
EG005(ED093)T: Total Metals by ICP-AES									
Arsenic	7440-38-2	5	mg/kg	----	<5	<5	<5	----	----
Cadmium	7440-43-9	1	mg/kg	----	<1	<1	<1	----	----
Chromium	7440-47-3	2	mg/kg	----	<2	<2	<2	----	----
Copper	7440-50-8	5	mg/kg	----	19	6	<5	----	----
Lead	7439-92-1	5	mg/kg	----	52	10	<5	----	----
Nickel	7440-02-0	2	mg/kg	----	<2	<2	<2	----	----
Zinc	7440-66-6	5	mg/kg	----	44	10	23	----	----
EG035T: Total Recoverable Mercury by FIMS									
Mercury	7439-97-6	0.1	mg/kg	----	<0.1	<0.1	<0.1	----	----
EP066: Polychlorinated Biphenyls (PCB)									
Total Polychlorinated biphenyls	----	0.1	mg/kg	----	<0.1	<0.1	<0.1	----	----
EP068A: Organochlorine Pesticides (OC)									
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	----	----



Analytical Results

Sub-Matrix: SOIL
 (Matrix: SOIL)

Sample ID

				BH04_0.2	BH04_1.0	BH04_2.0	BH04_5.0	BH04_7.5
Sampling date / time				10-Feb-2022 00:00	10-Feb-2022 00:00	10-Feb-2022 00:00	10-Feb-2022 00:00	10-Feb-2022 00:00
Compound	CAS Number	LOR	Unit	ES2204644-001	ES2204644-002	ES2204644-003	ES2204644-005	ES2204644-006
				Result	Result	Result	Result	Result

EP068A: Organochlorine Pesticides (OC) - Continued

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	----	----
^ Total Chlordane (sum)	----	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
Dieldrin	60-57-1	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
4,4'-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
Endrin	72-20-8	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
^ Endosulfan (sum)	115-29-7	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	----	----
Endrin aldehyde	7421-93-4	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	0.2	mg/kg	<0.2	<0.2	<0.2	----	----
Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
Methoxychlor	72-43-5	0.2	mg/kg	<0.2	<0.2	<0.2	----	----
^ Sum of Aldrin + Dieldrin	309-00-2/60-57-1	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
^ Sum of DDD + DDE + DDT	72-54-8/72-55-9/50-29-3	0.05	mg/kg	<0.05	<0.05	<0.05	----	----

EP068B: Organophosphorus Pesticides (OP)

Dichlorvos	62-73-7	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	<0.2	<0.2	----	----
Dimethoate	60-51-5	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
Diazinon	333-41-5	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	<0.2	<0.2	----	----
Malathion	121-75-5	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
Fenthion	55-38-9	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
Parathion	56-38-2	0.2	mg/kg	<0.2	<0.2	<0.2	----	----
Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	<0.05	<0.05	----	----



Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	BH04_0.2	BH04_1.0	BH04_2.0	BH04_5.0	BH04_7.5
Sampling date / time					10-Feb-2022 00:00	10-Feb-2022 00:00	10-Feb-2022 00:00	10-Feb-2022 00:00	10-Feb-2022 00:00
Compound	CAS Number	LOR	Unit		ES2204644-001	ES2204644-002	ES2204644-003	ES2204644-005	ES2204644-006
					Result	Result	Result	Result	Result
EP068B: Organophosphorus Pesticides (OP) - Continued									
Chlorfenvinphos	470-90-6	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
Bromophos-ethyl	4824-78-6	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
Fenamiphos	22224-92-6	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
Prothiofos	34643-46-4	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
Ethion	563-12-2	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
Carbophenothion	786-19-6	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
Azinphos Methyl	86-50-0	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
EP074A: Monocyclic Aromatic Hydrocarbons									
Styrene	100-42-5	0.5	mg/kg		<0.5	----	<0.5	----	----
Isopropylbenzene	98-82-8	0.5	mg/kg		<0.5	----	<0.5	----	----
n-Propylbenzene	103-65-1	0.5	mg/kg		<0.5	----	<0.5	----	----
1,3,5-Trimethylbenzene	108-67-8	0.5	mg/kg		<0.5	----	<0.5	----	----
sec-Butylbenzene	135-98-8	0.5	mg/kg		<0.5	----	<0.5	----	----
1,2,4-Trimethylbenzene	95-63-6	0.5	mg/kg		<0.5	----	<0.5	----	----
tert-Butylbenzene	98-06-6	0.5	mg/kg		<0.5	----	<0.5	----	----
p-Isopropyltoluene	99-87-6	0.5	mg/kg		<0.5	----	<0.5	----	----
n-Butylbenzene	104-51-8	0.5	mg/kg		<0.5	----	<0.5	----	----
EP074B: Oxygenated Compounds									
Vinyl Acetate	108-05-4	5	mg/kg		<5	----	<5	----	----
2-Butanone (MEK)	78-93-3	5	mg/kg		<5	----	<5	----	----
4-Methyl-2-pentanone (MIBK)	108-10-1	5	mg/kg		<5	----	<5	----	----
2-Hexanone (MBK)	591-78-6	5	mg/kg		<5	----	<5	----	----
EP074C: Sulfonated Compounds									
Carbon disulfide	75-15-0	0.5	mg/kg		<0.5	----	<0.5	----	----
EP074D: Fumigants									
2,2-Dichloropropane	594-20-7	0.5	mg/kg		<0.5	----	<0.5	----	----
1,2-Dichloropropane	78-87-5	0.5	mg/kg		<0.5	----	<0.5	----	----
cis-1,3-Dichloropropylene	10061-01-5	0.5	mg/kg		<0.5	----	<0.5	----	----
trans-1,3-Dichloropropylene	10061-02-6	0.5	mg/kg		<0.5	----	<0.5	----	----
1,2-Dibromoethane (EDB)	106-93-4	0.5	mg/kg		<0.5	----	<0.5	----	----
EP074E: Halogenated Aliphatic Compounds									
Dichlorodifluoromethane	75-71-8	5	mg/kg		<5	----	<5	----	----
Chloromethane	74-87-3	5	mg/kg		<5	----	<5	----	----
Vinyl chloride	75-01-4	5	mg/kg		<5	----	<5	----	----



Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	BH04_0.2	BH04_1.0	BH04_2.0	BH04_5.0	BH04_7.5
Sampling date / time					10-Feb-2022 00:00	10-Feb-2022 00:00	10-Feb-2022 00:00	10-Feb-2022 00:00	10-Feb-2022 00:00
Compound	CAS Number	LOR	Unit		ES2204644-001	ES2204644-002	ES2204644-003	ES2204644-005	ES2204644-006
					Result	Result	Result	Result	Result
EP074E: Halogenated Aliphatic Compounds - Continued									
Bromomethane	74-83-9	5	mg/kg		<5	----	<5	----	----
Chloroethane	75-00-3	5	mg/kg		<5	----	<5	----	----
Trichlorofluoromethane	75-69-4	5	mg/kg		<5	----	<5	----	----
1,1-Dichloroethene	75-35-4	0.5	mg/kg		<0.5	----	<0.5	----	----
Iodomethane	74-88-4	0.5	mg/kg		<0.5	----	<0.5	----	----
trans-1,2-Dichloroethene	156-60-5	0.5	mg/kg		<0.5	----	<0.5	----	----
1,1-Dichloroethane	75-34-3	0.5	mg/kg		<0.5	----	<0.5	----	----
cis-1,2-Dichloroethene	156-59-2	0.5	mg/kg		<0.5	----	<0.5	----	----
1,1,1-Trichloroethane	71-55-6	0.5	mg/kg		<0.5	----	<0.5	----	----
1,1-Dichloropropylene	563-58-6	0.5	mg/kg		<0.5	----	<0.5	----	----
Carbon Tetrachloride	56-23-5	0.5	mg/kg		<0.5	----	<0.5	----	----
1,2-Dichloroethane	107-06-2	0.5	mg/kg		<0.5	----	<0.5	----	----
Trichloroethene	79-01-6	0.5	mg/kg		<0.5	----	<0.5	----	----
Dibromomethane	74-95-3	0.5	mg/kg		<0.5	----	<0.5	----	----
1,1,2-Trichloroethane	79-00-5	0.5	mg/kg		<0.5	----	<0.5	----	----
1,3-Dichloropropane	142-28-9	0.5	mg/kg		<0.5	----	<0.5	----	----
Tetrachloroethene	127-18-4	0.5	mg/kg		<0.5	----	<0.5	----	----
1,1,1,2-Tetrachloroethane	630-20-6	0.5	mg/kg		<0.5	----	<0.5	----	----
trans-1,4-Dichloro-2-butene	110-57-6	0.5	mg/kg		<0.5	----	<0.5	----	----
cis-1,4-Dichloro-2-butene	1476-11-5	0.5	mg/kg		<0.5	----	<0.5	----	----
1,1,2,2-Tetrachloroethane	79-34-5	0.5	mg/kg		<0.5	----	<0.5	----	----
1,2,3-Trichloropropane	96-18-4	0.5	mg/kg		<0.5	----	<0.5	----	----
Pentachloroethane	76-01-7	0.5	mg/kg		<0.5	----	<0.5	----	----
1,2-Dibromo-3-chloropropane	96-12-8	0.5	mg/kg		<0.5	----	<0.5	----	----
EP074F: Halogenated Aromatic Compounds									
Chlorobenzene	108-90-7	0.5	mg/kg		<0.5	----	<0.5	----	----
Bromobenzene	108-86-1	0.5	mg/kg		<0.5	----	<0.5	----	----
2-Chlorotoluene	95-49-8	0.5	mg/kg		<0.5	----	<0.5	----	----
4-Chlorotoluene	106-43-4	0.5	mg/kg		<0.5	----	<0.5	----	----
1,2,3-Trichlorobenzene	87-61-6	0.5	mg/kg		<0.5	----	<0.5	----	----
EP074G: Trihalomethanes									
Chloroform	67-66-3	0.5	mg/kg		<0.5	----	<0.5	----	----
Bromodichloromethane	75-27-4	0.5	mg/kg		<0.5	----	<0.5	----	----
Dibromochloromethane	124-48-1	0.5	mg/kg		<0.5	----	<0.5	----	----



Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	BH04_0.2	BH04_1.0	BH04_2.0	BH04_5.0	BH04_7.5
Sampling date / time					10-Feb-2022 00:00	10-Feb-2022 00:00	10-Feb-2022 00:00	10-Feb-2022 00:00	10-Feb-2022 00:00
Compound	CAS Number	LOR	Unit		ES2204644-001	ES2204644-002	ES2204644-003	ES2204644-005	ES2204644-006
					Result	Result	Result	Result	Result
EP074G: Trihalomethanes - Continued									
Bromoform	75-25-2	0.5	mg/kg		<0.5	----	<0.5	----	----
EP075(SIM)A: Phenolic Compounds									
Phenol	108-95-2	0.5	mg/kg		<0.5	<0.5	<0.5	----	----
2-Chlorophenol	95-57-8	0.5	mg/kg		<0.5	<0.5	<0.5	----	----
2-Methylphenol	95-48-7	0.5	mg/kg		<0.5	<0.5	<0.5	----	----
3- & 4-Methylphenol	1319-77-3	1	mg/kg		<1	<1	<1	----	----
2-Nitrophenol	88-75-5	0.5	mg/kg		<0.5	<0.5	<0.5	----	----
2,4-Dimethylphenol	105-67-9	0.5	mg/kg		<0.5	<0.5	<0.5	----	----
2,4-Dichlorophenol	120-83-2	0.5	mg/kg		<0.5	<0.5	<0.5	----	----
2,6-Dichlorophenol	87-65-0	0.5	mg/kg		<0.5	<0.5	<0.5	----	----
4-Chloro-3-methylphenol	59-50-7	0.5	mg/kg		<0.5	<0.5	<0.5	----	----
2,4,6-Trichlorophenol	88-06-2	0.5	mg/kg		<0.5	<0.5	<0.5	----	----
2,4,5-Trichlorophenol	95-95-4	0.5	mg/kg		<0.5	<0.5	<0.5	----	----
Pentachlorophenol	87-86-5	2	mg/kg		<2	<2	<2	----	----
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons									
Naphthalene	91-20-3	0.5	mg/kg		<0.5	<0.5	<0.5	----	----
Acenaphthylene	208-96-8	0.5	mg/kg		<0.5	<0.5	<0.5	----	----
Acenaphthene	83-32-9	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	----	----
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg		<0.5	<0.5	<0.5	----	----
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg		<0.5	<0.5	<0.5	----	----
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	----	----



Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	BH04_0.2	BH04_1.0	BH04_2.0	BH04_5.0	BH04_7.5
Sampling date / time					10-Feb-2022 00:00	10-Feb-2022 00:00	10-Feb-2022 00:00	10-Feb-2022 00:00	10-Feb-2022 00:00
Compound	CAS Number	LOR	Unit		ES2204644-001	ES2204644-002	ES2204644-003	ES2204644-005	ES2204644-006
					Result	Result	Result	Result	Result
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued									
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg		1.2	1.2	1.2	----	----
EP075B: Polynuclear Aromatic Hydrocarbons									
2-Methylnaphthalene	91-57-6	0.5	mg/kg		<0.5	----	<0.5	----	----
2-Chloronaphthalene	91-58-7	0.5	mg/kg		<0.5	----	<0.5	----	----
N-2-Fluorenyl Acetamide	53-96-3	0.5	mg/kg		<0.5	----	<0.5	----	----
7.12-Dimethylbenz(a)anthracene	57-97-6	0.5	mg/kg		<0.5	----	<0.5	----	----
3-Methylcholanthrene	56-49-5	0.5	mg/kg		<0.5	----	<0.5	----	----
EP075C: Phthalate Esters									
Dimethyl phthalate	131-11-3	0.5	mg/kg		<0.5	----	<0.5	----	----
Diethyl phthalate	84-66-2	0.5	mg/kg		<0.5	----	<0.5	----	----
Di-n-butyl phthalate	84-74-2	0.5	mg/kg		<0.5	----	<0.5	----	----
Butyl benzyl phthalate	85-68-7	0.5	mg/kg		<0.5	----	<0.5	----	----
bis(2-ethylhexyl) phthalate	117-81-7	5.0	mg/kg		<5.0	----	<5.0	----	----
Di-n-octylphthalate	117-84-0	0.5	mg/kg		<0.5	----	<0.5	----	----
EP075D: Nitrosamines									
N-Nitrosomethylethylamine	10595-95-6	0.5	mg/kg		<0.5	----	<0.5	----	----
N-Nitrosodiethylamine	55-18-5	0.5	mg/kg		<0.5	----	<0.5	----	----
N-Nitrosopyrrolidine	930-55-2	1.0	mg/kg		<1.0	----	<1.0	----	----
N-Nitrosomorpholine	59-89-2	0.5	mg/kg		<0.5	----	<0.5	----	----
N-Nitrosodi-n-propylamine	621-64-7	0.5	mg/kg		<0.5	----	<0.5	----	----
N-Nitrosopiperidine	100-75-4	0.5	mg/kg		<0.5	----	<0.5	----	----
N-Nitrosodibutylamine	924-16-3	0.5	mg/kg		<0.5	----	<0.5	----	----
N-Nitrosodiphenyl & Diphenylamine	86-30-6 122-39-4	1.0	mg/kg		<1.0	----	<1.0	----	----
Methapyrilene	91-80-5	0.5	mg/kg		<0.5	----	<0.5	----	----
EP075E: Nitroaromatics and Ketones									
2-Picoline	109-06-8	0.5	mg/kg		<0.5	----	<0.5	----	----
Acetophenone	98-86-2	0.5	mg/kg		<0.5	----	<0.5	----	----
Nitrobenzene	98-95-3	0.5	mg/kg		<0.5	----	<0.5	----	----
Isophorone	78-59-1	0.5	mg/kg		<0.5	----	<0.5	----	----
2,6-Dinitrotoluene	606-20-2	1.0	mg/kg		<1.0	----	<1.0	----	----
2,4-Dinitrotoluene	121-14-2	1.0	mg/kg		<1.0	----	<1.0	----	----
1-Naphthylamine	134-32-7	0.5	mg/kg		<0.5	----	<0.5	----	----
4-Nitroquinoline-N-oxide	56-57-5	0.5	mg/kg		<0.5	----	<0.5	----	----



Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	BH04_0.2	BH04_1.0	BH04_2.0	BH04_5.0	BH04_7.5
Sampling date / time					10-Feb-2022 00:00	10-Feb-2022 00:00	10-Feb-2022 00:00	10-Feb-2022 00:00	10-Feb-2022 00:00
Compound	CAS Number	LOR	Unit		ES2204644-001	ES2204644-002	ES2204644-003	ES2204644-005	ES2204644-006
					Result	Result	Result	Result	Result
EP075E: Nitroaromatics and Ketones - Continued									
5-Nitro-o-toluidine	99-55-8	0.5	mg/kg		<0.5	----	<0.5	----	----
Azobenzene	103-33-3	1	mg/kg		<1	----	<1	----	----
1,3,5-Trinitrobenzene	99-35-4	0.5	mg/kg		<0.5	----	<0.5	----	----
Phenacetin	62-44-2	0.5	mg/kg		<0.5	----	<0.5	----	----
4-Aminobiphenyl	92-67-1	0.5	mg/kg		<0.5	----	<0.5	----	----
Pentachloronitrobenzene	82-68-8	0.5	mg/kg		<0.5	----	<0.5	----	----
Pronamide	23950-58-5	0.5	mg/kg		<0.5	----	<0.5	----	----
Dimethylaminoazobenzene	60-11-7	0.5	mg/kg		<0.5	----	<0.5	----	----
Chlorobenzilate	510-15-6	0.5	mg/kg		<0.5	----	<0.5	----	----
EP075F: Haloethers									
Bis(2-chloroethyl) ether	111-44-4	0.5	mg/kg		<0.5	----	<0.5	----	----
Bis(2-chloroethoxy) methane	111-91-1	0.5	mg/kg		<0.5	----	<0.5	----	----
4-Chlorophenyl phenyl ether	7005-72-3	0.5	mg/kg		<0.5	----	<0.5	----	----
4-Bromophenyl phenyl ether	101-55-3	0.5	mg/kg		<0.5	----	<0.5	----	----
EP075G: Chlorinated Hydrocarbons									
1,3-Dichlorobenzene	541-73-1	0.5	mg/kg		<0.5	----	<0.5	----	----
1,4-Dichlorobenzene	106-46-7	0.5	mg/kg		<0.5	----	<0.5	----	----
1,2-Dichlorobenzene	95-50-1	0.5	mg/kg		<0.5	----	<0.5	----	----
Hexachloroethane	67-72-1	0.5	mg/kg		<0.5	----	<0.5	----	----
1,2,4-Trichlorobenzene	120-82-1	0.5	mg/kg		<0.5	----	<0.5	----	----
Hexachloropropylene	1888-71-7	0.5	mg/kg		<0.5	----	<0.5	----	----
Hexachlorobutadiene	87-68-3	0.5	mg/kg		<0.5	----	<0.5	----	----
Hexachlorocyclopentadiene	77-47-4	2.5	mg/kg		<2.5	----	<2.5	----	----
Pentachlorobenzene	608-93-5	0.5	mg/kg		<0.5	----	<0.5	----	----
Hexachlorobenzene (HCB)	118-74-1	1.0	mg/kg		<1.0	----	<1.0	----	----
EP075H: Anilines and Benzidines									
Aniline	62-53-3	0.5	mg/kg		<0.5	----	<0.5	----	----
4-Chloroaniline	106-47-8	0.5	mg/kg		<0.5	----	<0.5	----	----
2-Nitroaniline	88-74-4	1.0	mg/kg		<1.0	----	<1.0	----	----
3-Nitroaniline	99-09-2	1.0	mg/kg		<1.0	----	<1.0	----	----
Dibenzofuran	132-64-9	0.5	mg/kg		<0.5	----	<0.5	----	----
4-Nitroaniline	100-01-6	0.5	mg/kg		<0.5	----	<0.5	----	----
Carbazole	86-74-8	0.5	mg/kg		<0.5	----	<0.5	----	----
3,3'-Dichlorobenzidine	91-94-1	0.5	mg/kg		<0.5	----	<0.5	----	----



Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	BH04_0.2	BH04_1.0	BH04_2.0	BH04_5.0	BH04_7.5
Sampling date / time					10-Feb-2022 00:00	10-Feb-2022 00:00	10-Feb-2022 00:00	10-Feb-2022 00:00	10-Feb-2022 00:00
Compound	CAS Number	LOR	Unit		ES2204644-001	ES2204644-002	ES2204644-003	ES2204644-005	ES2204644-006
					Result	Result	Result	Result	Result
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	----	10	mg/kg		<10	<10	<10	----	----
C10 - C14 Fraction	----	50	mg/kg		<50	<50	<50	----	----
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									
C6 - C10 Fraction	C6_C10	10	mg/kg		<10	<10	<10	----	----
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg		<10	<10	<10	----	----
>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	----	----
EP080: BTEXN									
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	----	----
ortho-Xylene	95-47-6	0.5	mg/kg		<0.5	<0.5	<0.5	----	----
^ Sum of BTEX	----	0.2	mg/kg		<0.2	<0.2	<0.2	----	----
^ Total Xylenes	----	0.5	mg/kg		<0.5	<0.5	<0.5	----	----
Naphthalene	91-20-3	1	mg/kg		<1	<1	<1	----	----
EP231A: Perfluoroalkyl Sulfonic Acids									
Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.0002	mg/kg		----	<0.0002	----	----	----
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.0002	mg/kg		----	<0.0002	----	----	----
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.0002	mg/kg		----	<0.0002	----	----	----
EP231B: Perfluoroalkyl Carboxylic Acids									
Perfluorobutanoic acid (PFBA)	375-22-4	0.001	mg/kg		----	<0.001	----	----	----
Perfluoropentanoic acid (PFPeA)	2706-90-3	0.0002	mg/kg		----	<0.0002	----	----	----
Perfluorohexanoic acid (PFHxA)	307-24-4	0.0002	mg/kg		----	<0.0002	----	----	----

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	BH04_0.2	BH04_1.0	BH04_2.0	BH04_5.0	BH04_7.5
Sampling date / time				10-Feb-2022 00:00	10-Feb-2022 00:00	10-Feb-2022 00:00	10-Feb-2022 00:00	10-Feb-2022 00:00	
Compound	CAS Number	LOR	Unit	ES2204644-001	ES2204644-002	ES2204644-003	ES2204644-005	ES2204644-006	
				Result	Result	Result	Result	Result	
EP231B: Perfluoroalkyl Carboxylic Acids - Continued									
Perfluoroheptanoic acid (PFHpA)	375-85-9	0.0002	mg/kg	----	<0.0002	----	----	----	
Perfluorooctanoic acid (PFOA)	335-67-1	0.0002	mg/kg	----	<0.0002	----	----	----	
EP231D: (n:2) Fluorotelomer Sulfonic Acids									
4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.0005	mg/kg	----	<0.0005	----	----	----	
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.0005	mg/kg	----	<0.0005	----	----	----	
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.0005	mg/kg	----	<0.0005	----	----	----	
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.0005	mg/kg	----	<0.0005	----	----	----	
EP231P: PFAS Sums									
Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.0002	mg/kg	----	<0.0002	----	----	----	
Sum of PFAS (WA DER List)	----	0.0002	mg/kg	----	<0.0002	----	----	----	
EP066S: PCB Surrogate									
Decachlorobiphenyl	2051-24-3	0.1	%	93.1	120	89.7	----	----	
EP068S: Organochlorine Pesticide Surrogate									
Dibromo-DDE	21655-73-2	0.05	%	76.7	92.4	75.0	----	----	
EP068T: Organophosphorus Pesticide Surrogate									
DEF	78-48-8	0.05	%	67.5	79.2	65.2	----	----	
EP074S: VOC Surrogates									
1,2-Dichloroethane-D4	17060-07-0	0.5	%	83.9	----	79.9	----	----	
Toluene-D8	2037-26-5	0.5	%	88.0	----	81.5	----	----	
4-Bromofluorobenzene	460-00-4	0.5	%	90.2	----	80.5	----	----	
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	0.5	%	89.4	88.4	83.6	----	----	
2-Chlorophenol-D4	93951-73-6	0.5	%	91.2	91.4	84.1	----	----	
2,4,6-Tribromophenol	118-79-6	0.5	%	69.7	67.4	62.6	----	----	
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	0.5	%	94.0	94.1	86.5	----	----	
Anthracene-d10	1719-06-8	0.5	%	95.2	95.3	88.5	----	----	
4-Terphenyl-d14	1718-51-0	0.5	%	91.8	93.8	85.3	----	----	
EP075S: Acid Extractable Surrogates									



Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	BH04_0.2	BH04_1.0	BH04_2.0	BH04_5.0	BH04_7.5
Sampling date / time					10-Feb-2022 00:00	10-Feb-2022 00:00	10-Feb-2022 00:00	10-Feb-2022 00:00	10-Feb-2022 00:00
Compound	CAS Number	LOR	Unit		ES2204644-001	ES2204644-002	ES2204644-003	ES2204644-005	ES2204644-006
					Result	Result	Result	Result	Result
EP075S: Acid Extractable Surrogates - Continued									
2-Fluorophenol	367-12-4	0.5	%		107	----	97.6	----	----
Phenol-d6	13127-88-3	0.5	%		101	----	99.7	----	----
2-Chlorophenol-D4	93951-73-6	0.5	%		98.9	----	90.5	----	----
2,4,6-Tribromophenol	118-79-6	0.5	%		76.5	----	67.7	----	----
EP075T: Base/Neutral Extractable Surrogates									
Nitrobenzene-D5	4165-60-0	0.5	%		104	----	82.8	----	----
1,2-Dichlorobenzene-D4	2199-69-1	0.5	%		86.9	----	77.1	----	----
2-Fluorobiphenyl	321-60-8	0.5	%		83.3	----	74.6	----	----
Anthracene-d10	1719-06-8	0.5	%		113	----	104	----	----
4-Terphenyl-d14	1718-51-0	0.5	%		92.1	----	84.5	----	----
EP080S: TPH(V)/BTEX Surrogates									
1,2-Dichloroethane-D4	17060-07-0	0.2	%		78.9	96.5	75.4	----	----
Toluene-D8	2037-26-5	0.2	%		86.3	91.8	80.1	----	----
4-Bromofluorobenzene	460-00-4	0.2	%		89.0	95.1	79.9	----	----
EP231S: PFAS Surrogate									
13C4-PFOS	----	0.0002	%		----	94.5	----	----	----
13C8-PFOA	----	0.0002	%		----	102	----	----	----

Analytical Results

Descriptive Results

Sub-Matrix: SOIL		
Method: Compound	Sample ID - Sampling date / time	Analytical Results
EA200: AS 4964 - 2004 Identification of Asbestos in Soils		
EA200: Description	BH04_0.2 - 10-Feb-2022 00:00	Soil sample.
EA200: Description	BH04_1.0 - 10-Feb-2022 00:00	Soil sample.



Surrogate Control Limits

Sub-Matrix: SOIL		Recovery Limits (%)	
Compound	CAS Number	Low	High
EP066S: PCB Surrogate			
Decachlorobiphenyl	2051-24-3	39	149
EP068S: Organochlorine Pesticide Surrogate			
Dibromo-DDE	21655-73-2	49	147
EP068T: Organophosphorus Pesticide Surrogate			
DEF	78-48-8	35	143
EP074S: VOC Surrogates			
1,2-Dichloroethane-D4	17060-07-0	64	130
Toluene-D8	2037-26-5	66	136
4-Bromofluorobenzene	460-00-4	60	122
EP075(SIM)S: Phenolic Compound Surrogates			
Phenol-d6	13127-88-3	63	123
2-Chlorophenol-D4	93951-73-6	66	122
2,4,6-Tribromophenol	118-79-6	40	138
EP075(SIM)T: PAH Surrogates			
2-Fluorobiphenyl	321-60-8	70	122
Anthracene-d10	1719-06-8	66	128
4-Terphenyl-d14	1718-51-0	65	129
EP075S: Acid Extractable Surrogates			
2-Fluorophenol	367-12-4	29	149
Phenol-d6	13127-88-3	32	128
2-Chlorophenol-D4	93951-73-6	32	128
2,4,6-Tribromophenol	118-79-6	13	121
EP075T: Base/Neutral Extractable Surrogates			
Nitrobenzene-D5	4165-60-0	33	125
1,2-Dichlorobenzene-D4	2199-69-1	34	108
2-Fluorobiphenyl	321-60-8	35	121
Anthracene-d10	1719-06-8	35	123
4-Terphenyl-d14	1718-51-0	33	125
EP080S: TPH(V)/BTEX Surrogates			
1,2-Dichloroethane-D4	17060-07-0	73	133
Toluene-D8	2037-26-5	74	132
4-Bromofluorobenzene	460-00-4	72	130
EP231S: PFAS Surrogate			
13C4-PFOS	----	60	120
13C8-PFOA	----	60	120



Inter-Laboratory Testing

Analysis conducted by ALS Brisbane, NATA accreditation no. 825, site no. 818 (Chemistry) 18958 (Biology).

(SOIL) EA003 :pH (field/fox)

(SOIL) EA029-D: Calcium Values

(SOIL) EA029-E: Magnesium Values

(SOIL) EA029-F: Excess Acid Neutralising Capacity

(SOIL) EA029-H: Acid Base Accounting

(SOIL) EA029-G: Retained Acidity

(SOIL) EA029-A: pH Measurements

(SOIL) EA029-C: Sulfur Trail

(SOIL) EA029-B: Acidity Trail

Analysis conducted by ALS Newcastle, NATA accreditation no. 825, site no. 1656 (Chemistry) 9854 (Biology).

(SOIL) EA200: AS 4964 - 2004 Identification of Asbestos in Soils

CERTIFICATE OF ANALYSIS

Work Order : **ES2204645**
Client : **EP RISK MANAGEMENT**
Contact : HARRISON BLAKE
Address : Level 4 73 Walker St
 North Sydney 2060
Telephone : ----
Project : EP2515
Order number : ----
C-O-C number : ----
Sampler : HARRISON BLAKE
Site : ----
Quote number : SY/497/20 Primary analysis only
No. of samples received : 6
No. of samples analysed : 4

Page : 1 of 16
Laboratory : Environmental Division Sydney
Contact : Tyler Anderson
Address : 277-289 Woodpark Road Smithfield NSW Australia 2164
Telephone : +61 2 8784 8555
Date Samples Received : 10-Feb-2022 16:50
Date Analysis Commenced : 14-Feb-2022
Issue Date : 22-Feb-2022 17:29



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
- Descriptive Results
- Surrogate Control Limits

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

Signatories

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

<i>Signatories</i>	<i>Position</i>	<i>Accreditation Category</i>
Alana Smylie	Team Leader - Asbestos	Newcastle - Asbestos, Mayfield West, NSW
Ben Felgendrejeris	Senior Acid Sulfate Soil Chemist	Brisbane Acid Sulphate Soils, Stafford, QLD
Edwandy Fadjjar	Organic Coordinator	Sydney Inorganics, Smithfield, NSW
Edwandy Fadjjar	Organic Coordinator	Sydney Organics, Smithfield, NSW
Franco Lentini	LCMS Coordinator	Sydney Organics, Smithfield, NSW
Ivan Taylor	Analyst	Sydney Inorganics, Smithfield, NSW



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.
- EP080: Where reported, Total Xylenes is the sum of the reported concentrations of m&p-Xylene and o-Xylene at or above the LOR.
- EP068: Where reported, Total Chlordane (sum) is the sum of the reported concentrations of cis-Chlordane and trans-Chlordane at or above the LOR.
- EP068: Where reported, Total OCP is the sum of the reported concentrations of all Organochlorine Pesticides at or above LOR.
- EP074: Where reported, Total Trihalomethanes is the sum of the reported concentrations of all Trihalomethanes at or above the LOR.
- EP074: Where reported, Total Xylenes is the sum of the reported concentrations of m&p-Xylene and o-Xylene at or above the LOR.
- EP074: Where reported, Sum of chlorinated hydrocarbons includes carbon tetrachloride, chlorobenzene, chloroform, 1,2-dichlorobenzene, 1,4-dichlorobenzene, 1,2-dichloroethane, 1,1-dichloroethene, cis-1,2-dichloroethene, trans-1,2-dichloroethene, 1,1,1,2-tetrachloroethane, 1,1,2,2-tetrachloroethane, 1,2,4-trichlorobenzene, 1,1,1-trichloroethane, 1,1,2-trichloroethane, trichloroethene, vinyl chloride, hexachlorobutadiene and methylene chloride.
- EP074: Where reported, Total Trimethylbenzenes is the sum of the reported concentrations of 1.2.3-Trimethylbenzene, 1.2.4-Trimethylbenzene and 1.3.5-Trimethylbenzene at or above the LOR.
- EP075(SIM): Where reported, Total Cresol is the sum of the reported concentrations of 2-Methylphenol and 3- & 4-Methylphenol at or above the LOR.
- ASS: EA029 (SPOCAS): Retained Acidity not required because pH KCl greater than or equal to 4.5
- ASS: EA029 (SPOCAS): Excess ANC not required because pH OX less than 6.5.
- EP075: Where reported, 'Sum of PAH' is the sum of the USEPA 16 priority PAHs
- ASS: EA029 (SPOCAS): Liming rate is calculated and reported on a dry weight basis assuming use of fine agricultural lime (CaCO₃) and using a safety factor of 1.5 to allow for non-homogeneous mixing and poor reactivity of lime. For conversion of Liming Rate from kg/t dry weight to kg/m³ in-situ soil, multiply reported results x wet bulk density of soil in t/m³.
- ASS: EA003 (NATA Field and F(ox) screening): pH F(ox) Reaction Rate: 1 - Slight; 2 - Moderate; 3 - Strong; 4 - Extreme
- EA200 'Am' Amosite (brown asbestos)
- EA200 'Cr' Crocidolite (blue asbestos)
- EA200 'Trace' - Asbestos fibres ("Free Fibres") detected by trace analysis per AS4964. The result can be interpreted that the sample contains detectable 'respirable' asbestos fibres
- EA200: Asbestos Identification Samples were analysed by Polarised Light Microscopy including dispersion staining.
- EA200 Legend
- EA200 'Ch' Chrysotile (white asbestos)



- EA200: 'UMF' Unknown Mineral Fibres. "-" indicates fibres detected may or may not be asbestos fibres. Confirmation by alternative techniques is recommended.
- Benzo(a)pyrene Toxicity Equivalent Quotient (TEQ) 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.
- EA200: For samples larger than 30g, the <2mm fraction may be sub-sampled prior to trace analysis as outlined in ISO23909:2008(E) Sect 6.3.2-2
- EA200: 'Yes' - Asbestos detected by polarised light microscopy including dispersion staining.
- EA200: 'No*' - No asbestos found, at the reporting limit of 0.1g/kg, by polarised light microscopy including dispersion staining. Asbestos material was detected and positively identified at concentrations estimated to be below 0.1g/kg.
- EA200: 'No' - No asbestos found at the reporting limit 0.1g/kg, by polarised light microscopy including dispersion staining.
- 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.

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	BH05_0.2	BH05_1.5	BH05_2.0	BH05_4.0	----
Sampling date / time				10-Feb-2022 00:00	10-Feb-2022 00:00	10-Feb-2022 00:00	10-Feb-2022 00:00	----	
Compound	CAS Number	LOR	Unit	ES2204645-001	ES2204645-002	ES2204645-003	ES2204645-004	-----	
				Result	Result	Result	Result	----	
EA003 :pH (field/fox)									
pH (F)	----	0.1	pH Unit	----	----	7.3	7.3	----	
pH (Fox)	----	0.1	pH Unit	----	----	3.4	3.2	----	
Reaction Rate	----	1	Reaction Unit	----	----	3	3	----	
EA029-A: pH Measurements									
pH KCl (23A)	----	0.1	pH Unit	----	----	----	6.4	----	
pH OX (23B)	----	0.1	pH Unit	----	----	----	4.9	----	
EA029-B: Acidity Trail									
Titratable Actual Acidity (23F)	----	2	mole H+ / t	----	----	----	<2	----	
Titratable Peroxide Acidity (23G)	----	2	mole H+ / t	----	----	----	<2	----	
Titratable Sulfidic Acidity (23H)	----	2	mole H+ / t	----	----	----	<2	----	
sulfidic - Titratable Actual Acidity (s-23F)	----	0.020	% pyrite S	----	----	----	<0.020	----	
sulfidic - Titratable Peroxide Acidity (s-23G)	----	0.020	% pyrite S	----	----	----	<0.020	----	
sulfidic - Titratable Sulfidic Acidity (s-23H)	----	0.020	% pyrite S	----	----	----	<0.020	----	
EA029-C: Sulfur Trail									
KCl Extractable Sulfur (23Ce)	----	0.020	% S	----	----	----	<0.020	----	
Peroxide Sulfur (23De)	----	0.020	% S	----	----	----	<0.020	----	
Peroxide Oxidisable Sulfur (23E)	----	0.020	% S	----	----	----	<0.020	----	
acidity - Peroxide Oxidisable Sulfur (a-23E)	----	10	mole H+ / t	----	----	----	<10	----	
EA029-D: Calcium Values									
KCl Extractable Calcium (23Vh)	----	0.020	% Ca	----	----	----	0.032	----	
Peroxide Calcium (23Wh)	----	0.020	% Ca	----	----	----	0.033	----	
Acid Reacted Calcium (23X)	----	0.020	% Ca	----	----	----	<0.020	----	
acidity - Acid Reacted Calcium (a-23X)	----	10	mole H+ / t	----	----	----	<10	----	
sulfidic - Acid Reacted Calcium (s-23X)	----	0.020	% S	----	----	----	<0.020	----	
EA029-E: Magnesium Values									
KCl Extractable Magnesium (23Sm)	----	0.020	% Mg	----	----	----	<0.020	----	
Peroxide Magnesium (23Tm)	----	0.020	% Mg	----	----	----	<0.020	----	
Acid Reacted Magnesium (23U)	----	0.020	% Mg	----	----	----	<0.020	----	
Acidity - Acid Reacted Magnesium (a-23U)	----	10	mole H+ / t	----	----	----	<10	----	
sulfidic - Acid Reacted Magnesium (s-23U)	----	0.020	% S	----	----	----	<0.020	----	
EA029-H: Acid Base Accounting									



Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	BH05_0.2	BH05_1.5	BH05_2.0	BH05_4.0	----
Sampling date / time					10-Feb-2022 00:00	10-Feb-2022 00:00	10-Feb-2022 00:00	10-Feb-2022 00:00	----
Compound	CAS Number	LOR	Unit		ES2204645-001	ES2204645-002	ES2204645-003	ES2204645-004	-----
					Result	Result	Result	Result	----
EA029-H: Acid Base Accounting - Continued									
ANC Fineness Factor	----	0.5	-		----	----	----	1.5	----
Net Acidity (sulfur units)	----	0.02	% S		----	----	----	<0.02	----
Net Acidity (acidity units)	----	10	mole H+ / t		----	----	----	<10	----
Liming Rate	----	1	kg CaCO3/t		----	----	----	<1	----
Net Acidity excluding ANC (sulfur units)	----	0.02	% S		----	----	----	<0.02	----
Net Acidity excluding ANC (acidity units)	----	10	mole H+ / t		----	----	----	<10	----
Liming Rate excluding ANC	----	1	kg CaCO3/t		----	----	----	<1	----
EA055: Moisture Content (Dried @ 105-110°C)									
Moisture Content	----	1.0	%		9.8	23.2	17.7	----	----
EA200: AS 4964 - 2004 Identification of Asbestos in Soils									
Asbestos Detected	1332-21-4	0.1	g/kg		No	No	----	----	----
Asbestos (Trace)	1332-21-4	5	Fibres		No	No	----	----	----
Asbestos Type	1332-21-4	-	--		-	-	----	----	----
Sample weight (dry)	----	0.01	g		72.6	46.9	----	----	----
APPROVED IDENTIFIER:	----	-	--		A. SMYLIE	A. SMYLIE	----	----	----
Synthetic Mineral Fibre	----	0.1	g/kg		No	No	----	----	----
Organic Fibre	----	0.1	g/kg		No	No	----	----	----
EG005(ED093)T: Total Metals by ICP-AES									
Arsenic	7440-38-2	5	mg/kg		18	<5	<5	----	----
Cadmium	7440-43-9	1	mg/kg		1	<1	<1	----	----
Chromium	7440-47-3	2	mg/kg		36	3	<2	----	----
Copper	7440-50-8	5	mg/kg		120	12	<5	----	----
Lead	7439-92-1	5	mg/kg		85	26	<5	----	----
Nickel	7440-02-0	2	mg/kg		27	2	<2	----	----
Zinc	7440-66-6	5	mg/kg		103	31	<5	----	----
EG035T: Total Recoverable Mercury by FIMS									
Mercury	7439-97-6	0.1	mg/kg		0.2	<0.1	<0.1	----	----
EP066: Polychlorinated Biphenyls (PCB)									
Total Polychlorinated biphenyls	----	0.1	mg/kg		<0.1	<0.1	<0.1	----	----
EP068A: Organochlorine Pesticides (OC)									
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	----	----



Analytical Results

Sub-Matrix: SOIL
 (Matrix: SOIL)

Sample ID

				BH05_0.2	BH05_1.5	BH05_2.0	BH05_4.0	----
Sampling date / time				10-Feb-2022 00:00	10-Feb-2022 00:00	10-Feb-2022 00:00	10-Feb-2022 00:00	----
Compound	CAS Number	LOR	Unit	ES2204645-001	ES2204645-002	ES2204645-003	ES2204645-004	-----
				Result	Result	Result	Result	----

EP068A: Organochlorine Pesticides (OC) - Continued

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	----	----
^ Total Chlordane (sum)	----	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
Dieldrin	60-57-1	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
4,4'-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
Endrin	72-20-8	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
^ Endosulfan (sum)	115-29-7	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	----	----
Endrin aldehyde	7421-93-4	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	0.2	mg/kg	<0.2	<0.2	<0.2	----	----
Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
Methoxychlor	72-43-5	0.2	mg/kg	<0.2	<0.2	<0.2	----	----
^ Sum of Aldrin + Dieldrin	309-00-2/60-57-1	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
^ Sum of DDD + DDE + DDT	72-54-8/72-55-9/50-29-3	0.05	mg/kg	<0.05	<0.05	<0.05	----	----

EP068B: Organophosphorus Pesticides (OP)

Dichlorvos	62-73-7	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	<0.2	<0.2	----	----
Dimethoate	60-51-5	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
Diazinon	333-41-5	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	<0.2	<0.2	----	----
Malathion	121-75-5	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
Fenthion	55-38-9	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	<0.05	<0.05	----	----
Parathion	56-38-2	0.2	mg/kg	<0.2	<0.2	<0.2	----	----
Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	<0.05	<0.05	----	----



Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	BH05_0.2	BH05_1.5	BH05_2.0	BH05_4.0	----
Sampling date / time					10-Feb-2022 00:00	10-Feb-2022 00:00	10-Feb-2022 00:00	10-Feb-2022 00:00	----
Compound	CAS Number	LOR	Unit		ES2204645-001	ES2204645-002	ES2204645-003	ES2204645-004	-----
					Result	Result	Result	Result	----
EP068B: Organophosphorus Pesticides (OP) - Continued									
Chlorfenvinphos	470-90-6	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
Bromophos-ethyl	4824-78-6	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
Fenamiphos	22224-92-6	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
Prothiofos	34643-46-4	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
Ethion	563-12-2	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
Carbophenothion	786-19-6	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
Azinphos Methyl	86-50-0	0.05	mg/kg		<0.05	<0.05	<0.05	----	----
EP074A: Monocyclic Aromatic Hydrocarbons									
Styrene	100-42-5	0.5	mg/kg		<0.5	----	----	----	----
Isopropylbenzene	98-82-8	0.5	mg/kg		<0.5	----	----	----	----
n-Propylbenzene	103-65-1	0.5	mg/kg		<0.5	----	----	----	----
1,3,5-Trimethylbenzene	108-67-8	0.5	mg/kg		<0.5	----	----	----	----
sec-Butylbenzene	135-98-8	0.5	mg/kg		<0.5	----	----	----	----
1,2,4-Trimethylbenzene	95-63-6	0.5	mg/kg		<0.5	----	----	----	----
tert-Butylbenzene	98-06-6	0.5	mg/kg		<0.5	----	----	----	----
p-Isopropyltoluene	99-87-6	0.5	mg/kg		<0.5	----	----	----	----
n-Butylbenzene	104-51-8	0.5	mg/kg		<0.5	----	----	----	----
EP074B: Oxygenated Compounds									
Vinyl Acetate	108-05-4	5	mg/kg		<5	----	----	----	----
2-Butanone (MEK)	78-93-3	5	mg/kg		<5	----	----	----	----
4-Methyl-2-pentanone (MIBK)	108-10-1	5	mg/kg		<5	----	----	----	----
2-Hexanone (MBK)	591-78-6	5	mg/kg		<5	----	----	----	----
EP074C: Sulfonated Compounds									
Carbon disulfide	75-15-0	0.5	mg/kg		<0.5	----	----	----	----
EP074D: Fumigants									
2,2-Dichloropropane	594-20-7	0.5	mg/kg		<0.5	----	----	----	----
1,2-Dichloropropane	78-87-5	0.5	mg/kg		<0.5	----	----	----	----
cis-1,3-Dichloropropylene	10061-01-5	0.5	mg/kg		<0.5	----	----	----	----
trans-1,3-Dichloropropylene	10061-02-6	0.5	mg/kg		<0.5	----	----	----	----
1,2-Dibromoethane (EDB)	106-93-4	0.5	mg/kg		<0.5	----	----	----	----
EP074E: Halogenated Aliphatic Compounds									
Dichlorodifluoromethane	75-71-8	5	mg/kg		<5	----	----	----	----
Chloromethane	74-87-3	5	mg/kg		<5	----	----	----	----
Vinyl chloride	75-01-4	5	mg/kg		<5	----	----	----	----



Analytical Results

Sub-Matrix: SOIL
 (Matrix: SOIL)

Sample ID

				BH05_0.2	BH05_1.5	BH05_2.0	BH05_4.0	----
Sampling date / time				10-Feb-2022 00:00	10-Feb-2022 00:00	10-Feb-2022 00:00	10-Feb-2022 00:00	----
Compound	CAS Number	LOR	Unit	ES2204645-001	ES2204645-002	ES2204645-003	ES2204645-004	-----
				Result	Result	Result	Result	----
EP074E: Halogenated Aliphatic Compounds - Continued								
Bromomethane	74-83-9	5	mg/kg	<5	----	----	----	----
Chloroethane	75-00-3	5	mg/kg	<5	----	----	----	----
Trichlorofluoromethane	75-69-4	5	mg/kg	<5	----	----	----	----
1,1-Dichloroethene	75-35-4	0.5	mg/kg	<0.5	----	----	----	----
Iodomethane	74-88-4	0.5	mg/kg	<0.5	----	----	----	----
trans-1,2-Dichloroethene	156-60-5	0.5	mg/kg	<0.5	----	----	----	----
1,1-Dichloroethane	75-34-3	0.5	mg/kg	<0.5	----	----	----	----
cis-1,2-Dichloroethene	156-59-2	0.5	mg/kg	<0.5	----	----	----	----
1,1,1-Trichloroethane	71-55-6	0.5	mg/kg	<0.5	----	----	----	----
1,1-Dichloropropylene	563-58-6	0.5	mg/kg	<0.5	----	----	----	----
Carbon Tetrachloride	56-23-5	0.5	mg/kg	<0.5	----	----	----	----
1,2-Dichloroethane	107-06-2	0.5	mg/kg	<0.5	----	----	----	----
Trichloroethene	79-01-6	0.5	mg/kg	<0.5	----	----	----	----
Dibromomethane	74-95-3	0.5	mg/kg	<0.5	----	----	----	----
1,1,2-Trichloroethane	79-00-5	0.5	mg/kg	<0.5	----	----	----	----
1,3-Dichloropropane	142-28-9	0.5	mg/kg	<0.5	----	----	----	----
Tetrachloroethene	127-18-4	0.5	mg/kg	<0.5	----	----	----	----
1,1,1,2-Tetrachloroethane	630-20-6	0.5	mg/kg	<0.5	----	----	----	----
trans-1,4-Dichloro-2-butene	110-57-6	0.5	mg/kg	<0.5	----	----	----	----
cis-1,4-Dichloro-2-butene	1476-11-5	0.5	mg/kg	<0.5	----	----	----	----
1,1,2,2-Tetrachloroethane	79-34-5	0.5	mg/kg	<0.5	----	----	----	----
1,2,3-Trichloropropane	96-18-4	0.5	mg/kg	<0.5	----	----	----	----
Pentachloroethane	76-01-7	0.5	mg/kg	<0.5	----	----	----	----
1,2-Dibromo-3-chloropropane	96-12-8	0.5	mg/kg	<0.5	----	----	----	----
EP074F: Halogenated Aromatic Compounds								
Chlorobenzene	108-90-7	0.5	mg/kg	<0.5	----	----	----	----
Bromobenzene	108-86-1	0.5	mg/kg	<0.5	----	----	----	----
2-Chlorotoluene	95-49-8	0.5	mg/kg	<0.5	----	----	----	----
4-Chlorotoluene	106-43-4	0.5	mg/kg	<0.5	----	----	----	----
1,2,3-Trichlorobenzene	87-61-6	0.5	mg/kg	<0.5	----	----	----	----
EP074G: Trihalomethanes								
Chloroform	67-66-3	0.5	mg/kg	<0.5	----	----	----	----
Bromodichloromethane	75-27-4	0.5	mg/kg	<0.5	----	----	----	----
Dibromochloromethane	124-48-1	0.5	mg/kg	<0.5	----	----	----	----



Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	BH05_0.2	BH05_1.5	BH05_2.0	BH05_4.0	----
Sampling date / time					10-Feb-2022 00:00	10-Feb-2022 00:00	10-Feb-2022 00:00	10-Feb-2022 00:00	----
Compound	CAS Number	LOR	Unit		ES2204645-001	ES2204645-002	ES2204645-003	ES2204645-004	-----
					Result	Result	Result	Result	----
EP074G: Trihalomethanes - Continued									
Bromoform	75-25-2	0.5	mg/kg		<0.5	----	----	----	----
EP075(SIM)A: Phenolic Compounds									
Phenol	108-95-2	0.5	mg/kg		<0.5	<0.5	<0.5	----	----
2-Chlorophenol	95-57-8	0.5	mg/kg		<0.5	<0.5	<0.5	----	----
2-Methylphenol	95-48-7	0.5	mg/kg		<0.5	<0.5	<0.5	----	----
3- & 4-Methylphenol	1319-77-3	1	mg/kg		<1	<1	<1	----	----
2-Nitrophenol	88-75-5	0.5	mg/kg		<0.5	<0.5	<0.5	----	----
2,4-Dimethylphenol	105-67-9	0.5	mg/kg		<0.5	<0.5	<0.5	----	----
2,4-Dichlorophenol	120-83-2	0.5	mg/kg		<0.5	<0.5	<0.5	----	----
2,6-Dichlorophenol	87-65-0	0.5	mg/kg		<0.5	<0.5	<0.5	----	----
4-Chloro-3-methylphenol	59-50-7	0.5	mg/kg		<0.5	<0.5	<0.5	----	----
2,4,6-Trichlorophenol	88-06-2	0.5	mg/kg		<0.5	<0.5	<0.5	----	----
2,4,5-Trichlorophenol	95-95-4	0.5	mg/kg		<0.5	<0.5	<0.5	----	----
Pentachlorophenol	87-86-5	2	mg/kg		<2	<2	<2	----	----
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons									
Naphthalene	91-20-3	0.5	mg/kg		<0.5	<0.5	<0.5	----	----
Acenaphthylene	208-96-8	0.5	mg/kg		<0.5	<0.5	<0.5	----	----
Acenaphthene	83-32-9	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	----	----
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg		<0.5	<0.5	<0.5	----	----
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg		<0.5	<0.5	<0.5	----	----
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	----	----



Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	BH05_0.2	BH05_1.5	BH05_2.0	BH05_4.0	----
Sampling date / time					10-Feb-2022 00:00	10-Feb-2022 00:00	10-Feb-2022 00:00	10-Feb-2022 00:00	----
Compound	CAS Number	LOR	Unit		ES2204645-001	ES2204645-002	ES2204645-003	ES2204645-004	-----
					Result	Result	Result	Result	----
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued									
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg		1.2	1.2	1.2	----	----
EP075B: Polynuclear Aromatic Hydrocarbons									
2-Methylnaphthalene	91-57-6	0.5	mg/kg		<0.5	----	----	----	----
2-Chloronaphthalene	91-58-7	0.5	mg/kg		<0.5	----	----	----	----
N-2-Fluorenyl Acetamide	53-96-3	0.5	mg/kg		<0.5	----	----	----	----
7.12-Dimethylbenz(a)anthracene	57-97-6	0.5	mg/kg		<0.5	----	----	----	----
3-Methylcholanthrene	56-49-5	0.5	mg/kg		<0.5	----	----	----	----
EP075C: Phthalate Esters									
Dimethyl phthalate	131-11-3	0.5	mg/kg		<0.5	----	----	----	----
Diethyl phthalate	84-66-2	0.5	mg/kg		<0.5	----	----	----	----
Di-n-butyl phthalate	84-74-2	0.5	mg/kg		<0.5	----	----	----	----
Butyl benzyl phthalate	85-68-7	0.5	mg/kg		<0.5	----	----	----	----
bis(2-ethylhexyl) phthalate	117-81-7	5.0	mg/kg		<5.0	----	----	----	----
Di-n-octylphthalate	117-84-0	0.5	mg/kg		<0.5	----	----	----	----
EP075D: Nitrosamines									
N-Nitrosomethylethylamine	10595-95-6	0.5	mg/kg		<0.5	----	----	----	----
N-Nitrosodiethylamine	55-18-5	0.5	mg/kg		<0.5	----	----	----	----
N-Nitrosopyrrolidine	930-55-2	1.0	mg/kg		<1.0	----	----	----	----
N-Nitrosomorpholine	59-89-2	0.5	mg/kg		<0.5	----	----	----	----
N-Nitrosodi-n-propylamine	621-64-7	0.5	mg/kg		<0.5	----	----	----	----
N-Nitrosopiperidine	100-75-4	0.5	mg/kg		<0.5	----	----	----	----
N-Nitrosodibutylamine	924-16-3	0.5	mg/kg		<0.5	----	----	----	----
N-Nitrosodiphenyl & Diphenylamine	86-30-6 122-39-4	1.0	mg/kg		<1.0	----	----	----	----
Methapyrilene	91-80-5	0.5	mg/kg		<0.5	----	----	----	----
EP075E: Nitroaromatics and Ketones									
2-Picoline	109-06-8	0.5	mg/kg		<0.5	----	----	----	----
Acetophenone	98-86-2	0.5	mg/kg		<0.5	----	----	----	----
Nitrobenzene	98-95-3	0.5	mg/kg		<0.5	----	----	----	----
Isophorone	78-59-1	0.5	mg/kg		<0.5	----	----	----	----
2,6-Dinitrotoluene	606-20-2	1.0	mg/kg		<1.0	----	----	----	----
2,4-Dinitrotoluene	121-14-2	1.0	mg/kg		<1.0	----	----	----	----
1-Naphthylamine	134-32-7	0.5	mg/kg		<0.5	----	----	----	----
4-Nitroquinoline-N-oxide	56-57-5	0.5	mg/kg		<0.5	----	----	----	----



Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	BH05_0.2	BH05_1.5	BH05_2.0	BH05_4.0	----
Sampling date / time					10-Feb-2022 00:00	10-Feb-2022 00:00	10-Feb-2022 00:00	10-Feb-2022 00:00	----
Compound	CAS Number	LOR	Unit		ES2204645-001	ES2204645-002	ES2204645-003	ES2204645-004	-----
					Result	Result	Result	Result	----
EP075E: Nitroaromatics and Ketones - Continued									
5-Nitro-o-toluidine	99-55-8	0.5	mg/kg		<0.5	----	----	----	----
Azobenzene	103-33-3	1	mg/kg		<1	----	----	----	----
1,3,5-Trinitrobenzene	99-35-4	0.5	mg/kg		<0.5	----	----	----	----
Phenacetin	62-44-2	0.5	mg/kg		<0.5	----	----	----	----
4-Aminobiphenyl	92-67-1	0.5	mg/kg		<0.5	----	----	----	----
Pentachloronitrobenzene	82-68-8	0.5	mg/kg		<0.5	----	----	----	----
Pronamide	23950-58-5	0.5	mg/kg		<0.5	----	----	----	----
Dimethylaminoazobenzene	60-11-7	0.5	mg/kg		<0.5	----	----	----	----
Chlorobenzilate	510-15-6	0.5	mg/kg		<0.5	----	----	----	----
EP075F: Haloethers									
Bis(2-chloroethyl) ether	111-44-4	0.5	mg/kg		<0.5	----	----	----	----
Bis(2-chloroethoxy) methane	111-91-1	0.5	mg/kg		<0.5	----	----	----	----
4-Chlorophenyl phenyl ether	7005-72-3	0.5	mg/kg		<0.5	----	----	----	----
4-Bromophenyl phenyl ether	101-55-3	0.5	mg/kg		<0.5	----	----	----	----
EP075G: Chlorinated Hydrocarbons									
1,3-Dichlorobenzene	541-73-1	0.5	mg/kg		<0.5	----	----	----	----
1,4-Dichlorobenzene	106-46-7	0.5	mg/kg		<0.5	----	----	----	----
1,2-Dichlorobenzene	95-50-1	0.5	mg/kg		<0.5	----	----	----	----
Hexachloroethane	67-72-1	0.5	mg/kg		<0.5	----	----	----	----
1,2,4-Trichlorobenzene	120-82-1	0.5	mg/kg		<0.5	----	----	----	----
Hexachloropropylene	1888-71-7	0.5	mg/kg		<0.5	----	----	----	----
Hexachlorobutadiene	87-68-3	0.5	mg/kg		<0.5	----	----	----	----
Hexachlorocyclopentadiene	77-47-4	2.5	mg/kg		<2.5	----	----	----	----
Pentachlorobenzene	608-93-5	0.5	mg/kg		<0.5	----	----	----	----
Hexachlorobenzene (HCB)	118-74-1	1.0	mg/kg		<1.0	----	----	----	----
EP075H: Anilines and Benzidines									
Aniline	62-53-3	0.5	mg/kg		<0.5	----	----	----	----
4-Chloroaniline	106-47-8	0.5	mg/kg		<0.5	----	----	----	----
2-Nitroaniline	88-74-4	1.0	mg/kg		<1.0	----	----	----	----
3-Nitroaniline	99-09-2	1.0	mg/kg		<1.0	----	----	----	----
Dibenzofuran	132-64-9	0.5	mg/kg		<0.5	----	----	----	----
4-Nitroaniline	100-01-6	0.5	mg/kg		<0.5	----	----	----	----
Carbazole	86-74-8	0.5	mg/kg		<0.5	----	----	----	----
3,3'-Dichlorobenzidine	91-94-1	0.5	mg/kg		<0.5	----	----	----	----



Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	BH05_0.2	BH05_1.5	BH05_2.0	BH05_4.0	----
Sampling date / time					10-Feb-2022 00:00	10-Feb-2022 00:00	10-Feb-2022 00:00	10-Feb-2022 00:00	----
Compound	CAS Number	LOR	Unit		ES2204645-001	ES2204645-002	ES2204645-003	ES2204645-004	-----
					Result	Result	Result	Result	----
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	----	10	mg/kg		<10	<10	<10	----	----
C10 - C14 Fraction	----	50	mg/kg		<50	<50	<50	----	----
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									
C6 - C10 Fraction	C6_C10	10	mg/kg		<10	<10	<10	----	----
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg		<10	<10	<10	----	----
>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	----	----
EP080: BTEXN									
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	----	----
ortho-Xylene	95-47-6	0.5	mg/kg		<0.5	<0.5	<0.5	----	----
^ Sum of BTEX	----	0.2	mg/kg		<0.2	<0.2	<0.2	----	----
^ Total Xylenes	----	0.5	mg/kg		<0.5	<0.5	<0.5	----	----
Naphthalene	91-20-3	1	mg/kg		<1	<1	<1	----	----
EP231A: Perfluoroalkyl Sulfonic Acids									
Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.0002	mg/kg		<0.0002	----	----	----	----
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.0002	mg/kg		<0.0002	----	----	----	----
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.0002	mg/kg		<0.0002	----	----	----	----
EP231B: Perfluoroalkyl Carboxylic Acids									
Perfluorobutanoic acid (PFBA)	375-22-4	0.001	mg/kg		<0.001	----	----	----	----
Perfluoropentanoic acid (PFPeA)	2706-90-3	0.0002	mg/kg		<0.0002	----	----	----	----
Perfluorohexanoic acid (PFHxA)	307-24-4	0.0002	mg/kg		<0.0002	----	----	----	----

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	BH05_0.2	BH05_1.5	BH05_2.0	BH05_4.0	----
Sampling date / time				10-Feb-2022 00:00	10-Feb-2022 00:00	10-Feb-2022 00:00	10-Feb-2022 00:00	----	
Compound	CAS Number	LOR	Unit	ES2204645-001	ES2204645-002	ES2204645-003	ES2204645-004	-----	
				Result	Result	Result	Result	----	
EP231B: Perfluoroalkyl Carboxylic Acids - Continued									
Perfluoroheptanoic acid (PFHpA)	375-85-9	0.0002	mg/kg	<0.0002	----	----	----	----	
Perfluorooctanoic acid (PFOA)	335-67-1	0.0002	mg/kg	<0.0002	----	----	----	----	
EP231D: (n:2) Fluorotelomer Sulfonic Acids									
4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.0005	mg/kg	<0.0005	----	----	----	----	
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.0005	mg/kg	<0.0005	----	----	----	----	
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.0005	mg/kg	<0.0005	----	----	----	----	
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.0005	mg/kg	<0.0005	----	----	----	----	
EP231P: PFAS Sums									
Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.0002	mg/kg	<0.0002	----	----	----	----	
Sum of PFAS (WA DER List)	----	0.0002	mg/kg	<0.0002	----	----	----	----	
EP066S: PCB Surrogate									
Decachlorobiphenyl	2051-24-3	0.1	%	97.9	105	113	----	----	
EP068S: Organochlorine Pesticide Surrogate									
Dibromo-DDE	21655-73-2	0.05	%	72.1	80.7	80.6	----	----	
EP068T: Organophosphorus Pesticide Surrogate									
DEF	78-48-8	0.05	%	69.0	76.6	72.6	----	----	
EP074S: VOC Surrogates									
1,2-Dichloroethane-D4	17060-07-0	0.5	%	84.7	----	----	----	----	
Toluene-D8	2037-26-5	0.5	%	89.2	----	----	----	----	
4-Bromofluorobenzene	460-00-4	0.5	%	86.8	----	----	----	----	
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	0.5	%	74.4	92.8	85.3	----	----	
2-Chlorophenol-D4	93951-73-6	0.5	%	75.8	93.3	86.6	----	----	
2,4,6-Tribromophenol	118-79-6	0.5	%	52.7	74.7	65.3	----	----	
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	0.5	%	80.4	96.4	88.1	----	----	
Anthracene-d10	1719-06-8	0.5	%	72.0	96.5	89.4	----	----	
4-Terphenyl-d14	1718-51-0	0.5	%	71.6	93.9	86.5	----	----	
EP075S: Acid Extractable Surrogates									



Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	BH05_0.2	BH05_1.5	BH05_2.0	BH05_4.0	----
Sampling date / time					10-Feb-2022 00:00	10-Feb-2022 00:00	10-Feb-2022 00:00	10-Feb-2022 00:00	----
Compound	CAS Number	LOR	Unit		ES2204645-001	ES2204645-002	ES2204645-003	ES2204645-004	-----
					Result	Result	Result	Result	----
EP075S: Acid Extractable Surrogates - Continued									
2-Fluorophenol	367-12-4	0.5	%		67.1	----	----	----	----
Phenol-d6	13127-88-3	0.5	%		75.0	----	----	----	----
2-Chlorophenol-D4	93951-73-6	0.5	%		62.1	----	----	----	----
2,4,6-Tribromophenol	118-79-6	0.5	%		24.2	----	----	----	----
EP075T: Base/Neutral Extractable Surrogates									
Nitrobenzene-D5	4165-60-0	0.5	%		72.2	----	----	----	----
1,2-Dichlorobenzene-D4	2199-69-1	0.5	%		68.7	----	----	----	----
2-Fluorobiphenyl	321-60-8	0.5	%		96.4	----	----	----	----
Anthracene-d10	1719-06-8	0.5	%		86.6	----	----	----	----
4-Terphenyl-d14	1718-51-0	0.5	%		73.5	----	----	----	----
EP080S: TPH(V)/BTEX Surrogates									
1,2-Dichloroethane-D4	17060-07-0	0.2	%		79.6	80.7	93.1	----	----
Toluene-D8	2037-26-5	0.2	%		87.2	78.1	93.9	----	----
4-Bromofluorobenzene	460-00-4	0.2	%		84.7	79.8	93.9	----	----
EP231S: PFAS Surrogate									
13C4-PFOS	----	0.0002	%		95.0	----	----	----	----
13C8-PFOA	----	0.0002	%		103	----	----	----	----

Analytical Results

Descriptive Results

Sub-Matrix: SOIL		
Method: Compound	Sample ID - Sampling date / time	Analytical Results
EA200: AS 4964 - 2004 Identification of Asbestos in Soils		
EA200: Description	BH05_0.2 - 10-Feb-2022 00:00	Soil sample.
EA200: Description	BH05_1.5 - 10-Feb-2022 00:00	Soil sample.



Surrogate Control Limits

Sub-Matrix: SOIL		Recovery Limits (%)	
Compound	CAS Number	Low	High
EP066S: PCB Surrogate			
Decachlorobiphenyl	2051-24-3	39	149
EP068S: Organochlorine Pesticide Surrogate			
Dibromo-DDE	21655-73-2	49	147
EP068T: Organophosphorus Pesticide Surrogate			
DEF	78-48-8	35	143
EP074S: VOC Surrogates			
1,2-Dichloroethane-D4	17060-07-0	64	130
Toluene-D8	2037-26-5	66	136
4-Bromofluorobenzene	460-00-4	60	122
EP075(SIM)S: Phenolic Compound Surrogates			
Phenol-d6	13127-88-3	63	123
2-Chlorophenol-D4	93951-73-6	66	122
2,4,6-Tribromophenol	118-79-6	40	138
EP075(SIM)T: PAH Surrogates			
2-Fluorobiphenyl	321-60-8	70	122
Anthracene-d10	1719-06-8	66	128
4-Terphenyl-d14	1718-51-0	65	129
EP075S: Acid Extractable Surrogates			
2-Fluorophenol	367-12-4	29	149
Phenol-d6	13127-88-3	32	128
2-Chlorophenol-D4	93951-73-6	32	128
2,4,6-Tribromophenol	118-79-6	13	121
EP075T: Base/Neutral Extractable Surrogates			
Nitrobenzene-D5	4165-60-0	33	125
1,2-Dichlorobenzene-D4	2199-69-1	34	108
2-Fluorobiphenyl	321-60-8	35	121
Anthracene-d10	1719-06-8	35	123
4-Terphenyl-d14	1718-51-0	33	125
EP080S: TPH(V)/BTEX Surrogates			
1,2-Dichloroethane-D4	17060-07-0	73	133
Toluene-D8	2037-26-5	74	132
4-Bromofluorobenzene	460-00-4	72	130
EP231S: PFAS Surrogate			
13C4-PFOS	----	60	120
13C8-PFOA	----	60	120



Inter-Laboratory Testing

Analysis conducted by ALS Brisbane, NATA accreditation no. 825, site no. 818 (Chemistry) 18958 (Biology).

(SOIL) EA003 :pH (field/fox)

(SOIL) EA029-D: Calcium Values

(SOIL) EA029-E: Magnesium Values

(SOIL) EA029-F: Excess Acid Neutralising Capacity

(SOIL) EA029-H: Acid Base Accounting

(SOIL) EA029-G: Retained Acidity

(SOIL) EA029-A: pH Measurements

(SOIL) EA029-C: Sulfur Trail

(SOIL) EA029-B: Acidity Trail

Analysis conducted by ALS Newcastle, NATA accreditation no. 825, site no. 1656 (Chemistry) 9854 (Biology).

(SOIL) EA200: AS 4964 - 2004 Identification of Asbestos in Soils

CERTIFICATE OF ANALYSIS

Work Order : **ES2204812**
Client : **EP RISK MANAGEMENT**
Contact : **HARRISON BLAKE**
Address : **Level 4 73 Walker St**
 North Sydney 2060
Telephone : **----**
Project : **EP2515**
Order number : **----**
C-O-C number : **----**
Sampler : **Harrison Blake**
Site : **----**
Quote number : **SY/497/20 Primary analysis only**
No. of samples received : **17**
No. of samples analysed : **16**

Page : 1 of 37
Laboratory : Environmental Division Sydney
Contact : Tyler Anderson
Address : 277-289 Woodpark Road Smithfield NSW Australia 2164
Telephone : +61 2 8784 8555
Date Samples Received : 11-Feb-2022 16:00
Date Analysis Commenced : 14-Feb-2022
Issue Date : 16-Feb-2022 18:51



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

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results
- Descriptive Results
- Surrogate Control Limits

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

Signatories

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

<i>Signatories</i>	<i>Position</i>	<i>Accreditation Category</i>
Alana Smylie	Team Leader - Asbestos	Newcastle - Asbestos, Mayfield West, NSW
Edwandy Fadjjar	Organic Coordinator	Sydney Inorganics, Smithfield, NSW
Edwandy Fadjjar	Organic Coordinator	Sydney Organics, Smithfield, NSW
Franco Lentini	LCMS Coordinator	Sydney Inorganics, Smithfield, NSW
Franco Lentini	LCMS Coordinator	Sydney Organics, Smithfield, NSW
Ivan Taylor	Analyst	Sydney Inorganics, Smithfield, NSW
Wisam Marassa	Inorganics Coordinator	Sydney Inorganics, Smithfield, NSW



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.
- EP080: Where reported, Total Xylenes is the sum of the reported concentrations of m&p-Xylene and o-Xylene at or above the LOR.
- EP068: Where reported, Total Chlordane (sum) is the sum of the reported concentrations of cis-Chlordane and trans-Chlordane at or above the LOR.
- EP068: Where reported, Total OCP is the sum of the reported concentrations of all Organochlorine Pesticides at or above LOR.
- EP074: Where reported, Total Trihalomethanes is the sum of the reported concentrations of all Trihalomethanes at or above the LOR.
- EP074: Where reported, Total Xylenes is the sum of the reported concentrations of m&p-Xylene and o-Xylene at or above the LOR.
- EP074: Where reported, Sum of chlorinated hydrocarbons includes carbon tetrachloride, chlorobenzene, chloroform, 1,2-dichlorobenzene, 1,4-dichlorobenzene, 1,2-dichloroethane, 1,1-dichloroethene, cis-1,2-dichloroethene, trans-1,2-dichloroethene, 1,1,1,2-tetrachloroethane, 1,1,2,2-tetrachloroethane, 1,2,4-trichlorobenzene, 1,1,1-trichloroethane, 1,1,2-trichloroethane, trichloroethene, vinyl chloride, hexachlorobutadiene and methylene chloride.
- EP074: Where reported, Total Trimethylbenzenes is the sum of the reported concentrations of 1.2.3-Trimethylbenzene, 1.2.4-Trimethylbenzene and 1.3.5-Trimethylbenzene at or above the LOR.
- EP075(SIM): Where reported, Total Cresol is the sum of the reported concentrations of 2-Methylphenol and 3- & 4-Methylphenol at or above the LOR.
- EG005T: Poor precision was obtained for Chromium on sample ES2204812# 5. Confirmed by re-digestion and reanalysis.
- EG035: Positive Mercury result ES2204812 #14 has been confirmed by reanalysis.
- EP075(SIM): Surrogate recovery bias low due to sample matrix interferences.
- EP075: Where reported, 'Sum of PAH' is the sum of the USEPA 16 priority PAHs
- EA200 'Am' Amosite (brown asbestos)
- EA200 'Cr' Crocidolite (blue asbestos)
- EA200 'Trace' - Asbestos fibres ("Free Fibres") detected by trace analysis per AS4964. The result can be interpreted that the sample contains detectable 'respirable' asbestos fibres
- EA200: Asbestos Identification Samples were analysed by Polarised Light Microscopy including dispersion staining.
- EA200 Legend
- EA200 'Ch' Chrysotile (white asbestos)
- EA200: 'UMF' Unknown Mineral Fibres. "-" indicates fibres detected may or may not be asbestos fibres. Confirmation by alternative techniques is recommended.



- Benzo(a)pyrene Toxicity Equivalent Quotient (TEQ) 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.
- EA200: For samples larger than 30g, the <2mm fraction may be sub-sampled prior to trace analysis as outlined in ISO23909:2008(E) Sect 6.3.2-2
- EA200: 'Yes' - Asbestos detected by polarised light microscopy including dispersion staining.
- EA200: 'No*' - No asbestos found, at the reporting limit of 0.1g/kg, by polarised light microscopy including dispersion staining. Asbestos material was detected and positively identified at concentrations estimated to be below 0.1g/kg.
- EA200: 'No' - No asbestos found at the reporting limit 0.1g/kg, by polarised light microscopy including dispersion staining.
- 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.



Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	BH11_0.2	BH11_1.5	BH13_0.3	BH13_1.5	BH10_0.3
Sampling date / time					11-Feb-2022 00:00	11-Feb-2022 00:00	11-Feb-2022 00:00	11-Feb-2022 00:00	11-Feb-2022 00:00
Compound	CAS Number	LOR	Unit		ES2204812-001	ES2204812-002	ES2204812-003	ES2204812-004	ES2204812-005
					Result	Result	Result	Result	Result
EA055: Moisture Content (Dried @ 105-110°C)									
Moisture Content	----	1.0	%		26.2	16.4	11.1	26.8	10.5
EA200: AS 4964 - 2004 Identification of Asbestos in Soils									
Asbestos Detected	1332-21-4	0.1	g/kg		No	----	No	----	No
Asbestos (Trace)	1332-21-4	5	Fibres		No	----	No	----	No
Asbestos Type	1332-21-4	-	--		-	----	-	----	-
Synthetic Mineral Fibre	----	0.1	g/kg		No	----	No	----	No
Organic Fibre	----	0.1	g/kg		No	----	No	----	No
Sample weight (dry)	----	0.01	g		67.0	----	90.6	----	75.0
APPROVED IDENTIFIER:	----	-	--		A. SMYLLIE	----	A. SMYLLIE	----	A. SMYLLIE
EG005(ED093)T: Total Metals by ICP-AES									
Arsenic	7440-38-2	5	mg/kg		16	<5	<5	6	5
Cadmium	7440-43-9	1	mg/kg		3	<1	3	3	<1
Chromium	7440-47-3	2	mg/kg		38	9	11	9	21
Copper	7440-50-8	5	mg/kg		318	57	123	127	29
Lead	7439-92-1	5	mg/kg		1200	197	2020	268	444
Nickel	7440-02-0	2	mg/kg		24	6	9	12	5
Zinc	7440-66-6	5	mg/kg		2580	445	1020	1450	121
EG035T: Total Recoverable Mercury by FIMS									
Mercury	7439-97-6	0.1	mg/kg		0.4	0.2	0.2	0.7	0.8
EP066: Polychlorinated Biphenyls (PCB)									
Total Polychlorinated biphenyls	----	0.1	mg/kg		<0.1	<0.1	<0.1	<0.1	<0.1
EP068A: Organochlorine Pesticides (OC)									
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
^ Total Chlordane (sum)	----	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
trans-Chlordane	5103-74-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
alpha-Endosulfan	959-98-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
cis-Chlordane	5103-71-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	BH11_0.2	BH11_1.5	BH13_0.3	BH13_1.5	BH10_0.3
Sampling date / time				11-Feb-2022 00:00	11-Feb-2022 00:00	11-Feb-2022 00:00	11-Feb-2022 00:00	11-Feb-2022 00:00	
Compound	CAS Number	LOR	Unit	ES2204812-001	ES2204812-002	ES2204812-003	ES2204812-004	ES2204812-005	
				Result	Result	Result	Result	Result	
EP068A: Organochlorine Pesticides (OC) - Continued									
Dieldrin	60-57-1	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	
Endrin	72-20-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05	
beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05	
^ Endosulfan (sum)	115-29-7	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	
Endrin aldehyde	7421-93-4	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	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2	
Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05	
Methoxychlor	72-43-5	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2	
^ Sum of Aldrin + Dieldrin	309-00-2/60-57-1	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05	
^ 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	
EP068B: Organophosphorus Pesticides (OP)									
Dichlorvos	62-73-7	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05	
Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05	
Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2	
Dimethoate	60-51-5	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05	
Diazinon	333-41-5	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05	
Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05	
Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2	
Malathion	121-75-5	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05	
Fenthion	55-38-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05	
Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05	
Parathion	56-38-2	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2	
Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05	
Chlorfenvinphos	470-90-6	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05	
Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05	
Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05	
Prothiofos	34643-46-4	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05	
Ethion	563-12-2	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05	
Carbophenothion	786-19-6	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05	
Azinphos Methyl	86-50-0	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05	
EP074A: Monocyclic Aromatic Hydrocarbons									



Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	BH11_0.2	BH11_1.5	BH13_0.3	BH13_1.5	BH10_0.3
Sampling date / time					11-Feb-2022 00:00	11-Feb-2022 00:00	11-Feb-2022 00:00	11-Feb-2022 00:00	11-Feb-2022 00:00
Compound	CAS Number	LOR	Unit		ES2204812-001	ES2204812-002	ES2204812-003	ES2204812-004	ES2204812-005
					Result	Result	Result	Result	Result
EP074A: Monocyclic Aromatic Hydrocarbons - Continued									
Styrene	100-42-5	0.5	mg/kg		<0.5	----	<0.5	----	----
Isopropylbenzene	98-82-8	0.5	mg/kg		<0.5	----	<0.5	----	----
n-Propylbenzene	103-65-1	0.5	mg/kg		<0.5	----	<0.5	----	----
1,3,5-Trimethylbenzene	108-67-8	0.5	mg/kg		<0.5	----	<0.5	----	----
sec-Butylbenzene	135-98-8	0.5	mg/kg		<0.5	----	<0.5	----	----
1,2,4-Trimethylbenzene	95-63-6	0.5	mg/kg		<0.5	----	<0.5	----	----
tert-Butylbenzene	98-06-6	0.5	mg/kg		<0.5	----	<0.5	----	----
p-Isopropyltoluene	99-87-6	0.5	mg/kg		<0.5	----	<0.5	----	----
n-Butylbenzene	104-51-8	0.5	mg/kg		<0.5	----	<0.5	----	----
EP074B: Oxygenated Compounds									
Vinyl Acetate	108-05-4	5	mg/kg		<5	----	<5	----	----
2-Butanone (MEK)	78-93-3	5	mg/kg		<5	----	<5	----	----
4-Methyl-2-pentanone (MIBK)	108-10-1	5	mg/kg		<5	----	<5	----	----
2-Hexanone (MBK)	591-78-6	5	mg/kg		<5	----	<5	----	----
EP074C: Sulfonated Compounds									
Carbon disulfide	75-15-0	0.5	mg/kg		<0.5	----	<0.5	----	----
EP074D: Fumigants									
2,2-Dichloropropane	594-20-7	0.5	mg/kg		<0.5	----	<0.5	----	----
1,2-Dichloropropane	78-87-5	0.5	mg/kg		<0.5	----	<0.5	----	----
cis-1,3-Dichloropropylene	10061-01-5	0.5	mg/kg		<0.5	----	<0.5	----	----
trans-1,3-Dichloropropylene	10061-02-6	0.5	mg/kg		<0.5	----	<0.5	----	----
1,2-Dibromoethane (EDB)	106-93-4	0.5	mg/kg		<0.5	----	<0.5	----	----
EP074E: Halogenated Aliphatic Compounds									
Dichlorodifluoromethane	75-71-8	5	mg/kg		<5	----	<5	----	----
Chloromethane	74-87-3	5	mg/kg		<5	----	<5	----	----
Vinyl chloride	75-01-4	5	mg/kg		<5	----	<5	----	----
Bromomethane	74-83-9	5	mg/kg		<5	----	<5	----	----
Chloroethane	75-00-3	5	mg/kg		<5	----	<5	----	----
Trichlorofluoromethane	75-69-4	5	mg/kg		<5	----	<5	----	----
1,1-Dichloroethene	75-35-4	0.5	mg/kg		<0.5	----	<0.5	----	----
Iodomethane	74-88-4	0.5	mg/kg		<0.5	----	<0.5	----	----
trans-1,2-Dichloroethene	156-60-5	0.5	mg/kg		<0.5	----	<0.5	----	----
1,1-Dichloroethane	75-34-3	0.5	mg/kg		<0.5	----	<0.5	----	----
cis-1,2-Dichloroethene	156-59-2	0.5	mg/kg		<0.5	----	<0.5	----	----



Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	BH11_0.2	BH11_1.5	BH13_0.3	BH13_1.5	BH10_0.3
Sampling date / time					11-Feb-2022 00:00	11-Feb-2022 00:00	11-Feb-2022 00:00	11-Feb-2022 00:00	11-Feb-2022 00:00
Compound	CAS Number	LOR	Unit		ES2204812-001	ES2204812-002	ES2204812-003	ES2204812-004	ES2204812-005
					Result	Result	Result	Result	Result
EP074E: Halogenated Aliphatic Compounds - Continued									
1.1.1-Trichloroethane	71-55-6	0.5	mg/kg		<0.5	----	<0.5	----	----
1.1-Dichloropropylene	563-58-6	0.5	mg/kg		<0.5	----	<0.5	----	----
Carbon Tetrachloride	56-23-5	0.5	mg/kg		<0.5	----	<0.5	----	----
1.2-Dichloroethane	107-06-2	0.5	mg/kg		<0.5	----	<0.5	----	----
Trichloroethene	79-01-6	0.5	mg/kg		<0.5	----	<0.5	----	----
Dibromomethane	74-95-3	0.5	mg/kg		<0.5	----	<0.5	----	----
1.1.2-Trichloroethane	79-00-5	0.5	mg/kg		<0.5	----	<0.5	----	----
1.3-Dichloropropane	142-28-9	0.5	mg/kg		<0.5	----	<0.5	----	----
Tetrachloroethene	127-18-4	0.5	mg/kg		<0.5	----	<0.5	----	----
1.1.1.2-Tetrachloroethane	630-20-6	0.5	mg/kg		<0.5	----	<0.5	----	----
trans-1.4-Dichloro-2-butene	110-57-6	0.5	mg/kg		<0.5	----	<0.5	----	----
cis-1.4-Dichloro-2-butene	1476-11-5	0.5	mg/kg		<0.5	----	<0.5	----	----
1.1.2.2-Tetrachloroethane	79-34-5	0.5	mg/kg		<0.5	----	<0.5	----	----
1.2.3-Trichloropropane	96-18-4	0.5	mg/kg		<0.5	----	<0.5	----	----
Pentachloroethane	76-01-7	0.5	mg/kg		<0.5	----	<0.5	----	----
1.2-Dibromo-3-chloropropane	96-12-8	0.5	mg/kg		<0.5	----	<0.5	----	----
EP074F: Halogenated Aromatic Compounds									
Chlorobenzene	108-90-7	0.5	mg/kg		<0.5	----	<0.5	----	----
Bromobenzene	108-86-1	0.5	mg/kg		<0.5	----	<0.5	----	----
2-Chlorotoluene	95-49-8	0.5	mg/kg		<0.5	----	<0.5	----	----
4-Chlorotoluene	106-43-4	0.5	mg/kg		<0.5	----	<0.5	----	----
1.2.3-Trichlorobenzene	87-61-6	0.5	mg/kg		<0.5	----	<0.5	----	----
EP074G: Trihalomethanes									
Chloroform	67-66-3	0.5	mg/kg		<0.5	----	<0.5	----	----
Bromodichloromethane	75-27-4	0.5	mg/kg		<0.5	----	<0.5	----	----
Dibromochloromethane	124-48-1	0.5	mg/kg		<0.5	----	<0.5	----	----
Bromoform	75-25-2	0.5	mg/kg		<0.5	----	<0.5	----	----
EP075(SIM)A: Phenolic Compounds									
Phenol	108-95-2	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
2-Chlorophenol	95-57-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
2-Methylphenol	95-48-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
3- & 4-Methylphenol	1319-77-3	1	mg/kg		<1	<1	<1	<1	<1
2-Nitrophenol	88-75-5	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
2.4-Dimethylphenol	105-67-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	BH11_0.2	BH11_1.5	BH13_0.3	BH13_1.5	BH10_0.3
Sampling date / time				11-Feb-2022 00:00	11-Feb-2022 00:00	11-Feb-2022 00:00	11-Feb-2022 00:00	11-Feb-2022 00:00	
Compound	CAS Number	LOR	Unit	ES2204812-001	ES2204812-002	ES2204812-003	ES2204812-004	ES2204812-005	
				Result	Result	Result	Result	Result	
EP075(SIM)A: Phenolic Compounds - Continued									
2.4-Dichlorophenol	120-83-2	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5	
2.6-Dichlorophenol	87-65-0	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5	
4-Chloro-3-methylphenol	59-50-7	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5	
2.4.6-Trichlorophenol	88-06-2	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5	
2.4.5-Trichlorophenol	95-95-4	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5	
Pentachlorophenol	87-86-5	2	mg/kg	<2	<2	<2	<2	<2	
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons									
Naphthalene	91-20-3	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	0.6	<0.5	
Acenaphthene	83-32-9	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	0.6	<0.5	0.8	2.5	<0.5	
Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	<0.5	0.8	<0.5	
Fluoranthene	206-44-0	0.5	mg/kg	2.1	<0.5	1.1	4.1	<0.5	
Pyrene	129-00-0	0.5	mg/kg	2.0	<0.5	1.0	4.0	0.5	
Benz(a)anthracene	56-55-3	0.5	mg/kg	1.1	<0.5	0.6	2.3	0.5	
Chrysene	218-01-9	0.5	mg/kg	0.9	<0.5	<0.5	1.8	<0.5	
Benzo(b+j)fluoranthene	205-99-2	205-82-3	0.5	mg/kg	1.7	<0.5	0.8	2.6	
Benzo(k)fluoranthene	207-08-9		0.5	mg/kg	0.6	<0.5	<0.5	0.9	
Benzo(a)pyrene	50-32-8		0.5	mg/kg	1.4	<0.5	0.7	2.2	
Indeno(1.2.3.cd)pyrene	193-39-5		0.5	mg/kg	1.0	<0.5	<0.5	1.1	
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	0.9	<0.5	0.5	1.2	
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg	12.3	<0.5	5.5	24.1	3.9	
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg	1.8	<0.5	0.8	2.9	0.9	
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg	2.1	0.6	1.1	3.2	1.2	
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg	2.4	1.2	1.4	3.4	1.5	
EP075B: Polynuclear Aromatic Hydrocarbons									
2-Methylnaphthalene	91-57-6	0.5	mg/kg	<0.5	----	<0.5	----	----	
2-Chloronaphthalene	91-58-7	0.5	mg/kg	<0.5	----	<0.5	----	----	
N-2-Fluorenyl Acetamide	53-96-3	0.5	mg/kg	<0.5	----	<0.5	----	----	
7.12-Dimethylbenz(a)anthracene	57-97-6	0.5	mg/kg	<0.5	----	<0.5	----	----	
3-Methylcholanthrene	56-49-5	0.5	mg/kg	<0.5	----	<0.5	----	----	
EP075C: Phthalate Esters									



Analytical Results

Sub-Matrix: SOIL
 (Matrix: SOIL)

Sample ID

				BH11_0.2	BH11_1.5	BH13_0.3	BH13_1.5	BH10_0.3
Sampling date / time				11-Feb-2022 00:00	11-Feb-2022 00:00	11-Feb-2022 00:00	11-Feb-2022 00:00	11-Feb-2022 00:00
Compound	CAS Number	LOR	Unit	ES2204812-001	ES2204812-002	ES2204812-003	ES2204812-004	ES2204812-005
				Result	Result	Result	Result	Result
EP075C: Phthalate Esters - Continued								
Dimethyl phthalate	131-11-3	0.5	mg/kg	<0.5	----	<0.5	----	----
Diethyl phthalate	84-66-2	0.5	mg/kg	<0.5	----	<0.5	----	----
Di-n-butyl phthalate	84-74-2	0.5	mg/kg	<0.5	----	<0.5	----	----
Butyl benzyl phthalate	85-68-7	0.5	mg/kg	<0.5	----	<0.5	----	----
bis(2-ethylhexyl) phthalate	117-81-7	5.0	mg/kg	<5.0	----	<5.0	----	----
Di-n-octylphthalate	117-84-0	0.5	mg/kg	<0.5	----	<0.5	----	----
EP075D: Nitrosamines								
N-Nitrosomethylethylamine	10595-95-6	0.5	mg/kg	<0.5	----	<0.5	----	----
N-Nitrosodiethylamine	55-18-5	0.5	mg/kg	<0.5	----	<0.5	----	----
N-Nitrosopyrrolidine	930-55-2	1.0	mg/kg	<1.0	----	<1.0	----	----
N-Nitrosomorpholine	59-89-2	0.5	mg/kg	<0.5	----	<0.5	----	----
N-Nitrosodi-n-propylamine	621-64-7	0.5	mg/kg	<0.5	----	<0.5	----	----
N-Nitrosopiperidine	100-75-4	0.5	mg/kg	<0.5	----	<0.5	----	----
N-Nitrosodibutylamine	924-16-3	0.5	mg/kg	<0.5	----	<0.5	----	----
N-Nitrosodiphenyl & Diphenylamine	86-30-6 122-39-4	1.0	mg/kg	<1.0	----	<1.0	----	----
Methapyrilene	91-80-5	0.5	mg/kg	<0.5	----	<0.5	----	----
EP075E: Nitroaromatics and Ketones								
2-Picoline	109-06-8	0.5	mg/kg	<0.5	----	<0.5	----	----
Acetophenone	98-86-2	0.5	mg/kg	<0.5	----	<0.5	----	----
Nitrobenzene	98-95-3	0.5	mg/kg	<0.5	----	<0.5	----	----
Isophorone	78-59-1	0.5	mg/kg	<0.5	----	<0.5	----	----
2,6-Dinitrotoluene	606-20-2	1.0	mg/kg	<1.0	----	<1.0	----	----
2,4-Dinitrotoluene	121-14-2	1.0	mg/kg	<1.0	----	<1.0	----	----
1-Naphthylamine	134-32-7	0.5	mg/kg	<0.5	----	<0.5	----	----
4-Nitroquinoline-N-oxide	56-57-5	0.5	mg/kg	<0.5	----	<0.5	----	----
5-Nitro-o-toluidine	99-55-8	0.5	mg/kg	<0.5	----	<0.5	----	----
Azobenzene	103-33-3	1	mg/kg	<1	----	<1	----	----
1,3,5-Trinitrobenzene	99-35-4	0.5	mg/kg	<0.5	----	<0.5	----	----
Phenacetin	62-44-2	0.5	mg/kg	<0.5	----	<0.5	----	----
4-Aminobiphenyl	92-67-1	0.5	mg/kg	<0.5	----	<0.5	----	----
Pentachloronitrobenzene	82-68-8	0.5	mg/kg	<0.5	----	<0.5	----	----
Pronamide	23950-58-5	0.5	mg/kg	<0.5	----	<0.5	----	----
Dimethylaminoazobenzene	60-11-7	0.5	mg/kg	<0.5	----	<0.5	----	----
Chlorobenzilate	510-15-6	0.5	mg/kg	<0.5	----	<0.5	----	----



Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	BH11_0.2	BH11_1.5	BH13_0.3	BH13_1.5	BH10_0.3
Sampling date / time					11-Feb-2022 00:00	11-Feb-2022 00:00	11-Feb-2022 00:00	11-Feb-2022 00:00	11-Feb-2022 00:00
Compound	CAS Number	LOR	Unit		ES2204812-001	ES2204812-002	ES2204812-003	ES2204812-004	ES2204812-005
					Result	Result	Result	Result	Result
EP075E: Nitroaromatics and Ketones - Continued									
EP075F: Haloethers									
Bis(2-chloroethyl) ether	111-44-4	0.5	mg/kg		<0.5	----	<0.5	----	----
Bis(2-chloroethoxy) methane	111-91-1	0.5	mg/kg		<0.5	----	<0.5	----	----
4-Chlorophenyl phenyl ether	7005-72-3	0.5	mg/kg		<0.5	----	<0.5	----	----
4-Bromophenyl phenyl ether	101-55-3	0.5	mg/kg		<0.5	----	<0.5	----	----
EP075G: Chlorinated Hydrocarbons									
1,3-Dichlorobenzene	541-73-1	0.5	mg/kg		<0.5	----	<0.5	----	----
1,4-Dichlorobenzene	106-46-7	0.5	mg/kg		<0.5	----	<0.5	----	----
1,2-Dichlorobenzene	95-50-1	0.5	mg/kg		<0.5	----	<0.5	----	----
Hexachloroethane	67-72-1	0.5	mg/kg		<0.5	----	<0.5	----	----
1,2,4-Trichlorobenzene	120-82-1	0.5	mg/kg		<0.5	----	<0.5	----	----
Hexachloropropylene	1888-71-7	0.5	mg/kg		<0.5	----	<0.5	----	----
Hexachlorobutadiene	87-68-3	0.5	mg/kg		<0.5	----	<0.5	----	----
Hexachlorocyclopentadiene	77-47-4	2.5	mg/kg		<2.5	----	<2.5	----	----
Pentachlorobenzene	608-93-5	0.5	mg/kg		<0.5	----	<0.5	----	----
Hexachlorobenzene (HCB)	118-74-1	1.0	mg/kg		<1.0	----	<1.0	----	----
EP075H: Anilines and Benzidines									
Aniline	62-53-3	0.5	mg/kg		<0.5	----	<0.5	----	----
4-Chloroaniline	106-47-8	0.5	mg/kg		<0.5	----	<0.5	----	----
2-Nitroaniline	88-74-4	1.0	mg/kg		<1.0	----	<1.0	----	----
3-Nitroaniline	99-09-2	1.0	mg/kg		<1.0	----	<1.0	----	----
Dibenzofuran	132-64-9	0.5	mg/kg		<0.5	----	<0.5	----	----
4-Nitroaniline	100-01-6	0.5	mg/kg		<0.5	----	<0.5	----	----
Carbazole	86-74-8	0.5	mg/kg		<0.5	----	<0.5	----	----
3,3'-Dichlorobenzidine	91-94-1	0.5	mg/kg		<0.5	----	<0.5	----	----
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	----	10	mg/kg		<10	<10	<10	<10	<10
C10 - C14 Fraction	----	50	mg/kg		<50	<50	<50	<50	<50
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	100	<50
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
C6 - C10 Fraction	C6_C10	10	mg/kg		<10	<10	<10	<10	<10



Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	BH11_0.2	BH11_1.5	BH13_0.3	BH13_1.5	BH10_0.3
Sampling date / time					11-Feb-2022 00:00	11-Feb-2022 00:00	11-Feb-2022 00:00	11-Feb-2022 00:00	11-Feb-2022 00:00
Compound	CAS Number	LOR	Unit		ES2204812-001	ES2204812-002	ES2204812-003	ES2204812-004	ES2204812-005
					Result	Result	Result	Result	Result
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions - Continued									
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg		<10	<10	<10	<10	<10
>C10 - C16 Fraction	----	50	mg/kg		<50	<50	<50	<50	<50
>C16 - C34 Fraction	----	100	mg/kg		150	<100	<100	160	<100
>C34 - C40 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
^ >C10 - C40 Fraction (sum)	----	50	mg/kg		150	<50	<50	160	<50
^ >C10 - C16 Fraction minus Naphthalene (F2)	----	50	mg/kg		<50	<50	<50	<50	<50
EP080: BTEXN									
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
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
ortho-Xylene	95-47-6	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Sum of BTEX	----	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
^ Total Xylenes	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Naphthalene	91-20-3	1	mg/kg		<1	<1	<1	<1	<1
EP231A: Perfluoroalkyl Sulfonic Acids									
Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.0002	mg/kg		<0.0002	----	<0.0002	----	<0.0002
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.0002	mg/kg		<0.0002	----	<0.0002	----	<0.0002
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.0002	mg/kg		<0.0002	----	<0.0002	----	<0.0002
EP231B: Perfluoroalkyl Carboxylic Acids									
Perfluorobutanoic acid (PFBA)	375-22-4	0.001	mg/kg		<0.001	----	<0.001	----	<0.001
Perfluoropentanoic acid (PFPeA)	2706-90-3	0.0002	mg/kg		<0.0002	----	<0.0002	----	<0.0002
Perfluorohexanoic acid (PFHxA)	307-24-4	0.0002	mg/kg		<0.0002	----	<0.0002	----	<0.0002
Perfluoroheptanoic acid (PFHpA)	375-85-9	0.0002	mg/kg		<0.0002	----	<0.0002	----	<0.0002
Perfluorooctanoic acid (PFOA)	335-67-1	0.0002	mg/kg		<0.0002	----	<0.0002	----	<0.0002
EP231D: (n:2) Fluorotelomer Sulfonic Acids									
4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.0005	mg/kg		<0.0005	----	<0.0005	----	<0.0005
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.0005	mg/kg		<0.0005	----	<0.0005	----	<0.0005



Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	BH11_0.2	BH11_1.5	BH13_0.3	BH13_1.5	BH10_0.3
Sampling date / time					11-Feb-2022 00:00	11-Feb-2022 00:00	11-Feb-2022 00:00	11-Feb-2022 00:00	11-Feb-2022 00:00
Compound	CAS Number	LOR	Unit		ES2204812-001	ES2204812-002	ES2204812-003	ES2204812-004	ES2204812-005
					Result	Result	Result	Result	Result
EP231D: (n:2) Fluorotelomer Sulfonic Acids - Continued									
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.0005	mg/kg		<0.0005	----	<0.0005	----	<0.0005
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.0005	mg/kg		<0.0005	----	<0.0005	----	<0.0005
EP231P: PFAS Sums									
Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.0002	mg/kg		<0.0002	----	<0.0002	----	<0.0002
Sum of PFAS (WA DER List)	----	0.0002	mg/kg		<0.0002	----	<0.0002	----	<0.0002
EP066S: PCB Surrogate									
Decachlorobiphenyl	2051-24-3	0.1	%		107	105	114	112	119
EP068S: Organochlorine Pesticide Surrogate									
Dibromo-DDE	21655-73-2	0.05	%		96.1	108	101	104	131
EP068T: Organophosphorus Pesticide Surrogate									
DEF	78-48-8	0.05	%		121	75.4	99.3	136	118
EP074S: VOC Surrogates									
1,2-Dichloroethane-D4	17060-07-0	0.5	%		107	----	101	----	----
Toluene-D8	2037-26-5	0.5	%		114	----	110	----	----
4-Bromofluorobenzene	460-00-4	0.5	%		116	----	116	----	----
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	0.5	%		101	104	104	118	111
2-Chlorophenol-D4	93951-73-6	0.5	%		107	111	106	112	106
2,4,6-Tribromophenol	118-79-6	0.5	%		79.0	82.6	80.3	91.0	79.5
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	0.5	%		121	110	120	122	115
Anthracene-d10	1719-06-8	0.5	%		120	119	123	122	118
4-Terphenyl-d14	1718-51-0	0.5	%		107	99.9	98.3	99.9	94.9
EP075S: Acid Extractable Surrogates									
2-Fluorophenol	367-12-4	0.5	%		104	----	88.9	----	----
Phenol-d6	13127-88-3	0.5	%		89.6	----	102	----	----
2-Chlorophenol-D4	93951-73-6	0.5	%		95.8	----	103	----	----
2,4,6-Tribromophenol	118-79-6	0.5	%		96.3	----	95.4	----	----
EP075T: Base/Neutral Extractable Surrogates									
Nitrobenzene-D5	4165-60-0	0.5	%		94.9	----	101	----	----
1,2-Dichlorobenzene-D4	2199-69-1	0.5	%		97.0	----	88.0	----	----



Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	BH11_0.2	BH11_1.5	BH13_0.3	BH13_1.5	BH10_0.3
Sampling date / time					11-Feb-2022 00:00	11-Feb-2022 00:00	11-Feb-2022 00:00	11-Feb-2022 00:00	11-Feb-2022 00:00
Compound	CAS Number	LOR	Unit		ES2204812-001	ES2204812-002	ES2204812-003	ES2204812-004	ES2204812-005
					Result	Result	Result	Result	Result
EP075T: Base/Neutral Extractable Surrogates - Continued									
2-Fluorobiphenyl	321-60-8	0.5	%		115	----	109	----	----
Anthracene-d10	1719-06-8	0.5	%		125	----	123	----	----
4-Terphenyl-d14	1718-51-0	0.5	%		101	----	105	----	----
EP080S: TPH(V)/BTEX Surrogates									
1,2-Dichloroethane-D4	17060-07-0	0.2	%		82.9	117	78.0	110	98.8
Toluene-D8	2037-26-5	0.2	%		91.2	121	87.5	111	100
4-Bromofluorobenzene	460-00-4	0.2	%		88.7	119	87.9	109	98.4
EP231S: PFAS Surrogate									
13C4-PFOS	----	0.0002	%		88.5	----	94.5	----	89.5
13C8-PFOA	----	0.0002	%		99.0	----	104	----	102



Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	BH10_2.0	BH14_0.2	BH14_0.9	BH08_0.2	DUP03
Sampling date / time					11-Feb-2022 00:00	11-Feb-2022 00:00	11-Feb-2022 00:00	11-Feb-2022 00:00	11-Feb-2022 00:00
Compound	CAS Number	LOR	Unit		ES2204812-006	ES2204812-007	ES2204812-008	ES2204812-009	ES2204812-011
					Result	Result	Result	Result	Result
EA055: Moisture Content (Dried @ 105-110°C)									
Moisture Content	----	0.1	%		----	----	----	----	10.4
Moisture Content	----	1.0	%		21.5	9.0	5.4	9.3	----
EA200: AS 4964 - 2004 Identification of Asbestos in Soils									
Asbestos Detected	1332-21-4	0.1	g/kg		----	No	Yes	----	----
Asbestos (Trace)	1332-21-4	5	Fibres		----	No	No	----	----
Asbestos Type	1332-21-4	-	--		----	-	Ch	----	----
Synthetic Mineral Fibre	----	0.1	g/kg		----	No	No	----	----
Organic Fibre	----	0.1	g/kg		----	No	No	----	----
Sample weight (dry)	----	0.01	g		----	87.6	77.5	----	----
APPROVED IDENTIFIER:	----	-	--		----	A. SMYIE	A. SMYIE	----	----
EG005(ED093)T: Total Metals by ICP-AES									
Arsenic	7440-38-2	5	mg/kg		<5	10	148	10	----
Cadmium	7440-43-9	1	mg/kg		<1	12	9	11	----
Chromium	7440-47-3	2	mg/kg		3	10	8	28	----
Copper	7440-50-8	5	mg/kg		6	99	281	130	----
Lead	7439-92-1	5	mg/kg		25	13000	207000	16500	----
Nickel	7440-02-0	2	mg/kg		<2	16	10	15	----
Zinc	7440-66-6	5	mg/kg		45	1260	1300	1650	----
EG035T: Total Recoverable Mercury by FIMS									
Mercury	7439-97-6	0.1	mg/kg		<0.1	0.6	0.6	0.5	----
EP066: Polychlorinated Biphenyls (PCB)									
Total Polychlorinated biphenyls	----	0.1	mg/kg		<0.1	<0.1	<0.1	<0.1	----
EP068A: Organochlorine Pesticides (OC)									
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	----
^ Total Chlordane (sum)	----	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	----
trans-Chlordane	5103-74-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	----
alpha-Endosulfan	959-98-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	----



Analytical Results

Sub-Matrix: SOIL
 (Matrix: SOIL)

Sample ID

				BH10_2.0	BH14_0.2	BH14_0.9	BH08_0.2	DUP03
Sampling date / time				11-Feb-2022 00:00	11-Feb-2022 00:00	11-Feb-2022 00:00	11-Feb-2022 00:00	11-Feb-2022 00:00
Compound	CAS Number	LOR	Unit	ES2204812-006	ES2204812-007	ES2204812-008	ES2204812-009	ES2204812-011
				Result	Result	Result	Result	Result

EP068A: Organochlorine Pesticides (OC) - Continued

cis-Chlordane	5103-71-9	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	----
4,4'-DDE	72-55-9	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	----
beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	----
^ Endosulfan (sum)	115-29-7	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	----
Endrin aldehyde	7421-93-4	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	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	----
Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	----
Methoxychlor	72-43-5	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	----
^ Sum of Aldrin + Dieldrin	309-00-2/60-57-1	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	----
^ 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	----

EP068B: Organophosphorus Pesticides (OP)

Dichlorvos	62-73-7	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	----
Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	----
Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	----
Dimethoate	60-51-5	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	----
Diazinon	333-41-5	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	----
Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	----
Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	----
Malathion	121-75-5	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	----
Fenthion	55-38-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	----
Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	----
Parathion	56-38-2	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	----
Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	----
Chlorfenvinphos	470-90-6	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	----
Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	----
Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	----
Prothiofos	34643-46-4	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	----
Ethion	563-12-2	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	----
Carbophenothion	786-19-6	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	----
Azinphos Methyl	86-50-0	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	----



Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	BH10_2.0	BH14_0.2	BH14_0.9	BH08_0.2	DUP03
Sampling date / time					11-Feb-2022 00:00	11-Feb-2022 00:00	11-Feb-2022 00:00	11-Feb-2022 00:00	11-Feb-2022 00:00
Compound	CAS Number	LOR	Unit		ES2204812-006	ES2204812-007	ES2204812-008	ES2204812-009	ES2204812-011
					Result	Result	Result	Result	Result
EP074A: Monocyclic Aromatic Hydrocarbons									
Styrene	100-42-5	0.5	mg/kg		<0.5	----	<0.5	<0.5	----
Isopropylbenzene	98-82-8	0.5	mg/kg		<0.5	----	<0.5	<0.5	----
n-Propylbenzene	103-65-1	0.5	mg/kg		<0.5	----	<0.5	<0.5	----
1,3,5-Trimethylbenzene	108-67-8	0.5	mg/kg		<0.5	----	<0.5	<0.5	----
sec-Butylbenzene	135-98-8	0.5	mg/kg		<0.5	----	<0.5	<0.5	----
1,2,4-Trimethylbenzene	95-63-6	0.5	mg/kg		<0.5	----	<0.5	<0.5	----
tert-Butylbenzene	98-06-6	0.5	mg/kg		<0.5	----	<0.5	<0.5	----
p-Isopropyltoluene	99-87-6	0.5	mg/kg		<0.5	----	<0.5	<0.5	----
n-Butylbenzene	104-51-8	0.5	mg/kg		<0.5	----	<0.5	<0.5	----
EP074B: Oxygenated Compounds									
Vinyl Acetate	108-05-4	5	mg/kg		<5	----	<5	<5	----
2-Butanone (MEK)	78-93-3	5	mg/kg		<5	----	<5	<5	----
4-Methyl-2-pentanone (MIBK)	108-10-1	5	mg/kg		<5	----	<5	<5	----
2-Hexanone (MBK)	591-78-6	5	mg/kg		<5	----	<5	<5	----
EP074C: Sulfonated Compounds									
Carbon disulfide	75-15-0	0.5	mg/kg		<0.5	----	<0.5	<0.5	----
EP074D: Fumigants									
2,2-Dichloropropane	594-20-7	0.5	mg/kg		<0.5	----	<0.5	<0.5	----
1,2-Dichloropropane	78-87-5	0.5	mg/kg		<0.5	----	<0.5	<0.5	----
cis-1,3-Dichloropropylene	10061-01-5	0.5	mg/kg		<0.5	----	<0.5	<0.5	----
trans-1,3-Dichloropropylene	10061-02-6	0.5	mg/kg		<0.5	----	<0.5	<0.5	----
1,2-Dibromoethane (EDB)	106-93-4	0.5	mg/kg		<0.5	----	<0.5	<0.5	----
EP074E: Halogenated Aliphatic Compounds									
Dichlorodifluoromethane	75-71-8	5	mg/kg		<5	----	<5	<5	----
Chloromethane	74-87-3	5	mg/kg		<5	----	<5	<5	----
Vinyl chloride	75-01-4	5	mg/kg		<5	----	<5	<5	----
Bromomethane	74-83-9	5	mg/kg		<5	----	<5	<5	----
Chloroethane	75-00-3	5	mg/kg		<5	----	<5	<5	----
Trichlorofluoromethane	75-69-4	5	mg/kg		<5	----	<5	<5	----
1,1-Dichloroethene	75-35-4	0.5	mg/kg		<0.5	----	<0.5	<0.5	----
Iodomethane	74-88-4	0.5	mg/kg		<0.5	----	<0.5	<0.5	----
trans-1,2-Dichloroethene	156-60-5	0.5	mg/kg		<0.5	----	<0.5	<0.5	----
1,1-Dichloroethane	75-34-3	0.5	mg/kg		<0.5	----	<0.5	<0.5	----
cis-1,2-Dichloroethene	156-59-2	0.5	mg/kg		<0.5	----	<0.5	<0.5	----



Analytical Results

Sub-Matrix: SOIL
 (Matrix: SOIL)

Sample ID

				BH10_2.0	BH14_0.2	BH14_0.9	BH08_0.2	DUP03
Sampling date / time				11-Feb-2022 00:00	11-Feb-2022 00:00	11-Feb-2022 00:00	11-Feb-2022 00:00	11-Feb-2022 00:00
Compound	CAS Number	LOR	Unit	ES2204812-006	ES2204812-007	ES2204812-008	ES2204812-009	ES2204812-011
				Result	Result	Result	Result	Result
EP074E: Halogenated Aliphatic Compounds - Continued								
1.1.1-Trichloroethane	71-55-6	0.5	mg/kg	<0.5	----	<0.5	<0.5	----
1.1-Dichloropropylene	563-58-6	0.5	mg/kg	<0.5	----	<0.5	<0.5	----
Carbon Tetrachloride	56-23-5	0.5	mg/kg	<0.5	----	<0.5	<0.5	----
1.2-Dichloroethane	107-06-2	0.5	mg/kg	<0.5	----	<0.5	<0.5	----
Trichloroethene	79-01-6	0.5	mg/kg	<0.5	----	<0.5	<0.5	----
Dibromomethane	74-95-3	0.5	mg/kg	<0.5	----	<0.5	<0.5	----
1.1.2-Trichloroethane	79-00-5	0.5	mg/kg	<0.5	----	<0.5	<0.5	----
1.3-Dichloropropane	142-28-9	0.5	mg/kg	<0.5	----	<0.5	<0.5	----
Tetrachloroethene	127-18-4	0.5	mg/kg	<0.5	----	<0.5	<0.5	----
1.1.1.2-Tetrachloroethane	630-20-6	0.5	mg/kg	<0.5	----	<0.5	<0.5	----
trans-1.4-Dichloro-2-butene	110-57-6	0.5	mg/kg	<0.5	----	<0.5	<0.5	----
cis-1.4-Dichloro-2-butene	1476-11-5	0.5	mg/kg	<0.5	----	<0.5	<0.5	----
1.1.2.2-Tetrachloroethane	79-34-5	0.5	mg/kg	<0.5	----	<0.5	<0.5	----
1.2.3-Trichloropropane	96-18-4	0.5	mg/kg	<0.5	----	<0.5	<0.5	----
Pentachloroethane	76-01-7	0.5	mg/kg	<0.5	----	<0.5	<0.5	----
1.2-Dibromo-3-chloropropane	96-12-8	0.5	mg/kg	<0.5	----	<0.5	<0.5	----
EP074F: Halogenated Aromatic Compounds								
Chlorobenzene	108-90-7	0.5	mg/kg	<0.5	----	<0.5	<0.5	----
Bromobenzene	108-86-1	0.5	mg/kg	<0.5	----	<0.5	<0.5	----
2-Chlorotoluene	95-49-8	0.5	mg/kg	<0.5	----	<0.5	<0.5	----
4-Chlorotoluene	106-43-4	0.5	mg/kg	<0.5	----	<0.5	<0.5	----
1.2.3-Trichlorobenzene	87-61-6	0.5	mg/kg	<0.5	----	<0.5	<0.5	----
EP074G: Trihalomethanes								
Chloroform	67-66-3	0.5	mg/kg	<0.5	----	<0.5	<0.5	----
Bromodichloromethane	75-27-4	0.5	mg/kg	<0.5	----	<0.5	<0.5	----
Dibromochloromethane	124-48-1	0.5	mg/kg	<0.5	----	<0.5	<0.5	----
Bromoform	75-25-2	0.5	mg/kg	<0.5	----	<0.5	<0.5	----
EP075(SIM)A: Phenolic Compounds								
Phenol	108-95-2	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	----
2-Chlorophenol	95-57-8	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	----
2-Methylphenol	95-48-7	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	----
3- & 4-Methylphenol	1319-77-3	1	mg/kg	<1	<1	<1	<1	----
2-Nitrophenol	88-75-5	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	----
2.4-Dimethylphenol	105-67-9	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	----

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	BH10_2.0	BH14_0.2	BH14_0.9	BH08_0.2	DUP03
Sampling date / time				11-Feb-2022 00:00	11-Feb-2022 00:00	11-Feb-2022 00:00	11-Feb-2022 00:00	11-Feb-2022 00:00	
Compound	CAS Number	LOR	Unit	ES2204812-006	ES2204812-007	ES2204812-008	ES2204812-009	ES2204812-011	
				Result	Result	Result	Result	Result	
EP075(SIM)A: Phenolic Compounds - Continued									
2,4-Dichlorophenol	120-83-2	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	----	
2,6-Dichlorophenol	87-65-0	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	----	
4-Chloro-3-methylphenol	59-50-7	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	----	
2,4,6-Trichlorophenol	88-06-2	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	----	
2,4,5-Trichlorophenol	95-95-4	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	----	
Pentachlorophenol	87-86-5	2	mg/kg	<2	<2	<2	<2	----	
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons									
Naphthalene	91-20-3	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	----	
Acenaphthene	83-32-9	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	1.2	<0.5	1.3	----	
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	2.1	0.7	2.8	----	
Pyrene	129-00-0	0.5	mg/kg	<0.5	2.0	0.6	2.7	----	
Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	1.1	<0.5	1.6	----	
Chrysene	218-01-9	0.5	mg/kg	<0.5	0.9	<0.5	1.3	----	
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	1.5	<0.5	2.1	----	
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	<0.5	<0.5	0.9	----	
Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	1.2	<0.5	1.8	----	
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	0.8	<0.5	1.1	----	
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	0.8	<0.5	1.2	----	
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg	<0.5	11.6	1.3	16.8	----	
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg	<0.5	1.6	<0.5	2.4	----	
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg	0.6	1.8	0.6	2.6	----	
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg	1.2	2.1	1.2	2.9	----	
EP075B: Polynuclear Aromatic Hydrocarbons									
2-Methylnaphthalene	91-57-6	0.5	mg/kg	<0.5	----	<0.5	<0.5	----	
2-Chloronaphthalene	91-58-7	0.5	mg/kg	<0.5	----	<0.5	<0.5	----	
N-2-Fluorenyl Acetamide	53-96-3	0.5	mg/kg	<0.5	----	<0.5	<0.5	----	
7,12-Dimethylbenz(a)anthracene	57-97-6	0.5	mg/kg	<0.5	----	<0.5	<0.5	----	
3-Methylcholanthrene	56-49-5	0.5	mg/kg	<0.5	----	<0.5	<0.5	----	
EP075C: Phthalate Esters									



Analytical Results

Sub-Matrix: SOIL
 (Matrix: SOIL)

Sample ID

				BH10_2.0	BH14_0.2	BH14_0.9	BH08_0.2	DUP03
Sampling date / time				11-Feb-2022 00:00	11-Feb-2022 00:00	11-Feb-2022 00:00	11-Feb-2022 00:00	11-Feb-2022 00:00
Compound	CAS Number	LOR	Unit	ES2204812-006	ES2204812-007	ES2204812-008	ES2204812-009	ES2204812-011
				Result	Result	Result	Result	Result
EP075C: Phthalate Esters - Continued								
Dimethyl phthalate	131-11-3	0.5	mg/kg	<0.5	----	<0.5	<0.5	----
Diethyl phthalate	84-66-2	0.5	mg/kg	<0.5	----	<0.5	<0.5	----
Di-n-butyl phthalate	84-74-2	0.5	mg/kg	<0.5	----	<0.5	<0.5	----
Butyl benzyl phthalate	85-68-7	0.5	mg/kg	<0.5	----	<0.5	<0.5	----
bis(2-ethylhexyl) phthalate	117-81-7	5.0	mg/kg	<5.0	----	<5.0	<5.0	----
Di-n-octylphthalate	117-84-0	0.5	mg/kg	<0.5	----	<0.5	<0.5	----
EP075D: Nitrosamines								
N-Nitrosomethylethylamine	10595-95-6	0.5	mg/kg	<0.5	----	<0.5	<0.5	----
N-Nitrosodiethylamine	55-18-5	0.5	mg/kg	<0.5	----	<0.5	<0.5	----
N-Nitrosopyrrolidine	930-55-2	1.0	mg/kg	<1.0	----	<1.0	<1.0	----
N-Nitrosomorpholine	59-89-2	0.5	mg/kg	<0.5	----	<0.5	<0.5	----
N-Nitrosodi-n-propylamine	621-64-7	0.5	mg/kg	<0.5	----	<0.5	<0.5	----
N-Nitrosopiperidine	100-75-4	0.5	mg/kg	<0.5	----	<0.5	<0.5	----
N-Nitrosodibutylamine	924-16-3	0.5	mg/kg	<0.5	----	<0.5	<0.5	----
N-Nitrosodiphenyl & Diphenylamine	86-30-6 122-39-4	1.0	mg/kg	<1.0	----	<1.0	<1.0	----
Methapyrilene	91-80-5	0.5	mg/kg	<0.5	----	<0.5	<0.5	----
EP075E: Nitroaromatics and Ketones								
2-Picoline	109-06-8	0.5	mg/kg	<0.5	----	<0.5	<0.5	----
Acetophenone	98-86-2	0.5	mg/kg	<0.5	----	<0.5	<0.5	----
Nitrobenzene	98-95-3	0.5	mg/kg	<0.5	----	<0.5	<0.5	----
Isophorone	78-59-1	0.5	mg/kg	<0.5	----	<0.5	<0.5	----
2,6-Dinitrotoluene	606-20-2	1.0	mg/kg	<1.0	----	<1.0	<1.0	----
2,4-Dinitrotoluene	121-14-2	1.0	mg/kg	<1.0	----	<1.0	<1.0	----
1-Naphthylamine	134-32-7	0.5	mg/kg	<0.5	----	<0.5	<0.5	----
4-Nitroquinoline-N-oxide	56-57-5	0.5	mg/kg	<0.5	----	<0.5	<0.5	----
5-Nitro-o-toluidine	99-55-8	0.5	mg/kg	<0.5	----	<0.5	<0.5	----
Azobenzene	103-33-3	1	mg/kg	<1	----	<1	<1	----
1,3,5-Trinitrobenzene	99-35-4	0.5	mg/kg	<0.5	----	<0.5	<0.5	----
Phenacetin	62-44-2	0.5	mg/kg	<0.5	----	<0.5	<0.5	----
4-Aminobiphenyl	92-67-1	0.5	mg/kg	<0.5	----	<0.5	<0.5	----
Pentachloronitrobenzene	82-68-8	0.5	mg/kg	<0.5	----	<0.5	<0.5	----
Pronamide	23950-58-5	0.5	mg/kg	<0.5	----	<0.5	<0.5	----
Dimethylaminoazobenzene	60-11-7	0.5	mg/kg	<0.5	----	<0.5	<0.5	----
Chlorobenzilate	510-15-6	0.5	mg/kg	<0.5	----	<0.5	<0.5	----



Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	BH10_2.0	BH14_0.2	BH14_0.9	BH08_0.2	DUP03
Sampling date / time					11-Feb-2022 00:00	11-Feb-2022 00:00	11-Feb-2022 00:00	11-Feb-2022 00:00	11-Feb-2022 00:00
Compound	CAS Number	LOR	Unit		ES2204812-006	ES2204812-007	ES2204812-008	ES2204812-009	ES2204812-011
					Result	Result	Result	Result	Result
EP075E: Nitroaromatics and Ketones - Continued									
EP075F: Haloethers									
Bis(2-chloroethyl) ether	111-44-4	0.5	mg/kg		<0.5	----	<0.5	<0.5	----
Bis(2-chloroethoxy) methane	111-91-1	0.5	mg/kg		<0.5	----	<0.5	<0.5	----
4-Chlorophenyl phenyl ether	7005-72-3	0.5	mg/kg		<0.5	----	<0.5	<0.5	----
4-Bromophenyl phenyl ether	101-55-3	0.5	mg/kg		<0.5	----	<0.5	<0.5	----
EP075G: Chlorinated Hydrocarbons									
1,3-Dichlorobenzene	541-73-1	0.5	mg/kg		<0.5	----	<0.5	<0.5	----
1,4-Dichlorobenzene	106-46-7	0.5	mg/kg		<0.5	----	<0.5	<0.5	----
1,2-Dichlorobenzene	95-50-1	0.5	mg/kg		<0.5	----	<0.5	<0.5	----
Hexachloroethane	67-72-1	0.5	mg/kg		<0.5	----	<0.5	<0.5	----
1,2,4-Trichlorobenzene	120-82-1	0.5	mg/kg		<0.5	----	<0.5	<0.5	----
Hexachloropropylene	1888-71-7	0.5	mg/kg		<0.5	----	<0.5	<0.5	----
Hexachlorobutadiene	87-68-3	0.5	mg/kg		<0.5	----	<0.5	<0.5	----
Hexachlorocyclopentadiene	77-47-4	2.5	mg/kg		<2.5	----	<2.5	<2.5	----
Pentachlorobenzene	608-93-5	0.5	mg/kg		<0.5	----	<0.5	<0.5	----
Hexachlorobenzene (HCB)	118-74-1	1.0	mg/kg		<1.0	----	<1.0	<1.0	----
EP075H: Anilines and Benzidines									
Aniline	62-53-3	0.5	mg/kg		<0.5	----	<0.5	<0.5	----
4-Chloroaniline	106-47-8	0.5	mg/kg		<0.5	----	<0.5	<0.5	----
2-Nitroaniline	88-74-4	1.0	mg/kg		<1.0	----	<1.0	<1.0	----
3-Nitroaniline	99-09-2	1.0	mg/kg		<1.0	----	<1.0	<1.0	----
Dibenzofuran	132-64-9	0.5	mg/kg		<0.5	----	<0.5	<0.5	----
4-Nitroaniline	100-01-6	0.5	mg/kg		<0.5	----	<0.5	<0.5	----
Carbazole	86-74-8	0.5	mg/kg		<0.5	----	<0.5	<0.5	----
3,3'-Dichlorobenzidine	91-94-1	0.5	mg/kg		<0.5	----	<0.5	<0.5	----
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	----	10	mg/kg		<10	<10	<10	<10	----
C10 - C14 Fraction	----	50	mg/kg		<50	<50	<50	<50	----
C15 - C28 Fraction	----	100	mg/kg		<100	<100	<100	<100	----
C29 - C36 Fraction	----	100	mg/kg		<100	<100	<100	<100	----
^ C10 - C36 Fraction (sum)	----	50	mg/kg		<50	<50	<50	<50	----
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
C6 - C10 Fraction	C6_C10	10	mg/kg		<10	<10	<10	<10	----



Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	BH10_2.0	BH14_0.2	BH14_0.9	BH08_0.2	DUP03
Sampling date / time					11-Feb-2022 00:00	11-Feb-2022 00:00	11-Feb-2022 00:00	11-Feb-2022 00:00	11-Feb-2022 00:00
Compound	CAS Number	LOR	Unit		ES2204812-006	ES2204812-007	ES2204812-008	ES2204812-009	ES2204812-011
					Result	Result	Result	Result	Result
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions - Continued									
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg		<10	<10	<10	<10	----
>C10 - C16 Fraction	----	50	mg/kg		<50	<50	<50	<50	----
>C16 - C34 Fraction	----	100	mg/kg		<100	<100	<100	130	----
>C34 - C40 Fraction	----	100	mg/kg		<100	<100	<100	<100	----
^ >C10 - C40 Fraction (sum)	----	50	mg/kg		<50	<50	<50	130	----
^ >C10 - C16 Fraction minus Naphthalene (F2)	----	50	mg/kg		<50	<50	<50	<50	----
EP080: BTEXN									
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	----
ortho-Xylene	95-47-6	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	----
^ Sum of BTEX	----	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	----
^ Total Xylenes	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	----
Naphthalene	91-20-3	1	mg/kg		<1	<1	<1	<1	----
EP231A: Perfluoroalkyl Sulfonic Acids									
Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.0002	mg/kg		----	<0.0002	----	----	<0.0002
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.0002	mg/kg		----	<0.0002	----	----	<0.0002
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.0002	mg/kg		----	0.0003	----	----	<0.0002
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
EP231D: (n:2) Fluorotelomer Sulfonic Acids									
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



Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	BH10_2.0	BH14_0.2	BH14_0.9	BH08_0.2	DUP03
Sampling date / time					11-Feb-2022 00:00	11-Feb-2022 00:00	11-Feb-2022 00:00	11-Feb-2022 00:00	11-Feb-2022 00:00
Compound	CAS Number	LOR	Unit		ES2204812-006	ES2204812-007	ES2204812-008	ES2204812-009	ES2204812-011
					Result	Result	Result	Result	Result
EP231D: (n:2) Fluorotelomer Sulfonic Acids - Continued									
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 PFHxS and PFOS	355-46-4/1763-23-1	0.0002	mg/kg		----	0.0003	----	----	<0.0002
Sum of PFAS (WA DER List)	----	0.0002	mg/kg		----	0.0003	----	----	<0.0002
EP066S: PCB Surrogate									
Decachlorobiphenyl	2051-24-3	0.1	%		102	108	125	103	----
EP068S: Organochlorine Pesticide Surrogate									
Dibromo-DDE	21655-73-2	0.05	%		98.6	101	117	93.9	----
EP068T: Organophosphorus Pesticide Surrogate									
DEF	78-48-8	0.05	%		71.2	116	112	110	----
EP074S: VOC Surrogates									
1,2-Dichloroethane-D4	17060-07-0	0.5	%		96.1	----	91.5	93.2	----
Toluene-D8	2037-26-5	0.5	%		119	----	110	111	----
4-Bromofluorobenzene	460-00-4	0.5	%		120	----	106	103	----
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	0.5	%		111	107	104	100.0	----
2-Chlorophenol-D4	93951-73-6	0.5	%		106	103	99.6	95.2	----
2,4,6-Tribromophenol	118-79-6	0.5	%		79.6	80.5	32.6	82.2	----
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	0.5	%		116	114	113	114	----
Anthracene-d10	1719-06-8	0.5	%		121	114	114	111	----
4-Terphenyl-d14	1718-51-0	0.5	%		96.5	94.3	92.6	97.5	----
EP075S: Acid Extractable Surrogates									
2-Fluorophenol	367-12-4	0.5	%		92.4	----	100	106	----
Phenol-d6	13127-88-3	0.5	%		96.5	----	100	93.3	----
2-Chlorophenol-D4	93951-73-6	0.5	%		99.5	----	100	97.8	----
2,4,6-Tribromophenol	118-79-6	0.5	%		87.6	----	40.5	94.6	----
EP075T: Base/Neutral Extractable Surrogates									
Nitrobenzene-D5	4165-60-0	0.5	%		86.3	----	97.9	99.6	----
1,2-Dichlorobenzene-D4	2199-69-1	0.5	%		96.3	----	97.4	89.6	----



Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	BH10_2.0	BH14_0.2	BH14_0.9	BH08_0.2	DUP03
Sampling date / time					11-Feb-2022 00:00	11-Feb-2022 00:00	11-Feb-2022 00:00	11-Feb-2022 00:00	11-Feb-2022 00:00
Compound	CAS Number	LOR	Unit		ES2204812-006	ES2204812-007	ES2204812-008	ES2204812-009	ES2204812-011
				Result	Result	Result	Result	Result	Result
EP075T: Base/Neutral Extractable Surrogates - Continued									
2-Fluorobiphenyl	321-60-8	0.5	%		104	----	106	103	----
Anthracene-d10	1719-06-8	0.5	%		121	----	120	120	----
4-Terphenyl-d14	1718-51-0	0.5	%		100	----	105	105	----
EP080S: TPH(V)/BTEX Surrogates									
1,2-Dichloroethane-D4	17060-07-0	0.2	%		86.8	101	82.4	83.9	----
Toluene-D8	2037-26-5	0.2	%		115	109	107	107	----
4-Bromofluorobenzene	460-00-4	0.2	%		118	106	105	102	----
EP231S: PFAS Surrogate									
13C4-PFOS	----	0.0002	%		----	92.0	----	----	98.0
13C8-PFOA	----	0.0002	%		----	110	----	----	103



Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	DUP04	BH08_0.5	BH08_1.5	BH07_0.5	BH07_1.3
Sampling date / time					11-Feb-2022 00:00	11-Feb-2022 00:00	11-Feb-2022 00:00	11-Feb-2022 00:00	11-Feb-2022 00:00
Compound	CAS Number	LOR	Unit		ES2204812-012	ES2204812-013	ES2204812-014	ES2204812-015	ES2204812-016
					Result	Result	Result	Result	Result
EA055: Moisture Content (Dried @ 105-110°C)									
Moisture Content	----	0.1	%		16.9	----	----	----	----
Moisture Content	----	1.0	%		----	7.3	17.2	20.7	15.6
EA200: AS 4964 - 2004 Identification of Asbestos in Soils									
Asbestos Detected	1332-21-4	0.1	g/kg		----	No	----	No	----
Asbestos (Trace)	1332-21-4	5	Fibres		----	No	----	No	----
Asbestos Type	1332-21-4	-	--		----	-	----	-	----
Synthetic Mineral Fibre	----	0.1	g/kg		----	No	----	No	----
Organic Fibre	----	0.1	g/kg		----	No	----	No	----
Sample weight (dry)	----	0.01	g		----	94.7	----	89.7	----
APPROVED IDENTIFIER:	----	-	--		----	A. SMYLIE	----	A. SMYLIE	----
EG005(ED093)T: Total Metals by ICP-AES									
Arsenic	7440-38-2	5	mg/kg		----	<5	10	<5	<5
Cadmium	7440-43-9	1	mg/kg		----	9	10	<1	<1
Chromium	7440-47-3	2	mg/kg		----	4	27	4	<2
Copper	7440-50-8	5	mg/kg		----	22	177	32	7
Lead	7439-92-1	5	mg/kg		----	1160	4920	145	216
Nickel	7440-02-0	2	mg/kg		----	2	8	2	<2
Zinc	7440-66-6	5	mg/kg		----	429	1690	98	61
EG035T: Total Recoverable Mercury by FIMS									
Mercury	7439-97-6	0.1	mg/kg		----	0.2	1.9	0.3	<0.1
EP066: Polychlorinated Biphenyls (PCB)									
Total Polychlorinated biphenyls	----	0.1	mg/kg		----	<0.1	<0.1	<0.1	<0.1
EP068A: Organochlorine Pesticides (OC)									
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
^ Total Chlordane (sum)	----	0.05	mg/kg		----	<0.05	<0.05	<0.05	<0.05
trans-Chlordane	5103-74-2	0.05	mg/kg		----	<0.05	<0.05	<0.05	<0.05
alpha-Endosulfan	959-98-8	0.05	mg/kg		----	<0.05	<0.05	<0.05	<0.05



Analytical Results

Sub-Matrix: SOIL
 (Matrix: SOIL)

Sample ID

				DUP04	BH08_0.5	BH08_1.5	BH07_0.5	BH07_1.3
Sampling date / time				11-Feb-2022 00:00	11-Feb-2022 00:00	11-Feb-2022 00:00	11-Feb-2022 00:00	11-Feb-2022 00:00
Compound	CAS Number	LOR	Unit	ES2204812-012	ES2204812-013	ES2204812-014	ES2204812-015	ES2204812-016
				Result	Result	Result	Result	Result

EP068A: Organochlorine Pesticides (OC) - Continued

cis-Chlordane	5103-71-9	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
4,4'-DDE	72-55-9	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
beta-Endosulfan	33213-65-9	0.05	mg/kg	----	<0.05	<0.05	<0.05	<0.05
^ Endosulfan (sum)	115-29-7	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
Endrin aldehyde	7421-93-4	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	0.2	mg/kg	----	<0.2	<0.2	<0.2	<0.2
Endrin ketone	53494-70-5	0.05	mg/kg	----	<0.05	<0.05	<0.05	<0.05
Methoxychlor	72-43-5	0.2	mg/kg	----	<0.2	<0.2	<0.2	<0.2
^ Sum of Aldrin + Dieldrin	309-00-2/60-57-1	0.05	mg/kg	----	<0.05	<0.05	<0.05	<0.05
^ 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

EP068B: Organophosphorus Pesticides (OP)

Dichlorvos	62-73-7	0.05	mg/kg	----	<0.05	<0.05	<0.05	<0.05
Demeton-S-methyl	919-86-8	0.05	mg/kg	----	<0.05	<0.05	<0.05	<0.05
Monocrotophos	6923-22-4	0.2	mg/kg	----	<0.2	<0.2	<0.2	<0.2
Dimethoate	60-51-5	0.05	mg/kg	----	<0.05	<0.05	<0.05	<0.05
Diazinon	333-41-5	0.05	mg/kg	----	<0.05	<0.05	<0.05	<0.05
Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	----	<0.05	<0.05	<0.05	<0.05
Parathion-methyl	298-00-0	0.2	mg/kg	----	<0.2	<0.2	<0.2	<0.2
Malathion	121-75-5	0.05	mg/kg	----	<0.05	<0.05	<0.05	<0.05
Fenthion	55-38-9	0.05	mg/kg	----	<0.05	<0.05	<0.05	<0.05
Chlorpyrifos	2921-88-2	0.05	mg/kg	----	<0.05	<0.05	<0.05	<0.05
Parathion	56-38-2	0.2	mg/kg	----	<0.2	<0.2	<0.2	<0.2
Pirimphos-ethyl	23505-41-1	0.05	mg/kg	----	<0.05	<0.05	<0.05	<0.05
Chlorfenvinphos	470-90-6	0.05	mg/kg	----	<0.05	<0.05	<0.05	<0.05
Bromophos-ethyl	4824-78-6	0.05	mg/kg	----	<0.05	<0.05	<0.05	<0.05
Fenamiphos	22224-92-6	0.05	mg/kg	----	<0.05	<0.05	<0.05	<0.05
Prothiofos	34643-46-4	0.05	mg/kg	----	<0.05	<0.05	<0.05	<0.05
Ethion	563-12-2	0.05	mg/kg	----	<0.05	<0.05	<0.05	<0.05
Carbophenothion	786-19-6	0.05	mg/kg	----	<0.05	<0.05	<0.05	<0.05
Azinphos Methyl	86-50-0	0.05	mg/kg	----	<0.05	<0.05	<0.05	<0.05



Analytical Results

Sub-Matrix: SOIL
 (Matrix: SOIL)

Sample ID

				DUP04	BH08_0.5	BH08_1.5	BH07_0.5	BH07_1.3
Sampling date / time				11-Feb-2022 00:00	11-Feb-2022 00:00	11-Feb-2022 00:00	11-Feb-2022 00:00	11-Feb-2022 00:00
Compound	CAS Number	LOR	Unit	ES2204812-012	ES2204812-013	ES2204812-014	ES2204812-015	ES2204812-016
				Result	Result	Result	Result	Result
EP074A: Monocyclic Aromatic Hydrocarbons								
Styrene	100-42-5	0.5	mg/kg	----	----	----	<0.5	----
Isopropylbenzene	98-82-8	0.5	mg/kg	----	----	----	<0.5	----
n-Propylbenzene	103-65-1	0.5	mg/kg	----	----	----	<0.5	----
1,3,5-Trimethylbenzene	108-67-8	0.5	mg/kg	----	----	----	<0.5	----
sec-Butylbenzene	135-98-8	0.5	mg/kg	----	----	----	<0.5	----
1,2,4-Trimethylbenzene	95-63-6	0.5	mg/kg	----	----	----	<0.5	----
tert-Butylbenzene	98-06-6	0.5	mg/kg	----	----	----	<0.5	----
p-Isopropyltoluene	99-87-6	0.5	mg/kg	----	----	----	<0.5	----
n-Butylbenzene	104-51-8	0.5	mg/kg	----	----	----	<0.5	----
EP074B: Oxygenated Compounds								
Vinyl Acetate	108-05-4	5	mg/kg	----	----	----	<5	----
2-Butanone (MEK)	78-93-3	5	mg/kg	----	----	----	<5	----
4-Methyl-2-pentanone (MIBK)	108-10-1	5	mg/kg	----	----	----	<5	----
2-Hexanone (MBK)	591-78-6	5	mg/kg	----	----	----	<5	----
EP074C: Sulfonated Compounds								
Carbon disulfide	75-15-0	0.5	mg/kg	----	----	----	<0.5	----
EP074D: Fumigants								
2,2-Dichloropropane	594-20-7	0.5	mg/kg	----	----	----	<0.5	----
1,2-Dichloropropane	78-87-5	0.5	mg/kg	----	----	----	<0.5	----
cis-1,3-Dichloropropylene	10061-01-5	0.5	mg/kg	----	----	----	<0.5	----
trans-1,3-Dichloropropylene	10061-02-6	0.5	mg/kg	----	----	----	<0.5	----
1,2-Dibromoethane (EDB)	106-93-4	0.5	mg/kg	----	----	----	<0.5	----
EP074E: Halogenated Aliphatic Compounds								
Dichlorodifluoromethane	75-71-8	5	mg/kg	----	----	----	<5	----
Chloromethane	74-87-3	5	mg/kg	----	----	----	<5	----
Vinyl chloride	75-01-4	5	mg/kg	----	----	----	<5	----
Bromomethane	74-83-9	5	mg/kg	----	----	----	<5	----
Chloroethane	75-00-3	5	mg/kg	----	----	----	<5	----
Trichlorofluoromethane	75-69-4	5	mg/kg	----	----	----	<5	----
1,1-Dichloroethene	75-35-4	0.5	mg/kg	----	----	----	<0.5	----
Iodomethane	74-88-4	0.5	mg/kg	----	----	----	<0.5	----
trans-1,2-Dichloroethene	156-60-5	0.5	mg/kg	----	----	----	<0.5	----
1,1-Dichloroethane	75-34-3	0.5	mg/kg	----	----	----	<0.5	----
cis-1,2-Dichloroethene	156-59-2	0.5	mg/kg	----	----	----	<0.5	----



Analytical Results

Sub-Matrix: SOIL
 (Matrix: SOIL)

Sample ID

				DUP04	BH08_0.5	BH08_1.5	BH07_0.5	BH07_1.3
Sampling date / time				11-Feb-2022 00:00	11-Feb-2022 00:00	11-Feb-2022 00:00	11-Feb-2022 00:00	11-Feb-2022 00:00
Compound	CAS Number	LOR	Unit	ES2204812-012	ES2204812-013	ES2204812-014	ES2204812-015	ES2204812-016
				Result	Result	Result	Result	Result
EP074E: Halogenated Aliphatic Compounds - Continued								
1.1.1-Trichloroethane	71-55-6	0.5	mg/kg	----	----	----	<0.5	----
1.1-Dichloropropylene	563-58-6	0.5	mg/kg	----	----	----	<0.5	----
Carbon Tetrachloride	56-23-5	0.5	mg/kg	----	----	----	<0.5	----
1.2-Dichloroethane	107-06-2	0.5	mg/kg	----	----	----	<0.5	----
Trichloroethene	79-01-6	0.5	mg/kg	----	----	----	<0.5	----
Dibromomethane	74-95-3	0.5	mg/kg	----	----	----	<0.5	----
1.1.2-Trichloroethane	79-00-5	0.5	mg/kg	----	----	----	<0.5	----
1.3-Dichloropropane	142-28-9	0.5	mg/kg	----	----	----	<0.5	----
Tetrachloroethene	127-18-4	0.5	mg/kg	----	----	----	<0.5	----
1.1.1.2-Tetrachloroethane	630-20-6	0.5	mg/kg	----	----	----	<0.5	----
trans-1.4-Dichloro-2-butene	110-57-6	0.5	mg/kg	----	----	----	<0.5	----
cis-1.4-Dichloro-2-butene	1476-11-5	0.5	mg/kg	----	----	----	<0.5	----
1.1.2.2-Tetrachloroethane	79-34-5	0.5	mg/kg	----	----	----	<0.5	----
1.2.3-Trichloropropane	96-18-4	0.5	mg/kg	----	----	----	<0.5	----
Pentachloroethane	76-01-7	0.5	mg/kg	----	----	----	<0.5	----
1.2-Dibromo-3-chloropropane	96-12-8	0.5	mg/kg	----	----	----	<0.5	----
EP074F: Halogenated Aromatic Compounds								
Chlorobenzene	108-90-7	0.5	mg/kg	----	----	----	<0.5	----
Bromobenzene	108-86-1	0.5	mg/kg	----	----	----	<0.5	----
2-Chlorotoluene	95-49-8	0.5	mg/kg	----	----	----	<0.5	----
4-Chlorotoluene	106-43-4	0.5	mg/kg	----	----	----	<0.5	----
1.2.3-Trichlorobenzene	87-61-6	0.5	mg/kg	----	----	----	<0.5	----
EP074G: Trihalomethanes								
Chloroform	67-66-3	0.5	mg/kg	----	----	----	<0.5	----
Bromodichloromethane	75-27-4	0.5	mg/kg	----	----	----	<0.5	----
Dibromochloromethane	124-48-1	0.5	mg/kg	----	----	----	<0.5	----
Bromoform	75-25-2	0.5	mg/kg	----	----	----	<0.5	----
EP075(SIM)A: Phenolic Compounds								
Phenol	108-95-2	0.5	mg/kg	----	<0.5	<0.5	<0.5	<0.5
2-Chlorophenol	95-57-8	0.5	mg/kg	----	<0.5	<0.5	<0.5	<0.5
2-Methylphenol	95-48-7	0.5	mg/kg	----	<0.5	<0.5	<0.5	<0.5
3- & 4-Methylphenol	1319-77-3	1	mg/kg	----	<1	<1	<1	<1
2-Nitrophenol	88-75-5	0.5	mg/kg	----	<0.5	<0.5	<0.5	<0.5
2.4-Dimethylphenol	105-67-9	0.5	mg/kg	----	<0.5	<0.5	<0.5	<0.5

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	DUP04	BH08_0.5	BH08_1.5	BH07_0.5	BH07_1.3
Sampling date / time				11-Feb-2022 00:00	11-Feb-2022 00:00	11-Feb-2022 00:00	11-Feb-2022 00:00	11-Feb-2022 00:00	
Compound	CAS Number	LOR	Unit	ES2204812-012	ES2204812-013	ES2204812-014	ES2204812-015	ES2204812-016	
				Result	Result	Result	Result	Result	
EP075(SIM)A: Phenolic Compounds - Continued									
2,4-Dichlorophenol	120-83-2	0.5	mg/kg	----	<0.5	<0.5	<0.5	<0.5	
2,6-Dichlorophenol	87-65-0	0.5	mg/kg	----	<0.5	<0.5	<0.5	<0.5	
4-Chloro-3-methylphenol	59-50-7	0.5	mg/kg	----	<0.5	<0.5	<0.5	<0.5	
2,4,6-Trichlorophenol	88-06-2	0.5	mg/kg	----	<0.5	<0.5	<0.5	<0.5	
2,4,5-Trichlorophenol	95-95-4	0.5	mg/kg	----	<0.5	<0.5	<0.5	<0.5	
Pentachlorophenol	87-86-5	2	mg/kg	----	<2	<2	<2	<2	
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons									
Naphthalene	91-20-3	0.5	mg/kg	----	<0.5	<0.5	<0.5	<0.5	
Acenaphthylene	208-96-8	0.5	mg/kg	----	<0.5	0.7	<0.5	<0.5	
Acenaphthene	83-32-9	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	----	0.6	2.1	<0.5	<0.5	
Anthracene	120-12-7	0.5	mg/kg	----	<0.5	0.8	<0.5	<0.5	
Fluoranthene	206-44-0	0.5	mg/kg	----	1.0	6.2	1.0	<0.5	
Pyrene	129-00-0	0.5	mg/kg	----	1.0	6.1	1.0	<0.5	
Benz(a)anthracene	56-55-3	0.5	mg/kg	----	<0.5	3.6	0.6	<0.5	
Chrysene	218-01-9	0.5	mg/kg	----	<0.5	3.0	<0.5	<0.5	
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	----	0.5	4.6	0.8	<0.5	
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	----	<0.5	1.9	<0.5	<0.5	
Benzo(a)pyrene	50-32-8	0.5	mg/kg	----	0.5	4.1	0.7	<0.5	
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	----	<0.5	2.3	<0.5	<0.5	
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	----	<0.5	0.6	<0.5	<0.5	
Benzo(g,h,i)perylene	191-24-2	0.5	mg/kg	----	<0.5	2.5	<0.5	<0.5	
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg	----	3.6	38.5	4.1	<0.5	
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg	----	0.6	6.0	0.8	<0.5	
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg	----	0.9	6.0	1.1	0.6	
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg	----	1.2	6.0	1.4	1.2	
EP075B: Polynuclear Aromatic Hydrocarbons									
2-Methylnaphthalene	91-57-6	0.5	mg/kg	----	----	----	<0.5	----	
2-Chloronaphthalene	91-58-7	0.5	mg/kg	----	----	----	<0.5	----	
N-2-Fluorenyl Acetamide	53-96-3	0.5	mg/kg	----	----	----	<0.5	----	
7,12-Dimethylbenz(a)anthracene	57-97-6	0.5	mg/kg	----	----	----	<0.5	----	
3-Methylcholanthrene	56-49-5	0.5	mg/kg	----	----	----	<0.5	----	
EP075C: Phthalate Esters									



Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	DUP04	BH08_0.5	BH08_1.5	BH07_0.5	BH07_1.3
Sampling date / time					11-Feb-2022 00:00	11-Feb-2022 00:00	11-Feb-2022 00:00	11-Feb-2022 00:00	11-Feb-2022 00:00
Compound	CAS Number	LOR	Unit		ES2204812-012	ES2204812-013	ES2204812-014	ES2204812-015	ES2204812-016
					Result	Result	Result	Result	Result
EP075C: Phthalate Esters - Continued									
Dimethyl phthalate	131-11-3	0.5	mg/kg		----	----	----	<0.5	----
Diethyl phthalate	84-66-2	0.5	mg/kg		----	----	----	<0.5	----
Di-n-butyl phthalate	84-74-2	0.5	mg/kg		----	----	----	<0.5	----
Butyl benzyl phthalate	85-68-7	0.5	mg/kg		----	----	----	<0.5	----
bis(2-ethylhexyl) phthalate	117-81-7	5.0	mg/kg		----	----	----	<5.0	----
Di-n-octylphthalate	117-84-0	0.5	mg/kg		----	----	----	<0.5	----
EP075D: Nitrosamines									
N-Nitrosomethylethylamine	10595-95-6	0.5	mg/kg		----	----	----	<0.5	----
N-Nitrosodiethylamine	55-18-5	0.5	mg/kg		----	----	----	<0.5	----
N-Nitrosopyrrolidine	930-55-2	1.0	mg/kg		----	----	----	<1.0	----
N-Nitrosomorpholine	59-89-2	0.5	mg/kg		----	----	----	<0.5	----
N-Nitrosodi-n-propylamine	621-64-7	0.5	mg/kg		----	----	----	<0.5	----
N-Nitrosopiperidine	100-75-4	0.5	mg/kg		----	----	----	<0.5	----
N-Nitrosodibutylamine	924-16-3	0.5	mg/kg		----	----	----	<0.5	----
N-Nitrosodiphenyl & Diphenylamine	86-30-6 122-39-4	1.0	mg/kg		----	----	----	<1.0	----
Methapyrilene	91-80-5	0.5	mg/kg		----	----	----	<0.5	----
EP075E: Nitroaromatics and Ketones									
2-Picoline	109-06-8	0.5	mg/kg		----	----	----	<0.5	----
Acetophenone	98-86-2	0.5	mg/kg		----	----	----	<0.5	----
Nitrobenzene	98-95-3	0.5	mg/kg		----	----	----	<0.5	----
Isophorone	78-59-1	0.5	mg/kg		----	----	----	<0.5	----
2,6-Dinitrotoluene	606-20-2	1.0	mg/kg		----	----	----	<1.0	----
2,4-Dinitrotoluene	121-14-2	1.0	mg/kg		----	----	----	<1.0	----
1-Naphthylamine	134-32-7	0.5	mg/kg		----	----	----	<0.5	----
4-Nitroquinoline-N-oxide	56-57-5	0.5	mg/kg		----	----	----	<0.5	----
5-Nitro-o-toluidine	99-55-8	0.5	mg/kg		----	----	----	<0.5	----
Azobenzene	103-33-3	1	mg/kg		----	----	----	<1	----
1,3,5-Trinitrobenzene	99-35-4	0.5	mg/kg		----	----	----	<0.5	----
Phenacetin	62-44-2	0.5	mg/kg		----	----	----	<0.5	----
4-Aminobiphenyl	92-67-1	0.5	mg/kg		----	----	----	<0.5	----
Pentachloronitrobenzene	82-68-8	0.5	mg/kg		----	----	----	<0.5	----
Pronamide	23950-58-5	0.5	mg/kg		----	----	----	<0.5	----
Dimethylaminoazobenzene	60-11-7	0.5	mg/kg		----	----	----	<0.5	----
Chlorobenzilate	510-15-6	0.5	mg/kg		----	----	----	<0.5	----



Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	DUP04	BH08_0.5	BH08_1.5	BH07_0.5	BH07_1.3
Sampling date / time					11-Feb-2022 00:00	11-Feb-2022 00:00	11-Feb-2022 00:00	11-Feb-2022 00:00	11-Feb-2022 00:00
Compound	CAS Number	LOR	Unit		ES2204812-012	ES2204812-013	ES2204812-014	ES2204812-015	ES2204812-016
					Result	Result	Result	Result	Result
EP075E: Nitroaromatics and Ketones - Continued									
EP075F: Haloethers									
Bis(2-chloroethyl) ether	111-44-4	0.5	mg/kg		----	----	----	<0.5	----
Bis(2-chloroethoxy) methane	111-91-1	0.5	mg/kg		----	----	----	<0.5	----
4-Chlorophenyl phenyl ether	7005-72-3	0.5	mg/kg		----	----	----	<0.5	----
4-Bromophenyl phenyl ether	101-55-3	0.5	mg/kg		----	----	----	<0.5	----
EP075G: Chlorinated Hydrocarbons									
1,3-Dichlorobenzene	541-73-1	0.5	mg/kg		----	----	----	<0.5	----
1,4-Dichlorobenzene	106-46-7	0.5	mg/kg		----	----	----	<0.5	----
1,2-Dichlorobenzene	95-50-1	0.5	mg/kg		----	----	----	<0.5	----
Hexachloroethane	67-72-1	0.5	mg/kg		----	----	----	<0.5	----
1,2,4-Trichlorobenzene	120-82-1	0.5	mg/kg		----	----	----	<0.5	----
Hexachloropropylene	1888-71-7	0.5	mg/kg		----	----	----	<0.5	----
Hexachlorobutadiene	87-68-3	0.5	mg/kg		----	----	----	<0.5	----
Hexachlorocyclopentadiene	77-47-4	2.5	mg/kg		----	----	----	<2.5	----
Pentachlorobenzene	608-93-5	0.5	mg/kg		----	----	----	<0.5	----
Hexachlorobenzene (HCB)	118-74-1	1.0	mg/kg		----	----	----	<1.0	----
EP075H: Anilines and Benzidines									
Aniline	62-53-3	0.5	mg/kg		----	----	----	<0.5	----
4-Chloroaniline	106-47-8	0.5	mg/kg		----	----	----	<0.5	----
2-Nitroaniline	88-74-4	1.0	mg/kg		----	----	----	<1.0	----
3-Nitroaniline	99-09-2	1.0	mg/kg		----	----	----	<1.0	----
Dibenzofuran	132-64-9	0.5	mg/kg		----	----	----	<0.5	----
4-Nitroaniline	100-01-6	0.5	mg/kg		----	----	----	<0.5	----
Carbazole	86-74-8	0.5	mg/kg		----	----	----	<0.5	----
3,3'-Dichlorobenzidine	91-94-1	0.5	mg/kg		----	----	----	<0.5	----
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	----	10	mg/kg		----	<10	<10	<10	<10
C10 - C14 Fraction	----	50	mg/kg		----	<50	<50	<50	<50
C15 - C28 Fraction	----	100	mg/kg		----	<100	140	<100	<100
C29 - C36 Fraction	----	100	mg/kg		----	<100	130	<100	<100
^ C10 - C36 Fraction (sum)	----	50	mg/kg		----	<50	270	<50	<50
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
C6 - C10 Fraction	C6_C10	10	mg/kg		----	<10	<10	<10	<10



Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	DUP04	BH08_0.5	BH08_1.5	BH07_0.5	BH07_1.3
Sampling date / time					11-Feb-2022 00:00	11-Feb-2022 00:00	11-Feb-2022 00:00	11-Feb-2022 00:00	11-Feb-2022 00:00
Compound	CAS Number	LOR	Unit		ES2204812-012	ES2204812-013	ES2204812-014	ES2204812-015	ES2204812-016
					Result	Result	Result	Result	Result
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions - Continued									
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg	----	<10	<10	<10	<10	<10
>C10 - C16 Fraction	----	50	mg/kg	----	<50	<50	<50	<50	<50
>C16 - C34 Fraction	----	100	mg/kg	----	<100	210	<100	<100	<100
>C34 - C40 Fraction	----	100	mg/kg	----	<100	<100	<100	<100	<100
^ >C10 - C40 Fraction (sum)	----	50	mg/kg	----	<50	210	<50	<50	<50
^ >C10 - C16 Fraction minus Naphthalene (F2)	----	50	mg/kg	----	<50	<50	<50	<50	<50
EP080: BTEXN									
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
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
ortho-Xylene	95-47-6	0.5	mg/kg	----	<0.5	<0.5	<0.5	<0.5	<0.5
^ Sum of BTEX	----	0.2	mg/kg	----	<0.2	<0.2	<0.2	<0.2	<0.2
^ Total Xylenes	----	0.5	mg/kg	----	<0.5	<0.5	<0.5	<0.5	<0.5
Naphthalene	91-20-3	1	mg/kg	----	<1	<1	<1	<1	<1
EP231A: Perfluoroalkyl Sulfonic Acids									
Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.0002	mg/kg	<0.0002	----	----	<0.0002	----	----
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.0002	mg/kg	<0.0002	----	----	<0.0002	----	----
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.0002	mg/kg	0.0004	----	----	<0.0002	----	----
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	----	----
EP231D: (n:2) Fluorotelomer Sulfonic Acids									
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	----	----



Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	DUP04	BH08_0.5	BH08_1.5	BH07_0.5	BH07_1.3
Sampling date / time					11-Feb-2022 00:00	11-Feb-2022 00:00	11-Feb-2022 00:00	11-Feb-2022 00:00	11-Feb-2022 00:00
Compound	CAS Number	LOR	Unit		ES2204812-012	ES2204812-013	ES2204812-014	ES2204812-015	ES2204812-016
					Result	Result	Result	Result	Result
EP231D: (n:2) Fluorotelomer Sulfonic Acids - Continued									
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 PFHxS and PFOS	355-46-4/1763-23-1	0.0002	mg/kg		0.0004	----	----	<0.0002	----
Sum of PFAS (WA DER List)	----	0.0002	mg/kg		0.0004	----	----	<0.0002	----
EP066S: PCB Surrogate									
Decachlorobiphenyl	2051-24-3	0.1	%		----	121	103	97.3	97.6
EP068S: Organochlorine Pesticide Surrogate									
Dibromo-DDE	21655-73-2	0.05	%		----	109	88.6	77.5	84.4
EP068T: Organophosphorus Pesticide Surrogate									
DEF	78-48-8	0.05	%		----	113	105	72.3	67.8
EP074S: VOC Surrogates									
1,2-Dichloroethane-D4	17060-07-0	0.5	%		----	----	----	108	----
Toluene-D8	2037-26-5	0.5	%		----	----	----	115	----
4-Bromofluorobenzene	460-00-4	0.5	%		----	----	----	118	----
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	0.5	%		----	108	111	104	105
2-Chlorophenol-D4	93951-73-6	0.5	%		----	107	110	98.3	103
2,4,6-Tribromophenol	118-79-6	0.5	%		----	85.6	81.6	87.4	93.0
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	0.5	%		----	116	118	116	118
Anthracene-d10	1719-06-8	0.5	%		----	121	124	117	117
4-Terphenyl-d14	1718-51-0	0.5	%		----	90.3	90.0	87.5	96.9
EP075S: Acid Extractable Surrogates									
2-Fluorophenol	367-12-4	0.5	%		----	----	----	106	----
Phenol-d6	13127-88-3	0.5	%		----	----	----	96.5	----
2-Chlorophenol-D4	93951-73-6	0.5	%		----	----	----	98.6	----
2,4,6-Tribromophenol	118-79-6	0.5	%		----	----	----	84.2	----
EP075T: Base/Neutral Extractable Surrogates									
Nitrobenzene-D5	4165-60-0	0.5	%		----	----	----	101	----
1,2-Dichlorobenzene-D4	2199-69-1	0.5	%		----	----	----	89.9	----



Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	DUP04	BH08_0.5	BH08_1.5	BH07_0.5	BH07_1.3
Sampling date / time					11-Feb-2022 00:00	11-Feb-2022 00:00	11-Feb-2022 00:00	11-Feb-2022 00:00	11-Feb-2022 00:00
Compound	CAS Number	LOR	Unit		ES2204812-012	ES2204812-013	ES2204812-014	ES2204812-015	ES2204812-016
					Result	Result	Result	Result	Result
EP075T: Base/Neutral Extractable Surrogates - Continued									
2-Fluorobiphenyl	321-60-8	0.5	%		----	----	----	87.1	----
Anthracene-d10	1719-06-8	0.5	%		----	----	----	118	----
4-Terphenyl-d14	1718-51-0	0.5	%		----	----	----	99.8	----
EP080S: TPH(V)/BTEX Surrogates									
1,2-Dichloroethane-D4	17060-07-0	0.2	%		----	102	95.9	84.0	94.1
Toluene-D8	2037-26-5	0.2	%		----	105	99.1	91.6	95.6
4-Bromofluorobenzene	460-00-4	0.2	%		----	101	97.0	87.5	95.2
EP231S: PFAS Surrogate									
13C4-PFOS	----	0.0002	%		96.5	----	----	98.5	----
13C8-PFOA	----	0.0002	%		108	----	----	103	----



Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)		Sample ID		DUP06	----	----	----	----
Sampling date / time		11-Feb-2022 00:00		----	----	----	----	----
Compound	CAS Number	LOR	Unit	ES2204812-017	-----	-----	-----	-----
Result				----	----	----	----	----
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	----	0.1	%	20.6	----	----	----	----
EP231A: Perfluoroalkyl Sulfonic Acids								
Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.0002	mg/kg	<0.0002	----	----	----	----
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.0002	mg/kg	<0.0002	----	----	----	----
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.0002	mg/kg	<0.0002	----	----	----	----
EP231B: Perfluoroalkyl Carboxylic Acids								
Perfluorobutanoic acid (PFBA)	375-22-4	0.001	mg/kg	<0.001	----	----	----	----
Perfluoropentanoic acid (PFPeA)	2706-90-3	0.0002	mg/kg	<0.0002	----	----	----	----
Perfluorohexanoic acid (PFHxA)	307-24-4	0.0002	mg/kg	<0.0002	----	----	----	----
Perfluoroheptanoic acid (PFHpA)	375-85-9	0.0002	mg/kg	<0.0002	----	----	----	----
Perfluorooctanoic acid (PFOA)	335-67-1	0.0002	mg/kg	<0.0002	----	----	----	----
EP231D: (n:2) Fluorotelomer Sulfonic Acids								
4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.0005	mg/kg	<0.0005	----	----	----	----
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.0005	mg/kg	<0.0005	----	----	----	----
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.0005	mg/kg	<0.0005	----	----	----	----
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.0005	mg/kg	<0.0005	----	----	----	----
EP231P: PFAS Sums								
Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.0002	mg/kg	<0.0002	----	----	----	----
Sum of PFAS (WA DER List)	----	0.0002	mg/kg	<0.0002	----	----	----	----
EP231S: PFAS Surrogate								
13C4-PFOS	----	0.0002	%	93.5	----	----	----	----
13C8-PFOA	----	0.0002	%	100	----	----	----	----



Analytical Results

Descriptive Results

Sub-Matrix: **SOIL**

Method: Compound	Sample ID - Sampling date / time	Analytical Results
EA200: AS 4964 - 2004 Identification of Asbestos in Soils		
EA200: Description	BH11_0.2 - 11-Feb-2022 00:00	Soil sample.
EA200: Description	BH13_0.3 - 11-Feb-2022 00:00	Soil sample.
EA200: Description	BH10_0.3 - 11-Feb-2022 00:00	Soil sample.
EA200: Description	BH14_0.2 - 11-Feb-2022 00:00	Soil sample.
EA200: Description	BH14_0.9 - 11-Feb-2022 00:00	Soil sample containing many fragments of asbestos fibre board and loose asbestos fibre bundles.
EA200: Description	BH08_0.5 - 11-Feb-2022 00:00	Soil sample.
EA200: Description	BH07_0.5 - 11-Feb-2022 00:00	Soil sample.



Surrogate Control Limits

Sub-Matrix: SOIL		Recovery Limits (%)	
Compound	CAS Number	Low	High
EP066S: PCB Surrogate			
Decachlorobiphenyl	2051-24-3	39	149
EP068S: Organochlorine Pesticide Surrogate			
Dibromo-DDE	21655-73-2	49	147
EP068T: Organophosphorus Pesticide Surrogate			
DEF	78-48-8	35	143
EP074S: VOC Surrogates			
1,2-Dichloroethane-D4	17060-07-0	64	130
Toluene-D8	2037-26-5	66	136
4-Bromofluorobenzene	460-00-4	60	122
EP075(SIM)S: Phenolic Compound Surrogates			
Phenol-d6	13127-88-3	63	123
2-Chlorophenol-D4	93951-73-6	66	122
2,4,6-Tribromophenol	118-79-6	40	138
EP075(SIM)T: PAH Surrogates			
2-Fluorobiphenyl	321-60-8	70	122
Anthracene-d10	1719-06-8	66	128
4-Terphenyl-d14	1718-51-0	65	129
EP075S: Acid Extractable Surrogates			
2-Fluorophenol	367-12-4	29	149
Phenol-d6	13127-88-3	32	128
2-Chlorophenol-D4	93951-73-6	32	128
2,4,6-Tribromophenol	118-79-6	13	121
EP075T: Base/Neutral Extractable Surrogates			
Nitrobenzene-D5	4165-60-0	33	125
1,2-Dichlorobenzene-D4	2199-69-1	34	108
2-Fluorobiphenyl	321-60-8	35	121
Anthracene-d10	1719-06-8	35	123
4-Terphenyl-d14	1718-51-0	33	125
EP080S: TPH(V)/BTEX Surrogates			
1,2-Dichloroethane-D4	17060-07-0	73	133
Toluene-D8	2037-26-5	74	132
4-Bromofluorobenzene	460-00-4	72	130
EP231S: PFAS Surrogate			
13C4-PFOS	----	60	120
13C8-PFOA	----	60	120

Page : 37 of 37
Work Order : ES2204812
Client : EP RISK MANAGEMENT
Project : EP2515



Inter-Laboratory Testing

Analysis conducted by ALS Newcastle, NATA accreditation no. 825, site no. 1656 (Chemistry) 9854 (Biology).

(SOIL) EA200: AS 4964 - 2004 Identification of Asbestos in Soils

CERTIFICATE OF ANALYSIS

Work Order : **ES2204958**
Client : **EP RISK MANAGEMENT**
Contact : HARRISON BLAKE
Address : Level 4 73 Walker St
 North Sydney 2060
Telephone : ----
Project : EP2515
Order number : ----
C-O-C number : ----
Sampler : HARRISON BLAKE
Site : ----
Quote number : SY/497/20 Primary analysis only
No. of samples received : 21
No. of samples analysed : 16

Page : 1 of 52
Laboratory : Environmental Division Sydney
Contact : Tyler Anderson
Address : 277-289 Woodpark Road Smithfield NSW Australia 2164
Telephone : +61 2 8784 8555
Date Samples Received : 14-Feb-2022 16:35
Date Analysis Commenced : 15-Feb-2022
Issue Date : 18-Feb-2022 21:11



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
- Descriptive Results
- Surrogate Control Limits

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

Signatories

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

<i>Signatories</i>	<i>Position</i>	<i>Accreditation Category</i>
Alana Smylie	Team Leader - Asbestos	Newcastle - Asbestos, Mayfield West, NSW
Edwandy Fadjar	Organic Coordinator	Sydney Organics, Smithfield, NSW
Franco Lentini	LCMS Coordinator	Sydney Inorganics, Smithfield, NSW
Franco Lentini	LCMS Coordinator	Sydney Organics, Smithfield, NSW
Ivan Taylor	Analyst	Sydney Inorganics, Smithfield, NSW



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.

- EP075 (SIM): Where reported, 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.
- EP075: Where reported, 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.
- 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.
- EP080: Where reported, Total Xylenes is the sum of the reported concentrations of m&p-Xylene and o-Xylene at or above the LOR.
- EP068: Where reported, Total Chlordane (sum) is the sum of the reported concentrations of cis-Chlordane and trans-Chlordane at or above the LOR.
- EP068: Where reported, Total OCP is the sum of the reported concentrations of all Organochlorine Pesticides at or above LOR.
- EP074: Where reported, Total Trihalomethanes is the sum of the reported concentrations of all Trihalomethanes at or above the LOR.
- EP074: Where reported, Total Xylenes is the sum of the reported concentrations of m&p-Xylene and o-Xylene at or above the LOR.
- EP074: Where reported, Sum of chlorinated hydrocarbons includes carbon tetrachloride, chlorobenzene, chloroform, 1,2-dichlorobenzene, 1,4-dichlorobenzene, 1,2-dichloroethane, 1,1-dichloroethene, cis-1,2-dichloroethene, trans-1,2-dichloroethene, 1,1,1,2-tetrachloroethane, 1,1,2,2-tetrachloroethane, 1,2,4-trichlorobenzene, 1,1,1-trichloroethane, 1,1,2-trichloroethane, trichloroethene, vinyl chloride, hexachlorobutadiene and methylene chloride.
- EP074: Where reported, Total Trimethylbenzenes is the sum of the reported concentrations of 1.2.3-Trimethylbenzene, 1.2.4-Trimethylbenzene and 1.3.5-Trimethylbenzene at or above the LOR.
- EP075(SIM): Where reported, Total Cresol is the sum of the reported concentrations of 2-Methylphenol and 3- & 4-Methylphenol at or above the LOR.
- EP080/EP074: Positive results for sample ES2204958-015 was confirmed by re-analysis
- EG035T: Positive Hg result has been confirm by redigestion and reanalysis.
- EP075(SIM): Surrogate recovery bias low due to sample matrix interferences.
- EP075: Where reported, 'Sum of PAH' is the sum of the USEPA 16 priority PAHs
- EA200 'Am' Amosite (brown asbestos)
- EA200 'Cr' Crocidolite (blue asbestos)
- EA200 'Trace' - Asbestos fibres ("Free Fibres") detected by trace analysis per AS4964. The result can be interpreted that the sample contains detectable 'respirable' asbestos fibres



- EA200: Asbestos Identification Samples were analysed by Polarised Light Microscopy including dispersion staining.
- EA200 Legend
- EA200 'Ch' Chrysotile (white asbestos)
- EA200: 'UMF' Unknown Mineral Fibres. "-" indicates fibres detected may or may not be asbestos fibres. Confirmation by alternative techniques is recommended.
- Benzo(a)pyrene Toxicity Equivalent Quotient (TEQ) 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.
- EA200: For samples larger than 30g, the <2mm fraction may be sub-sampled prior to trace analysis as outlined in ISO23909:2008(E) Sect 6.3.2-2
- EA200: 'Yes' - Asbestos detected by polarised light microscopy including dispersion staining.
- EA200: 'No*' - No asbestos found, at the reporting limit of 0.1g/kg, by polarised light microscopy including dispersion staining. Asbestos material was detected and positively identified at concentrations estimated to be below 0.1g/kg.
- EA200: 'No' - No asbestos found at the reporting limit 0.1g/kg, by polarised light microscopy including dispersion staining.
- 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.



Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	BH09_0.3	BH09_1.0	BH15_0.4	BH15_1.5	BH17_0.4
Sampling date / time					14-Feb-2022 00:00	14-Feb-2022 00:00	14-Feb-2022 00:00	14-Feb-2022 00:00	14-Feb-2022 00:00
Compound	CAS Number	LOR	Unit		ES2204958-001	ES2204958-002	ES2204958-003	ES2204958-004	ES2204958-006
					Result	Result	Result	Result	Result
EA055: Moisture Content (Dried @ 105-110°C)									
Moisture Content	----	1.0	%		16.1	7.5	7.6	13.4	8.2
EA200: AS 4964 - 2004 Identification of Asbestos in Soils									
Asbestos Detected	1332-21-4	0.1	g/kg		No	----	No	----	No
Asbestos (Trace)	1332-21-4	5	Fibres		No	----	No	----	No
Asbestos Type	1332-21-4	-	--		-	----	-	----	-
Synthetic Mineral Fibre	----	0.1	g/kg		No	----	No	----	No
Organic Fibre	----	0.1	g/kg		No	----	No	----	Yes
Sample weight (dry)	----	0.01	g		90.7	----	122	----	142
APPROVED IDENTIFIER:	----	-	--		A. SMYLLIE	----	A. SMYLLIE	----	A. SMYLLIE
EG005(ED093)T: Total Metals by ICP-AES									
Arsenic	7440-38-2	5	mg/kg		12	<5	<5	<5	45
Cadmium	7440-43-9	1	mg/kg		2	<1	<1	<1	8
Chromium	7440-47-3	2	mg/kg		33	2	3	3	65
Copper	7440-50-8	5	mg/kg		670	16	194	<5	24800
Lead	7439-92-1	5	mg/kg		694	20	153	6	1380
Nickel	7440-02-0	2	mg/kg		38	<2	6	<2	89
Zinc	7440-66-6	5	mg/kg		1720	44	235	60	13000
EG035T: Total Recoverable Mercury by FIMS									
Mercury	7439-97-6	0.1	mg/kg		0.3	<0.1	0.3	<0.1	1.1
EP066: Polychlorinated Biphenyls (PCB)									
Total Polychlorinated biphenyls	----	0.1	mg/kg		<0.1	<0.1	<0.1	<0.1	<0.1
EP068A: Organochlorine Pesticides (OC)									
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
^ Total Chlordane (sum)	----	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
trans-Chlordane	5103-74-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
alpha-Endosulfan	959-98-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
cis-Chlordane	5103-71-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	BH09_0.3	BH09_1.0	BH15_0.4	BH15_1.5	BH17_0.4
Sampling date / time				14-Feb-2022 00:00	14-Feb-2022 00:00	14-Feb-2022 00:00	14-Feb-2022 00:00	14-Feb-2022 00:00	
Compound	CAS Number	LOR	Unit	ES2204958-001	ES2204958-002	ES2204958-003	ES2204958-004	ES2204958-006	
				Result	Result	Result	Result	Result	
EP068A: Organochlorine Pesticides (OC) - Continued									
Dieldrin	60-57-1	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	
Endrin	72-20-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05	
beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05	
^ Endosulfan (sum)	115-29-7	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	
Endrin aldehyde	7421-93-4	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	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2	
Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05	
Methoxychlor	72-43-5	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2	
^ Sum of Aldrin + Dieldrin	309-00-2/60-57-1	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05	
^ 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	
EP068B: Organophosphorus Pesticides (OP)									
Dichlorvos	62-73-7	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05	
Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05	
Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2	
Dimethoate	60-51-5	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05	
Diazinon	333-41-5	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05	
Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05	
Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2	
Malathion	121-75-5	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05	
Fenthion	55-38-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05	
Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05	
Parathion	56-38-2	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2	
Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05	
Chlorfenvinphos	470-90-6	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05	
Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05	
Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05	
Prothiofos	34643-46-4	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05	
Ethion	563-12-2	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05	
Carbophenothion	786-19-6	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05	
Azinphos Methyl	86-50-0	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05	
EP074A: Monocyclic Aromatic Hydrocarbons									



Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	BH09_0.3	BH09_1.0	BH15_0.4	BH15_1.5	BH17_0.4
Sampling date / time					14-Feb-2022 00:00	14-Feb-2022 00:00	14-Feb-2022 00:00	14-Feb-2022 00:00	14-Feb-2022 00:00
Compound	CAS Number	LOR	Unit		ES2204958-001	ES2204958-002	ES2204958-003	ES2204958-004	ES2204958-006
					Result	Result	Result	Result	Result
EP074A: Monocyclic Aromatic Hydrocarbons - Continued									
Styrene	100-42-5	0.5	mg/kg		<0.5	----	<0.5	----	----
Isopropylbenzene	98-82-8	0.5	mg/kg		<0.5	----	<0.5	----	----
n-Propylbenzene	103-65-1	0.5	mg/kg		<0.5	----	<0.5	----	----
1,3,5-Trimethylbenzene	108-67-8	0.5	mg/kg		<0.5	----	<0.5	----	----
sec-Butylbenzene	135-98-8	0.5	mg/kg		<0.5	----	<0.5	----	----
1,2,4-Trimethylbenzene	95-63-6	0.5	mg/kg		<0.5	----	<0.5	----	----
tert-Butylbenzene	98-06-6	0.5	mg/kg		<0.5	----	<0.5	----	----
p-Isopropyltoluene	99-87-6	0.5	mg/kg		<0.5	----	<0.5	----	----
n-Butylbenzene	104-51-8	0.5	mg/kg		<0.5	----	<0.5	----	----
EP074B: Oxygenated Compounds									
Vinyl Acetate	108-05-4	5	mg/kg		<5	----	<5	----	----
2-Butanone (MEK)	78-93-3	5	mg/kg		<5	----	<5	----	----
4-Methyl-2-pentanone (MIBK)	108-10-1	5	mg/kg		<5	----	<5	----	----
2-Hexanone (MBK)	591-78-6	5	mg/kg		<5	----	<5	----	----
EP074C: Sulfonated Compounds									
Carbon disulfide	75-15-0	0.5	mg/kg		<0.5	----	<0.5	----	----
EP074D: Fumigants									
2,2-Dichloropropane	594-20-7	0.5	mg/kg		<0.5	----	<0.5	----	----
1,2-Dichloropropane	78-87-5	0.5	mg/kg		<0.5	----	<0.5	----	----
cis-1,3-Dichloropropylene	10061-01-5	0.5	mg/kg		<0.5	----	<0.5	----	----
trans-1,3-Dichloropropylene	10061-02-6	0.5	mg/kg		<0.5	----	<0.5	----	----
1,2-Dibromoethane (EDB)	106-93-4	0.5	mg/kg		<0.5	----	<0.5	----	----
EP074E: Halogenated Aliphatic Compounds									
Dichlorodifluoromethane	75-71-8	5	mg/kg		<5	----	<5	----	----
Chloromethane	74-87-3	5	mg/kg		<5	----	<5	----	----
Vinyl chloride	75-01-4	5	mg/kg		<5	----	<5	----	----
Bromomethane	74-83-9	5	mg/kg		<5	----	<5	----	----
Chloroethane	75-00-3	5	mg/kg		<5	----	<5	----	----
Trichlorofluoromethane	75-69-4	5	mg/kg		<5	----	<5	----	----
1,1-Dichloroethene	75-35-4	0.5	mg/kg		<0.5	----	<0.5	----	----
Iodomethane	74-88-4	0.5	mg/kg		<0.5	----	<0.5	----	----
trans-1,2-Dichloroethene	156-60-5	0.5	mg/kg		<0.5	----	<0.5	----	----
1,1-Dichloroethane	75-34-3	0.5	mg/kg		<0.5	----	<0.5	----	----
cis-1,2-Dichloroethene	156-59-2	0.5	mg/kg		<0.5	----	<0.5	----	----



Analytical Results

Sub-Matrix: SOIL
 (Matrix: SOIL)

Sample ID

				BH09_0.3	BH09_1.0	BH15_0.4	BH15_1.5	BH17_0.4
Sampling date / time				14-Feb-2022 00:00	14-Feb-2022 00:00	14-Feb-2022 00:00	14-Feb-2022 00:00	14-Feb-2022 00:00
Compound	CAS Number	LOR	Unit	ES2204958-001	ES2204958-002	ES2204958-003	ES2204958-004	ES2204958-006
				Result	Result	Result	Result	Result
EP074E: Halogenated Aliphatic Compounds - Continued								
1.1.1-Trichloroethane	71-55-6	0.5	mg/kg	<0.5	----	<0.5	----	----
1.1-Dichloropropylene	563-58-6	0.5	mg/kg	<0.5	----	<0.5	----	----
Carbon Tetrachloride	56-23-5	0.5	mg/kg	<0.5	----	<0.5	----	----
1.2-Dichloroethane	107-06-2	0.5	mg/kg	<0.5	----	<0.5	----	----
Trichloroethene	79-01-6	0.5	mg/kg	<0.5	----	<0.5	----	----
Dibromomethane	74-95-3	0.5	mg/kg	<0.5	----	<0.5	----	----
1.1.2-Trichloroethane	79-00-5	0.5	mg/kg	<0.5	----	1.0	----	----
1.3-Dichloropropane	142-28-9	0.5	mg/kg	<0.5	----	<0.5	----	----
Tetrachloroethene	127-18-4	0.5	mg/kg	<0.5	----	<0.5	----	----
1.1.1.2-Tetrachloroethane	630-20-6	0.5	mg/kg	<0.5	----	<0.5	----	----
trans-1.4-Dichloro-2-butene	110-57-6	0.5	mg/kg	<0.5	----	<0.5	----	----
cis-1.4-Dichloro-2-butene	1476-11-5	0.5	mg/kg	<0.5	----	<0.5	----	----
1.1.2.2-Tetrachloroethane	79-34-5	0.5	mg/kg	<0.5	----	<0.5	----	----
1.2.3-Trichloropropane	96-18-4	0.5	mg/kg	<0.5	----	<0.5	----	----
Pentachloroethane	76-01-7	0.5	mg/kg	<0.5	----	<0.5	----	----
1.2-Dibromo-3-chloropropane	96-12-8	0.5	mg/kg	<0.5	----	<0.5	----	----
EP074F: Halogenated Aromatic Compounds								
Chlorobenzene	108-90-7	0.5	mg/kg	<0.5	----	<0.5	----	----
Bromobenzene	108-86-1	0.5	mg/kg	<0.5	----	<0.5	----	----
2-Chlorotoluene	95-49-8	0.5	mg/kg	<0.5	----	<0.5	----	----
4-Chlorotoluene	106-43-4	0.5	mg/kg	<0.5	----	<0.5	----	----
1.2.3-Trichlorobenzene	87-61-6	0.5	mg/kg	<0.5	----	<0.5	----	----
EP074G: Trihalomethanes								
Chloroform	67-66-3	0.5	mg/kg	<0.5	----	<0.5	----	----
Bromodichloromethane	75-27-4	0.5	mg/kg	<0.5	----	<0.5	----	----
Dibromochloromethane	124-48-1	0.5	mg/kg	<0.5	----	<0.5	----	----
Bromoform	75-25-2	0.5	mg/kg	<0.5	----	<0.5	----	----
EP075(SIM)A: Phenolic Compounds								
Phenol	108-95-2	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
2-Chlorophenol	95-57-8	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
2-Methylphenol	95-48-7	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
3- & 4-Methylphenol	1319-77-3	1	mg/kg	<1	<1	<1	<1	<1
2-Nitrophenol	88-75-5	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
2.4-Dimethylphenol	105-67-9	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5



Analytical Results

Sub-Matrix: SOIL
 (Matrix: SOIL)

Sample ID

				BH09_0.3	BH09_1.0	BH15_0.4	BH15_1.5	BH17_0.4
Sampling date / time				14-Feb-2022 00:00	14-Feb-2022 00:00	14-Feb-2022 00:00	14-Feb-2022 00:00	14-Feb-2022 00:00
Compound	CAS Number	LOR	Unit	ES2204958-001	ES2204958-002	ES2204958-003	ES2204958-004	ES2204958-006
				Result	Result	Result	Result	Result
EP075(SIM)A: Phenolic Compounds - Continued								
2,4-Dichlorophenol	120-83-2	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
2,6-Dichlorophenol	87-65-0	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
4-Chloro-3-methylphenol	59-50-7	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
2,4,6-Trichlorophenol	88-06-2	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
2,4,5-Trichlorophenol	95-95-4	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Pentachlorophenol	87-86-5	2	mg/kg	<2	<2	<2	<2	<2
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons								
Naphthalene	91-20-3	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
Acenaphthene	83-32-9	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	3.3	<0.5	<0.5	<0.5	<0.5
Anthracene	120-12-7	0.5	mg/kg	0.7	<0.5	<0.5	<0.5	<0.5
Fluoranthene	206-44-0	0.5	mg/kg	4.0	<0.5	<0.5	<0.5	<0.5
Pyrene	129-00-0	0.5	mg/kg	4.1	<0.5	<0.5	<0.5	<0.5
Benzo(a)anthracene	56-55-3	0.5	mg/kg	1.5	<0.5	<0.5	<0.5	<0.5
Chrysene	218-01-9	0.5	mg/kg	1.4	<0.5	<0.5	<0.5	<0.5
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	1.6	<0.5	<0.5	<0.5	<0.5
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene	50-32-8	0.5	mg/kg	1.2	<0.5	<0.5	<0.5	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	0.6	<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	0.7	<0.5	<0.5	<0.5	<0.5
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg	19.6	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg	1.6	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg	1.9	0.6	0.6	0.6	0.6
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg	2.1	1.2	1.2	1.2	1.2
EP075A: Phenolic Compounds								
Phenol	108-95-2	0.5	mg/kg	<0.5	----	<0.5	----	----
2-Chlorophenol	95-57-8	0.5	mg/kg	<0.5	----	<0.5	----	----
2-Methylphenol	95-48-7	0.5	mg/kg	<0.5	----	<0.5	----	----
3- & 4-Methylphenol	1319-77-3	0.5	mg/kg	<0.5	----	<0.5	----	----
2-Nitrophenol	88-75-5	0.5	mg/kg	<0.5	----	<0.5	----	----
2,4-Dimethylphenol	105-67-9	0.5	mg/kg	<0.5	----	<0.5	----	----



Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	BH09_0.3	BH09_1.0	BH15_0.4	BH15_1.5	BH17_0.4
Sampling date / time					14-Feb-2022 00:00	14-Feb-2022 00:00	14-Feb-2022 00:00	14-Feb-2022 00:00	14-Feb-2022 00:00
Compound	CAS Number	LOR	Unit		ES2204958-001	ES2204958-002	ES2204958-003	ES2204958-004	ES2204958-006
					Result	Result	Result	Result	Result
EP075A: Phenolic Compounds - Continued									
2,4-Dichlorophenol	120-83-2	0.5	mg/kg		<0.5	----	<0.5	----	----
2,6-Dichlorophenol	87-65-0	0.5	mg/kg		<0.5	----	<0.5	----	----
4-Chloro-3-methylphenol	59-50-7	0.5	mg/kg		<0.5	----	<0.5	----	----
2,4,6-Trichlorophenol	88-06-2	0.5	mg/kg		<0.5	----	<0.5	----	----
2,4,5-Trichlorophenol	95-95-4	0.5	mg/kg		<0.5	----	<0.5	----	----
Pentachlorophenol	87-86-5	1	mg/kg		<1	----	<1	----	----
EP075B: Polynuclear Aromatic Hydrocarbons									
Naphthalene	91-20-3	0.5	mg/kg		<0.5	----	<0.5	----	----
2-Methylnaphthalene	91-57-6	0.5	mg/kg		<0.5	----	<0.5	----	----
2-Chloronaphthalene	91-58-7	0.5	mg/kg		<0.5	----	<0.5	----	----
Acenaphthylene	208-96-8	0.5	mg/kg		<0.5	----	<0.5	----	----
Acenaphthene	83-32-9	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		3.3	----	<0.5	----	----
Anthracene	120-12-7	0.5	mg/kg		0.6	----	<0.5	----	----
Fluoranthene	206-44-0	0.5	mg/kg		3.8	----	<0.5	----	----
Pyrene	129-00-0	0.5	mg/kg		3.7	----	<0.5	----	----
N-2-Fluorenyl Acetamide	53-96-3	0.5	mg/kg		<0.5	----	<0.5	----	----
Benzo(a)anthracene	56-55-3	0.5	mg/kg		1.6	----	<0.5	----	----
Chrysene	218-01-9	0.5	mg/kg		1.4	----	<0.5	----	----
Benzo(b+j) & Benzo(k)fluoranthene	205-99-2 207-08-9	1	mg/kg		2	----	<1	----	----
7,12-Dimethylbenzo(a)anthracene	57-97-6	0.5	mg/kg		<0.5	----	<0.5	----	----
Benzo(a)pyrene	50-32-8	0.5	mg/kg		1.2	----	<0.5	----	----
3-Methylcholanthrene	56-49-5	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		0.6	----	<0.5	----	----
^ Sum of PAHs	----	0.5	mg/kg		18.7	----	<0.5	----	----
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg		1.6	----	<0.5	----	----
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg		1.9	----	0.6	----	----
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg		2.1	----	1.2	----	----
EP075C: Phthalate Esters									
Dimethyl phthalate	131-11-3	0.5	mg/kg		<0.5	----	<0.5	----	----
Diethyl phthalate	84-66-2	0.5	mg/kg		<0.5	----	<0.5	----	----

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	BH09_0.3	BH09_1.0	BH15_0.4	BH15_1.5	BH17_0.4
Sampling date / time					14-Feb-2022 00:00	14-Feb-2022 00:00	14-Feb-2022 00:00	14-Feb-2022 00:00	14-Feb-2022 00:00
Compound	CAS Number	LOR	Unit	ES2204958-001	ES2204958-002	ES2204958-003	ES2204958-004	ES2204958-006	
				Result	Result	Result	Result	Result	
EP075C: Phthalate Esters - Continued									
Di-n-butyl phthalate	84-74-2	0.5	mg/kg	<0.5	----	<0.5	----	----	
Butyl benzyl phthalate	85-68-7	0.5	mg/kg	<0.5	----	<0.5	----	----	
bis(2-ethylhexyl) phthalate	117-81-7	5.0	mg/kg	<5.0	----	<5.0	----	----	
Di-n-octylphthalate	117-84-0	0.5	mg/kg	<0.5	----	<0.5	----	----	
EP075D: Nitrosamines									
N-Nitrosomethylethylamine	10595-95-6	0.5	mg/kg	<0.5	----	<0.5	----	----	
N-Nitrosodiethylamine	55-18-5	0.5	mg/kg	<0.5	----	<0.5	----	----	
N-Nitrosopyrrolidine	930-55-2	1.0	mg/kg	<1.0	----	<1.0	----	----	
N-Nitrosomorpholine	59-89-2	0.5	mg/kg	<0.5	----	<0.5	----	----	
N-Nitrosodi-n-propylamine	621-64-7	0.5	mg/kg	<0.5	----	<0.5	----	----	
N-Nitrosopiperidine	100-75-4	0.5	mg/kg	<0.5	----	<0.5	----	----	
N-Nitrosodibutylamine	924-16-3	0.5	mg/kg	<0.5	----	<0.5	----	----	
N-Nitrosodiphenyl & Diphenylamine	86-30-6 122-39-4	1.0	mg/kg	<1.0	----	<1.0	----	----	
Methapyrilene	91-80-5	0.5	mg/kg	<0.5	----	<0.5	----	----	
EP075E: Nitroaromatics and Ketones									
2-Picoline	109-06-8	0.5	mg/kg	<0.5	----	<0.5	----	----	
Acetophenone	98-86-2	0.5	mg/kg	<0.5	----	<0.5	----	----	
Nitrobenzene	98-95-3	0.5	mg/kg	<0.5	----	<0.5	----	----	
Isophorone	78-59-1	0.5	mg/kg	<0.5	----	<0.5	----	----	
2,6-Dinitrotoluene	606-20-2	1.0	mg/kg	<1.0	----	<1.0	----	----	
2,4-Dinitrotoluene	121-14-2	1.0	mg/kg	<1.0	----	<1.0	----	----	
1-Naphthylamine	134-32-7	0.5	mg/kg	<0.5	----	<0.5	----	----	
4-Nitroquinoline-N-oxide	56-57-5	0.5	mg/kg	<0.5	----	<0.5	----	----	
5-Nitro-o-toluidine	99-55-8	0.5	mg/kg	<0.5	----	<0.5	----	----	
Azobenzene	103-33-3	1	mg/kg	<1	----	<1	----	----	
1,3,5-Trinitrobenzene	99-35-4	0.5	mg/kg	<0.5	----	<0.5	----	----	
Phenacetin	62-44-2	0.5	mg/kg	<0.5	----	<0.5	----	----	
4-Aminobiphenyl	92-67-1	0.5	mg/kg	<0.5	----	<0.5	----	----	
Pentachloronitrobenzene	82-68-8	0.5	mg/kg	<0.5	----	<0.5	----	----	
Pronamide	23950-58-5	0.5	mg/kg	<0.5	----	<0.5	----	----	
Dimethylaminoazobenzene	60-11-7	0.5	mg/kg	<0.5	----	<0.5	----	----	
Chlorobenzilate	510-15-6	0.5	mg/kg	<0.5	----	<0.5	----	----	
EP075F: Haloethers									



Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	BH09_0.3	BH09_1.0	BH15_0.4	BH15_1.5	BH17_0.4
Sampling date / time					14-Feb-2022 00:00	14-Feb-2022 00:00	14-Feb-2022 00:00	14-Feb-2022 00:00	14-Feb-2022 00:00
Compound	CAS Number	LOR	Unit		ES2204958-001	ES2204958-002	ES2204958-003	ES2204958-004	ES2204958-006
					Result	Result	Result	Result	Result
EP075F: Haloethers - Continued									
Bis(2-chloroethyl) ether	111-44-4	0.5	mg/kg		<0.5	----	<0.5	----	----
Bis(2-chloroethoxy) methane	111-91-1	0.5	mg/kg		<0.5	----	<0.5	----	----
4-Chlorophenyl phenyl ether	7005-72-3	0.5	mg/kg		<0.5	----	<0.5	----	----
4-Bromophenyl phenyl ether	101-55-3	0.5	mg/kg		<0.5	----	<0.5	----	----
EP075G: Chlorinated Hydrocarbons									
1,3-Dichlorobenzene	541-73-1	0.5	mg/kg		<0.5	----	<0.5	----	----
1,4-Dichlorobenzene	106-46-7	0.5	mg/kg		<0.5	----	<0.5	----	----
1,2-Dichlorobenzene	95-50-1	0.5	mg/kg		<0.5	----	<0.5	----	----
Hexachloroethane	67-72-1	0.5	mg/kg		<0.5	----	<0.5	----	----
1,2,4-Trichlorobenzene	120-82-1	0.5	mg/kg		<0.5	----	<0.5	----	----
Hexachloropropylene	1888-71-7	0.5	mg/kg		<0.5	----	<0.5	----	----
Hexachlorobutadiene	87-68-3	0.5	mg/kg		<0.5	----	<0.5	----	----
Hexachlorocyclopentadiene	77-47-4	2.5	mg/kg		<2.5	----	<2.5	----	----
Pentachlorobenzene	608-93-5	0.5	mg/kg		<0.5	----	<0.5	----	----
Hexachlorobenzene (HCB)	118-74-1	1.0	mg/kg		<1.0	----	<1.0	----	----
EP075H: Anilines and Benzidines									
Aniline	62-53-3	0.5	mg/kg		<0.5	----	<0.5	----	----
4-Chloroaniline	106-47-8	0.5	mg/kg		<0.5	----	<0.5	----	----
2-Nitroaniline	88-74-4	1.0	mg/kg		<1.0	----	<1.0	----	----
3-Nitroaniline	99-09-2	1.0	mg/kg		<1.0	----	<1.0	----	----
Dibenzofuran	132-64-9	0.5	mg/kg		<0.5	----	<0.5	----	----
4-Nitroaniline	100-01-6	0.5	mg/kg		<0.5	----	<0.5	----	----
Carbazole	86-74-8	0.5	mg/kg		<0.5	----	<0.5	----	----
3,3'-Dichlorobenzidine	91-94-1	0.5	mg/kg		<0.5	----	<0.5	----	----
EP075I: Organochlorine Pesticides									
alpha-BHC	319-84-6	0.5	mg/kg		<0.5	----	<0.5	----	----
beta-BHC	319-85-7	0.5	mg/kg		<0.5	----	<0.5	----	----
gamma-BHC	58-89-9	0.5	mg/kg		<0.5	----	<0.5	----	----
delta-BHC	319-86-8	0.5	mg/kg		<0.5	----	<0.5	----	----
Heptachlor	76-44-8	0.5	mg/kg		<0.5	----	<0.5	----	----
Aldrin	309-00-2	0.5	mg/kg		<0.5	----	<0.5	----	----
Heptachlor epoxide	1024-57-3	0.5	mg/kg		<0.5	----	<0.5	----	----
alpha-Endosulfan	959-98-8	0.5	mg/kg		<0.5	----	<0.5	----	----
4,4'-DDE	72-55-9	0.5	mg/kg		<0.5	----	<0.5	----	----



Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	BH09_0.3	BH09_1.0	BH15_0.4	BH15_1.5	BH17_0.4
Sampling date / time					14-Feb-2022 00:00	14-Feb-2022 00:00	14-Feb-2022 00:00	14-Feb-2022 00:00	14-Feb-2022 00:00
Compound	CAS Number	LOR	Unit		ES2204958-001	ES2204958-002	ES2204958-003	ES2204958-004	ES2204958-006
					Result	Result	Result	Result	Result
EP075I: Organochlorine Pesticides - Continued									
Dieldrin	60-57-1	0.5	mg/kg		<0.5	----	<0.5	----	----
Endrin	72-20-8	0.5	mg/kg		<0.5	----	<0.5	----	----
beta-Endosulfan	33213-65-9	0.5	mg/kg		<0.5	----	<0.5	----	----
4.4`-DDD	72-54-8	0.5	mg/kg		<0.5	----	<0.5	----	----
Endosulfan sulfate	1031-07-8	0.5	mg/kg		<0.5	----	<0.5	----	----
4.4`-DDT	50-29-3	1.0	mg/kg		<1.0	----	<1.0	----	----
EP075J: Organophosphorus Pesticides									
Dichlorvos	62-73-7	0.5	mg/kg		<0.5	----	<0.5	----	----
Dimethoate	60-51-5	0.5	mg/kg		<0.5	----	<0.5	----	----
Diazinon	333-41-5	0.5	mg/kg		<0.5	----	<0.5	----	----
Chlorpyrifos-methyl	5598-13-0	0.5	mg/kg		<0.5	----	<0.5	----	----
Malathion	121-75-5	0.5	mg/kg		<0.5	----	<0.5	----	----
Fenthion	55-38-9	0.5	mg/kg		<0.5	----	<0.5	----	----
Chlorpyrifos	2921-88-2	0.5	mg/kg		<0.5	----	<0.5	----	----
Pirimphos-ethyl	23505-41-1	0.5	mg/kg		<0.5	----	<0.5	----	----
Chlorfenvinphos	470-90-6	0.5	mg/kg		<0.5	----	<0.5	----	----
Prothiofos	34643-46-4	0.5	mg/kg		<0.5	----	<0.5	----	----
Ethion	563-12-2	0.5	mg/kg		<0.5	----	<0.5	----	----
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	----	10	mg/kg		<10	<10	<10	<10	<10
C10 - C14 Fraction	----	50	mg/kg		<50	<50	<50	<50	<50
C15 - C28 Fraction	----	100	mg/kg		490	<100	<100	<100	350
C29 - C36 Fraction	----	100	mg/kg		360	<100	<100	<100	140
^ C10 - C36 Fraction (sum)	----	50	mg/kg		850	<50	<50	<50	490
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
C6 - C10 Fraction	C6_C10	10	mg/kg		<10	<10	<10	<10	<10
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg		<10	<10	<10	<10	<10
>C10 - C16 Fraction	----	50	mg/kg		<50	<50	<50	<50	<50
>C16 - C34 Fraction	----	100	mg/kg		770	<100	<100	<100	460
>C34 - C40 Fraction	----	100	mg/kg		150	<100	<100	<100	<100
^ >C10 - C40 Fraction (sum)	----	50	mg/kg		920	<50	<50	<50	460
^ >C10 - C16 Fraction minus Naphthalene (F2)	----	50	mg/kg		<50	<50	<50	<50	<50

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	BH09_0.3	BH09_1.0	BH15_0.4	BH15_1.5	BH17_0.4
Sampling date / time				14-Feb-2022 00:00	14-Feb-2022 00:00	14-Feb-2022 00:00	14-Feb-2022 00:00	14-Feb-2022 00:00	14-Feb-2022 00:00
Compound	CAS Number	LOR	Unit	ES2204958-001	ES2204958-002	ES2204958-003	ES2204958-004	ES2204958-006	
				Result	Result	Result	Result	Result	
EP080: BTEXN									
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	
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	
ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5	
^ Sum of BTEX	----	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2	
^ Total Xylenes	----	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5	
Naphthalene	91-20-3	1	mg/kg	<1	<1	<1	<1	<1	
EP231A: Perfluoroalkyl Sulfonic Acids									
Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.0002	mg/kg	<0.0002	----	<0.0002	----	<0.0002	
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.0002	mg/kg	<0.0002	----	<0.0002	----	<0.0002	
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.0002	mg/kg	<0.0002	----	<0.0002	----	<0.0002	
EP231B: Perfluoroalkyl Carboxylic Acids									
Perfluorobutanoic acid (PFBA)	375-22-4	0.001	mg/kg	<0.001	----	<0.001	----	<0.001	
Perfluoropentanoic acid (PFPeA)	2706-90-3	0.0002	mg/kg	<0.0002	----	<0.0002	----	<0.0002	
Perfluorohexanoic acid (PFHxA)	307-24-4	0.0002	mg/kg	<0.0002	----	<0.0002	----	<0.0002	
Perfluoroheptanoic acid (PFHpA)	375-85-9	0.0002	mg/kg	<0.0002	----	<0.0002	----	<0.0002	
Perfluorooctanoic acid (PFOA)	335-67-1	0.0002	mg/kg	<0.0002	----	<0.0002	----	<0.0002	
EP231D: (n:2) Fluorotelomer Sulfonic Acids									
4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.0005	mg/kg	<0.0005	----	<0.0005	----	<0.0005	
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.0005	mg/kg	<0.0005	----	<0.0005	----	<0.0005	
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.0005	mg/kg	<0.0005	----	<0.0005	----	<0.0005	
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.0005	mg/kg	<0.0005	----	<0.0005	----	<0.0005	
EP231P: PFAS Sums									
Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.0002	mg/kg	<0.0002	----	<0.0002	----	<0.0002	
Sum of PFAS (WA DER List)	----	0.0002	mg/kg	<0.0002	----	<0.0002	----	<0.0002	
EP066S: PCB Surrogate									



Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	BH09_0.3	BH09_1.0	BH15_0.4	BH15_1.5	BH17_0.4
Sampling date / time					14-Feb-2022 00:00	14-Feb-2022 00:00	14-Feb-2022 00:00	14-Feb-2022 00:00	14-Feb-2022 00:00
Compound	CAS Number	LOR	Unit		ES2204958-001	ES2204958-002	ES2204958-003	ES2204958-004	ES2204958-006
					Result	Result	Result	Result	Result
EP066S: PCB Surrogate - Continued									
Decachlorobiphenyl	2051-24-3	0.1	%		97.9	104	93.4	105	102
EP068S: Organochlorine Pesticide Surrogate									
Dibromo-DDE	21655-73-2	0.05	%		82.3	99.6	96.5	104	104
EP068T: Organophosphorus Pesticide Surrogate									
DEF	78-48-8	0.05	%		137	109	118	86.7	113
EP074S: VOC Surrogates									
1,2-Dichloroethane-D4	17060-07-0	0.5	%		83.7	----	91.0	----	----
Toluene-D8	2037-26-5	0.5	%		93.9	----	103	----	----
4-Bromofluorobenzene	460-00-4	0.5	%		92.2	----	101	----	----
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	0.5	%		80.6	82.8	80.8	79.9	76.8
2-Chlorophenol-D4	93951-73-6	0.5	%		88.4	86.5	87.2	84.4	82.5
2,4,6-Tribromophenol	118-79-6	0.5	%		70.4	80.0	79.0	75.4	68.8
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	0.5	%		102	101	101	100	97.8
Anthracene-d10	1719-06-8	0.5	%		102	104	105	104	102
4-Terphenyl-d14	1718-51-0	0.5	%		91.7	94.5	94.8	93.7	89.5
EP075S: Acid Extractable Surrogates									
2-Fluorophenol	367-12-4	0.5	%		99.0	----	105	----	----
Phenol-d6	13127-88-3	0.5	%		92.6	----	94.1	----	----
2-Chlorophenol-D4	93951-73-6	0.5	%		97.9	----	100	----	----
2,4,6-Tribromophenol	118-79-6	0.5	%		87.9	----	90.3	----	----
EP075T: Base/Neutral Extractable Surrogates									
Nitrobenzene-D5	4165-60-0	0.5	%		99.7	----	96.1	----	----
1,2-Dichlorobenzene-D4	2199-69-1	0.5	%		91.0	----	89.5	----	----
2-Fluorobiphenyl	321-60-8	0.5	%		106	----	108	----	----
Anthracene-d10	1719-06-8	0.5	%		115	----	120	----	----
4-Terphenyl-d14	1718-51-0	0.5	%		94.3	----	96.1	----	----
EP080S: TPH(V)/BTEX Surrogates									
1,2-Dichloroethane-D4	17060-07-0	0.2	%		92.2	99.7	101	95.6	100.0
Toluene-D8	2037-26-5	0.2	%		90.0	98.7	99.3	89.8	98.5
4-Bromofluorobenzene	460-00-4	0.2	%		86.9	97.2	95.3	87.4	93.2
EP231S: PFAS Surrogate									
13C4-PFOS	----	0.0002	%		102	----	98.5	----	109



Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	BH09_0.3	BH09_1.0	BH15_0.4	BH15_1.5	BH17_0.4
Sampling date / time					14-Feb-2022 00:00	14-Feb-2022 00:00	14-Feb-2022 00:00	14-Feb-2022 00:00	14-Feb-2022 00:00
Compound	CAS Number	LOR	Unit		ES2204958-001	ES2204958-002	ES2204958-003	ES2204958-004	ES2204958-006
					Result	Result	Result	Result	Result
EP231S: PFAS Surrogate - Continued									
13C8-PFOA	----	0.0002	%		98.0	----	96.0	----	94.5



Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	BH17_1.5	BH06_0.4	BH06_1.8	DUP08	DUP07
Sampling date / time					14-Feb-2022 00:00	14-Feb-2022 00:00	14-Feb-2022 00:00	14-Feb-2022 00:00	14-Feb-2022 00:00
Compound	CAS Number	LOR	Unit		ES2204958-007	ES2204958-008	ES2204958-010	ES2204958-011	ES2204958-012
					Result	Result	Result	Result	Result
EA055: Moisture Content (Dried @ 105-110°C)									
Moisture Content	----	0.1	%		----	----	----	7.1	----
Moisture Content	----	1.0	%		6.2	7.8	13.2	----	10.3
EA200: AS 4964 - 2004 Identification of Asbestos in Soils									
Asbestos Detected	1332-21-4	0.1	g/kg		----	No	----	----	----
Asbestos (Trace)	1332-21-4	5	Fibres		----	No	----	----	----
Asbestos Type	1332-21-4	-	--		----	-	----	----	----
Synthetic Mineral Fibre	----	0.1	g/kg		----	No	----	----	----
Organic Fibre	----	0.1	g/kg		----	No	----	----	----
Sample weight (dry)	----	0.01	g		----	80.3	----	----	----
APPROVED IDENTIFIER:	----	-	--		----	A. SMYLLIE	----	----	----
EG005(ED093)T: Total Metals by ICP-AES									
Arsenic	7440-38-2	5	mg/kg		<5	<5	<5	----	5
Cadmium	7440-43-9	1	mg/kg		2	<1	<1	----	<1
Chromium	7440-47-3	2	mg/kg		<2	4	<2	----	5
Copper	7440-50-8	5	mg/kg		112	101	<5	----	304
Lead	7439-92-1	5	mg/kg		19	58	<5	----	268
Nickel	7440-02-0	2	mg/kg		9	5	<2	----	10
Zinc	7440-66-6	5	mg/kg		395	77	25	----	377
EG035T: Total Recoverable Mercury by FIMS									
Mercury	7439-97-6	0.1	mg/kg		<0.1	<0.1	<0.1	----	0.3
EP066: Polychlorinated Biphenyls (PCB)									
Total Polychlorinated biphenyls	----	0.1	mg/kg		<0.1	<0.1	<0.1	----	<0.1
EP068A: Organochlorine Pesticides (OC)									
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
^ Total Chlordane (sum)	----	0.05	mg/kg		<0.05	<0.05	<0.05	----	<0.05
trans-Chlordane	5103-74-2	0.05	mg/kg		<0.05	<0.05	<0.05	----	<0.05
alpha-Endosulfan	959-98-8	0.05	mg/kg		<0.05	<0.05	<0.05	----	<0.05



Analytical Results

Sub-Matrix: SOIL
 (Matrix: SOIL)

Sample ID

				BH17_1.5	BH06_0.4	BH06_1.8	DUP08	DUP07
Sampling date / time				14-Feb-2022 00:00	14-Feb-2022 00:00	14-Feb-2022 00:00	14-Feb-2022 00:00	14-Feb-2022 00:00
Compound	CAS Number	LOR	Unit	ES2204958-007	ES2204958-008	ES2204958-010	ES2204958-011	ES2204958-012
				Result	Result	Result	Result	Result

EP068A: Organochlorine Pesticides (OC) - Continued

cis-Chlordane	5103-71-9	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
4,4'-DDE	72-55-9	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
beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	<0.05	<0.05	----	<0.05
^ Endosulfan (sum)	115-29-7	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
Endrin aldehyde	7421-93-4	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	0.2	mg/kg	<0.2	<0.2	<0.2	----	<0.2
Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	<0.05	<0.05	----	<0.05
Methoxychlor	72-43-5	0.2	mg/kg	<0.2	<0.2	<0.2	----	<0.2
^ Sum of Aldrin + Dieldrin	309-00-2/60-57-1	0.05	mg/kg	<0.05	<0.05	<0.05	----	<0.05
^ 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

EP068B: Organophosphorus Pesticides (OP)

Dichlorvos	62-73-7	0.05	mg/kg	<0.05	<0.05	<0.05	----	<0.05
Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	<0.05	<0.05	----	<0.05
Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	<0.2	<0.2	----	<0.2
Dimethoate	60-51-5	0.05	mg/kg	<0.05	<0.05	<0.05	----	<0.05
Diazinon	333-41-5	0.05	mg/kg	<0.05	<0.05	<0.05	----	<0.05
Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	<0.05	<0.05	----	<0.05
Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	<0.2	<0.2	----	<0.2
Malathion	121-75-5	0.05	mg/kg	<0.05	<0.05	<0.05	----	<0.05
Fenthion	55-38-9	0.05	mg/kg	<0.05	<0.05	<0.05	----	<0.05
Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	<0.05	<0.05	----	<0.05
Parathion	56-38-2	0.2	mg/kg	<0.2	<0.2	<0.2	----	<0.2
Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	<0.05	<0.05	----	<0.05
Chlorfenvinphos	470-90-6	0.05	mg/kg	<0.05	<0.05	<0.05	----	<0.05
Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	<0.05	<0.05	----	<0.05
Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	<0.05	<0.05	----	<0.05
Prothiofos	34643-46-4	0.05	mg/kg	<0.05	<0.05	<0.05	----	<0.05
Ethion	563-12-2	0.05	mg/kg	<0.05	<0.05	<0.05	----	<0.05
Carbophenothion	786-19-6	0.05	mg/kg	<0.05	<0.05	<0.05	----	<0.05
Azinphos Methyl	86-50-0	0.05	mg/kg	<0.05	<0.05	<0.05	----	<0.05



Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	BH17_1.5	BH06_0.4	BH06_1.8	DUP08	DUP07
Sampling date / time					14-Feb-2022 00:00	14-Feb-2022 00:00	14-Feb-2022 00:00	14-Feb-2022 00:00	14-Feb-2022 00:00
Compound	CAS Number	LOR	Unit		ES2204958-007	ES2204958-008	ES2204958-010	ES2204958-011	ES2204958-012
					Result	Result	Result	Result	Result
EP074A: Monocyclic Aromatic Hydrocarbons									
Styrene	100-42-5	0.5	mg/kg		<0.5	----	<0.5	----	----
Isopropylbenzene	98-82-8	0.5	mg/kg		<0.5	----	<0.5	----	----
n-Propylbenzene	103-65-1	0.5	mg/kg		<0.5	----	<0.5	----	----
1,3,5-Trimethylbenzene	108-67-8	0.5	mg/kg		<0.5	----	<0.5	----	----
sec-Butylbenzene	135-98-8	0.5	mg/kg		<0.5	----	<0.5	----	----
1,2,4-Trimethylbenzene	95-63-6	0.5	mg/kg		<0.5	----	<0.5	----	----
tert-Butylbenzene	98-06-6	0.5	mg/kg		<0.5	----	<0.5	----	----
p-Isopropyltoluene	99-87-6	0.5	mg/kg		<0.5	----	<0.5	----	----
n-Butylbenzene	104-51-8	0.5	mg/kg		<0.5	----	<0.5	----	----
EP074B: Oxygenated Compounds									
Vinyl Acetate	108-05-4	5	mg/kg		<5	----	<5	----	----
2-Butanone (MEK)	78-93-3	5	mg/kg		<5	----	<5	----	----
4-Methyl-2-pentanone (MIBK)	108-10-1	5	mg/kg		<5	----	<5	----	----
2-Hexanone (MBK)	591-78-6	5	mg/kg		<5	----	<5	----	----
EP074C: Sulfonated Compounds									
Carbon disulfide	75-15-0	0.5	mg/kg		<0.5	----	<0.5	----	----
EP074D: Fumigants									
2,2-Dichloropropane	594-20-7	0.5	mg/kg		<0.5	----	<0.5	----	----
1,2-Dichloropropane	78-87-5	0.5	mg/kg		<0.5	----	<0.5	----	----
cis-1,3-Dichloropropylene	10061-01-5	0.5	mg/kg		<0.5	----	<0.5	----	----
trans-1,3-Dichloropropylene	10061-02-6	0.5	mg/kg		<0.5	----	<0.5	----	----
1,2-Dibromoethane (EDB)	106-93-4	0.5	mg/kg		<0.5	----	<0.5	----	----
EP074E: Halogenated Aliphatic Compounds									
Dichlorodifluoromethane	75-71-8	5	mg/kg		<5	----	<5	----	----
Chloromethane	74-87-3	5	mg/kg		<5	----	<5	----	----
Vinyl chloride	75-01-4	5	mg/kg		<5	----	<5	----	----
Bromomethane	74-83-9	5	mg/kg		<5	----	<5	----	----
Chloroethane	75-00-3	5	mg/kg		<5	----	<5	----	----
Trichlorofluoromethane	75-69-4	5	mg/kg		<5	----	<5	----	----
1,1-Dichloroethene	75-35-4	0.5	mg/kg		<0.5	----	<0.5	----	----
Iodomethane	74-88-4	0.5	mg/kg		<0.5	----	<0.5	----	----
trans-1,2-Dichloroethene	156-60-5	0.5	mg/kg		<0.5	----	<0.5	----	----
1,1-Dichloroethane	75-34-3	0.5	mg/kg		<0.5	----	<0.5	----	----
cis-1,2-Dichloroethene	156-59-2	0.5	mg/kg		<0.5	----	<0.5	----	----



Analytical Results

Sub-Matrix: SOIL
 (Matrix: SOIL)

Sample ID

				BH17_1.5	BH06_0.4	BH06_1.8	DUP08	DUP07
Sampling date / time				14-Feb-2022 00:00	14-Feb-2022 00:00	14-Feb-2022 00:00	14-Feb-2022 00:00	14-Feb-2022 00:00
Compound	CAS Number	LOR	Unit	ES2204958-007	ES2204958-008	ES2204958-010	ES2204958-011	ES2204958-012
				Result	Result	Result	Result	Result
EP074E: Halogenated Aliphatic Compounds - Continued								
1.1.1-Trichloroethane	71-55-6	0.5	mg/kg	<0.5	----	<0.5	----	----
1.1-Dichloropropylene	563-58-6	0.5	mg/kg	<0.5	----	<0.5	----	----
Carbon Tetrachloride	56-23-5	0.5	mg/kg	<0.5	----	<0.5	----	----
1.2-Dichloroethane	107-06-2	0.5	mg/kg	<0.5	----	<0.5	----	----
Trichloroethene	79-01-6	0.5	mg/kg	<0.5	----	<0.5	----	----
Dibromomethane	74-95-3	0.5	mg/kg	<0.5	----	<0.5	----	----
1.1.2-Trichloroethane	79-00-5	0.5	mg/kg	<0.5	----	<0.5	----	----
1.3-Dichloropropane	142-28-9	0.5	mg/kg	<0.5	----	<0.5	----	----
Tetrachloroethene	127-18-4	0.5	mg/kg	<0.5	----	<0.5	----	----
1.1.1.2-Tetrachloroethane	630-20-6	0.5	mg/kg	<0.5	----	<0.5	----	----
trans-1.4-Dichloro-2-butene	110-57-6	0.5	mg/kg	<0.5	----	<0.5	----	----
cis-1.4-Dichloro-2-butene	1476-11-5	0.5	mg/kg	<0.5	----	<0.5	----	----
1.1.2.2-Tetrachloroethane	79-34-5	0.5	mg/kg	<0.5	----	<0.5	----	----
1.2.3-Trichloropropane	96-18-4	0.5	mg/kg	<0.5	----	<0.5	----	----
Pentachloroethane	76-01-7	0.5	mg/kg	<0.5	----	<0.5	----	----
1.2-Dibromo-3-chloropropane	96-12-8	0.5	mg/kg	<0.5	----	<0.5	----	----
EP074F: Halogenated Aromatic Compounds								
Chlorobenzene	108-90-7	0.5	mg/kg	<0.5	----	<0.5	----	----
Bromobenzene	108-86-1	0.5	mg/kg	<0.5	----	<0.5	----	----
2-Chlorotoluene	95-49-8	0.5	mg/kg	<0.5	----	<0.5	----	----
4-Chlorotoluene	106-43-4	0.5	mg/kg	<0.5	----	<0.5	----	----
1.2.3-Trichlorobenzene	87-61-6	0.5	mg/kg	<0.5	----	<0.5	----	----
EP074G: Trihalomethanes								
Chloroform	67-66-3	0.5	mg/kg	<0.5	----	<0.5	----	----
Bromodichloromethane	75-27-4	0.5	mg/kg	<0.5	----	<0.5	----	----
Dibromochloromethane	124-48-1	0.5	mg/kg	<0.5	----	<0.5	----	----
Bromoform	75-25-2	0.5	mg/kg	<0.5	----	<0.5	----	----
EP075(SIM)A: Phenolic Compounds								
Phenol	108-95-2	0.5	mg/kg	<0.5	<0.5	<0.5	----	<0.5
2-Chlorophenol	95-57-8	0.5	mg/kg	<0.5	<0.5	<0.5	----	<0.5
2-Methylphenol	95-48-7	0.5	mg/kg	<0.5	<0.5	<0.5	----	<0.5
3- & 4-Methylphenol	1319-77-3	1	mg/kg	<1	<1	<1	----	<1
2-Nitrophenol	88-75-5	0.5	mg/kg	<0.5	<0.5	<0.5	----	<0.5
2.4-Dimethylphenol	105-67-9	0.5	mg/kg	<0.5	<0.5	<0.5	----	<0.5



Analytical Results

Sub-Matrix: SOIL
 (Matrix: SOIL)

Sample ID

				BH17_1.5	BH06_0.4	BH06_1.8	DUP08	DUP07
Sampling date / time				14-Feb-2022 00:00	14-Feb-2022 00:00	14-Feb-2022 00:00	14-Feb-2022 00:00	14-Feb-2022 00:00
Compound	CAS Number	LOR	Unit	ES2204958-007	ES2204958-008	ES2204958-010	ES2204958-011	ES2204958-012
				Result	Result	Result	Result	Result
EP075(SIM)A: Phenolic Compounds - Continued								
2,4-Dichlorophenol	120-83-2	0.5	mg/kg	<0.5	<0.5	<0.5	----	<0.5
2,6-Dichlorophenol	87-65-0	0.5	mg/kg	<0.5	<0.5	<0.5	----	<0.5
4-Chloro-3-methylphenol	59-50-7	0.5	mg/kg	<0.5	<0.5	<0.5	----	<0.5
2,4,6-Trichlorophenol	88-06-2	0.5	mg/kg	<0.5	<0.5	<0.5	----	<0.5
2,4,5-Trichlorophenol	95-95-4	0.5	mg/kg	<0.5	<0.5	<0.5	----	<0.5
Pentachlorophenol	87-86-5	2	mg/kg	<2	<2	<2	----	<2
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons								
Naphthalene	91-20-3	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
Acenaphthene	83-32-9	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	----	1.0
Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	<0.5	----	1.1
Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	<0.5	----	0.6
Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	<0.5	----	0.6
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	<0.5	<0.5	----	0.9
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	<0.5	<0.5	----	<0.5
Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	<0.5	<0.5	----	0.7
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	----	0.6
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg	<0.5	<0.5	<0.5	----	5.5
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg	<0.5	<0.5	<0.5	----	0.9
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg	0.6	0.6	0.6	----	1.2
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg	1.2	1.2	1.2	----	1.5
EP075A: Phenolic Compounds								
Phenol	108-95-2	0.5	mg/kg	<0.5	----	<0.5	----	----
2-Chlorophenol	95-57-8	0.5	mg/kg	<0.5	----	<0.5	----	----
2-Methylphenol	95-48-7	0.5	mg/kg	<0.5	----	<0.5	----	----
3- & 4-Methylphenol	1319-77-3	0.5	mg/kg	<0.5	----	<0.5	----	----
2-Nitrophenol	88-75-5	0.5	mg/kg	<0.5	----	<0.5	----	----
2,4-Dimethylphenol	105-67-9	0.5	mg/kg	<0.5	----	<0.5	----	----



Analytical Results

Sub-Matrix: SOIL
 (Matrix: SOIL)

Sample ID

				BH17_1.5	BH06_0.4	BH06_1.8	DUP08	DUP07
Sampling date / time				14-Feb-2022 00:00	14-Feb-2022 00:00	14-Feb-2022 00:00	14-Feb-2022 00:00	14-Feb-2022 00:00
Compound	CAS Number	LOR	Unit	ES2204958-007	ES2204958-008	ES2204958-010	ES2204958-011	ES2204958-012
				Result	Result	Result	Result	Result
EP075A: Phenolic Compounds - Continued								
2,4-Dichlorophenol	120-83-2	0.5	mg/kg	<0.5	----	<0.5	----	----
2,6-Dichlorophenol	87-65-0	0.5	mg/kg	<0.5	----	<0.5	----	----
4-Chloro-3-methylphenol	59-50-7	0.5	mg/kg	<0.5	----	<0.5	----	----
2,4,6-Trichlorophenol	88-06-2	0.5	mg/kg	<0.5	----	<0.5	----	----
2,4,5-Trichlorophenol	95-95-4	0.5	mg/kg	<0.5	----	<0.5	----	----
Pentachlorophenol	87-86-5	1	mg/kg	<1	----	<1	----	----
EP075B: Polynuclear Aromatic Hydrocarbons								
Naphthalene	91-20-3	0.5	mg/kg	<0.5	----	<0.5	----	----
2-Methylnaphthalene	91-57-6	0.5	mg/kg	<0.5	----	<0.5	----	----
2-Chloronaphthalene	91-58-7	0.5	mg/kg	<0.5	----	<0.5	----	----
Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	----	<0.5	----	----
Acenaphthene	83-32-9	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	----	----
N-2-Fluorenyl Acetamide	53-96-3	0.5	mg/kg	<0.5	----	<0.5	----	----
Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	----	<0.5	----	----
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	mg/kg	<1	----	<1	----	----
7,12-Dimethylbenz(a)anthracene	57-97-6	0.5	mg/kg	<0.5	----	<0.5	----	----
Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	----	<0.5	----	----
3-Methylcholanthrene	56-49-5	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 PAHs	----	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	----	----
EP075C: Phthalate Esters								
Dimethyl phthalate	131-11-3	0.5	mg/kg	<0.5	----	<0.5	----	----
Diethyl phthalate	84-66-2	0.5	mg/kg	<0.5	----	<0.5	----	----

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	BH17_1.5	BH06_0.4	BH06_1.8	DUP08	DUP07
Sampling date / time				14-Feb-2022 00:00	14-Feb-2022 00:00	14-Feb-2022 00:00	14-Feb-2022 00:00	14-Feb-2022 00:00	
Compound	CAS Number	LOR	Unit	ES2204958-007	ES2204958-008	ES2204958-010	ES2204958-011	ES2204958-012	
				Result	Result	Result	Result	Result	
EP075C: Phthalate Esters - Continued									
Di-n-butyl phthalate	84-74-2	0.5	mg/kg	<0.5	----	<0.5	----	----	
Butyl benzyl phthalate	85-68-7	0.5	mg/kg	<0.5	----	<0.5	----	----	
bis(2-ethylhexyl) phthalate	117-81-7	5.0	mg/kg	<5.0	----	<5.0	----	----	
Di-n-octylphthalate	117-84-0	0.5	mg/kg	<0.5	----	<0.5	----	----	
EP075D: Nitrosamines									
N-Nitrosomethylethylamine	10595-95-6	0.5	mg/kg	<0.5	----	<0.5	----	----	
N-Nitrosodiethylamine	55-18-5	0.5	mg/kg	<0.5	----	<0.5	----	----	
N-Nitrosopyrrolidine	930-55-2	1.0	mg/kg	<1.0	----	<1.0	----	----	
N-Nitrosomorpholine	59-89-2	0.5	mg/kg	<0.5	----	<0.5	----	----	
N-Nitrosodi-n-propylamine	621-64-7	0.5	mg/kg	<0.5	----	<0.5	----	----	
N-Nitrosopiperidine	100-75-4	0.5	mg/kg	<0.5	----	<0.5	----	----	
N-Nitrosodibutylamine	924-16-3	0.5	mg/kg	<0.5	----	<0.5	----	----	
N-Nitrosodiphenyl & Diphenylamine	86-30-6 122-39-4	1.0	mg/kg	<1.0	----	<1.0	----	----	
Methapyrilene	91-80-5	0.5	mg/kg	<0.5	----	<0.5	----	----	
EP075E: Nitroaromatics and Ketones									
2-Picoline	109-06-8	0.5	mg/kg	<0.5	----	<0.5	----	----	
Acetophenone	98-86-2	0.5	mg/kg	<0.5	----	<0.5	----	----	
Nitrobenzene	98-95-3	0.5	mg/kg	<0.5	----	<0.5	----	----	
Isophorone	78-59-1	0.5	mg/kg	<0.5	----	<0.5	----	----	
2,6-Dinitrotoluene	606-20-2	1.0	mg/kg	<1.0	----	<1.0	----	----	
2,4-Dinitrotoluene	121-14-2	1.0	mg/kg	<1.0	----	<1.0	----	----	
1-Naphthylamine	134-32-7	0.5	mg/kg	<0.5	----	<0.5	----	----	
4-Nitroquinoline-N-oxide	56-57-5	0.5	mg/kg	<0.5	----	<0.5	----	----	
5-Nitro-o-toluidine	99-55-8	0.5	mg/kg	<0.5	----	<0.5	----	----	
Azobenzene	103-33-3	1	mg/kg	<1	----	<1	----	----	
1,3,5-Trinitrobenzene	99-35-4	0.5	mg/kg	<0.5	----	<0.5	----	----	
Phenacetin	62-44-2	0.5	mg/kg	<0.5	----	<0.5	----	----	
4-Aminobiphenyl	92-67-1	0.5	mg/kg	<0.5	----	<0.5	----	----	
Pentachloronitrobenzene	82-68-8	0.5	mg/kg	<0.5	----	<0.5	----	----	
Pronamide	23950-58-5	0.5	mg/kg	<0.5	----	<0.5	----	----	
Dimethylaminoazobenzene	60-11-7	0.5	mg/kg	<0.5	----	<0.5	----	----	
Chlorobenzilate	510-15-6	0.5	mg/kg	<0.5	----	<0.5	----	----	
EP075F: Haloethers									



Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	BH17_1.5	BH06_0.4	BH06_1.8	DUP08	DUP07
Sampling date / time					14-Feb-2022 00:00	14-Feb-2022 00:00	14-Feb-2022 00:00	14-Feb-2022 00:00	14-Feb-2022 00:00
Compound	CAS Number	LOR	Unit		ES2204958-007	ES2204958-008	ES2204958-010	ES2204958-011	ES2204958-012
					Result	Result	Result	Result	Result
EP075F: Haloethers - Continued									
Bis(2-chloroethyl) ether	111-44-4	0.5	mg/kg		<0.5	----	<0.5	----	----
Bis(2-chloroethoxy) methane	111-91-1	0.5	mg/kg		<0.5	----	<0.5	----	----
4-Chlorophenyl phenyl ether	7005-72-3	0.5	mg/kg		<0.5	----	<0.5	----	----
4-Bromophenyl phenyl ether	101-55-3	0.5	mg/kg		<0.5	----	<0.5	----	----
EP075G: Chlorinated Hydrocarbons									
1,3-Dichlorobenzene	541-73-1	0.5	mg/kg		<0.5	----	<0.5	----	----
1,4-Dichlorobenzene	106-46-7	0.5	mg/kg		<0.5	----	<0.5	----	----
1,2-Dichlorobenzene	95-50-1	0.5	mg/kg		<0.5	----	<0.5	----	----
Hexachloroethane	67-72-1	0.5	mg/kg		<0.5	----	<0.5	----	----
1,2,4-Trichlorobenzene	120-82-1	0.5	mg/kg		<0.5	----	<0.5	----	----
Hexachloropropylene	1888-71-7	0.5	mg/kg		<0.5	----	<0.5	----	----
Hexachlorobutadiene	87-68-3	0.5	mg/kg		<0.5	----	<0.5	----	----
Hexachlorocyclopentadiene	77-47-4	2.5	mg/kg		<2.5	----	<2.5	----	----
Pentachlorobenzene	608-93-5	0.5	mg/kg		<0.5	----	<0.5	----	----
Hexachlorobenzene (HCB)	118-74-1	1.0	mg/kg		<1.0	----	<1.0	----	----
EP075H: Anilines and Benzidines									
Aniline	62-53-3	0.5	mg/kg		<0.5	----	<0.5	----	----
4-Chloroaniline	106-47-8	0.5	mg/kg		<0.5	----	<0.5	----	----
2-Nitroaniline	88-74-4	1.0	mg/kg		<1.0	----	<1.0	----	----
3-Nitroaniline	99-09-2	1.0	mg/kg		<1.0	----	<1.0	----	----
Dibenzofuran	132-64-9	0.5	mg/kg		<0.5	----	<0.5	----	----
4-Nitroaniline	100-01-6	0.5	mg/kg		<0.5	----	<0.5	----	----
Carbazole	86-74-8	0.5	mg/kg		<0.5	----	<0.5	----	----
3,3'-Dichlorobenzidine	91-94-1	0.5	mg/kg		<0.5	----	<0.5	----	----
EP075I: Organochlorine Pesticides									
alpha-BHC	319-84-6	0.5	mg/kg		<0.5	----	<0.5	----	----
beta-BHC	319-85-7	0.5	mg/kg		<0.5	----	<0.5	----	----
gamma-BHC	58-89-9	0.5	mg/kg		<0.5	----	<0.5	----	----
delta-BHC	319-86-8	0.5	mg/kg		<0.5	----	<0.5	----	----
Heptachlor	76-44-8	0.5	mg/kg		<0.5	----	<0.5	----	----
Aldrin	309-00-2	0.5	mg/kg		<0.5	----	<0.5	----	----
Heptachlor epoxide	1024-57-3	0.5	mg/kg		<0.5	----	<0.5	----	----
alpha-Endosulfan	959-98-8	0.5	mg/kg		<0.5	----	<0.5	----	----
4,4'-DDE	72-55-9	0.5	mg/kg		<0.5	----	<0.5	----	----



Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	BH17_1.5	BH06_0.4	BH06_1.8	DUP08	DUP07
Sampling date / time					14-Feb-2022 00:00	14-Feb-2022 00:00	14-Feb-2022 00:00	14-Feb-2022 00:00	14-Feb-2022 00:00
Compound	CAS Number	LOR	Unit		ES2204958-007	ES2204958-008	ES2204958-010	ES2204958-011	ES2204958-012
					Result	Result	Result	Result	Result
EP075I: Organochlorine Pesticides - Continued									
Dieldrin	60-57-1	0.5	mg/kg		<0.5	----	<0.5	----	----
Endrin	72-20-8	0.5	mg/kg		<0.5	----	<0.5	----	----
beta-Endosulfan	33213-65-9	0.5	mg/kg		<0.5	----	<0.5	----	----
4,4`-DDD	72-54-8	0.5	mg/kg		<0.5	----	<0.5	----	----
Endosulfan sulfate	1031-07-8	0.5	mg/kg		<0.5	----	<0.5	----	----
4,4`-DDT	50-29-3	1.0	mg/kg		<1.0	----	<1.0	----	----
EP075J: Organophosphorus Pesticides									
Dichlorvos	62-73-7	0.5	mg/kg		<0.5	----	<0.5	----	----
Dimethoate	60-51-5	0.5	mg/kg		<0.5	----	<0.5	----	----
Diazinon	333-41-5	0.5	mg/kg		<0.5	----	<0.5	----	----
Chlorpyrifos-methyl	5598-13-0	0.5	mg/kg		<0.5	----	<0.5	----	----
Malathion	121-75-5	0.5	mg/kg		<0.5	----	<0.5	----	----
Fenthion	55-38-9	0.5	mg/kg		<0.5	----	<0.5	----	----
Chlorpyrifos	2921-88-2	0.5	mg/kg		<0.5	----	<0.5	----	----
Pirimphos-ethyl	23505-41-1	0.5	mg/kg		<0.5	----	<0.5	----	----
Chlorfenvinphos	470-90-6	0.5	mg/kg		<0.5	----	<0.5	----	----
Prothiofos	34643-46-4	0.5	mg/kg		<0.5	----	<0.5	----	----
Ethion	563-12-2	0.5	mg/kg		<0.5	----	<0.5	----	----
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	----	10	mg/kg		<10	<10	<10	----	<10
C10 - C14 Fraction	----	50	mg/kg		<50	<50	<50	----	<50
C15 - C28 Fraction	----	100	mg/kg		<100	<100	<100	----	<100
C29 - C36 Fraction	----	100	mg/kg		<100	<100	<100	----	<100
^ C10 - C36 Fraction (sum)	----	50	mg/kg		<50	<50	<50	----	<50
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
C6 - C10 Fraction	C6_C10	10	mg/kg		<10	<10	<10	----	<10
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg		<10	<10	<10	----	<10
>C10 - C16 Fraction	----	50	mg/kg		<50	<50	<50	----	<50
>C16 - C34 Fraction	----	100	mg/kg		<100	<100	<100	----	<100
>C34 - C40 Fraction	----	100	mg/kg		<100	<100	<100	----	<100
^ >C10 - C40 Fraction (sum)	----	50	mg/kg		<50	<50	<50	----	<50
^ >C10 - C16 Fraction minus Naphthalene (F2)	----	50	mg/kg		<50	<50	<50	----	<50

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	BH17_1.5	BH06_0.4	BH06_1.8	DUP08	DUP07
Sampling date / time				14-Feb-2022 00:00	14-Feb-2022 00:00	14-Feb-2022 00:00	14-Feb-2022 00:00	14-Feb-2022 00:00	
Compound	CAS Number	LOR	Unit	ES2204958-007	ES2204958-008	ES2204958-010	ES2204958-011	ES2204958-012	
				Result	Result	Result	Result	Result	
EP080: BTEXN									
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	
ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	<0.5	----	<0.5	
^ Sum of BTEX	----	0.2	mg/kg	<0.2	<0.2	<0.2	----	<0.2	
^ Total Xylenes	----	0.5	mg/kg	<0.5	<0.5	<0.5	----	<0.5	
Naphthalene	91-20-3	1	mg/kg	<1	<1	<1	----	<1	
EP231A: Perfluoroalkyl Sulfonic Acids									
Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.0002	mg/kg	----	<0.0002	----	<0.0002	<0.0002	
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.0002	mg/kg	----	<0.0002	----	<0.0002	<0.0002	
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.0002	mg/kg	----	<0.0002	----	0.0004	<0.0002	
EP231B: Perfluoroalkyl Carboxylic Acids									
Perfluorobutanoic acid (PFBA)	375-22-4	0.001	mg/kg	----	<0.001	----	<0.001	<0.001	
Perfluoropentanoic acid (PFPeA)	2706-90-3	0.0002	mg/kg	----	<0.0002	----	<0.0002	<0.0002	
Perfluorohexanoic acid (PFHxA)	307-24-4	0.0002	mg/kg	----	<0.0002	----	<0.0002	<0.0002	
Perfluoroheptanoic acid (PFHpA)	375-85-9	0.0002	mg/kg	----	<0.0002	----	<0.0002	<0.0002	
Perfluorooctanoic acid (PFOA)	335-67-1	0.0002	mg/kg	----	<0.0002	----	<0.0002	<0.0002	
EP231D: (n:2) Fluorotelomer Sulfonic Acids									
4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.0005	mg/kg	----	<0.0005	----	<0.0005	<0.0005	
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.0005	mg/kg	----	<0.0005	----	<0.0005	<0.0005	
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.0005	mg/kg	----	<0.0005	----	<0.0005	<0.0005	
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.0005	mg/kg	----	<0.0005	----	<0.0005	<0.0005	
EP231P: PFAS Sums									
Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.0002	mg/kg	----	<0.0002	----	0.0004	<0.0002	
Sum of PFAS (WA DER List)	----	0.0002	mg/kg	----	<0.0002	----	0.0004	<0.0002	
EP066S: PCB Surrogate									



Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	BH17_1.5	BH06_0.4	BH06_1.8	DUP08	DUP07
Sampling date / time					14-Feb-2022 00:00	14-Feb-2022 00:00	14-Feb-2022 00:00	14-Feb-2022 00:00	14-Feb-2022 00:00
Compound	CAS Number	LOR	Unit		ES2204958-007	ES2204958-008	ES2204958-010	ES2204958-011	ES2204958-012
					Result	Result	Result	Result	Result
EP066S: PCB Surrogate - Continued									
Decachlorobiphenyl	2051-24-3	0.1	%		102	90.0	86.1	----	98.7
EP068S: Organochlorine Pesticide Surrogate									
Dibromo-DDE	21655-73-2	0.05	%		119	89.9	96.2	----	102
EP068T: Organophosphorus Pesticide Surrogate									
DEF	78-48-8	0.05	%		88.1	75.2	69.4	----	98.2
EP074S: VOC Surrogates									
1,2-Dichloroethane-D4	17060-07-0	0.5	%		92.6	----	80.2	----	----
Toluene-D8	2037-26-5	0.5	%		104	----	90.8	----	----
4-Bromofluorobenzene	460-00-4	0.5	%		101	----	90.9	----	----
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	0.5	%		79.4	83.2	74.8	----	82.0
2-Chlorophenol-D4	93951-73-6	0.5	%		87.0	73.2	77.5	----	82.7
2,4,6-Tribromophenol	118-79-6	0.5	%		71.0	Not Determined	67.0	----	72.2
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	0.5	%		100	109	98.5	----	101
Anthracene-d10	1719-06-8	0.5	%		106	112	100	----	104
4-Terphenyl-d14	1718-51-0	0.5	%		94.6	100	90.7	----	92.8
EP075S: Acid Extractable Surrogates									
2-Fluorophenol	367-12-4	0.5	%		104	----	109	----	----
Phenol-d6	13127-88-3	0.5	%		92.6	----	95.4	----	----
2-Chlorophenol-D4	93951-73-6	0.5	%		93.3	----	90.8	----	----
2,4,6-Tribromophenol	118-79-6	0.5	%		70.2	----	67.0	----	----
EP075T: Base/Neutral Extractable Surrogates									
Nitrobenzene-D5	4165-60-0	0.5	%		98.5	----	101	----	----
1,2-Dichlorobenzene-D4	2199-69-1	0.5	%		84.7	----	90.2	----	----
2-Fluorobiphenyl	321-60-8	0.5	%		104	----	118	----	----
Anthracene-d10	1719-06-8	0.5	%		115	----	114	----	----
4-Terphenyl-d14	1718-51-0	0.5	%		92.3	----	91.1	----	----
EP080S: TPH(V)/BTEX Surrogates									
1,2-Dichloroethane-D4	17060-07-0	0.2	%		103	99.5	88.7	----	90.4
Toluene-D8	2037-26-5	0.2	%		100	95.8	87.5	----	88.6
4-Bromofluorobenzene	460-00-4	0.2	%		94.2	91.7	84.6	----	85.1
EP231S: PFAS Surrogate									
13C4-PFOS	----	0.0002	%		----	107	----	107	103



Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	BH17_1.5	BH06_0.4	BH06_1.8	DUP08	DUP07
Sampling date / time					14-Feb-2022 00:00	14-Feb-2022 00:00	14-Feb-2022 00:00	14-Feb-2022 00:00	14-Feb-2022 00:00
Compound	CAS Number	LOR	Unit		ES2204958-007	ES2204958-008	ES2204958-010	ES2204958-011	ES2204958-012
Result					Result	Result	Result	Result	Result
EP231S: PFAS Surrogate - Continued									
13C8-PFOA	----	0.0002	%		----	98.0	----	102	97.5



Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	BH16_0.4	BH16_1.8	DUP09	TRP08	TRP09
Sampling date / time					14-Feb-2022 00:00	14-Feb-2022 00:00	14-Feb-2022 00:00	14-Feb-2022 00:00	14-Feb-2022 00:00
Compound	CAS Number	LOR	Unit		ES2204958-013	ES2204958-014	ES2204958-018	ES2204958-019	ES2204958-020
					Result	Result	Result	Result	Result
EA055: Moisture Content (Dried @ 105-110°C)									
Moisture Content	----	0.1	%		----	----	----	6.6	----
Moisture Content	----	1.0	%		10.1	26.6	3.2	----	3.1
EA200: AS 4964 - 2004 Identification of Asbestos in Soils									
Asbestos Detected	1332-21-4	0.1	g/kg		No	----	----	----	----
Asbestos (Trace)	1332-21-4	5	Fibres		No	----	----	----	----
Asbestos Type	1332-21-4	-	--		-	----	----	----	----
Synthetic Mineral Fibre	----	0.1	g/kg		No	----	----	----	----
Organic Fibre	----	0.1	g/kg		No	----	----	----	----
Sample weight (dry)	----	0.01	g		59.0	----	----	----	----
APPROVED IDENTIFIER:	----	-	--		A. SMYLIÉ	----	----	----	----
EG005(ED093)T: Total Metals by ICP-AES									
Arsenic	7440-38-2	5	mg/kg		10	<5	<5	----	<5
Cadmium	7440-43-9	1	mg/kg		31	<1	<1	----	<1
Chromium	7440-47-3	2	mg/kg		7	<2	<2	----	<2
Copper	7440-50-8	5	mg/kg		59	<5	17	----	<5
Lead	7439-92-1	5	mg/kg		19600	495	12	----	<5
Nickel	7440-02-0	2	mg/kg		7	<2	<2	----	<2
Zinc	7440-66-6	5	mg/kg		1330	23	18	----	7
EG035T: Total Recoverable Mercury by FIMS									
Mercury	7439-97-6	0.1	mg/kg		0.2	<0.1	<0.1	----	<0.1
EP066: Polychlorinated Biphenyls (PCB)									
Total Polychlorinated biphenyls	----	0.1	mg/kg		<0.1	<0.1	<0.1	----	<0.1
EP068A: Organochlorine Pesticides (OC)									
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
^ Total Chlordane (sum)	----	0.05	mg/kg		<0.05	<0.05	<0.05	----	<0.05
trans-Chlordane	5103-74-2	0.05	mg/kg		<0.05	<0.05	<0.05	----	<0.05
alpha-Endosulfan	959-98-8	0.05	mg/kg		<0.05	<0.05	<0.05	----	<0.05



Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	BH16_0.4	BH16_1.8	DUP09	TRP08	TRP09
Sampling date / time					14-Feb-2022 00:00	14-Feb-2022 00:00	14-Feb-2022 00:00	14-Feb-2022 00:00	14-Feb-2022 00:00
Compound	CAS Number	LOR	Unit		ES2204958-013	ES2204958-014	ES2204958-018	ES2204958-019	ES2204958-020
					Result	Result	Result	Result	Result
EP068A: Organochlorine Pesticides (OC) - Continued									
cis-Chlordane	5103-71-9	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
4,4'-DDE	72-55-9	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
beta-Endosulfan	33213-65-9	0.05	mg/kg		<0.05	<0.05	<0.05	----	<0.05
^ Endosulfan (sum)	115-29-7	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
Endrin aldehyde	7421-93-4	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	0.2	mg/kg		<0.2	<0.2	<0.2	----	<0.2
Endrin ketone	53494-70-5	0.05	mg/kg		<0.05	<0.05	<0.05	----	<0.05
Methoxychlor	72-43-5	0.2	mg/kg		<0.2	<0.2	<0.2	----	<0.2
^ Sum of Aldrin + Dieldrin	309-00-2/60-57-1	0.05	mg/kg		<0.05	<0.05	<0.05	----	<0.05
^ 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
EP068B: Organophosphorus Pesticides (OP)									
Dichlorvos	62-73-7	0.05	mg/kg		<0.05	<0.05	<0.05	----	<0.05
Demeton-S-methyl	919-86-8	0.05	mg/kg		<0.05	<0.05	<0.05	----	<0.05
Monocrotophos	6923-22-4	0.2	mg/kg		<0.2	<0.2	<0.2	----	<0.2
Dimethoate	60-51-5	0.05	mg/kg		<0.05	<0.05	<0.05	----	<0.05
Diazinon	333-41-5	0.05	mg/kg		<0.05	<0.05	<0.05	----	<0.05
Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg		<0.05	<0.05	<0.05	----	<0.05
Parathion-methyl	298-00-0	0.2	mg/kg		<0.2	<0.2	<0.2	----	<0.2
Malathion	121-75-5	0.05	mg/kg		<0.05	<0.05	<0.05	----	<0.05
Fenthion	55-38-9	0.05	mg/kg		<0.05	<0.05	<0.05	----	<0.05
Chlorpyrifos	2921-88-2	0.05	mg/kg		<0.05	<0.05	<0.05	----	<0.05
Parathion	56-38-2	0.2	mg/kg		<0.2	<0.2	<0.2	----	<0.2
Pirimphos-ethyl	23505-41-1	0.05	mg/kg		<0.05	<0.05	<0.05	----	<0.05
Chlorfenvinphos	470-90-6	0.05	mg/kg		<0.05	<0.05	<0.05	----	<0.05
Bromophos-ethyl	4824-78-6	0.05	mg/kg		<0.05	<0.05	<0.05	----	<0.05
Fenamiphos	22224-92-6	0.05	mg/kg		<0.05	<0.05	<0.05	----	<0.05
Prothiofos	34643-46-4	0.05	mg/kg		<0.05	<0.05	<0.05	----	<0.05
Ethion	563-12-2	0.05	mg/kg		<0.05	<0.05	<0.05	----	<0.05
Carbophenothion	786-19-6	0.05	mg/kg		<0.05	<0.05	<0.05	----	<0.05
Azinphos Methyl	86-50-0	0.05	mg/kg		<0.05	<0.05	<0.05	----	<0.05



Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	BH16_0.4	BH16_1.8	DUP09	TRP08	TRP09
Sampling date / time					14-Feb-2022 00:00	14-Feb-2022 00:00	14-Feb-2022 00:00	14-Feb-2022 00:00	14-Feb-2022 00:00
Compound	CAS Number	LOR	Unit		ES2204958-013	ES2204958-014	ES2204958-018	ES2204958-019	ES2204958-020
					Result	Result	Result	Result	Result
EP074A: Monocyclic Aromatic Hydrocarbons									
Styrene	100-42-5	0.5	mg/kg		----	<0.5	----	----	----
Isopropylbenzene	98-82-8	0.5	mg/kg		----	<0.5	----	----	----
n-Propylbenzene	103-65-1	0.5	mg/kg		----	<0.5	----	----	----
1,3,5-Trimethylbenzene	108-67-8	0.5	mg/kg		----	<0.5	----	----	----
sec-Butylbenzene	135-98-8	0.5	mg/kg		----	<0.5	----	----	----
1,2,4-Trimethylbenzene	95-63-6	0.5	mg/kg		----	<0.5	----	----	----
tert-Butylbenzene	98-06-6	0.5	mg/kg		----	<0.5	----	----	----
p-Isopropyltoluene	99-87-6	0.5	mg/kg		----	<0.5	----	----	----
n-Butylbenzene	104-51-8	0.5	mg/kg		----	<0.5	----	----	----
EP074B: Oxygenated Compounds									
Vinyl Acetate	108-05-4	5	mg/kg		----	<5	----	----	----
2-Butanone (MEK)	78-93-3	5	mg/kg		----	<5	----	----	----
4-Methyl-2-pentanone (MIBK)	108-10-1	5	mg/kg		----	<5	----	----	----
2-Hexanone (MBK)	591-78-6	5	mg/kg		----	<5	----	----	----
EP074C: Sulfonated Compounds									
Carbon disulfide	75-15-0	0.5	mg/kg		----	<0.5	----	----	----
EP074D: Fumigants									
2,2-Dichloropropane	594-20-7	0.5	mg/kg		----	<0.5	----	----	----
1,2-Dichloropropane	78-87-5	0.5	mg/kg		----	<0.5	----	----	----
cis-1,3-Dichloropropylene	10061-01-5	0.5	mg/kg		----	<0.5	----	----	----
trans-1,3-Dichloropropylene	10061-02-6	0.5	mg/kg		----	<0.5	----	----	----
1,2-Dibromoethane (EDB)	106-93-4	0.5	mg/kg		----	<0.5	----	----	----
EP074E: Halogenated Aliphatic Compounds									
Dichlorodifluoromethane	75-71-8	5	mg/kg		----	<5	----	----	----
Chloromethane	74-87-3	5	mg/kg		----	<5	----	----	----
Vinyl chloride	75-01-4	5	mg/kg		----	<5	----	----	----
Bromomethane	74-83-9	5	mg/kg		----	<5	----	----	----
Chloroethane	75-00-3	5	mg/kg		----	<5	----	----	----
Trichlorofluoromethane	75-69-4	5	mg/kg		----	<5	----	----	----
1,1-Dichloroethene	75-35-4	0.5	mg/kg		----	<0.5	----	----	----
Iodomethane	74-88-4	0.5	mg/kg		----	<0.5	----	----	----
trans-1,2-Dichloroethene	156-60-5	0.5	mg/kg		----	<0.5	----	----	----
1,1-Dichloroethane	75-34-3	0.5	mg/kg		----	<0.5	----	----	----
cis-1,2-Dichloroethene	156-59-2	0.5	mg/kg		----	<0.5	----	----	----



Analytical Results

Sub-Matrix: SOIL
 (Matrix: SOIL)

Sample ID

				BH16_0.4	BH16_1.8	DUP09	TRP08	TRP09
Sampling date / time				14-Feb-2022 00:00	14-Feb-2022 00:00	14-Feb-2022 00:00	14-Feb-2022 00:00	14-Feb-2022 00:00
Compound	CAS Number	LOR	Unit	ES2204958-013	ES2204958-014	ES2204958-018	ES2204958-019	ES2204958-020
				Result	Result	Result	Result	Result
EP074E: Halogenated Aliphatic Compounds - Continued								
1.1.1-Trichloroethane	71-55-6	0.5	mg/kg	----	<0.5	----	----	----
1.1-Dichloropropylene	563-58-6	0.5	mg/kg	----	<0.5	----	----	----
Carbon Tetrachloride	56-23-5	0.5	mg/kg	----	<0.5	----	----	----
1.2-Dichloroethane	107-06-2	0.5	mg/kg	----	<0.5	----	----	----
Trichloroethene	79-01-6	0.5	mg/kg	----	<0.5	----	----	----
Dibromomethane	74-95-3	0.5	mg/kg	----	<0.5	----	----	----
1.1.2-Trichloroethane	79-00-5	0.5	mg/kg	----	<0.5	----	----	----
1.3-Dichloropropane	142-28-9	0.5	mg/kg	----	<0.5	----	----	----
Tetrachloroethene	127-18-4	0.5	mg/kg	----	<0.5	----	----	----
1.1.1.2-Tetrachloroethane	630-20-6	0.5	mg/kg	----	<0.5	----	----	----
trans-1.4-Dichloro-2-butene	110-57-6	0.5	mg/kg	----	<0.5	----	----	----
cis-1.4-Dichloro-2-butene	1476-11-5	0.5	mg/kg	----	<0.5	----	----	----
1.1.2.2-Tetrachloroethane	79-34-5	0.5	mg/kg	----	<0.5	----	----	----
1.2.3-Trichloropropane	96-18-4	0.5	mg/kg	----	<0.5	----	----	----
Pentachloroethane	76-01-7	0.5	mg/kg	----	<0.5	----	----	----
1.2-Dibromo-3-chloropropane	96-12-8	0.5	mg/kg	----	<0.5	----	----	----
EP074F: Halogenated Aromatic Compounds								
Chlorobenzene	108-90-7	0.5	mg/kg	----	<0.5	----	----	----
Bromobenzene	108-86-1	0.5	mg/kg	----	<0.5	----	----	----
2-Chlorotoluene	95-49-8	0.5	mg/kg	----	<0.5	----	----	----
4-Chlorotoluene	106-43-4	0.5	mg/kg	----	<0.5	----	----	----
1.2.3-Trichlorobenzene	87-61-6	0.5	mg/kg	----	<0.5	----	----	----
EP074G: Trihalomethanes								
Chloroform	67-66-3	0.5	mg/kg	----	<0.5	----	----	----
Bromodichloromethane	75-27-4	0.5	mg/kg	----	<0.5	----	----	----
Dibromochloromethane	124-48-1	0.5	mg/kg	----	<0.5	----	----	----
Bromoform	75-25-2	0.5	mg/kg	----	<0.5	----	----	----
EP075(SIM)A: Phenolic Compounds								
Phenol	108-95-2	0.5	mg/kg	<0.5	<0.5	<0.5	----	<0.5
2-Chlorophenol	95-57-8	0.5	mg/kg	<0.5	<0.5	<0.5	----	<0.5
2-Methylphenol	95-48-7	0.5	mg/kg	<0.5	<0.5	<0.5	----	<0.5
3- & 4-Methylphenol	1319-77-3	1	mg/kg	<1	<1	<1	----	<1
2-Nitrophenol	88-75-5	0.5	mg/kg	<0.5	<0.5	<0.5	----	<0.5
2.4-Dimethylphenol	105-67-9	0.5	mg/kg	<0.5	<0.5	<0.5	----	<0.5



Analytical Results

Sub-Matrix: SOIL
 (Matrix: SOIL)

Sample ID

				BH16_0.4	BH16_1.8	DUP09	TRP08	TRP09
Sampling date / time				14-Feb-2022 00:00	14-Feb-2022 00:00	14-Feb-2022 00:00	14-Feb-2022 00:00	14-Feb-2022 00:00
Compound	CAS Number	LOR	Unit	ES2204958-013	ES2204958-014	ES2204958-018	ES2204958-019	ES2204958-020
				Result	Result	Result	Result	Result
EP075(SIM)A: Phenolic Compounds - Continued								
2,4-Dichlorophenol	120-83-2	0.5	mg/kg	<0.5	<0.5	<0.5	----	<0.5
2,6-Dichlorophenol	87-65-0	0.5	mg/kg	<0.5	<0.5	<0.5	----	<0.5
4-Chloro-3-methylphenol	59-50-7	0.5	mg/kg	<0.5	<0.5	<0.5	----	<0.5
2,4,6-Trichlorophenol	88-06-2	0.5	mg/kg	<0.5	<0.5	<0.5	----	<0.5
2,4,5-Trichlorophenol	95-95-4	0.5	mg/kg	<0.5	<0.5	<0.5	----	<0.5
Pentachlorophenol	87-86-5	2	mg/kg	<2	<2	<2	----	<2
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons								
Naphthalene	91-20-3	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
Acenaphthene	83-32-9	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	0.6	<0.5	<0.5	----	<0.5
Benzo(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	<0.5	----	<0.5
Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	<0.5	----	<0.5
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	0.8	<0.5	<0.5	----	<0.5
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	<0.5	<0.5	----	<0.5
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	0.7	<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	0.9	<0.5	<0.5	----	<0.5
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg	4.0	<0.5	<0.5	----	<0.5
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg	0.6	<0.5	<0.5	----	<0.5
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg	1.0	0.6	0.6	----	0.6
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg	1.3	1.2	1.2	----	1.2
EP075A: Phenolic Compounds								
Phenol	108-95-2	0.5	mg/kg	----	<0.5	----	----	----
2-Chlorophenol	95-57-8	0.5	mg/kg	----	<0.5	----	----	----
2-Methylphenol	95-48-7	0.5	mg/kg	----	<0.5	----	----	----
3- & 4-Methylphenol	1319-77-3	0.5	mg/kg	----	<0.5	----	----	----
2-Nitrophenol	88-75-5	0.5	mg/kg	----	<0.5	----	----	----
2,4-Dimethylphenol	105-67-9	0.5	mg/kg	----	<0.5	----	----	----



Analytical Results

Sub-Matrix: SOIL
 (Matrix: SOIL)

Sample ID

				BH16_0.4	BH16_1.8	DUP09	TRP08	TRP09
Sampling date / time				14-Feb-2022 00:00	14-Feb-2022 00:00	14-Feb-2022 00:00	14-Feb-2022 00:00	14-Feb-2022 00:00
Compound	CAS Number	LOR	Unit	ES2204958-013	ES2204958-014	ES2204958-018	ES2204958-019	ES2204958-020
				Result	Result	Result	Result	Result
EP075A: Phenolic Compounds - Continued								
2,4-Dichlorophenol	120-83-2	0.5	mg/kg	----	<0.5	----	----	----
2,6-Dichlorophenol	87-65-0	0.5	mg/kg	----	<0.5	----	----	----
4-Chloro-3-methylphenol	59-50-7	0.5	mg/kg	----	<0.5	----	----	----
2,4,6-Trichlorophenol	88-06-2	0.5	mg/kg	----	<0.5	----	----	----
2,4,5-Trichlorophenol	95-95-4	0.5	mg/kg	----	<0.5	----	----	----
Pentachlorophenol	87-86-5	1	mg/kg	----	<1	----	----	----
EP075B: Polynuclear Aromatic Hydrocarbons								
Naphthalene	91-20-3	0.5	mg/kg	----	<0.5	----	----	----
2-Methylnaphthalene	91-57-6	0.5	mg/kg	----	<0.5	----	----	----
2-Chloronaphthalene	91-58-7	0.5	mg/kg	----	<0.5	----	----	----
Acenaphthylene	208-96-8	0.5	mg/kg	----	<0.5	----	----	----
Acenaphthene	83-32-9	0.5	mg/kg	----	<0.5	----	----	----
Fluorene	86-73-7	0.5	mg/kg	----	<0.5	----	----	----
Phenanthrene	85-01-8	0.5	mg/kg	----	<0.5	----	----	----
Anthracene	120-12-7	0.5	mg/kg	----	<0.5	----	----	----
Fluoranthene	206-44-0	0.5	mg/kg	----	<0.5	----	----	----
Pyrene	129-00-0	0.5	mg/kg	----	<0.5	----	----	----
N-2-Fluorenyl Acetamide	53-96-3	0.5	mg/kg	----	<0.5	----	----	----
Benzo(a)anthracene	56-55-3	0.5	mg/kg	----	<0.5	----	----	----
Chrysene	218-01-9	0.5	mg/kg	----	<0.5	----	----	----
Benzo(b+j) & Benzo(k)fluoranthene	205-99-2 207-08-9	1	mg/kg	----	<1	----	----	----
7,12-Dimethylbenzo(a)anthracene	57-97-6	0.5	mg/kg	----	<0.5	----	----	----
Benzo(a)pyrene	50-32-8	0.5	mg/kg	----	<0.5	----	----	----
3-Methylcholanthrene	56-49-5	0.5	mg/kg	----	<0.5	----	----	----
Indeno(1,2,3-cd)pyrene	193-39-5	0.5	mg/kg	----	<0.5	----	----	----
Dibenz(a,h)anthracene	53-70-3	0.5	mg/kg	----	<0.5	----	----	----
Benzo(g,h,i)perylene	191-24-2	0.5	mg/kg	----	<0.5	----	----	----
^ Sum of PAHs	----	0.5	mg/kg	----	<0.5	----	----	----
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg	----	<0.5	----	----	----
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg	----	0.6	----	----	----
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg	----	1.2	----	----	----
EP075C: Phthalate Esters								
Dimethyl phthalate	131-11-3	0.5	mg/kg	----	<0.5	----	----	----
Diethyl phthalate	84-66-2	0.5	mg/kg	----	<0.5	----	----	----

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID		BH16_0.4		BH16_1.8		DUP09		TRP08		TRP09	
Sampling date / time				14-Feb-2022 00:00		14-Feb-2022 00:00		14-Feb-2022 00:00		14-Feb-2022 00:00		14-Feb-2022 00:00		14-Feb-2022 00:00	
Compound		CAS Number	LOR	Unit	ES2204958-013		ES2204958-014		ES2204958-018		ES2204958-019		ES2204958-020		
					Result		Result		Result		Result		Result		
EP075C: Phthalate Esters - Continued															
Di-n-butyl phthalate		84-74-2	0.5	mg/kg	----		<0.5		----		----		----		
Butyl benzyl phthalate		85-68-7	0.5	mg/kg	----		<0.5		----		----		----		
bis(2-ethylhexyl) phthalate		117-81-7	5.0	mg/kg	----		<5.0		----		----		----		
Di-n-octylphthalate		117-84-0	0.5	mg/kg	----		<0.5		----		----		----		
EP075D: Nitrosamines															
N-Nitrosomethylethylamine		10595-95-6	0.5	mg/kg	----		<0.5		----		----		----		
N-Nitrosodiethylamine		55-18-5	0.5	mg/kg	----		<0.5		----		----		----		
N-Nitrosopyrrolidine		930-55-2	1.0	mg/kg	----		<1.0		----		----		----		
N-Nitrosomorpholine		59-89-2	0.5	mg/kg	----		<0.5		----		----		----		
N-Nitrosodi-n-propylamine		621-64-7	0.5	mg/kg	----		<0.5		----		----		----		
N-Nitrosopiperidine		100-75-4	0.5	mg/kg	----		<0.5		----		----		----		
N-Nitrosodibutylamine		924-16-3	0.5	mg/kg	----		<0.5		----		----		----		
N-Nitrosodiphenyl & Diphenylamine		86-30-6	122-39-4	1.0	mg/kg		----		<1.0		----		----		
Methapyrilene		91-80-5	0.5	mg/kg	----		<0.5		----		----		----		
EP075E: Nitroaromatics and Ketones															
2-Picoline		109-06-8	0.5	mg/kg	----		<0.5		----		----		----		
Acetophenone		98-86-2	0.5	mg/kg	----		<0.5		----		----		----		
Nitrobenzene		98-95-3	0.5	mg/kg	----		<0.5		----		----		----		
Isophorone		78-59-1	0.5	mg/kg	----		<0.5		----		----		----		
2,6-Dinitrotoluene		606-20-2	1.0	mg/kg	----		<1.0		----		----		----		
2,4-Dinitrotoluene		121-14-2	1.0	mg/kg	----		<1.0		----		----		----		
1-Naphthylamine		134-32-7	0.5	mg/kg	----		<0.5		----		----		----		
4-Nitroquinoline-N-oxide		56-57-5	0.5	mg/kg	----		<0.5		----		----		----		
5-Nitro-o-toluidine		99-55-8	0.5	mg/kg	----		<0.5		----		----		----		
Azobenzene		103-33-3	1	mg/kg	----		<1		----		----		----		
1,3,5-Trinitrobenzene		99-35-4	0.5	mg/kg	----		<0.5		----		----		----		
Phenacetin		62-44-2	0.5	mg/kg	----		<0.5		----		----		----		
4-Aminobiphenyl		92-67-1	0.5	mg/kg	----		<0.5		----		----		----		
Pentachloronitrobenzene		82-68-8	0.5	mg/kg	----		<0.5		----		----		----		
Pronamide		23950-58-5	0.5	mg/kg	----		<0.5		----		----		----		
Dimethylaminoazobenzene		60-11-7	0.5	mg/kg	----		<0.5		----		----		----		
Chlorobenzilate		510-15-6	0.5	mg/kg	----		<0.5		----		----		----		
EP075F: Haloethers															



Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	BH16_0.4	BH16_1.8	DUP09	TRP08	TRP09
Sampling date / time					14-Feb-2022 00:00	14-Feb-2022 00:00	14-Feb-2022 00:00	14-Feb-2022 00:00	14-Feb-2022 00:00
Compound	CAS Number	LOR	Unit		ES2204958-013	ES2204958-014	ES2204958-018	ES2204958-019	ES2204958-020
					Result	Result	Result	Result	Result
EP075F: Haloethers - Continued									
Bis(2-chloroethyl) ether	111-44-4	0.5	mg/kg		----	<0.5	----	----	----
Bis(2-chloroethoxy) methane	111-91-1	0.5	mg/kg		----	<0.5	----	----	----
4-Chlorophenyl phenyl ether	7005-72-3	0.5	mg/kg		----	<0.5	----	----	----
4-Bromophenyl phenyl ether	101-55-3	0.5	mg/kg		----	<0.5	----	----	----
EP075G: Chlorinated Hydrocarbons									
1,3-Dichlorobenzene	541-73-1	0.5	mg/kg		----	<0.5	----	----	----
1,4-Dichlorobenzene	106-46-7	0.5	mg/kg		----	<0.5	----	----	----
1,2-Dichlorobenzene	95-50-1	0.5	mg/kg		----	<0.5	----	----	----
Hexachloroethane	67-72-1	0.5	mg/kg		----	<0.5	----	----	----
1,2,4-Trichlorobenzene	120-82-1	0.5	mg/kg		----	<0.5	----	----	----
Hexachloropropylene	1888-71-7	0.5	mg/kg		----	<0.5	----	----	----
Hexachlorobutadiene	87-68-3	0.5	mg/kg		----	<0.5	----	----	----
Hexachlorocyclopentadiene	77-47-4	2.5	mg/kg		----	<2.5	----	----	----
Pentachlorobenzene	608-93-5	0.5	mg/kg		----	<0.5	----	----	----
Hexachlorobenzene (HCB)	118-74-1	1.0	mg/kg		----	<1.0	----	----	----
EP075H: Anilines and Benzidines									
Aniline	62-53-3	0.5	mg/kg		----	<0.5	----	----	----
4-Chloroaniline	106-47-8	0.5	mg/kg		----	<0.5	----	----	----
2-Nitroaniline	88-74-4	1.0	mg/kg		----	<1.0	----	----	----
3-Nitroaniline	99-09-2	1.0	mg/kg		----	<1.0	----	----	----
Dibenzofuran	132-64-9	0.5	mg/kg		----	<0.5	----	----	----
4-Nitroaniline	100-01-6	0.5	mg/kg		----	<0.5	----	----	----
Carbazole	86-74-8	0.5	mg/kg		----	<0.5	----	----	----
3,3'-Dichlorobenzidine	91-94-1	0.5	mg/kg		----	<0.5	----	----	----
EP075I: Organochlorine Pesticides									
alpha-BHC	319-84-6	0.5	mg/kg		----	<0.5	----	----	----
beta-BHC	319-85-7	0.5	mg/kg		----	<0.5	----	----	----
gamma-BHC	58-89-9	0.5	mg/kg		----	<0.5	----	----	----
delta-BHC	319-86-8	0.5	mg/kg		----	<0.5	----	----	----
Heptachlor	76-44-8	0.5	mg/kg		----	<0.5	----	----	----
Aldrin	309-00-2	0.5	mg/kg		----	<0.5	----	----	----
Heptachlor epoxide	1024-57-3	0.5	mg/kg		----	<0.5	----	----	----
alpha-Endosulfan	959-98-8	0.5	mg/kg		----	<0.5	----	----	----
4,4'-DDE	72-55-9	0.5	mg/kg		----	<0.5	----	----	----



Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	BH16_0.4	BH16_1.8	DUP09	TRP08	TRP09
Sampling date / time					14-Feb-2022 00:00	14-Feb-2022 00:00	14-Feb-2022 00:00	14-Feb-2022 00:00	14-Feb-2022 00:00
Compound	CAS Number	LOR	Unit		ES2204958-013	ES2204958-014	ES2204958-018	ES2204958-019	ES2204958-020
					Result	Result	Result	Result	Result
EP075I: Organochlorine Pesticides - Continued									
Dieldrin	60-57-1	0.5	mg/kg		----	<0.5	----	----	----
Endrin	72-20-8	0.5	mg/kg		----	<0.5	----	----	----
beta-Endosulfan	33213-65-9	0.5	mg/kg		----	<0.5	----	----	----
4.4`-DDD	72-54-8	0.5	mg/kg		----	<0.5	----	----	----
Endosulfan sulfate	1031-07-8	0.5	mg/kg		----	<0.5	----	----	----
4.4`-DDT	50-29-3	1.0	mg/kg		----	<1.0	----	----	----
EP075J: Organophosphorus Pesticides									
Dichlorvos	62-73-7	0.5	mg/kg		----	<0.5	----	----	----
Dimethoate	60-51-5	0.5	mg/kg		----	<0.5	----	----	----
Diazinon	333-41-5	0.5	mg/kg		----	<0.5	----	----	----
Chlorpyrifos-methyl	5598-13-0	0.5	mg/kg		----	<0.5	----	----	----
Malathion	121-75-5	0.5	mg/kg		----	<0.5	----	----	----
Fenthion	55-38-9	0.5	mg/kg		----	<0.5	----	----	----
Chlorpyrifos	2921-88-2	0.5	mg/kg		----	<0.5	----	----	----
Pirimphos-ethyl	23505-41-1	0.5	mg/kg		----	<0.5	----	----	----
Chlorfenvinphos	470-90-6	0.5	mg/kg		----	<0.5	----	----	----
Prothiofos	34643-46-4	0.5	mg/kg		----	<0.5	----	----	----
Ethion	563-12-2	0.5	mg/kg		----	<0.5	----	----	----
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	----	10	mg/kg		<10	<10	<10	----	<10
C10 - C14 Fraction	----	50	mg/kg		<50	<50	<50	----	<50
C15 - C28 Fraction	----	100	mg/kg		<100	<100	<100	----	<100
C29 - C36 Fraction	----	100	mg/kg		<100	<100	<100	----	<100
^ C10 - C36 Fraction (sum)	----	50	mg/kg		<50	<50	<50	----	<50
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
C6 - C10 Fraction	C6_C10	10	mg/kg		<10	<10	<10	----	<10
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg		<10	<10	<10	----	<10
>C10 - C16 Fraction	----	50	mg/kg		<50	<50	<50	----	<50
>C16 - C34 Fraction	----	100	mg/kg		<100	<100	<100	----	<100
>C34 - C40 Fraction	----	100	mg/kg		<100	<100	<100	----	<100
^ >C10 - C40 Fraction (sum)	----	50	mg/kg		<50	<50	<50	----	<50
^ >C10 - C16 Fraction minus Naphthalene (F2)	----	50	mg/kg		<50	<50	<50	----	<50

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	BH16_0.4	BH16_1.8	DUP09	TRP08	TRP09
Sampling date / time				14-Feb-2022 00:00	14-Feb-2022 00:00	14-Feb-2022 00:00	14-Feb-2022 00:00	14-Feb-2022 00:00	
Compound	CAS Number	LOR	Unit	ES2204958-013	ES2204958-014	ES2204958-018	ES2204958-019	ES2204958-020	
				Result	Result	Result	Result	Result	
EP080: BTEXN									
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	
ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	<0.5	----	<0.5	
^ Sum of BTEX	----	0.2	mg/kg	<0.2	<0.2	<0.2	----	<0.2	
^ Total Xylenes	----	0.5	mg/kg	<0.5	<0.5	<0.5	----	<0.5	
Naphthalene	91-20-3	1	mg/kg	<1	<1	<1	----	<1	
EP231A: Perfluoroalkyl Sulfonic Acids									
Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.0002	mg/kg	<0.0002	----	----	<0.0002	----	
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.0002	mg/kg	<0.0002	----	----	<0.0002	----	
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.0002	mg/kg	0.0004	----	----	<0.0002	----	
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	----	
EP231D: (n:2) Fluorotelomer Sulfonic Acids									
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 PFHxS and PFOS	355-46-4/1763-23-1	0.0002	mg/kg	0.0004	----	----	<0.0002	----	
Sum of PFAS (WA DER List)	----	0.0002	mg/kg	0.0004	----	----	<0.0002	----	
EP066S: PCB Surrogate									



Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	BH16_0.4	BH16_1.8	DUP09	TRP08	TRP09
Sampling date / time					14-Feb-2022 00:00	14-Feb-2022 00:00	14-Feb-2022 00:00	14-Feb-2022 00:00	14-Feb-2022 00:00
Compound	CAS Number	LOR	Unit		ES2204958-013	ES2204958-014	ES2204958-018	ES2204958-019	ES2204958-020
					Result	Result	Result	Result	Result
EP066S: PCB Surrogate - Continued									
Decachlorobiphenyl	2051-24-3	0.1	%		113	85.6	120	----	102
EP068S: Organochlorine Pesticide Surrogate									
Dibromo-DDE	21655-73-2	0.05	%		107	85.4	122	----	103
EP068T: Organophosphorus Pesticide Surrogate									
DEF	78-48-8	0.05	%		98.2	69.7	91.0	----	68.5
EP074S: VOC Surrogates									
1,2-Dichloroethane-D4	17060-07-0	0.5	%		----	82.3	----	----	----
Toluene-D8	2037-26-5	0.5	%		----	84.4	----	----	----
4-Bromofluorobenzene	460-00-4	0.5	%		----	84.4	----	----	----
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	0.5	%		76.6	80.6	77.5	----	79.9
2-Chlorophenol-D4	93951-73-6	0.5	%		74.3	78.5	73.5	----	76.1
2,4,6-Tribromophenol	118-79-6	0.5	%		57.7	74.0	31.7	----	29.7
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	0.5	%		112	99.0	99.2	----	102
Anthracene-d10	1719-06-8	0.5	%		102	103	102	----	105
4-Terphenyl-d14	1718-51-0	0.5	%		91.6	92.8	93.1	----	95.1
EP075S: Acid Extractable Surrogates									
2-Fluorophenol	367-12-4	0.5	%		----	108	----	----	----
Phenol-d6	13127-88-3	0.5	%		----	98.2	----	----	----
2-Chlorophenol-D4	93951-73-6	0.5	%		----	104	----	----	----
2,4,6-Tribromophenol	118-79-6	0.5	%		----	86.9	----	----	----
EP075T: Base/Neutral Extractable Surrogates									
Nitrobenzene-D5	4165-60-0	0.5	%		----	98.9	----	----	----
1,2-Dichlorobenzene-D4	2199-69-1	0.5	%		----	85.2	----	----	----
2-Fluorobiphenyl	321-60-8	0.5	%		----	110	----	----	----
Anthracene-d10	1719-06-8	0.5	%		----	115	----	----	----
4-Terphenyl-d14	1718-51-0	0.5	%		----	92.6	----	----	----
EP080S: TPH(V)/BTEX Surrogates									
1,2-Dichloroethane-D4	17060-07-0	0.2	%		96.8	81.3	90.5	----	94.6
Toluene-D8	2037-26-5	0.2	%		96.0	81.5	87.7	----	92.2
4-Bromofluorobenzene	460-00-4	0.2	%		87.7	79.2	82.4	----	87.1
EP231S: PFAS Surrogate									
13C4-PFOS	----	0.0002	%		95.5	----	----	95.0	----



Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	BH16_0.4	BH16_1.8	DUP09	TRP08	TRP09
Sampling date / time					14-Feb-2022 00:00	14-Feb-2022 00:00	14-Feb-2022 00:00	14-Feb-2022 00:00	14-Feb-2022 00:00
Compound	CAS Number	LOR	Unit		ES2204958-013	ES2204958-014	ES2204958-018	ES2204958-019	ES2204958-020
					Result	Result	Result	Result	Result
EP231S: PFAS Surrogate - Continued									
13C8-PFOA	----	0.0002	%		96.0	----	----	91.0	----



Analytical Results

Sub-Matrix: **WATER**
 (Matrix: **WATER**)

Sample ID

				Rinsate	----	----	----	----
Sampling date / time				14-Feb-2022 00:00	----	----	----	----
Compound	CAS Number	LOR	Unit	ES2204958-015	-----	-----	-----	-----
Result				Result	----	----	----	----
EG020T: Total Metals by ICP-MS								
Arsenic	7440-38-2	0.001	mg/L	<0.001	----	----	----	----
Cadmium	7440-43-9	0.0001	mg/L	<0.0001	----	----	----	----
Chromium	7440-47-3	0.001	mg/L	<0.001	----	----	----	----
Copper	7440-50-8	0.001	mg/L	<0.001	----	----	----	----
Nickel	7440-02-0	0.001	mg/L	<0.001	----	----	----	----
Lead	7439-92-1	0.001	mg/L	<0.001	----	----	----	----
Zinc	7440-66-6	0.005	mg/L	<0.005	----	----	----	----
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.0001	mg/L	<0.0001	----	----	----	----
EP066: Polychlorinated Biphenyls (PCB)								
^ Total Polychlorinated biphenyls	----	1	µg/L	<1	----	----	----	----
EP068A: Organochlorine Pesticides (OC)								
alpha-BHC	319-84-6	0.5	µg/L	<0.5	----	----	----	----
Hexachlorobenzene (HCB)	118-74-1	0.5	µg/L	<0.5	----	----	----	----
beta-BHC	319-85-7	0.5	µg/L	<0.5	----	----	----	----
gamma-BHC	58-89-9	0.5	µg/L	<0.5	----	----	----	----
delta-BHC	319-86-8	0.5	µg/L	<0.5	----	----	----	----
Heptachlor	76-44-8	0.5	µg/L	<0.5	----	----	----	----
Aldrin	309-00-2	0.5	µg/L	<0.5	----	----	----	----
Heptachlor epoxide	1024-57-3	0.5	µg/L	<0.5	----	----	----	----
trans-Chlordane	5103-74-2	0.5	µg/L	<0.5	----	----	----	----
alpha-Endosulfan	959-98-8	0.5	µg/L	<0.5	----	----	----	----
cis-Chlordane	5103-71-9	0.5	µg/L	<0.5	----	----	----	----
Dieldrin	60-57-1	0.5	µg/L	<0.5	----	----	----	----
4,4'-DDE	72-55-9	0.5	µg/L	<0.5	----	----	----	----
Endrin	72-20-8	0.5	µg/L	<0.5	----	----	----	----
beta-Endosulfan	33213-65-9	0.5	µg/L	<0.5	----	----	----	----
4,4'-DDD	72-54-8	0.5	µg/L	<0.5	----	----	----	----
Endrin aldehyde	7421-93-4	0.5	µg/L	<0.5	----	----	----	----
Endosulfan sulfate	1031-07-8	0.5	µg/L	<0.5	----	----	----	----
4,4'-DDT	50-29-3	2.0	µg/L	<2.0	----	----	----	----
Endrin ketone	53494-70-5	0.5	µg/L	<0.5	----	----	----	----
Methoxychlor	72-43-5	2.0	µg/L	<2.0	----	----	----	----
^ Total Chlordane (sum)	----	0.5	µg/L	<0.5	----	----	----	----

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	Rinsate	----	----	----	----
Sampling date / time				14-Feb-2022 00:00	----	----	----	----	
Compound	CAS Number	LOR	Unit	ES2204958-015	-----	-----	-----	-----	
				Result	----	----	----	----	
EP068A: Organochlorine Pesticides (OC) - Continued									
^ Sum of DDD + DDE + DDT	72-54-8/72-55-9/5 0-2	0.5	µg/L	<0.5	----	----	----	----	
^ Sum of Aldrin + Dieldrin	309-00-2/60-57-1	0.5	µg/L	<0.5	----	----	----	----	
EP068B: Organophosphorus Pesticides (OP)									
Dichlorvos	62-73-7	0.5	µg/L	<0.5	----	----	----	----	
Demeton-S-methyl	919-86-8	0.5	µg/L	<0.5	----	----	----	----	
Monocrotophos	6923-22-4	2.0	µg/L	<2.0	----	----	----	----	
Dimethoate	60-51-5	0.5	µg/L	<0.5	----	----	----	----	
Diazinon	333-41-5	0.5	µg/L	<0.5	----	----	----	----	
Chlorpyrifos-methyl	5598-13-0	0.5	µg/L	<0.5	----	----	----	----	
Parathion-methyl	298-00-0	2.0	µg/L	<2.0	----	----	----	----	
Malathion	121-75-5	0.5	µg/L	<0.5	----	----	----	----	
Fenthion	55-38-9	0.5	µg/L	<0.5	----	----	----	----	
Chlorpyrifos	2921-88-2	0.5	µg/L	<0.5	----	----	----	----	
Parathion	56-38-2	2.0	µg/L	<2.0	----	----	----	----	
Pirimphos-ethyl	23505-41-1	0.5	µg/L	<0.5	----	----	----	----	
Chlorfenvinphos	470-90-6	0.5	µg/L	<0.5	----	----	----	----	
Bromophos-ethyl	4824-78-6	0.5	µg/L	<0.5	----	----	----	----	
Fenamiphos	22224-92-6	0.5	µg/L	<0.5	----	----	----	----	
Prothiofos	34643-46-4	0.5	µg/L	<0.5	----	----	----	----	
Ethion	563-12-2	0.5	µg/L	<0.5	----	----	----	----	
Carbophenothion	786-19-6	0.5	µg/L	<0.5	----	----	----	----	
Azinphos Methyl	86-50-0	0.5	µg/L	<0.5	----	----	----	----	
EP074A: Monocyclic Aromatic Hydrocarbons									
Styrene	100-42-5	5	µg/L	<5	----	----	----	----	
Isopropylbenzene	98-82-8	5	µg/L	<5	----	----	----	----	
n-Propylbenzene	103-65-1	5	µg/L	<5	----	----	----	----	
1.3.5-Trimethylbenzene	108-67-8	5	µg/L	<5	----	----	----	----	
sec-Butylbenzene	135-98-8	5	µg/L	<5	----	----	----	----	
1.2.4-Trimethylbenzene	95-63-6	5	µg/L	<5	----	----	----	----	
tert-Butylbenzene	98-06-6	5	µg/L	<5	----	----	----	----	
p-Isopropyltoluene	99-87-6	5	µg/L	<5	----	----	----	----	
n-Butylbenzene	104-51-8	5	µg/L	<5	----	----	----	----	
EP074B: Oxygenated Compounds									



Analytical Results

Sub-Matrix: **WATER**
 (Matrix: **WATER**)

Sample ID

				Rinsate	----	----	----	----
Sampling date / time				14-Feb-2022 00:00	----	----	----	----
Compound	CAS Number	LOR	Unit	ES2204958-015	-----	-----	-----	-----
Result				----	----	----	----	----
EP074B: Oxygenated Compounds - Continued								
Vinyl Acetate	108-05-4	50	µg/L	<50	----	----	----	----
2-Butanone (MEK)	78-93-3	50	µg/L	<50	----	----	----	----
4-Methyl-2-pentanone (MIBK)	108-10-1	50	µg/L	<50	----	----	----	----
2-Hexanone (MBK)	591-78-6	50	µg/L	<50	----	----	----	----
EP074C: Sulfonated Compounds								
Carbon disulfide	75-15-0	5	µg/L	9	----	----	----	----
EP074D: Fumigants								
2,2-Dichloropropane	594-20-7	5	µg/L	<5	----	----	----	----
1,2-Dichloropropane	78-87-5	5	µg/L	<5	----	----	----	----
cis-1,3-Dichloropropylene	10061-01-5	5	µg/L	<5	----	----	----	----
trans-1,3-Dichloropropylene	10061-02-6	5	µg/L	<5	----	----	----	----
1,2-Dibromoethane (EDB)	106-93-4	5	µg/L	<5	----	----	----	----
EP074E: Halogenated Aliphatic Compounds								
Dichlorodifluoromethane	75-71-8	50	µg/L	<50	----	----	----	----
Chloromethane	74-87-3	50	µg/L	<50	----	----	----	----
Vinyl chloride	75-01-4	50	µg/L	<50	----	----	----	----
Bromomethane	74-83-9	50	µg/L	<50	----	----	----	----
Chloroethane	75-00-3	50	µg/L	<50	----	----	----	----
Trichlorofluoromethane	75-69-4	50	µg/L	<50	----	----	----	----
1,1-Dichloroethene	75-35-4	5	µg/L	<5	----	----	----	----
Iodomethane	74-88-4	5	µg/L	<5	----	----	----	----
trans-1,2-Dichloroethene	156-60-5	5	µg/L	<5	----	----	----	----
1,1-Dichloroethane	75-34-3	5	µg/L	<5	----	----	----	----
cis-1,2-Dichloroethene	156-59-2	5	µg/L	<5	----	----	----	----
1,1,1-Trichloroethane	71-55-6	5	µg/L	<5	----	----	----	----
1,1-Dichloropropylene	563-58-6	5	µg/L	<5	----	----	----	----
Carbon Tetrachloride	56-23-5	5	µg/L	<5	----	----	----	----
1,2-Dichloroethane	107-06-2	5	µg/L	<5	----	----	----	----
Trichloroethene	79-01-6	5	µg/L	<5	----	----	----	----
Dibromomethane	74-95-3	5	µg/L	<5	----	----	----	----
1,1,2-Trichloroethane	79-00-5	5	µg/L	<5	----	----	----	----
1,3-Dichloropropane	142-28-9	5	µg/L	<5	----	----	----	----
Tetrachloroethene	127-18-4	5	µg/L	<5	----	----	----	----
1,1,1,2-Tetrachloroethane	630-20-6	5	µg/L	<5	----	----	----	----



Analytical Results

Sub-Matrix: **WATER**
 (Matrix: **WATER**)

Sample ID

				Rinsate	----	----	----	----
Sampling date / time				14-Feb-2022 00:00	----	----	----	----
Compound	CAS Number	LOR	Unit	ES2204958-015	-----	-----	-----	-----
Result				----	----	----	----	----

EP074E: Halogenated Aliphatic Compounds - Continued

trans-1.4-Dichloro-2-butene	110-57-6	5	µg/L	<5	----	----	----	----
cis-1.4-Dichloro-2-butene	1476-11-5	5	µg/L	<5	----	----	----	----
1.1.2.2-Tetrachloroethane	79-34-5	5	µg/L	<5	----	----	----	----
1.2.3-Trichloropropane	96-18-4	5	µg/L	<5	----	----	----	----
Pentachloroethane	76-01-7	5	µg/L	<5	----	----	----	----
1.2-Dibromo-3-chloropropane	96-12-8	5	µg/L	<5	----	----	----	----

EP074F: Halogenated Aromatic Compounds

Chlorobenzene	108-90-7	5	µg/L	<5	----	----	----	----
Bromobenzene	108-86-1	5	µg/L	<5	----	----	----	----
2-Chlorotoluene	95-49-8	5	µg/L	<5	----	----	----	----
4-Chlorotoluene	106-43-4	5	µg/L	<5	----	----	----	----
1.2.3-Trichlorobenzene	87-61-6	5	µg/L	<5	----	----	----	----

EP074G: Trihalomethanes

Chloroform	67-66-3	5	µg/L	<5	----	----	----	----
Bromodichloromethane	75-27-4	5	µg/L	<5	----	----	----	----
Dibromochloromethane	124-48-1	5	µg/L	<5	----	----	----	----
Bromoform	75-25-2	5	µg/L	<5	----	----	----	----

EP075(SIM)A: Phenolic Compounds

Phenol	108-95-2	1.0	µg/L	<1.0	----	----	----	----
2-Chlorophenol	95-57-8	1.0	µg/L	<1.0	----	----	----	----
2-Methylphenol	95-48-7	1.0	µg/L	<1.0	----	----	----	----
3- & 4-Methylphenol	1319-77-3	2.0	µg/L	<2.0	----	----	----	----
2-Nitrophenol	88-75-5	1.0	µg/L	<1.0	----	----	----	----
2.4-Dimethylphenol	105-67-9	1.0	µg/L	<1.0	----	----	----	----
2.4-Dichlorophenol	120-83-2	1.0	µg/L	<1.0	----	----	----	----
2.6-Dichlorophenol	87-65-0	1.0	µg/L	<1.0	----	----	----	----
4-Chloro-3-methylphenol	59-50-7	1.0	µg/L	<1.0	----	----	----	----
2.4.6-Trichlorophenol	88-06-2	1.0	µg/L	<1.0	----	----	----	----
2.4.5-Trichlorophenol	95-95-4	1.0	µg/L	<1.0	----	----	----	----
Pentachlorophenol	87-86-5	2.0	µg/L	<2.0	----	----	----	----

EP075(SIM)B: Polynuclear Aromatic Hydrocarbons

Naphthalene	91-20-3	1.0	µg/L	<1.0	----	----	----	----
Acenaphthylene	208-96-8	1.0	µg/L	<1.0	----	----	----	----
Acenaphthene	83-32-9	1.0	µg/L	<1.0	----	----	----	----



Analytical Results

Sub-Matrix: WATER
 (Matrix: WATER)

Sample ID

				Rinsate	----	----	----	----
Sampling date / time				14-Feb-2022 00:00	----	----	----	----
Compound	CAS Number	LOR	Unit	ES2204958-015	-----	-----	-----	-----
Result				----	----	----	----	----

EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued

Fluorene	86-73-7	1.0	µg/L	<1.0	----	----	----	----
Phenanthrene	85-01-8	1.0	µg/L	<1.0	----	----	----	----
Anthracene	120-12-7	1.0	µg/L	<1.0	----	----	----	----
Fluoranthene	206-44-0	1.0	µg/L	<1.0	----	----	----	----
Pyrene	129-00-0	1.0	µg/L	<1.0	----	----	----	----
Benz(a)anthracene	56-55-3	1.0	µg/L	<1.0	----	----	----	----
Chrysene	218-01-9	1.0	µg/L	<1.0	----	----	----	----
Benzo(b+j)fluoranthene	205-99-2 205-82-3	1.0	µg/L	<1.0	----	----	----	----
Benzo(k)fluoranthene	207-08-9	1.0	µg/L	<1.0	----	----	----	----
Benzo(a)pyrene	50-32-8	0.5	µg/L	<0.5	----	----	----	----
Indeno(1.2.3.cd)pyrene	193-39-5	1.0	µg/L	<1.0	----	----	----	----
Dibenz(a,h)anthracene	53-70-3	1.0	µg/L	<1.0	----	----	----	----
Benzo(g,h,i)perylene	191-24-2	1.0	µg/L	<1.0	----	----	----	----
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	µg/L	<0.5	----	----	----	----
^ Benzo(a)pyrene TEQ (zero)	----	0.5	µg/L	<0.5	----	----	----	----

EP075A: Phenolic Compounds

Phenol	108-95-2	2	µg/L	<2	----	----	----	----
2-Chlorophenol	95-57-8	2	µg/L	<2	----	----	----	----
2-Methylphenol	95-48-7	2	µg/L	<2	----	----	----	----
3- & 4-Methylphenol	1319-77-3	4	µg/L	<4	----	----	----	----
2-Nitrophenol	88-75-5	2	µg/L	<2	----	----	----	----
2,4-Dimethylphenol	105-67-9	2	µg/L	<2	----	----	----	----
2,4-Dichlorophenol	120-83-2	2	µg/L	<2	----	----	----	----
2,6-Dichlorophenol	87-65-0	2	µg/L	<2	----	----	----	----
4-Chloro-3-methylphenol	59-50-7	2	µg/L	<2	----	----	----	----
2,4,6-Trichlorophenol	88-06-2	2	µg/L	<2	----	----	----	----
2,4,5-Trichlorophenol	95-95-4	2	µg/L	<2	----	----	----	----
Pentachlorophenol	87-86-5	4	µg/L	<4	----	----	----	----

EP075B: Polynuclear Aromatic Hydrocarbons

Naphthalene	91-20-3	2	µg/L	<2	----	----	----	----
2-Methylnaphthalene	91-57-6	2	µg/L	<2	----	----	----	----
2-Chloronaphthalene	91-58-7	2	µg/L	<2	----	----	----	----
Acenaphthylene	208-96-8	2	µg/L	<2	----	----	----	----
Acenaphthene	83-32-9	2	µg/L	<2	----	----	----	----



Analytical Results

Sub-Matrix: **WATER**
 (Matrix: **WATER**)

Sample ID

				Rinsate	----	----	----	----
Sampling date / time				14-Feb-2022 00:00	----	----	----	----
Compound	CAS Number	LOR	Unit	ES2204958-015	-----	-----	-----	-----
Result				----	----	----	----	----

EP075B: Polynuclear Aromatic Hydrocarbons - Continued

Fluorene	86-73-7	2	µg/L	<2	----	----	----	----
Phenanthrene	85-01-8	2	µg/L	<2	----	----	----	----
Anthracene	120-12-7	2	µg/L	<2	----	----	----	----
Fluoranthene	206-44-0	2	µg/L	<2	----	----	----	----
Pyrene	129-00-0	2	µg/L	<2	----	----	----	----
N-2-Fluorenyl Acetamide	53-96-3	2	µg/L	<2	----	----	----	----
Benz(a)anthracene	56-55-3	2	µg/L	<2	----	----	----	----
Chrysene	218-01-9	2	µg/L	<2	----	----	----	----
Benzo(b+j) & Benzo(k)fluoranthene	205-99-2 207-08-9	4	µg/L	<4	----	----	----	----
7,12-Dimethylbenz(a)anthracene	57-97-6	2	µg/L	<2	----	----	----	----
Benzo(a)pyrene	50-32-8	2	µg/L	<2	----	----	----	----
3-Methylcholanthrene	56-49-5	2	µg/L	<2	----	----	----	----
Indeno(1,2,3.cd)pyrene	193-39-5	2	µg/L	<2	----	----	----	----
Dibenz(a,h)anthracene	53-70-3	2	µg/L	<2	----	----	----	----
Benzo(g,h,i)perylene	191-24-2	2	µg/L	<2	----	----	----	----
^ Sum of PAHs	----	2	µg/L	<2	----	----	----	----
^ Benzo(a)pyrene TEQ (zero)	----	2	µg/L	<2	----	----	----	----

EP075C: Phthalate Esters

Dimethyl phthalate	131-11-3	2	µg/L	<2	----	----	----	----
Diethyl phthalate	84-66-2	2	µg/L	<2	----	----	----	----
Di-n-butyl phthalate	84-74-2	2	µg/L	<2	----	----	----	----
Butyl benzyl phthalate	85-68-7	2	µg/L	<2	----	----	----	----
bis(2-ethylhexyl) phthalate	117-81-7	10	µg/L	<10	----	----	----	----
Di-n-octylphthalate	117-84-0	2	µg/L	<2	----	----	----	----

EP075D: Nitrosamines

N-Nitrosomethylethylamine	10595-95-6	2	µg/L	<2	----	----	----	----
N-Nitrosodiethylamine	55-18-5	2	µg/L	<2	----	----	----	----
N-Nitrosopyrrolidine	930-55-2	4	µg/L	<4	----	----	----	----
N-Nitrosomorpholine	59-89-2	2	µg/L	<2	----	----	----	----
N-Nitrosodi-n-propylamine	621-64-7	2	µg/L	<2	----	----	----	----
N-Nitrosopiperidine	100-75-4	2	µg/L	<2	----	----	----	----
N-Nitrosodibutylamine	924-16-3	2	µg/L	<2	----	----	----	----
N-Nitrosodiphenyl & Diphenylamine	86-30-6 122-39-4	4	µg/L	<4	----	----	----	----



Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	Rinsate	----	----	----	----
Sampling date / time					14-Feb-2022 00:00	----	----	----	----
Compound	CAS Number	LOR	Unit		ES2204958-015	-----	-----	-----	-----
					Result	----	----	----	----
EP075D: Nitrosamines - Continued									
Methapyrilene	91-80-5	2	µg/L		<2	----	----	----	----
EP075E: Nitroaromatics and Ketones									
2-Picoline	109-06-8	2	µg/L		<2	----	----	----	----
Acetophenone	98-86-2	2	µg/L		<2	----	----	----	----
Nitrobenzene	98-95-3	2	µg/L		<2	----	----	----	----
Isophorone	78-59-1	2	µg/L		<2	----	----	----	----
2,6-Dinitrotoluene	606-20-2	4	µg/L		<4	----	----	----	----
2,4-Dinitrotoluene	121-14-2	4	µg/L		<4	----	----	----	----
1-Naphthylamine	134-32-7	2	µg/L		<2	----	----	----	----
4-Nitroquinoline-N-oxide	56-57-5	2	µg/L		<2	----	----	----	----
5-Nitro-o-toluidine	99-55-8	2	µg/L		<2	----	----	----	----
Azobenzene	103-33-3	2	µg/L		<2	----	----	----	----
1,3,5-Trinitrobenzene	99-35-4	2	µg/L		<2	----	----	----	----
Phenacetin	62-44-2	2	µg/L		<2	----	----	----	----
4-Aminobiphenyl	92-67-1	2	µg/L		<2	----	----	----	----
Pentachloronitrobenzene	82-68-8	2	µg/L		<2	----	----	----	----
Pronamide	23950-58-5	2	µg/L		<2	----	----	----	----
Dimethylaminoazobenzene	60-11-7	2	µg/L		<2	----	----	----	----
Chlorobenzilate	510-15-6	2	µg/L		<2	----	----	----	----
EP075F: Haloethers									
Bis(2-chloroethyl) ether	111-44-4	2	µg/L		<2	----	----	----	----
Bis(2-chloroethoxy) methane	111-91-1	2	µg/L		<2	----	----	----	----
4-Chlorophenyl phenyl ether	7005-72-3	2	µg/L		<2	----	----	----	----
4-Bromophenyl phenyl ether	101-55-3	2	µg/L		<2	----	----	----	----
EP075G: Chlorinated Hydrocarbons									
1,3-Dichlorobenzene	541-73-1	2	µg/L		<2	----	----	----	----
1,4-Dichlorobenzene	106-46-7	2	µg/L		<2	----	----	----	----
1,2-Dichlorobenzene	95-50-1	2	µg/L		<2	----	----	----	----
Hexachloroethane	67-72-1	2	µg/L		<2	----	----	----	----
1,2,4-Trichlorobenzene	120-82-1	2	µg/L		<2	----	----	----	----
Hexachloropropylene	1888-71-7	2	µg/L		<2	----	----	----	----
Hexachlorobutadiene	87-68-3	2	µg/L		<2	----	----	----	----
Hexachlorocyclopentadiene	77-47-4	10	µg/L		<10	----	----	----	----
Pentachlorobenzene	608-93-5	2	µg/L		<2	----	----	----	----



Analytical Results

Sub-Matrix: **WATER**
 (Matrix: **WATER**)

Sample ID

				Rinsate	----	----	----	----
Sampling date / time				14-Feb-2022 00:00	----	----	----	----
Compound	CAS Number	LOR	Unit	ES2204958-015	-----	-----	-----	-----
Result				----	----	----	----	----
EP075G: Chlorinated Hydrocarbons - Continued								
Hexachlorobenzene (HCB)	118-74-1	4	µg/L	<4	----	----	----	----
EP075H: Anilines and Benzidines								
Aniline	62-53-3	2	µg/L	<2	----	----	----	----
4-Chloroaniline	106-47-8	2	µg/L	<2	----	----	----	----
2-Nitroaniline	88-74-4	4	µg/L	<4	----	----	----	----
3-Nitroaniline	99-09-2	4	µg/L	<4	----	----	----	----
Dibenzofuran	132-64-9	2	µg/L	<2	----	----	----	----
4-Nitroaniline	100-01-6	2	µg/L	<2	----	----	----	----
Carbazole	86-74-8	2	µg/L	<2	----	----	----	----
3,3'-Dichlorobenzidine	91-94-1	2	µg/L	<2	----	----	----	----
EP075I: Organochlorine Pesticides								
alpha-BHC	319-84-6	2	µg/L	<2	----	----	----	----
beta-BHC	319-85-7	2	µg/L	<2	----	----	----	----
gamma-BHC	58-89-9	2	µg/L	<2	----	----	----	----
delta-BHC	319-86-8	2	µg/L	<2	----	----	----	----
Heptachlor	76-44-8	2	µg/L	<2	----	----	----	----
Aldrin	309-00-2	2	µg/L	<2	----	----	----	----
Heptachlor epoxide	1024-57-3	2	µg/L	<2	----	----	----	----
alpha-Endosulfan	959-98-8	2	µg/L	<2	----	----	----	----
4,4'-DDE	72-55-9	2	µg/L	<2	----	----	----	----
Dieldrin	60-57-1	2	µg/L	<2	----	----	----	----
Endrin	72-20-8	2	µg/L	<2	----	----	----	----
beta-Endosulfan	33213-65-9	2	µg/L	<2	----	----	----	----
4,4'-DDD	72-54-8	2	µg/L	<2	----	----	----	----
Endosulfan sulfate	1031-07-8	2	µg/L	<2	----	----	----	----
4,4'-DDT	50-29-3	4	µg/L	<4	----	----	----	----
^ Sum of Aldrin + Dieldrin	309-00-2/60-57-1	4	µg/L	<4	----	----	----	----
^ Sum of DDD + DDE + DDT	72-54-8/72-55-9/50-2	4	µg/L	<4	----	----	----	----
EP075J: Organophosphorus Pesticides								
Dichlorvos	62-73-7	2	µg/L	<2	----	----	----	----
Dimethoate	60-51-5	2	µg/L	<2	----	----	----	----
Diazinon	333-41-5	2	µg/L	<2	----	----	----	----
Chlorpyrifos-methyl	5598-13-0	2	µg/L	<2	----	----	----	----



Analytical Results

Sub-Matrix: **WATER**
 (Matrix: **WATER**)

Sample ID

				Rinsate	----	----	----	----
Sampling date / time				14-Feb-2022 00:00	----	----	----	----
Compound	CAS Number	LOR	Unit	ES2204958-015	-----	-----	-----	-----
Result				----	----	----	----	----

EP075J: Organophosphorus Pesticides - Continued

Malathion	121-75-5	2	µg/L	<2	----	----	----	----
Fenthion	55-38-9	2	µg/L	<2	----	----	----	----
Chlorpyrifos	2921-88-2	2	µg/L	<2	----	----	----	----
Pirimphos-ethyl	23505-41-1	2	µg/L	<2	----	----	----	----
Chlorfenvinphos	470-90-6	2	µg/L	<2	----	----	----	----
Prothiofos	34643-46-4	2	µg/L	<2	----	----	----	----
Ethion	563-12-2	2	µg/L	<2	----	----	----	----

EP080/071: Total Petroleum Hydrocarbons

C6 - C9 Fraction	----	20	µg/L	<20	----	----	----	----
C10 - C14 Fraction	----	50	µg/L	<50	----	----	----	----
C15 - C28 Fraction	----	100	µg/L	<100	----	----	----	----
C29 - C36 Fraction	----	50	µg/L	<50	----	----	----	----
^ C10 - C36 Fraction (sum)	----	50	µg/L	<50	----	----	----	----

EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions

C6 - C10 Fraction	C6_C10	20	µg/L	<20	----	----	----	----
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	20	µg/L	<20	----	----	----	----
>C10 - C16 Fraction	----	100	µg/L	<100	----	----	----	----
>C16 - C34 Fraction	----	100	µg/L	<100	----	----	----	----
>C34 - C40 Fraction	----	100	µg/L	<100	----	----	----	----
^ >C10 - C40 Fraction (sum)	----	100	µg/L	<100	----	----	----	----
^ >C10 - C16 Fraction minus Naphthalene (F2)	----	100	µg/L	<100	----	----	----	----

EP080: BTEXN

Benzene	71-43-2	1	µg/L	<1	----	----	----	----
Toluene	108-88-3	2	µg/L	<2	----	----	----	----
Ethylbenzene	100-41-4	2	µg/L	<2	----	----	----	----
meta- & para-Xylene	108-38-3 106-42-3	2	µg/L	<2	----	----	----	----
ortho-Xylene	95-47-6	2	µg/L	<2	----	----	----	----
^ Total Xylenes	----	2	µg/L	<2	----	----	----	----
^ Sum of BTEX	----	1	µg/L	<1	----	----	----	----
Naphthalene	91-20-3	5	µg/L	<5	----	----	----	----

EP066S: PCB Surrogate

Decachlorobiphenyl	2051-24-3	1	%	76.1	----	----	----	----



Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	Rinsate	----	----	----	----
Sampling date / time				14-Feb-2022 00:00	----	----	----	----	----
Compound	CAS Number	LOR	Unit	ES2204958-015	-----	-----	-----	-----	-----
Result				----	----	----	----	----	----
EP068S: Organochlorine Pesticide Surrogate									
Dibromo-DDE	21655-73-2	0.5	%	77.8	----	----	----	----	----
EP068T: Organophosphorus Pesticide Surrogate									
DEF	78-48-8	0.5	%	73.3	----	----	----	----	----
EP074S: VOC Surrogates									
1,2-Dichloroethane-D4	17060-07-0	5	%	93.1	----	----	----	----	----
Toluene-D8	2037-26-5	5	%	118	----	----	----	----	----
4-Bromofluorobenzene	460-00-4	5	%	114	----	----	----	----	----
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	1.0	%	29.2	----	----	----	----	----
2-Chlorophenol-D4	93951-73-6	1.0	%	58.6	----	----	----	----	----
2,4,6-Tribromophenol	118-79-6	1.0	%	66.5	----	----	----	----	----
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	1.0	%	70.6	----	----	----	----	----
Anthracene-d10	1719-06-8	1.0	%	82.0	----	----	----	----	----
4-Terphenyl-d14	1718-51-0	1.0	%	83.3	----	----	----	----	----
EP075S: Acid Extractable Surrogates									
2-Fluorophenol	367-12-4	2	%	39.9	----	----	----	----	----
Phenol-d6	13127-88-3	2	%	30.2	----	----	----	----	----
2-Chlorophenol-D4	93951-73-6	2	%	59.1	----	----	----	----	----
2,4,6-Tribromophenol	118-79-6	2	%	69.0	----	----	----	----	----
EP075T: Base/Neutral Extractable Surrogates									
Nitrobenzene-D5	4165-60-0	2	%	61.5	----	----	----	----	----
1,2-Dichlorobenzene-D4	2199-69-1	2	%	57.2	----	----	----	----	----
2-Fluorobiphenyl	321-60-8	2	%	95.6	----	----	----	----	----
Anthracene-d10	1719-06-8	2	%	95.8	----	----	----	----	----
4-Terphenyl-d14	1718-51-0	2	%	82.7	----	----	----	----	----
EP080S: TPH(V)/BTEX Surrogates									
1,2-Dichloroethane-D4	17060-07-0	2	%	107	----	----	----	----	----
Toluene-D8	2037-26-5	2	%	113	----	----	----	----	----
4-Bromofluorobenzene	460-00-4	2	%	108	----	----	----	----	----



Analytical Results

Descriptive Results

Sub-Matrix: **SOIL**

Method: Compound	Sample ID - Sampling date / time	Analytical Results
EA200: AS 4964 - 2004 Identification of Asbestos in Soils		
EA200: Description	BH09_0.3 - 14-Feb-2022 00:00	Soil sample.
EA200: Description	BH15_0.4 - 14-Feb-2022 00:00	Soil sample.
EA200: Description	BH17_0.4 - 14-Feb-2022 00:00	Soil sample.
EA200: Description	BH06_0.4 - 14-Feb-2022 00:00	Soil sample.
EA200: Description	BH16_0.4 - 14-Feb-2022 00:00	Soil sample.



Surrogate Control Limits

Sub-Matrix: SOIL		Recovery Limits (%)	
Compound	CAS Number	Low	High
EP066S: PCB Surrogate			
Decachlorobiphenyl	2051-24-3	39	149
EP068S: Organochlorine Pesticide Surrogate			
Dibromo-DDE	21655-73-2	49	147
EP068T: Organophosphorus Pesticide Surrogate			
DEF	78-48-8	35	143
EP074S: VOC Surrogates			
1,2-Dichloroethane-D4	17060-07-0	64	130
Toluene-D8	2037-26-5	66	136
4-Bromofluorobenzene	460-00-4	60	122
EP075(SIM)S: Phenolic Compound Surrogates			
Phenol-d6	13127-88-3	63	123
2-Chlorophenol-D4	93951-73-6	66	122
2,4,6-Tribromophenol	118-79-6	40	138
EP075(SIM)T: PAH Surrogates			
2-Fluorobiphenyl	321-60-8	70	122
Anthracene-d10	1719-06-8	66	128
4-Terphenyl-d14	1718-51-0	65	129
EP075S: Acid Extractable Surrogates			
2-Fluorophenol	367-12-4	29	149
Phenol-d6	13127-88-3	32	128
2-Chlorophenol-D4	93951-73-6	32	128
2,4,6-Tribromophenol	118-79-6	13	121
EP075T: Base/Neutral Extractable Surrogates			
Nitrobenzene-D5	4165-60-0	33	125
1,2-Dichlorobenzene-D4	2199-69-1	34	108
2-Fluorobiphenyl	321-60-8	35	121
Anthracene-d10	1719-06-8	35	123
4-Terphenyl-d14	1718-51-0	33	125
EP080S: TPH(V)/BTEX Surrogates			
1,2-Dichloroethane-D4	17060-07-0	73	133
Toluene-D8	2037-26-5	74	132
4-Bromofluorobenzene	460-00-4	72	130
EP231S: PFAS Surrogate			
13C4-PFOS	----	60	120
13C8-PFOA	----	60	120

Sub-Matrix: WATER		Recovery Limits (%)	
Compound	CAS Number	Low	High



Sub-Matrix: WATER		Recovery Limits (%)	
Compound	CAS Number	Low	High
EP066S: PCB Surrogate			
Decachlorobiphenyl	2051-24-3	45	134
EP068S: Organochlorine Pesticide Surrogate			
Dibromo-DDE	21655-73-2	67	111
EP068T: Organophosphorus Pesticide Surrogate			
DEF	78-48-8	67	111
EP074S: VOC Surrogates			
1,2-Dichloroethane-D4	17060-07-0	78	133
Toluene-D8	2037-26-5	79	129
4-Bromofluorobenzene	460-00-4	81	124
EP075(SIM)S: Phenolic Compound Surrogates			
Phenol-d6	13127-88-3	10	44
2-Chlorophenol-D4	93951-73-6	14	94
2,4,6-Tribromophenol	118-79-6	17	125
EP075(SIM)T: PAH Surrogates			
2-Fluorobiphenyl	321-60-8	20	104
Anthracene-d10	1719-06-8	27	113
4-Terphenyl-d14	1718-51-0	32	112
EP075S: Acid Extractable Surrogates			
2-Fluorophenol	367-12-4	10	117
Phenol-d6	13127-88-3	10	69
2-Chlorophenol-D4	93951-73-6	21	130
2,4,6-Tribromophenol	118-79-6	10	151
EP075T: Base/Neutral Extractable Surrogates			
Nitrobenzene-D5	4165-60-0	29	142
1,2-Dichlorobenzene-D4	2199-69-1	24	121
2-Fluorobiphenyl	321-60-8	27	135
Anthracene-d10	1719-06-8	27	113
4-Terphenyl-d14	1718-51-0	21	123
EP080S: TPH(V)/BTEX Surrogates			
1,2-Dichloroethane-D4	17060-07-0	71	137
Toluene-D8	2037-26-5	79	131
4-Bromofluorobenzene	460-00-4	70	128

Inter-Laboratory Testing

Analysis conducted by ALS Newcastle, NATA accreditation no. 825, site no. 1656 (Chemistry) 9854 (Biology).

(SOIL) EA200: AS 4964 - 2004 Identification of Asbestos in Soils

CERTIFICATE OF ANALYSIS

Work Order : **ES2205426**
Client : **EP RISK MANAGEMENT**
Contact : HARRISON BLAKE
Address : Level 4 73 Walker St
 North Sydney 2060
Telephone : ----
Project : EP2515
Order number : ----
C-O-C number : ----
Sampler : HARRISON BLAKE
Site : ----
Quote number : SY/497/20 Primary analysis only
No. of samples received : 13
No. of samples analysed : 13

Page : 1 of 9
Laboratory : Environmental Division Sydney
Contact : Tyler Anderson
Address : 277-289 Woodpark Road Smithfield NSW Australia 2164
Telephone : +61 2 8784 8555
Date Samples Received : 17-Feb-2022 11:45
Date Analysis Commenced : 22-Feb-2022
Issue Date : 28-Feb-2022 17:23



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

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results
- Surrogate Control Limits

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

Signatories

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

<i>Signatories</i>	<i>Position</i>	<i>Accreditation Category</i>
Edwandy Fadjjar	Organic Coordinator	Sydney Organics, Smithfield, NSW
Ivan Taylor	Analyst	Sydney Inorganics, Smithfield, NSW



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.

- EP075 (SIM): Where reported, 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.
- EP075(SIM): Where reported, Total Cresol is the sum of the reported concentrations of 2-Methylphenol and 3- & 4-Methylphenol at or above the LOR.
- EN33: 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: SOIL
 (Matrix: SOIL)

Sample ID

				BH01_0.2	BH07_0.5	BH07_1.3	BH08_0.2	BH08_0.5
Sampling date / time				08-Feb-2022 00:00	11-Feb-2022 00:00	11-Feb-2022 00:00	11-Feb-2022 00:00	11-Feb-2022 00:00
Compound	CAS Number	LOR	Unit	ES2205426-001	ES2205426-002	ES2205426-003	ES2205426-004	ES2205426-005
				Result	Result	Result	Result	Result
EN33: TCLP Leach - Inorganics/Non-Volatile Organics (Glass Vessel)								
Initial pH	----	0.1	pH Unit	9.2	----	----	9.2	8.6
After HCl pH	----	0.1	pH Unit	1.4	----	----	1.5	1.3
Extraction Fluid Number	----	1	-	1	----	----	1	1
Final pH	----	0.1	pH Unit	5.2	----	----	5.5	5.1
EN33: TCLP Leach - Inorganics/PFAS (Plastic Vessel)								
Initial pH	----	0.1	pH Unit	----	7.1	6.8	----	----
After HCl pH	----	0.1	pH Unit	----	1.4	1.3	----	----
Extraction Fluid Number	----	1	-	----	1	1	----	----
Final pH	----	0.1	pH Unit	----	5.1	5.0	----	----



Analytical Results

Sub-Matrix: SOIL
 (Matrix: SOIL)

Sample ID

				BH08_1.5	BH10_0.3	BH11_0.2	BH11_1.5	BH13_0.3
Sampling date / time				11-Feb-2022 00:00	11-Feb-2022 00:00	11-Feb-2022 00:00	11-Feb-2022 00:00	11-Feb-2022 00:00
Compound	CAS Number	LOR	Unit	ES2205426-006	ES2205426-007	ES2205426-008	ES2205426-009	ES2205426-010
				Result	Result	Result	Result	Result
EN33: TCLP Leach - Inorganics/Non-Volatile Organics (Glass Vessel)								
Initial pH	----	0.1	pH Unit	----	----	9.2	----	----
After HCl pH	----	0.1	pH Unit	----	----	5.0	----	----
Extraction Fluid Number	----	1	-	----	----	2	----	----
Final pH	----	0.1	pH Unit	----	----	4.8	----	----
EN33: TCLP Leach - Inorganics/PFAS (Plastic Vessel)								
Initial pH	----	0.1	pH Unit	9.0	9.2	----	7.6	5.7
After HCl pH	----	0.1	pH Unit	1.4	1.3	----	1.5	1.4
Extraction Fluid Number	----	1	-	1	1	----	1	1
Final pH	----	0.1	pH Unit	5.4	5.1	----	5.2	5.1



Analytical Results

Sub-Matrix: SOIL
 (Matrix: SOIL)

Sample ID

				BH13_1.5	BH14_0.2	BH14_0.9	----	----
Sampling date / time				11-Feb-2022 00:00	11-Feb-2022 00:00	11-Feb-2022 00:00	----	----
Compound	CAS Number	LOR	Unit	ES2205426-011	ES2205426-012	ES2205426-013	-----	-----
				Result	Result	Result	----	----
EN33: TCLP Leach - Inorganics/Non-Volatile Organics (Glass Vessel)								
Initial pH	----	0.1	pH Unit	7.5	9.0	----	----	----
After HCl pH	----	0.1	pH Unit	1.5	1.4	----	----	----
Extraction Fluid Number	----	1	-	1	1	----	----	----
Final pH	----	0.1	pH Unit	5.1	5.2	----	----	----
EN33: TCLP Leach - Inorganics/PFAS (Plastic Vessel)								
Initial pH	----	0.1	pH Unit	----	----	8.9	----	----
After HCl pH	----	0.1	pH Unit	----	----	1.6	----	----
Extraction Fluid Number	----	1	-	----	----	1	----	----
Final pH	----	0.1	pH Unit	----	----	5.7	----	----



Analytical Results

Sub-Matrix: TCLP LEACHATE
 (Matrix: WATER)

Sample ID

				BH01_0.2	BH07_0.5	BH07_1.3	BH08_0.2	BH08_0.5
Sampling date / time				08-Feb-2022 00:00	11-Feb-2022 00:00	11-Feb-2022 00:00	11-Feb-2022 00:00	11-Feb-2022 00:00
Compound	CAS Number	LOR	Unit	ES2205426-001	ES2205426-002	ES2205426-003	ES2205426-004	ES2205426-005
				Result	Result	Result	Result	Result
EG005(ED093)C: Leachable Metals by ICPAES								
Lead	7439-92-1	0.1	mg/L	0.6	0.1	0.2	275	23.7
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons								
Benzo(a)pyrene	50-32-8	0.5	µg/L	<0.5	----	----	<0.5	<0.5
EP075(SIM)S: Phenolic Compound Surrogates								
Phenol-d6	13127-88-3	1.0	%	17.2	----	----	18.7	19.0
2-Chlorophenol-D4	93951-73-6	1.0	%	38.6	----	----	36.4	38.6
2,4,6-Tribromophenol	118-79-6	1.0	%	43.8	----	----	59.5	42.2
EP075(SIM)T: PAH Surrogates								
2-Fluorobiphenyl	321-60-8	1.0	%	52.6	----	----	49.6	50.4
Anthracene-d10	1719-06-8	1.0	%	73.5	----	----	68.9	63.8
4-Terphenyl-d14	1718-51-0	1.0	%	84.1	----	----	63.3	81.9



Analytical Results

Sub-Matrix: TCLP LEACHATE
 (Matrix: WATER)

Sample ID

				BH08_1.5	BH10_0.3	BH11_0.2	BH11_1.5	BH13_0.3
Sampling date / time				11-Feb-2022 00:00	11-Feb-2022 00:00	11-Feb-2022 00:00	11-Feb-2022 00:00	11-Feb-2022 00:00
Compound	CAS Number	LOR	Unit	ES2205426-006	ES2205426-007	ES2205426-008	ES2205426-009	ES2205426-010
				Result	Result	Result	Result	Result
EG005(ED093)C: Leachable Metals by ICPAES								
Lead	7439-92-1	0.1	mg/L	65.3	1.6	0.6	0.2	207
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons								
Benzo(a)pyrene	50-32-8	0.5	µg/L	----	----	<0.5	----	----
EP075(SIM)S: Phenolic Compound Surrogates								
Phenol-d6	13127-88-3	1.0	%	----	----	16.7	----	----
2-Chlorophenol-D4	93951-73-6	1.0	%	----	----	34.6	----	----
2,4,6-Tribromophenol	118-79-6	1.0	%	----	----	67.4	----	----
EP075(SIM)T: PAH Surrogates								
2-Fluorobiphenyl	321-60-8	1.0	%	----	----	55.3	----	----
Anthracene-d10	1719-06-8	1.0	%	----	----	64.8	----	----
4-Terphenyl-d14	1718-51-0	1.0	%	----	----	76.5	----	----



Analytical Results

Sub-Matrix: **TCLP LEACHATE**
 (Matrix: **WATER**)

				Sample ID	BH13_1.5	BH14_0.2	BH14_0.9	----	----
Sampling date / time					11-Feb-2022 00:00	11-Feb-2022 00:00	11-Feb-2022 00:00	----	----
Compound	CAS Number	LOR	Unit		ES2205426-011	ES2205426-012	ES2205426-013	-----	-----
				Result	Result	Result	Result	----	----
EG005(ED093)C: Leachable Metals by ICPAES									
Arsenic	7440-38-2	0.1	mg/L		----	----	0.4	----	----
Lead	7439-92-1	0.1	mg/L		0.2	250	2190	----	----
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons									
Benzo(a)pyrene	50-32-8	0.5	µg/L		<0.5	<0.5	----	----	----
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	1.0	%		19.5	16.6	----	----	----
2-Chlorophenol-D4	93951-73-6	1.0	%		33.1	35.0	----	----	----
2,4,6-Tribromophenol	118-79-6	1.0	%		63.8	65.1	----	----	----
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	1.0	%		50.5	52.0	----	----	----
Anthracene-d10	1719-06-8	1.0	%		69.0	76.6	----	----	----
4-Terphenyl-d14	1718-51-0	1.0	%		69.8	76.7	----	----	----



Surrogate Control Limits

Sub-Matrix: TCLP LEACHATE

		Recovery Limits (%)	
Compound	CAS Number	Low	High
EP075(SIM)S: Phenolic Compound Surrogates			
Phenol-d6	13127-88-3	10	44
2-Chlorophenol-D4	93951-73-6	14	94
2,4,6-Tribromophenol	118-79-6	17	125
EP075(SIM)T: PAH Surrogates			
2-Fluorobiphenyl	321-60-8	20	104
Anthracene-d10	1719-06-8	27	113
4-Terphenyl-d14	1718-51-0	32	112

CERTIFICATE OF ANALYSIS

Work Order : **ES2206121**
Client : **EP RISK MANAGEMENT**
Contact : HARRISON BLAKE
Address : Level 4 73 Walker St
 North Sydney 2060
Telephone : ----
Project : EP2515
Order number : ----
C-O-C number : ----
Sampler : HARRISON BLAKE
Site : ----
Quote number : SY/497/20 Primary analysis only
No. of samples received : 9
No. of samples analysed : 9

Page : 1 of 21
Laboratory : Environmental Division Sydney
Contact : Tyler Anderson
Address : 277-289 Woodpark Road Smithfield NSW Australia 2164
Telephone : +61 2 8784 8555
Date Samples Received : 22-Feb-2022 18:50
Date Analysis Commenced : 23-Feb-2022
Issue Date : 24-Feb-2022 20:02



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

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results
- Surrogate Control Limits

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

Signatories

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

<i>Signatories</i>	<i>Position</i>	<i>Accreditation Category</i>
Edwandy Fadjjar	Organic Coordinator	Sydney Organics, Smithfield, NSW
Franco Lentini	LCMS Coordinator	Sydney Organics, Smithfield, NSW
Ivan Taylor	Analyst	Sydney Inorganics, Smithfield, NSW
Wisam Marassa	Inorganics Coordinator	Sydney Inorganics, Smithfield, NSW



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.

- EP075 (SIM): Where reported, 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.
- EP075: Where reported, 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.
- 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.
- EP068: Where reported, Total Chlordane (sum) is the sum of the reported concentrations of cis-Chlordane and trans-Chlordane at or above the LOR.
- EP080: Where reported, Total Xylenes is the sum of the reported concentrations of m&p-Xylene and o-Xylene at or above the LOR.
- EP074: Where reported, Total Trihalomethanes is the sum of the reported concentrations of all Trihalomethanes at or above the LOR.
- EP074: Where reported, Total Trimethylbenzenes is the sum of the reported concentrations of 1.2.3-Trimethylbenzene, 1.2.4-Trimethylbenzene and 1.3.5-Trimethylbenzene at or above the LOR.
- EP075(SIM): Where reported, Total Cresol is the sum of the reported concentrations of 2-Methylphenol and 3- & 4-Methylphenol at or above the LOR.
- EP231X: PFAS results for sample #6 (TRIP) confirmed by re-extraction and re-analysis.
- EP080: Sample TRIP SPIKE contains volatile compounds spiked into the sample containers prior to dispatch from the laboratory. BTEXN compounds spiked at 20 ug/L.
- EP075: Where reported, 'Sum of PAH' is the sum of the USEPA 16 priority PAHs
- 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.



Analytical Results

Sub-Matrix: WATER
 (Matrix: WATER)

Sample ID

				MW01	MW02	MW03	MW04	DUP
Sampling date / time				21-Feb-2022 00:00	21-Feb-2022 00:00	21-Feb-2022 00:00	21-Feb-2022 00:00	21-Feb-2022 00:00
Compound	CAS Number	LOR	Unit	ES2206121-001	ES2206121-002	ES2206121-003	ES2206121-004	ES2206121-005
				Result	Result	Result	Result	Result
EG020F: Dissolved Metals by ICP-MS								
Arsenic	7440-38-2	0.001	mg/L	0.006	0.008	0.001	0.005	0.001
Cadmium	7440-43-9	0.0001	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Chromium	7440-47-3	0.001	mg/L	0.001	<0.001	<0.001	<0.001	<0.001
Copper	7440-50-8	0.001	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001
Nickel	7440-02-0	0.001	mg/L	0.067	0.073	0.055	0.086	0.056
Lead	7439-92-1	0.001	mg/L	<0.001	0.001	<0.001	<0.001	<0.001
Zinc	7440-66-6	0.005	mg/L	0.068	0.035	0.022	0.054	0.022
EG035F: Dissolved Mercury by FIMS								
Mercury	7439-97-6	0.0001	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
EP066: Polychlorinated Biphenyls (PCB)								
^ Total Polychlorinated biphenyls	----	1	µg/L	<1	<1	<1	<1	<1
EP068A: Organochlorine Pesticides (OC)								
alpha-BHC	319-84-6	0.5	µg/L	<0.5	<0.5	<0.5	<0.5	<0.5
Hexachlorobenzene (HCB)	118-74-1	0.5	µg/L	<0.5	<0.5	<0.5	<0.5	<0.5
beta-BHC	319-85-7	0.5	µg/L	<0.5	<0.5	<0.5	<0.5	<0.5
gamma-BHC	58-89-9	0.5	µg/L	<0.5	<0.5	<0.5	<0.5	<0.5
delta-BHC	319-86-8	0.5	µg/L	<0.5	<0.5	<0.5	<0.5	<0.5
Heptachlor	76-44-8	0.5	µg/L	<0.5	<0.5	<0.5	<0.5	<0.5
Aldrin	309-00-2	0.5	µg/L	<0.5	<0.5	<0.5	<0.5	<0.5
Heptachlor epoxide	1024-57-3	0.5	µg/L	<0.5	<0.5	<0.5	<0.5	<0.5
trans-Chlordane	5103-74-2	0.5	µg/L	<0.5	<0.5	<0.5	<0.5	<0.5
alpha-Endosulfan	959-98-8	0.5	µg/L	<0.5	<0.5	<0.5	<0.5	<0.5
cis-Chlordane	5103-71-9	0.5	µg/L	<0.5	<0.5	<0.5	<0.5	<0.5
Dieldrin	60-57-1	0.5	µg/L	<0.5	<0.5	<0.5	<0.5	<0.5
4,4'-DDE	72-55-9	0.5	µg/L	<0.5	<0.5	<0.5	<0.5	<0.5
Endrin	72-20-8	0.5	µg/L	<0.5	<0.5	<0.5	<0.5	<0.5
beta-Endosulfan	33213-65-9	0.5	µg/L	<0.5	<0.5	<0.5	<0.5	<0.5
4,4'-DDD	72-54-8	0.5	µg/L	<0.5	<0.5	<0.5	<0.5	<0.5
Endrin aldehyde	7421-93-4	0.5	µg/L	<0.5	<0.5	<0.5	<0.5	<0.5
Endosulfan sulfate	1031-07-8	0.5	µg/L	<0.5	<0.5	<0.5	<0.5	<0.5
4,4'-DDT	50-29-3	2.0	µg/L	<2.0	<2.0	<2.0	<2.0	<2.0
Endrin ketone	53494-70-5	0.5	µg/L	<0.5	<0.5	<0.5	<0.5	<0.5
Methoxychlor	72-43-5	2.0	µg/L	<2.0	<2.0	<2.0	<2.0	<2.0
^ Total Chlordane (sum)	----	0.5	µg/L	<0.5	<0.5	<0.5	<0.5	<0.5



Analytical Results

Sub-Matrix: WATER
 (Matrix: WATER)

Sample ID

				MW01	MW02	MW03	MW04	DUP
Sampling date / time				21-Feb-2022 00:00	21-Feb-2022 00:00	21-Feb-2022 00:00	21-Feb-2022 00:00	21-Feb-2022 00:00
Compound	CAS Number	LOR	Unit	ES2206121-001	ES2206121-002	ES2206121-003	ES2206121-004	ES2206121-005
				Result	Result	Result	Result	Result
EP068A: Organochlorine Pesticides (OC) - Continued								
^ Sum of DDD + DDE + DDT	72-54-8/72-55-9/5 0-2	0.5	µg/L	<0.5	<0.5	<0.5	<0.5	<0.5
^ Sum of Aldrin + Dieldrin	309-00-2/60-57-1	0.5	µg/L	<0.5	<0.5	<0.5	<0.5	<0.5
EP068B: Organophosphorus Pesticides (OP)								
Dichlorvos	62-73-7	0.5	µg/L	<0.5	<0.5	<0.5	<0.5	<0.5
Demeton-S-methyl	919-86-8	0.5	µg/L	<0.5	<0.5	<0.5	<0.5	<0.5
Monocrotophos	6923-22-4	2.0	µg/L	<2.0	<2.0	<2.0	<2.0	<2.0
Dimethoate	60-51-5	0.5	µg/L	<0.5	<0.5	<0.5	<0.5	<0.5
Diazinon	333-41-5	0.5	µg/L	<0.5	<0.5	<0.5	<0.5	<0.5
Chlorpyrifos-methyl	5598-13-0	0.5	µg/L	<0.5	<0.5	<0.5	<0.5	<0.5
Parathion-methyl	298-00-0	2.0	µg/L	<2.0	<2.0	<2.0	<2.0	<2.0
Malathion	121-75-5	0.5	µg/L	<0.5	<0.5	<0.5	<0.5	<0.5
Fenthion	55-38-9	0.5	µg/L	<0.5	<0.5	<0.5	<0.5	<0.5
Chlorpyrifos	2921-88-2	0.5	µg/L	<0.5	<0.5	<0.5	<0.5	<0.5
Parathion	56-38-2	2.0	µg/L	<2.0	<2.0	<2.0	<2.0	<2.0
Pirimphos-ethyl	23505-41-1	0.5	µg/L	<0.5	<0.5	<0.5	<0.5	<0.5
Chlorfenvinphos	470-90-6	0.5	µg/L	<0.5	<0.5	<0.5	<0.5	<0.5
Bromophos-ethyl	4824-78-6	0.5	µg/L	<0.5	<0.5	<0.5	<0.5	<0.5
Fenamiphos	22224-92-6	0.5	µg/L	<0.5	<0.5	<0.5	<0.5	<0.5
Prothiofos	34643-46-4	0.5	µg/L	<0.5	<0.5	<0.5	<0.5	<0.5
Ethion	563-12-2	0.5	µg/L	<0.5	<0.5	<0.5	<0.5	<0.5
Carbophenothion	786-19-6	0.5	µg/L	<0.5	<0.5	<0.5	<0.5	<0.5
Azinphos Methyl	86-50-0	0.5	µg/L	<0.5	<0.5	<0.5	<0.5	<0.5
EP074A: Monocyclic Aromatic Hydrocarbons								
Benzene	71-43-2	1	µg/L	<1	<1	<1	<1	----
Toluene	108-88-3	2	µg/L	<2	<2	<2	<2	----
Ethylbenzene	100-41-4	2	µg/L	<2	<2	<2	<2	----
meta- & para-Xylene	108-38-3 106-42-3	2	µg/L	<2	<2	<2	<2	----
Styrene	100-42-5	5	µg/L	<5	<5	<5	<5	----
ortho-Xylene	95-47-6	2	µg/L	<2	<2	<2	<2	----
Isopropylbenzene	98-82-8	5	µg/L	<5	<5	<5	<5	----
n-Propylbenzene	103-65-1	5	µg/L	<5	<5	<5	<5	----
1,3,5-Trimethylbenzene	108-67-8	5	µg/L	<5	<5	<5	<5	----
sec-Butylbenzene	135-98-8	5	µg/L	<5	<5	<5	<5	----
1,2,4-Trimethylbenzene	95-63-6	5	µg/L	<5	<5	<5	<5	----



Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	MW01	MW02	MW03	MW04	DUP
Sampling date / time					21-Feb-2022 00:00	21-Feb-2022 00:00	21-Feb-2022 00:00	21-Feb-2022 00:00	21-Feb-2022 00:00
Compound	CAS Number	LOR	Unit		ES2206121-001	ES2206121-002	ES2206121-003	ES2206121-004	ES2206121-005
					Result	Result	Result	Result	Result
EP074A: Monocyclic Aromatic Hydrocarbons - Continued									
tert-Butylbenzene	98-06-6	5	µg/L		<5	<5	<5	<5	----
p-Isopropyltoluene	99-87-6	5	µg/L		<5	<5	<5	<5	----
n-Butylbenzene	104-51-8	5	µg/L		<5	<5	<5	<5	----
EP074B: Oxygenated Compounds									
Vinyl Acetate	108-05-4	50	µg/L		<50	<50	<50	<50	----
2-Butanone (MEK)	78-93-3	50	µg/L		<50	<50	<50	<50	----
4-Methyl-2-pentanone (MIBK)	108-10-1	50	µg/L		<50	<50	<50	<50	----
2-Hexanone (MBK)	591-78-6	50	µg/L		<50	<50	<50	<50	----
EP074C: Sulfonated Compounds									
Carbon disulfide	75-15-0	5	µg/L		<5	<5	<5	<5	----
EP074D: Fumigants									
2,2-Dichloropropane	594-20-7	5	µg/L		<5	<5	<5	<5	----
1,2-Dichloropropane	78-87-5	5	µg/L		<5	<5	<5	<5	----
cis-1,3-Dichloropropylene	10061-01-5	5	µg/L		<5	<5	<5	<5	----
trans-1,3-Dichloropropylene	10061-02-6	5	µg/L		<5	<5	<5	<5	----
1,2-Dibromoethane (EDB)	106-93-4	5	µg/L		<5	<5	<5	<5	----
EP074E: Halogenated Aliphatic Compounds									
Dichlorodifluoromethane	75-71-8	50	µg/L		<50	<50	<50	<50	----
Chloromethane	74-87-3	50	µg/L		<50	<50	<50	<50	----
Vinyl chloride	75-01-4	50	µg/L		<50	<50	<50	<50	----
Bromomethane	74-83-9	50	µg/L		<50	<50	<50	<50	----
Chloroethane	75-00-3	50	µg/L		<50	<50	<50	<50	----
Trichlorofluoromethane	75-69-4	50	µg/L		<50	<50	<50	<50	----
1,1-Dichloroethene	75-35-4	5	µg/L		<5	<5	<5	<5	----
Iodomethane	74-88-4	5	µg/L		<5	<5	<5	<5	----
trans-1,2-Dichloroethene	156-60-5	5	µg/L		<5	<5	<5	<5	----
1,1-Dichloroethane	75-34-3	5	µg/L		<5	<5	<5	<5	----
cis-1,2-Dichloroethene	156-59-2	5	µg/L		<5	<5	<5	<5	----
1,1,1-Trichloroethane	71-55-6	5	µg/L		<5	<5	<5	<5	----
1,1-Dichloropropylene	563-58-6	5	µg/L		<5	<5	<5	<5	----
Carbon Tetrachloride	56-23-5	5	µg/L		<5	<5	<5	<5	----
1,2-Dichloroethane	107-06-2	5	µg/L		<5	<5	<5	<5	----
Trichloroethene	79-01-6	5	µg/L		<5	<5	<5	<5	----
Dibromomethane	74-95-3	5	µg/L		<5	<5	<5	<5	----



Analytical Results

Sub-Matrix: WATER
 (Matrix: WATER)

Sample ID

				MW01	MW02	MW03	MW04	DUP
Sampling date / time				21-Feb-2022 00:00	21-Feb-2022 00:00	21-Feb-2022 00:00	21-Feb-2022 00:00	21-Feb-2022 00:00
Compound	CAS Number	LOR	Unit	ES2206121-001	ES2206121-002	ES2206121-003	ES2206121-004	ES2206121-005
				Result	Result	Result	Result	Result
EP074E: Halogenated Aliphatic Compounds - Continued								
1.1.2-Trichloroethane	79-00-5	5	µg/L	<5	<5	<5	<5	----
1.3-Dichloropropane	142-28-9	5	µg/L	<5	<5	<5	<5	----
Tetrachloroethene	127-18-4	5	µg/L	<5	<5	<5	<5	----
1.1.1.2-Tetrachloroethane	630-20-6	5	µg/L	<5	<5	<5	<5	----
trans-1.4-Dichloro-2-butene	110-57-6	5	µg/L	<5	<5	<5	<5	----
cis-1.4-Dichloro-2-butene	1476-11-5	5	µg/L	<5	<5	<5	<5	----
1.1.2.2-Tetrachloroethane	79-34-5	5	µg/L	<5	<5	<5	<5	----
1.2.3-Trichloropropane	96-18-4	5	µg/L	<5	<5	<5	<5	----
Pentachloroethane	76-01-7	5	µg/L	<5	<5	<5	<5	----
1.2-Dibromo-3-chloropropane	96-12-8	5	µg/L	<5	<5	<5	<5	----
EP074F: Halogenated Aromatic Compounds								
Chlorobenzene	108-90-7	5	µg/L	<5	<5	<5	<5	----
Bromobenzene	108-86-1	5	µg/L	<5	<5	<5	<5	----
2-Chlorotoluene	95-49-8	5	µg/L	<5	<5	<5	<5	----
4-Chlorotoluene	106-43-4	5	µg/L	<5	<5	<5	<5	----
1.2.3-Trichlorobenzene	87-61-6	5	µg/L	<5	<5	<5	<5	----
EP074G: Trihalomethanes								
Chloroform	67-66-3	5	µg/L	<5	<5	<5	<5	----
Bromodichloromethane	75-27-4	5	µg/L	<5	<5	<5	<5	----
Dibromochloromethane	124-48-1	5	µg/L	<5	<5	<5	<5	----
Bromoform	75-25-2	5	µg/L	<5	<5	<5	<5	----
EP075(SIM)A: Phenolic Compounds								
Phenol	108-95-2	1.0	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0
2-Chlorophenol	95-57-8	1.0	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0
2-Methylphenol	95-48-7	1.0	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0
3- & 4-Methylphenol	1319-77-3	2.0	µg/L	<2.0	<2.0	<2.0	<2.0	<2.0
2-Nitrophenol	88-75-5	1.0	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0
2.4-Dimethylphenol	105-67-9	1.0	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0
2.4-Dichlorophenol	120-83-2	1.0	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0
2.6-Dichlorophenol	87-65-0	1.0	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0
4-Chloro-3-methylphenol	59-50-7	1.0	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0
2.4.6-Trichlorophenol	88-06-2	1.0	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0
2.4.5-Trichlorophenol	95-95-4	1.0	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0
Pentachlorophenol	87-86-5	2.0	µg/L	<2.0	<2.0	<2.0	<2.0	<2.0



Analytical Results

Sub-Matrix: WATER
 (Matrix: WATER)

Sample ID

				MW01	MW02	MW03	MW04	DUP
Sampling date / time				21-Feb-2022 00:00	21-Feb-2022 00:00	21-Feb-2022 00:00	21-Feb-2022 00:00	21-Feb-2022 00:00
Compound	CAS Number	LOR	Unit	ES2206121-001	ES2206121-002	ES2206121-003	ES2206121-004	ES2206121-005
				Result	Result	Result	Result	Result
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons								
Naphthalene	91-20-3	1.0	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0
Acenaphthylene	208-96-8	1.0	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0
Acenaphthene	83-32-9	1.0	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0
Fluorene	86-73-7	1.0	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0
Phenanthrene	85-01-8	1.0	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0
Anthracene	120-12-7	1.0	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0
Fluoranthene	206-44-0	1.0	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0
Pyrene	129-00-0	1.0	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0
Benz(a)anthracene	56-55-3	1.0	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0
Chrysene	218-01-9	1.0	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0
Benzo(b+j)fluoranthene	205-99-2 205-82-3	1.0	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0
Benzo(k)fluoranthene	207-08-9	1.0	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0
Benzo(a)pyrene	50-32-8	0.5	µg/L	<0.5	<0.5	<0.5	<0.5	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	1.0	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0
Dibenz(a,h)anthracene	53-70-3	1.0	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0
Benzo(g,h,i)perylene	191-24-2	1.0	µg/L	<1.0	<1.0	<1.0	<1.0	<1.0
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	µg/L	<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (zero)	----	0.5	µg/L	<0.5	<0.5	<0.5	<0.5	<0.5
EP075A: Phenolic Compounds								
Phenol	108-95-2	2	µg/L	<2	<2	<2	<2	----
2-Chlorophenol	95-57-8	2	µg/L	<2	<2	<2	<2	----
2-Methylphenol	95-48-7	2	µg/L	<2	<2	<2	<2	----
3- & 4-Methylphenol	1319-77-3	4	µg/L	<4	<4	<4	<4	----
2-Nitrophenol	88-75-5	2	µg/L	<2	<2	<2	<2	----
2,4-Dimethylphenol	105-67-9	2	µg/L	<2	<2	<2	<2	----
2,4-Dichlorophenol	120-83-2	2	µg/L	<2	<2	<2	<2	----
2,6-Dichlorophenol	87-65-0	2	µg/L	<2	<2	<2	<2	----
4-Chloro-3-methylphenol	59-50-7	2	µg/L	<2	<2	<2	<2	----
2,4,6-Trichlorophenol	88-06-2	2	µg/L	<2	<2	<2	<2	----
2,4,5-Trichlorophenol	95-95-4	2	µg/L	<2	<2	<2	<2	----
Pentachlorophenol	87-86-5	4	µg/L	<4	<4	<4	<4	----
EP075B: Polynuclear Aromatic Hydrocarbons								
Naphthalene	91-20-3	2	µg/L	<2	<2	<2	<2	----
2-Methylnaphthalene	91-57-6	2	µg/L	<2	<2	<2	<2	----



Analytical Results

Sub-Matrix: WATER
 (Matrix: WATER)

Sample ID

				MW01	MW02	MW03	MW04	DUP
Sampling date / time				21-Feb-2022 00:00	21-Feb-2022 00:00	21-Feb-2022 00:00	21-Feb-2022 00:00	21-Feb-2022 00:00
Compound	CAS Number	LOR	Unit	ES2206121-001	ES2206121-002	ES2206121-003	ES2206121-004	ES2206121-005
				Result	Result	Result	Result	Result
EP075B: Polynuclear Aromatic Hydrocarbons - Continued								
2-Chloronaphthalene	91-58-7	2	µg/L	<2	<2	<2	<2	----
Acenaphthylene	208-96-8	2	µg/L	<2	<2	<2	<2	----
Acenaphthene	83-32-9	2	µg/L	<2	<2	<2	<2	----
Fluorene	86-73-7	2	µg/L	<2	<2	<2	<2	----
Phenanthrene	85-01-8	2	µg/L	<2	<2	<2	<2	----
Anthracene	120-12-7	2	µg/L	<2	<2	<2	<2	----
Fluoranthene	206-44-0	2	µg/L	<2	<2	<2	<2	----
Pyrene	129-00-0	2	µg/L	<2	<2	<2	<2	----
N-2-Fluorenyl Acetamide	53-96-3	2	µg/L	<2	<2	<2	<2	----
Benz(a)anthracene	56-55-3	2	µg/L	<2	<2	<2	<2	----
Chrysene	218-01-9	2	µg/L	<2	<2	<2	<2	----
Benzo(b+j) & Benzo(k)fluoranthene	205-99-2 207-08-9	4	µg/L	<4	<4	<4	<4	----
7.12-Dimethylbenz(a)anthracene	57-97-6	2	µg/L	<2	<2	<2	<2	----
Benzo(a)pyrene	50-32-8	2	µg/L	<2	<2	<2	<2	----
3-Methylcholanthrene	56-49-5	2	µg/L	<2	<2	<2	<2	----
Indeno(1.2.3.cd)pyrene	193-39-5	2	µg/L	<2	<2	<2	<2	----
Dibenz(a,h)anthracene	53-70-3	2	µg/L	<2	<2	<2	<2	----
Benzo(g,h,i)perylene	191-24-2	2	µg/L	<2	<2	<2	<2	----
^ Sum of PAHs	----	2	µg/L	<2	<2	<2	<2	----
^ Benzo(a)pyrene TEQ (zero)	----	2	µg/L	<2	<2	<2	<2	----
EP075C: Phthalate Esters								
Dimethyl phthalate	131-11-3	2	µg/L	<2	<2	<2	<2	----
Diethyl phthalate	84-66-2	2	µg/L	<2	<2	<2	<2	----
Di-n-butyl phthalate	84-74-2	2	µg/L	<2	<2	<2	<2	----
Butyl benzyl phthalate	85-68-7	2	µg/L	<2	<2	<2	<2	----
bis(2-ethylhexyl) phthalate	117-81-7	10	µg/L	<10	<10	<10	<10	----
Di-n-octylphthalate	117-84-0	2	µg/L	<2	<2	<2	<2	----
EP075D: Nitrosamines								
N-Nitrosomethylethylamine	10595-95-6	2	µg/L	<2	<2	<2	<2	----
N-Nitrosodiethylamine	55-18-5	2	µg/L	<2	<2	<2	<2	----
N-Nitrosopyrrolidine	930-55-2	4	µg/L	<4	<4	<4	<4	----
N-Nitrosomorpholine	59-89-2	2	µg/L	<2	<2	<2	<2	----
N-Nitrosodi-n-propylamine	621-64-7	2	µg/L	<2	<2	<2	<2	----
N-Nitrosopiperidine	100-75-4	2	µg/L	<2	<2	<2	<2	----



Analytical Results

Sub-Matrix: WATER
 (Matrix: WATER)

Sample ID

				MW01	MW02	MW03	MW04	DUP
Sampling date / time				21-Feb-2022 00:00	21-Feb-2022 00:00	21-Feb-2022 00:00	21-Feb-2022 00:00	21-Feb-2022 00:00
Compound	CAS Number	LOR	Unit	ES2206121-001	ES2206121-002	ES2206121-003	ES2206121-004	ES2206121-005
				Result	Result	Result	Result	Result
EP075D: Nitrosamines - Continued								
N-Nitrosodibutylamine	924-16-3	2	µg/L	<2	<2	<2	<2	----
N-Nitrosodiphenyl & Diphenylamine	86-30-6 122-39-4	4	µg/L	<4	<4	<4	<4	----
Methapyrilene	91-80-5	2	µg/L	<2	<2	<2	<2	----
EP075E: Nitroaromatics and Ketones								
2-Picoline	109-06-8	2	µg/L	<2	<2	<2	<2	----
Acetophenone	98-86-2	2	µg/L	<2	<2	<2	<2	----
Nitrobenzene	98-95-3	2	µg/L	<2	<2	<2	<2	----
Isophorone	78-59-1	2	µg/L	<2	<2	<2	<2	----
2,6-Dinitrotoluene	606-20-2	4	µg/L	<4	<4	<4	<4	----
2,4-Dinitrotoluene	121-14-2	4	µg/L	<4	<4	<4	<4	----
1-Naphthylamine	134-32-7	2	µg/L	<2	<2	<2	<2	----
4-Nitroquinoline-N-oxide	56-57-5	2	µg/L	<2	<2	<2	<2	----
5-Nitro-o-toluidine	99-55-8	2	µg/L	<2	<2	<2	<2	----
Azobenzene	103-33-3	2	µg/L	<2	<2	<2	<2	----
1,3,5-Trinitrobenzene	99-35-4	2	µg/L	<2	<2	<2	<2	----
Phenacetin	62-44-2	2	µg/L	<2	<2	<2	<2	----
4-Aminobiphenyl	92-67-1	2	µg/L	<2	<2	<2	<2	----
Pentachloronitrobenzene	82-68-8	2	µg/L	<2	<2	<2	<2	----
Pronamide	23950-58-5	2	µg/L	<2	<2	<2	<2	----
Dimethylaminoazobenzene	60-11-7	2	µg/L	<2	<2	<2	<2	----
Chlorobenzilate	510-15-6	2	µg/L	<2	<2	<2	<2	----
EP075F: Haloethers								
Bis(2-chloroethyl) ether	111-44-4	2	µg/L	<2	<2	<2	<2	----
Bis(2-chloroethoxy) methane	111-91-1	2	µg/L	<2	<2	<2	<2	----
4-Chlorophenyl phenyl ether	7005-72-3	2	µg/L	<2	<2	<2	<2	----
4-Bromophenyl phenyl ether	101-55-3	2	µg/L	<2	<2	<2	<2	----
EP075G: Chlorinated Hydrocarbons								
1,3-Dichlorobenzene	541-73-1	2	µg/L	<2	<2	<2	<2	----
1,4-Dichlorobenzene	106-46-7	2	µg/L	<2	<2	<2	<2	----
1,2-Dichlorobenzene	95-50-1	2	µg/L	<2	<2	<2	<2	----
Hexachloroethane	67-72-1	2	µg/L	<2	<2	<2	<2	----
1,2,4-Trichlorobenzene	120-82-1	2	µg/L	<2	<2	<2	<2	----
Hexachloropropylene	1888-71-7	2	µg/L	<2	<2	<2	<2	----



Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	MW01	MW02	MW03	MW04	DUP
Sampling date / time					21-Feb-2022 00:00	21-Feb-2022 00:00	21-Feb-2022 00:00	21-Feb-2022 00:00	21-Feb-2022 00:00
Compound	CAS Number	LOR	Unit		ES2206121-001	ES2206121-002	ES2206121-003	ES2206121-004	ES2206121-005
					Result	Result	Result	Result	Result
EP075G: Chlorinated Hydrocarbons - Continued									
Hexachlorobutadiene	87-68-3	2	µg/L		<2	<2	<2	<2	----
Hexachlorocyclopentadiene	77-47-4	10	µg/L		<10	<10	<10	<10	----
Pentachlorobenzene	608-93-5	2	µg/L		<2	<2	<2	<2	----
Hexachlorobenzene (HCB)	118-74-1	4	µg/L		<4	<4	<4	<4	----
EP075H: Anilines and Benzidines									
Aniline	62-53-3	2	µg/L		<2	<2	<2	<2	----
4-Chloroaniline	106-47-8	2	µg/L		<2	<2	<2	<2	----
2-Nitroaniline	88-74-4	4	µg/L		<4	<4	<4	<4	----
3-Nitroaniline	99-09-2	4	µg/L		<4	<4	<4	<4	----
Dibenzofuran	132-64-9	2	µg/L		<2	<2	<2	<2	----
4-Nitroaniline	100-01-6	2	µg/L		<2	<2	<2	<2	----
Carbazole	86-74-8	2	µg/L		<2	<2	<2	<2	----
3,3'-Dichlorobenzidine	91-94-1	2	µg/L		<2	<2	<2	<2	----
EP075I: Organochlorine Pesticides									
alpha-BHC	319-84-6	2	µg/L		<2	<2	<2	<2	----
beta-BHC	319-85-7	2	µg/L		<2	<2	<2	<2	----
gamma-BHC	58-89-9	2	µg/L		<2	<2	<2	<2	----
delta-BHC	319-86-8	2	µg/L		<2	<2	<2	<2	----
Heptachlor	76-44-8	2	µg/L		<2	<2	<2	<2	----
Aldrin	309-00-2	2	µg/L		<2	<2	<2	<2	----
Heptachlor epoxide	1024-57-3	2	µg/L		<2	<2	<2	<2	----
alpha-Endosulfan	959-98-8	2	µg/L		<2	<2	<2	<2	----
4,4'-DDE	72-55-9	2	µg/L		<2	<2	<2	<2	----
Dieldrin	60-57-1	2	µg/L		<2	<2	<2	<2	----
Endrin	72-20-8	2	µg/L		<2	<2	<2	<2	----
beta-Endosulfan	33213-65-9	2	µg/L		<2	<2	<2	<2	----
4,4'-DDD	72-54-8	2	µg/L		<2	<2	<2	<2	----
Endosulfan sulfate	1031-07-8	2	µg/L		<2	<2	<2	<2	----
4,4'-DDT	50-29-3	4	µg/L		<4	<4	<4	<4	----
^ Sum of Aldrin + Dieldrin	309-00-2/60-57-1	4	µg/L		<4	<4	<4	<4	----
^ Sum of DDD + DDE + DDT	72-54-8/72-55-9/50-2	4	µg/L		<4	<4	<4	<4	----
EP075J: Organophosphorus Pesticides									
Dichlorvos	62-73-7	2	µg/L		<2	<2	<2	<2	----



Analytical Results

Sub-Matrix: WATER
 (Matrix: WATER)

Sample ID

				MW01	MW02	MW03	MW04	DUP
Sampling date / time				21-Feb-2022 00:00	21-Feb-2022 00:00	21-Feb-2022 00:00	21-Feb-2022 00:00	21-Feb-2022 00:00
Compound	CAS Number	LOR	Unit	ES2206121-001	ES2206121-002	ES2206121-003	ES2206121-004	ES2206121-005
				Result	Result	Result	Result	Result
EP075J: Organophosphorus Pesticides - Continued								
Dimethoate	60-51-5	2	µg/L	<2	<2	<2	<2	----
Diazinon	333-41-5	2	µg/L	<2	<2	<2	<2	----
Chlorpyrifos-methyl	5598-13-0	2	µg/L	<2	<2	<2	<2	----
Malathion	121-75-5	2	µg/L	<2	<2	<2	<2	----
Fenthion	55-38-9	2	µg/L	<2	<2	<2	<2	----
Chlorpyrifos	2921-88-2	2	µg/L	<2	<2	<2	<2	----
Pirimphos-ethyl	23505-41-1	2	µg/L	<2	<2	<2	<2	----
Chlorfenvinphos	470-90-6	2	µg/L	<2	<2	<2	<2	----
Prothiofos	34643-46-4	2	µg/L	<2	<2	<2	<2	----
Ethion	563-12-2	2	µg/L	<2	<2	<2	<2	----
EP080/071: Total Petroleum Hydrocarbons								
C6 - C9 Fraction	----	20	µg/L	<20	<20	<20	<20	<20
C10 - C14 Fraction	----	50	µg/L	<50	<50	<50	<50	<50
C15 - C28 Fraction	----	100	µg/L	<100	<100	<100	<100	<100
C29 - C36 Fraction	----	50	µg/L	<50	<50	<50	<50	<50
^ C10 - C36 Fraction (sum)	----	50	µg/L	<50	<50	<50	<50	<50
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions								
C6 - C10 Fraction	C6_C10	20	µg/L	<20	<20	<20	<20	<20
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	20	µg/L	<20	<20	<20	<20	<20
>C10 - C16 Fraction	----	100	µg/L	<100	<100	<100	<100	<100
>C16 - C34 Fraction	----	100	µg/L	<100	<100	<100	<100	<100
>C34 - C40 Fraction	----	100	µg/L	<100	<100	<100	<100	<100
^ >C10 - C40 Fraction (sum)	----	100	µg/L	<100	<100	<100	<100	<100
^ >C10 - C16 Fraction minus Naphthalene (F2)	----	100	µg/L	<100	<100	<100	<100	<100
EP080: BTEXN								
Benzene	71-43-2	1	µg/L	<1	<1	<1	<1	<1
Toluene	108-88-3	2	µg/L	<2	<2	<2	<2	<2
Ethylbenzene	100-41-4	2	µg/L	<2	<2	<2	<2	<2
meta- & para-Xylene	108-38-3 106-42-3	2	µg/L	<2	<2	<2	<2	<2
ortho-Xylene	95-47-6	2	µg/L	<2	<2	<2	<2	<2
^ Total Xylenes	----	2	µg/L	<2	<2	<2	<2	<2
^ Sum of BTEX	----	1	µg/L	<1	<1	<1	<1	<1
Naphthalene	91-20-3	5	µg/L	<5	<5	<5	<5	<5



Analytical Results

Sub-Matrix: WATER
 (Matrix: WATER)

Sample ID

				MW01	MW02	MW03	MW04	DUP
Sampling date / time				21-Feb-2022 00:00	21-Feb-2022 00:00	21-Feb-2022 00:00	21-Feb-2022 00:00	21-Feb-2022 00:00
Compound	CAS Number	LOR	Unit	ES2206121-001	ES2206121-002	ES2206121-003	ES2206121-004	ES2206121-005
				Result	Result	Result	Result	Result

EP080: BTEXN - Continued

EP231A: Perfluoroalkyl Sulfonic Acids

Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	0.04	<0.02	0.03	<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	0.02	0.04	<0.01	0.03	<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	0.02	0.02	<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	0.05	0.04	<0.02	0.04	<0.02
Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	0.04	0.04	<0.02	0.03	<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	0.02	<0.01	0.02	<0.01
Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L	<0.02	<0.02	<0.02	0.03	<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: WATER
 (Matrix: WATER)

Sample ID

				MW01	MW02	MW03	MW04	DUP
Sampling date / time				21-Feb-2022 00:00	21-Feb-2022 00:00	21-Feb-2022 00:00	21-Feb-2022 00:00	21-Feb-2022 00:00
Compound	CAS Number	LOR	Unit	ES2206121-001	ES2206121-002	ES2206121-003	ES2206121-004	ES2206121-005
				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	0.08	<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	0.12	0.20	0.10	0.18	0.01
Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L	0.02	0.06	0.02	0.03	0.01
Sum of PFAS (WA DER List)	----	0.01	µg/L	0.12	0.20	0.10	0.15	0.01
EP066S: PCB Surrogate								
Decachlorobiphenyl	2051-24-3	1	%	118	97.8	112	97.7	90.1
EP068S: Organochlorine Pesticide Surrogate								
Dibromo-DDE	21655-73-2	0.5	%	110	93.1	114	91.9	87.5
EP068T: Organophosphorus Pesticide Surrogate								
DEF	78-48-8	0.5	%	115	98.2	117	97.4	95.7
EP074S: VOC Surrogates								
1,2-Dichloroethane-D4	17060-07-0	5	%	108	129	105	125	----
Toluene-D8	2037-26-5	5	%	124	122	102	119	----



Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	MW01	MW02	MW03	MW04	DUP
Sampling date / time					21-Feb-2022 00:00	21-Feb-2022 00:00	21-Feb-2022 00:00	21-Feb-2022 00:00	21-Feb-2022 00:00
Compound	CAS Number	LOR	Unit		ES2206121-001	ES2206121-002	ES2206121-003	ES2206121-004	ES2206121-005
					Result	Result	Result	Result	Result
EP074S: VOC Surrogates - Continued									
4-Bromofluorobenzene	460-00-4	5	%		115	112	95.4	111	----
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	1.0	%		25.7	24.4	19.0	25.8	20.0
2-Chlorophenol-D4	93951-73-6	1.0	%		47.0	53.3	54.3	47.1	39.8
2,4,6-Tribromophenol	118-79-6	1.0	%		33.7	56.2	55.2	35.0	28.8
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	1.0	%		89.2	82.9	54.0	77.4	83.4
Anthracene-d10	1719-06-8	1.0	%		96.0	69.5	85.6	81.1	81.4
4-Terphenyl-d14	1718-51-0	1.0	%		98.3	80.2	96.0	85.3	66.1
EP075S: Acid Extractable Surrogates									
2-Fluorophenol	367-12-4	2	%		27.3	30.2	36.3	37.6	----
Phenol-d6	13127-88-3	2	%		31.9	33.1	27.5	30.3	----
2-Chlorophenol-D4	93951-73-6	2	%		62.5	66.2	47.2	61.1	----
2,4,6-Tribromophenol	118-79-6	2	%		79.8	66.6	41.9	65.4	----
EP075T: Base/Neutral Extractable Surrogates									
Nitrobenzene-D5	4165-60-0	2	%		67.7	76.7	49.0	57.6	----
1,2-Dichlorobenzene-D4	2199-69-1	2	%		57.7	55.1	45.6	50.0	----
2-Fluorobiphenyl	321-60-8	2	%		59.3	86.9	69.0	79.5	----
Anthracene-d10	1719-06-8	2	%		108	92.7	87.2	88.9	----
4-Terphenyl-d14	1718-51-0	2	%		94.4	76.9	65.8	78.6	----
EP080S: TPH(V)/BTEX Surrogates									
1,2-Dichloroethane-D4	17060-07-0	2	%		123	127	119	123	128
Toluene-D8	2037-26-5	2	%		104	120	91.8	116	99.6
4-Bromofluorobenzene	460-00-4	2	%		107	111	96.9	110	104
EP231S: PFAS Surrogate									
13C4-PFOS	----	0.02	%		102	99.1	93.1	86.5	93.5
13C8-PFOA	----	0.02	%		87.1	91.0	87.6	88.8	89.4



Analytical Results

Sub-Matrix: WATER
 (Matrix: WATER)

Sample ID

				TRIP	Rinsate	Trip blank	Trip Spike	----
Sampling date / time				21-Feb-2022 00:00	21-Feb-2022 00:00	09-Feb-2022 00:00	07-Feb-2022 00:00	----
Compound	CAS Number	LOR	Unit	ES2206121-006	ES2206121-007	ES2206121-008	ES2206121-009	-----
				Result	Result	Result	Result	----
EG020F: Dissolved Metals by ICP-MS								
Arsenic	7440-38-2	0.001	mg/L	0.001	<0.001	----	----	----
Cadmium	7440-43-9	0.0001	mg/L	<0.0001	<0.0001	----	----	----
Chromium	7440-47-3	0.001	mg/L	<0.001	<0.001	----	----	----
Copper	7440-50-8	0.001	mg/L	<0.001	<0.001	----	----	----
Nickel	7440-02-0	0.001	mg/L	0.057	<0.001	----	----	----
Lead	7439-92-1	0.001	mg/L	<0.001	<0.001	----	----	----
Zinc	7440-66-6	0.005	mg/L	0.022	<0.005	----	----	----
EG035F: Dissolved Mercury by FIMS								
Mercury	7439-97-6	0.0001	mg/L	<0.0001	<0.0001	----	----	----
EP066: Polychlorinated Biphenyls (PCB)								
^ Total Polychlorinated biphenyls	----	1	µg/L	<1	<1	----	----	----
EP068A: Organochlorine Pesticides (OC)								
alpha-BHC	319-84-6	0.5	µg/L	<0.5	<0.5	----	----	----
Hexachlorobenzene (HCB)	118-74-1	0.5	µg/L	<0.5	<0.5	----	----	----
beta-BHC	319-85-7	0.5	µg/L	<0.5	<0.5	----	----	----
gamma-BHC	58-89-9	0.5	µg/L	<0.5	<0.5	----	----	----
delta-BHC	319-86-8	0.5	µg/L	<0.5	<0.5	----	----	----
Heptachlor	76-44-8	0.5	µg/L	<0.5	<0.5	----	----	----
Aldrin	309-00-2	0.5	µg/L	<0.5	<0.5	----	----	----
Heptachlor epoxide	1024-57-3	0.5	µg/L	<0.5	<0.5	----	----	----
trans-Chlordane	5103-74-2	0.5	µg/L	<0.5	<0.5	----	----	----
alpha-Endosulfan	959-98-8	0.5	µg/L	<0.5	<0.5	----	----	----
cis-Chlordane	5103-71-9	0.5	µg/L	<0.5	<0.5	----	----	----
Dieldrin	60-57-1	0.5	µg/L	<0.5	<0.5	----	----	----
4,4'-DDE	72-55-9	0.5	µg/L	<0.5	<0.5	----	----	----
Endrin	72-20-8	0.5	µg/L	<0.5	<0.5	----	----	----
beta-Endosulfan	33213-65-9	0.5	µg/L	<0.5	<0.5	----	----	----
4,4'-DDD	72-54-8	0.5	µg/L	<0.5	<0.5	----	----	----
Endrin aldehyde	7421-93-4	0.5	µg/L	<0.5	<0.5	----	----	----
Endosulfan sulfate	1031-07-8	0.5	µg/L	<0.5	<0.5	----	----	----
4,4'-DDT	50-29-3	2.0	µg/L	<2.0	<2.0	----	----	----
Endrin ketone	53494-70-5	0.5	µg/L	<0.5	<0.5	----	----	----
Methoxychlor	72-43-5	2.0	µg/L	<2.0	<2.0	----	----	----
^ Total Chlordane (sum)	----	0.5	µg/L	<0.5	<0.5	----	----	----



Analytical Results

Sub-Matrix: WATER
 (Matrix: WATER)

Sample ID

				TRIP	Rinsate	Trip blank	Trip Spike	----
Sampling date / time				21-Feb-2022 00:00	21-Feb-2022 00:00	09-Feb-2022 00:00	07-Feb-2022 00:00	----
Compound	CAS Number	LOR	Unit	ES2206121-006	ES2206121-007	ES2206121-008	ES2206121-009	-----
				Result	Result	Result	Result	----
EP068A: Organochlorine Pesticides (OC) - Continued								
^ Sum of DDD + DDE + DDT	72-54-8/72-55-9/5 0-2	0.5	µg/L	<0.5	<0.5	----	----	----
^ Sum of Aldrin + Dieldrin	309-00-2/60-57-1	0.5	µg/L	<0.5	<0.5	----	----	----
EP068B: Organophosphorus Pesticides (OP)								
Dichlorvos	62-73-7	0.5	µg/L	<0.5	<0.5	----	----	----
Demeton-S-methyl	919-86-8	0.5	µg/L	<0.5	<0.5	----	----	----
Monocrotophos	6923-22-4	2.0	µg/L	<2.0	<2.0	----	----	----
Dimethoate	60-51-5	0.5	µg/L	<0.5	<0.5	----	----	----
Diazinon	333-41-5	0.5	µg/L	<0.5	<0.5	----	----	----
Chlorpyrifos-methyl	5598-13-0	0.5	µg/L	<0.5	<0.5	----	----	----
Parathion-methyl	298-00-0	2.0	µg/L	<2.0	<2.0	----	----	----
Malathion	121-75-5	0.5	µg/L	<0.5	<0.5	----	----	----
Fenthion	55-38-9	0.5	µg/L	<0.5	<0.5	----	----	----
Chlorpyrifos	2921-88-2	0.5	µg/L	<0.5	<0.5	----	----	----
Parathion	56-38-2	2.0	µg/L	<2.0	<2.0	----	----	----
Pirimphos-ethyl	23505-41-1	0.5	µg/L	<0.5	<0.5	----	----	----
Chlorfenvinphos	470-90-6	0.5	µg/L	<0.5	<0.5	----	----	----
Bromophos-ethyl	4824-78-6	0.5	µg/L	<0.5	<0.5	----	----	----
Fenamiphos	22224-92-6	0.5	µg/L	<0.5	<0.5	----	----	----
Prothiofos	34643-46-4	0.5	µg/L	<0.5	<0.5	----	----	----
Ethion	563-12-2	0.5	µg/L	<0.5	<0.5	----	----	----
Carbophenothion	786-19-6	0.5	µg/L	<0.5	<0.5	----	----	----
Azinphos Methyl	86-50-0	0.5	µg/L	<0.5	<0.5	----	----	----
EP075(SIM)A: Phenolic Compounds								
Phenol	108-95-2	1.0	µg/L	<1.0	<1.0	----	----	----
2-Chlorophenol	95-57-8	1.0	µg/L	<1.0	<1.0	----	----	----
2-Methylphenol	95-48-7	1.0	µg/L	<1.0	<1.0	----	----	----
3- & 4-Methylphenol	1319-77-3	2.0	µg/L	<2.0	<2.0	----	----	----
2-Nitrophenol	88-75-5	1.0	µg/L	<1.0	<1.0	----	----	----
2,4-Dimethylphenol	105-67-9	1.0	µg/L	<1.0	<1.0	----	----	----
2,4-Dichlorophenol	120-83-2	1.0	µg/L	<1.0	<1.0	----	----	----
2,6-Dichlorophenol	87-65-0	1.0	µg/L	<1.0	<1.0	----	----	----
4-Chloro-3-methylphenol	59-50-7	1.0	µg/L	<1.0	<1.0	----	----	----
2,4,6-Trichlorophenol	88-06-2	1.0	µg/L	<1.0	<1.0	----	----	----
2,4,5-Trichlorophenol	95-95-4	1.0	µg/L	<1.0	<1.0	----	----	----



Analytical Results

Sub-Matrix: WATER
 (Matrix: WATER)

Sample ID

				TRIP	Rinsate	Trip blank	Trip Spike	----
Sampling date / time				21-Feb-2022 00:00	21-Feb-2022 00:00	09-Feb-2022 00:00	07-Feb-2022 00:00	----
Compound	CAS Number	LOR	Unit	ES2206121-006	ES2206121-007	ES2206121-008	ES2206121-009	-----
				Result	Result	Result	Result	----

EP075(SIM)A: Phenolic Compounds - Continued

Pentachlorophenol	87-86-5	2.0	µg/L	<2.0	<2.0	----	----	----

EP075(SIM)B: Polynuclear Aromatic Hydrocarbons

Naphthalene	91-20-3	1.0	µg/L	<1.0	<1.0	----	----	----
Acenaphthylene	208-96-8	1.0	µg/L	<1.0	<1.0	----	----	----
Acenaphthene	83-32-9	1.0	µg/L	<1.0	<1.0	----	----	----
Fluorene	86-73-7	1.0	µg/L	<1.0	<1.0	----	----	----
Phenanthrene	85-01-8	1.0	µg/L	<1.0	<1.0	----	----	----
Anthracene	120-12-7	1.0	µg/L	<1.0	<1.0	----	----	----
Fluoranthene	206-44-0	1.0	µg/L	<1.0	<1.0	----	----	----
Pyrene	129-00-0	1.0	µg/L	<1.0	<1.0	----	----	----
Benz(a)anthracene	56-55-3	1.0	µg/L	<1.0	<1.0	----	----	----
Chrysene	218-01-9	1.0	µg/L	<1.0	<1.0	----	----	----
Benzo(b+j)fluoranthene	205-99-2 205-82-3	1.0	µg/L	<1.0	<1.0	----	----	----
Benzo(k)fluoranthene	207-08-9	1.0	µg/L	<1.0	<1.0	----	----	----
Benzo(a)pyrene	50-32-8	0.5	µg/L	<0.5	<0.5	----	----	----
Indeno(1.2.3.cd)pyrene	193-39-5	1.0	µg/L	<1.0	<1.0	----	----	----
Dibenz(a,h)anthracene	53-70-3	1.0	µg/L	<1.0	<1.0	----	----	----
Benzo(g,h,i)perylene	191-24-2	1.0	µg/L	<1.0	<1.0	----	----	----
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	µg/L	<0.5	<0.5	----	----	----
^ Benzo(a)pyrene TEQ (zero)	----	0.5	µg/L	<0.5	<0.5	----	----	----

EP080/071: Total Petroleum Hydrocarbons

C6 - C9 Fraction	----	20	µg/L	<20	<20	<20	----	----
C10 - C14 Fraction	----	50	µg/L	<50	<50	----	----	----
C15 - C28 Fraction	----	100	µg/L	<100	<100	----	----	----
C29 - C36 Fraction	----	50	µg/L	<50	<50	----	----	----
^ C10 - C36 Fraction (sum)	----	50	µg/L	<50	<50	----	----	----

EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions

C6 - C10 Fraction	C6_C10	20	µg/L	<20	<20	<20	----	----
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	20	µg/L	<20	<20	<20	----	----
>C10 - C16 Fraction	----	100	µg/L	<100	<100	----	----	----
>C16 - C34 Fraction	----	100	µg/L	<100	<100	----	----	----
>C34 - C40 Fraction	----	100	µg/L	<100	<100	----	----	----
^ >C10 - C40 Fraction (sum)	----	100	µg/L	<100	<100	----	----	----



Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	TRIP	Rinsate	Trip blank	Trip Spike	----
Sampling date / time					21-Feb-2022 00:00	21-Feb-2022 00:00	09-Feb-2022 00:00	07-Feb-2022 00:00	----
Compound	CAS Number	LOR	Unit		ES2206121-006	ES2206121-007	ES2206121-008	ES2206121-009	-----
					Result	Result	Result	Result	----
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions - Continued									
^ >C10 - C16 Fraction minus Naphthalene (F2)	----	100	µg/L		<100	<100	----	----	----
EP080: BTEXN									
Benzene	71-43-2	1	µg/L		<1	<1	<1	18	----
Toluene	108-88-3	2	µg/L		<2	<2	<2	16	----
Ethylbenzene	100-41-4	2	µg/L		<2	<2	<2	15	----
meta- & para-Xylene	108-38-3 106-42-3	2	µg/L		<2	<2	<2	14	----
ortho-Xylene	95-47-6	2	µg/L		<2	<2	<2	16	----
^ Total Xylenes	----	2	µg/L		<2	<2	<2	30	----
^ Sum of BTEX	----	1	µg/L		<1	<1	<1	79	----
Naphthalene	91-20-3	5	µg/L		<5	<5	<5	16	----
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		0.02	<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	----	----	----



Analytical Results

Sub-Matrix: WATER
 (Matrix: WATER)

Sample ID

				TRIP	Rinsate	Trip blank	Trip Spike	----
Sampling date / time				21-Feb-2022 00:00	21-Feb-2022 00:00	09-Feb-2022 00:00	07-Feb-2022 00:00	----
Compound	CAS Number	LOR	Unit	ES2206121-006	ES2206121-007	ES2206121-008	ES2206121-009	-----
				Result	Result	Result	Result	----
EP231B: Perfluoroalkyl Carboxylic Acids - Continued								
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	----	----	----
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	0.03	<0.01	----	----	----
Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L	0.03	<0.01	----	----	----



Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	TRIP	Rinsate	Trip blank	Trip Spike	----
Sampling date / time					21-Feb-2022 00:00	21-Feb-2022 00:00	09-Feb-2022 00:00	07-Feb-2022 00:00	----
Compound	CAS Number	LOR	Unit		ES2206121-006	ES2206121-007	ES2206121-008	ES2206121-009	-----
					Result	Result	Result	Result	----
EP231P: PFAS Sums - Continued									
Sum of PFAS (WA DER List)	----	0.01	µg/L		0.03	<0.01	----	----	----
EP066S: PCB Surrogate									
Decachlorobiphenyl	2051-24-3	1	%		75.0	116	----	----	----
EP068S: Organochlorine Pesticide Surrogate									
Dibromo-DDE	21655-73-2	0.5	%		73.0	120	----	----	----
EP068T: Organophosphorus Pesticide Surrogate									
DEF	78-48-8	0.5	%		75.8	124	----	----	----
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	1.0	%		22.9	22.9	----	----	----
2-Chlorophenol-D4	93951-73-6	1.0	%		40.2	46.7	----	----	----
2,4,6-Tribromophenol	118-79-6	1.0	%		27.7	27.1	----	----	----
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	1.0	%		56.4	67.6	----	----	----
Anthracene-d10	1719-06-8	1.0	%		69.7	97.4	----	----	----
4-Terphenyl-d14	1718-51-0	1.0	%		70.2	94.6	----	----	----
EP080S: TPH(V)/BTEX Surrogates									
1,2-Dichloroethane-D4	17060-07-0	2	%		131	123	124	128	----
Toluene-D8	2037-26-5	2	%		96.8	93.6	98.8	98.0	----
4-Bromofluorobenzene	460-00-4	2	%		101	94.8	104	102	----
EP231S: PFAS Surrogate									
13C4-PFOS	----	0.02	%		92.2	99.7	----	----	----
13C8-PFOA	----	0.02	%		91.4	90.3	----	----	----



Surrogate Control Limits

Sub-Matrix: WATER		Recovery Limits (%)	
Compound	CAS Number	Low	High
EP066S: PCB Surrogate			
Decachlorobiphenyl	2051-24-3	45	134
EP068S: Organochlorine Pesticide Surrogate			
Dibromo-DDE	21655-73-2	67	111
EP068T: Organophosphorus Pesticide Surrogate			
DEF	78-48-8	67	111
EP074S: VOC Surrogates			
1,2-Dichloroethane-D4	17060-07-0	78	133
Toluene-D8	2037-26-5	79	129
4-Bromofluorobenzene	460-00-4	81	124
EP075(SIM)S: Phenolic Compound Surrogates			
Phenol-d6	13127-88-3	10	44
2-Chlorophenol-D4	93951-73-6	14	94
2,4,6-Tribromophenol	118-79-6	17	125
EP075(SIM)T: PAH Surrogates			
2-Fluorobiphenyl	321-60-8	20	104
Anthracene-d10	1719-06-8	27	113
4-Terphenyl-d14	1718-51-0	32	112
EP075S: Acid Extractable Surrogates			
2-Fluorophenol	367-12-4	10	117
Phenol-d6	13127-88-3	10	69
2-Chlorophenol-D4	93951-73-6	21	130
2,4,6-Tribromophenol	118-79-6	10	151
EP075T: Base/Neutral Extractable Surrogates			
Nitrobenzene-D5	4165-60-0	29	142
1,2-Dichlorobenzene-D4	2199-69-1	24	121
2-Fluorobiphenyl	321-60-8	27	135
Anthracene-d10	1719-06-8	27	113
4-Terphenyl-d14	1718-51-0	21	123
EP080S: TPH(V)/BTEX Surrogates			
1,2-Dichloroethane-D4	17060-07-0	71	137
Toluene-D8	2037-26-5	79	131
4-Bromofluorobenzene	460-00-4	70	128
EP231S: PFAS Surrogate			
13C4-PFOS	----	60	120
13C8-PFOA	----	60	120

CERTIFICATE OF ANALYSIS

Work Order	: ES2207127	Page	: 1 of 5
Client	: EP RISK MANAGEMENT	Laboratory	: Environmental Division Sydney
Contact	: HARRISON BLAKE	Contact	: Tyler Anderson
Address	: Level 4 73 Walker St North Sydney 2060	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
Telephone	: ----	Telephone	: +61 2 8784 8555
Project	: EP2515	Date Samples Received	: 01-Mar-2022 11:30
Order number	: ----	Date Analysis Commenced	: 01-Mar-2022
C-O-C number	: ----	Issue Date	: 03-Mar-2022 17:34
Sampler	: ----		
Site	: ----		
Quote number	: SYBQ/401/21		
No. of samples received	: 5		
No. of samples analysed	: 5		



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

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results
- Surrogate Control Limits

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

Signatories

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

<i>Signatories</i>	<i>Position</i>	<i>Accreditation Category</i>
Edwandy Fadjjar	Organic Coordinator	Sydney Organics, Smithfield, NSW
Wisam Marassa	Inorganics Coordinator	Sydney Inorganics, Smithfield, NSW



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.

- EP075 (SIM): Where reported, 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.
- EP075(SIM): Where reported, Total Cresol is the sum of the reported concentrations of 2-Methylphenol and 3- & 4-Methylphenol at or above the LOR.



Analytical Results

Sub-Matrix: SOIL
 (Matrix: SOIL)

Sample ID

				BH02_0.1	BH02_1.0	BH08_1.5	BH15_0.4	BH17_0.4
Sampling date / time				09-Feb-2022 00:00	09-Feb-2022 00:00	11-Feb-2022 00:00	14-Feb-2022 00:00	14-Feb-2022 00:00
Compound	CAS Number	LOR	Unit	ES2207127-001	ES2207127-002	ES2207127-003	ES2207127-004	ES2207127-005
				Result	Result	Result	Result	Result
EN33: TCLP Leach - Inorganics/Non-Volatile Organics (Glass Vessel)								
Initial pH	----	0.1	pH Unit	10.00	8.00	9.20	7.00	8.10
After HCl pH	----	0.1	pH Unit	5.02	1.77	1.97	1.71	1.73
Extraction Fluid Number	----	1	-	2	1	1	1	1
Final pH	----	0.1	pH Unit	4.60	5.60	5.30	5.00	5.70



Analytical Results

Sub-Matrix: TCLP LEACHATE
 (Matrix: WATER)

Sample ID

				BH02_0.1	BH02_1.0	BH08_1.5	BH15_0.4	BH17_0.4
Sampling date / time				09-Feb-2022 00:00	09-Feb-2022 00:00	11-Feb-2022 00:00	14-Feb-2022 00:00	14-Feb-2022 00:00
Compound	CAS Number	LOR	Unit	ES2207127-001	ES2207127-002	ES2207127-003	ES2207127-004	ES2207127-005
				Result	Result	Result	Result	Result
EG005(ED093)C: Leachable Metals by ICPAES								
Lead	7439-92-1	0.1	mg/L	1.0	0.1	----	0.5	0.2
Nickel	7440-02-0	0.1	mg/L	0.5	----	----	----	0.4
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons								
Benzo(a)pyrene	50-32-8	0.5	µg/L	----	----	<0.5	----	----
EP075(SIM)S: Phenolic Compound Surrogates								
Phenol-d6	13127-88-3	1.0	%	----	----	25.4	----	----
2-Chlorophenol-D4	93951-73-6	1.0	%	----	----	53.9	----	----
2,4,6-Tribromophenol	118-79-6	1.0	%	----	----	68.5	----	----
EP075(SIM)T: PAH Surrogates								
2-Fluorobiphenyl	321-60-8	1.0	%	----	----	71.7	----	----
Anthracene-d10	1719-06-8	1.0	%	----	----	75.3	----	----
4-Terphenyl-d14	1718-51-0	1.0	%	----	----	72.2	----	----



Surrogate Control Limits

Sub-Matrix: TCLP LEACHATE

		Recovery Limits (%)	
Compound	CAS Number	Low	High
EP075(SIM)S: Phenolic Compound Surrogates			
Phenol-d6	13127-88-3	10	44
2-Chlorophenol-D4	93951-73-6	14	94
2,4,6-Tribromophenol	118-79-6	17	125
EP075(SIM)T: PAH Surrogates			
2-Fluorobiphenyl	321-60-8	20	104
Anthracene-d10	1719-06-8	27	113
4-Terphenyl-d14	1718-51-0	32	112



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Company Name: EP Risk Management (NSW)
Address: 80 Mount Street,
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NSW 2060

Project Name: BOURKE ROAD
Project ID: EP3072

Order No.:
Report #: 970423
Phone: 02 99225021
Fax:

Received: Mar 7, 2023 1:16 PM
Due: Mar 14, 2023
Priority: 5 Day
Contact Name: Troy Chatman

Eurofins Analytical Services Manager : Quinn Raw

Sample Detail						Asbestos Absence /Presence	CANCELLED	HOLD	Lead	Particle Size Distribution	Eurofins Suite B15	Chromium Reducible Sulfur Suite	Moisture Set	Moisture Set	Eurofins Suite B7	BTEXN and Volatile TRH	BTEXN and Volatile TRH
Melbourne Laboratory - NATA # 1261 Site # 1254																	
Sydney Laboratory - NATA # 1261 Site # 18217						X	X	X	X		X		X	X	X	X	X
Brisbane Laboratory - NATA # 1261 Site # 20794												X	X	X			
External Laboratory										X							
No	Sample ID	Sample Date	Sampling Time	Matrix	LAB ID												
1	BH18 0.4	Mar 06, 2023		Soil	S23-Ma0022352						X			X	X		
2	BH18 1.0	Mar 06, 2023		Soil	S23-Ma0022353						X			X	X		
3	BH19 0.3	Mar 06, 2023		Soil	S23-Ma0022354						X			X	X		
4	BH19 0.5	Mar 06, 2023		Soil	S23-Ma0022355						X			X	X		
5	BH20 0.5	Mar 06, 2023		Soil	S23-Ma0022356						X			X	X		
6	BH20 1.0	Mar 06, 2023		Soil	S23-Ma0022357						X			X	X		
7	BH21 0.3	Mar 06, 2023		Soil	S23-Ma0022358						X			X	X		
8	BH21 0.5	Mar 06, 2023		Soil	S23-Ma0022359						X			X	X		
9	BH22 0.1	Mar 03, 2023		Soil	S23-Ma0022360						X			X	X		
10	BH22 0.5	Mar 03, 2023		Soil	S23-Ma0022361						X			X	X		
11	BH23 0.3	Mar 02, 2023		Soil	S23-Ma0022362				X					X			



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Melbourne Laboratory - NATA # 1261 Site # 1254																	
Sydney Laboratory - NATA # 1261 Site # 18217						X	X	X	X		X		X	X	X	X	X
Brisbane Laboratory - NATA # 1261 Site # 20794											X	X	X	X			
12	BH23_0.5	Mar 02, 2023		Soil	S23-Ma0022363				X					X			
13	BH23_1.0	Mar 02, 2023		Soil	S23-Ma0022364				X					X			
14	BH23_2.0	Mar 02, 2023		Soil	S23-Ma0022365				X					X			
15	BH24_0.3	Mar 02, 2023		Soil	S23-Ma0022366				X					X			
16	BH24_0.5	Mar 02, 2023		Soil	S23-Ma0022367				X					X			
17	BH24_1.0	Mar 02, 2023		Soil	S23-Ma0022368				X					X			
18	BH24_1.5	Mar 02, 2023		Soil	S23-Ma0022369				X					X			
19	BH25_0.3	Mar 03, 2023		Soil	S23-Ma0022370				X					X			
20	BH25_0.5	Mar 03, 2023		Soil	S23-Ma0022371				X					X			
21	BH25_1.0	Mar 03, 2023		Soil	S23-Ma0022372				X					X			
22	BH25_2.0	Mar 03, 2023		Soil	S23-Ma0022373				X					X			
23	BH26_0.3	Mar 06, 2023		Soil	S23-Ma0022374				X					X			
24	BH26_0.5	Mar 06, 2023		Soil	S23-Ma0022375				X					X			
25	BH26_1.0	Mar 06, 2023		Soil	S23-Ma0022376				X					X			



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Melbourne Laboratory - NATA # 1261 Site # 1254																	
Sydney Laboratory - NATA # 1261 Site # 18217						X	X	X	X		X		X	X	X	X	X
Brisbane Laboratory - NATA # 1261 Site # 20794											X	X	X	X			
26	BH26_2.0	Mar 06, 2023		Soil	S23-Ma0022377				X					X			
27	BH27_0.3	Mar 03, 2023		Soil	S23-Ma0022378				X					X			
28	BH27_0.5	Mar 03, 2023		Soil	S23-Ma0022379				X					X			
29	BH27_1.0	Mar 03, 2023		Soil	S23-Ma0022380				X					X			
30	BH27_2.0	Mar 03, 2023		Soil	S23-Ma0022381				X					X			
31	BH28_0.3	Mar 03, 2023		Soil	S23-Ma0022382				X					X			
32	BH28_0.5	Mar 03, 2023		Soil	S23-Ma0022383				X					X			
33	BH28_1.0	Mar 03, 2023		Soil	S23-Ma0022384				X					X			
34	BH28_2.0	Mar 03, 2023		Soil	S23-Ma0022385				X					X			
35	BH29_0.3	Mar 06, 2023		Soil	S23-Ma0022386				X					X			
36	BH29_0.5	Mar 06, 2023		Soil	S23-Ma0022387				X					X			
37	BH29_1.0	Mar 06, 2023		Soil	S23-Ma0022388				X					X			
38	BH29_2.0	Mar 06, 2023		Soil	S23-Ma0022389				X					X			
39	BH30_0.1	Mar 02, 2023		Soil	S23-Ma0022390				X					X			



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Melbourne Laboratory - NATA # 1261 Site # 1254																	
Sydney Laboratory - NATA # 1261 Site # 18217						X	X	X	X		X		X	X	X	X	X
Brisbane Laboratory - NATA # 1261 Site # 20794											X	X	X	X			
40	BH30_0.5	Mar 02, 2023		Soil	S23-Ma0022391				X					X			
41	BH30_0.7	Mar 02, 2023		Soil	S23-Ma0022392				X					X			
42	BH30_2.0	Mar 02, 2023		Soil	S23-Ma0022393				X					X			
43	BH31_0.3	Mar 03, 2023		Soil	S23-Ma0022394				X					X			
44	BH31_0.5	Mar 03, 2023		Soil	S23-Ma0022395				X					X			
45	BH31_1.0	Mar 03, 2023		Soil	S23-Ma0022396				X					X			
46	BH31_2.0	Mar 03, 2023		Soil	S23-Ma0022397				X					X			
47	BH32_0.1	Mar 06, 2023		Soil	S23-Ma0022398				X					X			
48	BH32_0.5	Mar 06, 2023		Soil	S23-Ma0022399				X					X			
49	BH32_1.0	Mar 06, 2023		Soil	S23-Ma0022400				X					X			
50	BH32_2.0	Mar 06, 2023		Soil	S23-Ma0022401				X					X			
51	BH33_0.3	Mar 03, 2023		Soil	S23-Ma0022402				X					X			
52	BH33_0.5	Mar 03, 2023		Soil	S23-Ma0022403				X					X			
53	BH33_1.0	Mar 03, 2023		Soil	S23-Ma0022404				X					X			



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Melbourne Laboratory - NATA # 1261 Site # 1254																	
Sydney Laboratory - NATA # 1261 Site # 18217						X	X	X	X		X		X	X	X	X	X
Brisbane Laboratory - NATA # 1261 Site # 20794											X	X	X	X			
54	BH33_2.0	Mar 03, 2023		Soil	S23-Ma0022405				X					X			
55	BH34_0.3	Mar 02, 2023		Soil	S23-Ma0022406				X					X			
56	BH34_0.5	Mar 02, 2023		Soil	S23-Ma0022407				X					X			
57	BH34_1.0	Mar 02, 2023		Soil	S23-Ma0022408				X					X			
58	BH34_2.0	Mar 02, 2023		Soil	S23-Ma0022409				X					X			
59	BH35_0.3	Mar 03, 2023		Soil	S23-Ma0022410				X					X			
60	BH35_0.5	Mar 03, 2023		Soil	S23-Ma0022411				X					X			
61	BH35_1.0	Mar 03, 2023		Soil	S23-Ma0022412				X					X			
62	BH35_2.0	Mar 03, 2023		Soil	S23-Ma0022413				X					X			
63	BH36_0.1	Mar 03, 2023		Soil	S23-Ma0022414				X					X			
64	BH36_0.3	Mar 03, 2023		Soil	S23-Ma0022415				X					X			
65	BH36_1.0	Mar 03, 2023		Soil	S23-Ma0022416				X					X			
66	BH36_2.0	Mar 03, 2023		Soil	S23-Ma0022417				X					X			
67	BH37_0.3	Mar 03, 2023		Soil	S23-Ma0022418				X					X			



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Melbourne Laboratory - NATA # 1261 Site # 1254																	
Sydney Laboratory - NATA # 1261 Site # 18217						X	X	X	X		X		X	X	X	X	X
Brisbane Laboratory - NATA # 1261 Site # 20794											X	X	X	X			
68	BH37_0.5	Mar 03, 2023		Soil	S23-Ma0022419				X					X			
69	BH37_1.0	Mar 03, 2023		Soil	S23-Ma0022420				X					X			
70	BH37_2.0	Mar 03, 2023		Soil	S23-Ma0022421				X					X			
71	BH38_0.1	Mar 03, 2023		Soil	S23-Ma0022422				X					X			
72	BH38_0.5	Mar 03, 2023		Soil	S23-Ma0022423				X					X			
73	BH38_0.7	Mar 03, 2023		Soil	S23-Ma0022424				X					X			
74	BH39_0.1	Mar 03, 2023		Soil	S23-Ma0022425				X					X			
75	BH39_0.5	Mar 03, 2023		Soil	S23-Ma0022426				X					X			
76	BH39_1.0	Mar 03, 2023		Soil	S23-Ma0022427				X					X			
77	BH39_2.0	Mar 03, 2023		Soil	S23-Ma0022428				X					X			
78	BH40_0.1	Mar 03, 2023		Soil	S23-Ma0022429				X					X			
79	BH40_0.5	Mar 03, 2023		Soil	S23-Ma0022430				X					X			
80	BH40_1.0	Mar 03, 2023		Soil	S23-Ma0022431				X					X			
81	BH41_0.3	Mar 02, 2023		Soil	S23-Ma0022432				X					X			



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Brisbane
1/21 Smallwood Place
Murarrie
QLD 4172
Tel: +61 7 3902 4600
NATA# 1261 Site# 20794

Newcastle
1/2 Frost Drive
Mayfield West NSW 2304
Tel: +61 2 4968 8448
NATA# 1261
Site# 25079 & 25289

Perth
46-48 Banksia Road
Welshpool
WA 6106
Tel: +61 8 6253 4444
NATA# 2377 Site# 2370

Auckland
35 O'Rorke Road
Penrose,
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43 Detroit Drive
Rolleston,
Christchurch 7675
Tel: 0800 856 450
IANZ# 1290

web: www.eurofins.com.au
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Company Name: EP Risk Management (NSW)
Address: 80 Mount Street,
North Sydney
NSW 2060
Project Name: BOURKE ROAD
Project ID: EP3072

Order No.:
Report #: 970423
Phone: 02 99225021
Fax:

Received: Mar 7, 2023 1:16 PM
Due: Mar 14, 2023
Priority: 5 Day
Contact Name: Troy Chatman

Eurofins Analytical Services Manager : Quinn Raw

Sample Detail						Asbestos Absence /Presence	CANCELLED	HOLD	Lead	Particle Size Distribution	Eurofins Suite B15	Chromium Reducible Sulfur Suite	Moisture Set	Moisture Set	Eurofins Suite B7	BTEXN and Volatile TRH	BTEXN and Volatile TRH
Melbourne Laboratory - NATA # 1261 Site # 1254																	
Sydney Laboratory - NATA # 1261 Site # 18217						X	X	X	X		X		X	X	X	X	X
Brisbane Laboratory - NATA # 1261 Site # 20794											X	X	X	X			
82	BH41_0.5	Mar 02, 2023		Soil	S23-Ma0022433				X					X			
83	BH41_1.0	Mar 02, 2023		Soil	S23-Ma0022434				X					X			
84	BH41_2.0	Mar 02, 2023		Soil	S23-Ma0022435				X					X			
85	BH42_0.1	Mar 03, 2023		Soil	S23-Ma0022436				X					X			
86	BH42_0.5	Mar 03, 2023		Soil	S23-Ma0022437				X					X			
87	BH42_1.0	Mar 03, 2023		Soil	S23-Ma0022438				X					X			
88	BH42_2.0	Mar 03, 2023		Soil	S23-Ma0022439				X					X			
89	BH43_0.3	Mar 06, 2023		Soil	S23-Ma0022440				X					X			
90	BH43_0.5	Mar 06, 2023		Soil	S23-Ma0022441				X					X			
91	DUP01	Mar 06, 2023		Soil	S23-Ma0022448				X					X			
92	DUP01 (Should be DUP02)	Mar 02, 2023		Soil	S23-Ma0022449				X					X			
93	DUP03	Mar 02, 2023		Soil	S23-Ma0022450				X					X			



Eurofins Environment Testing Australia Pty Ltd

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Melbourne
6 Monterey Road
Dandenong South
VIC 3175
Tel: +61 3 8564 5000
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19/8 Lewalan Street
Grovedale
VIC 3216
Tel: +61 3 8564 5000
NATA# 1261 Site# 25403

Sydney
179 Magowar Road
Girraween
NSW 2145
Tel: +61 2 9900 8400
NATA# 1261 Site# 18217

Canberra
Unit 1,2 Dacre Street
Mitchell
ACT 2911
Tel: +61 2 6113 8091
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Melbourne Laboratory - NATA # 1261 Site # 1254																	
Sydney Laboratory - NATA # 1261 Site # 18217						X	X	X	X		X		X	X	X	X	X
Brisbane Laboratory - NATA # 1261 Site # 20794											X	X	X	X			
94	DUP04	Mar 03, 2023		Soil	S23-Ma0022451				X					X			
95	SD01_1.0	Mar 06, 2023		Soil	S23-Ma0022456					X							
96	SD02_0.5	Mar 03, 2023		Soil	S23-Ma0022457					X							
97	SD03_0.5	Mar 06, 2023		Soil	S23-Ma0022458					X							
98	SD04_1.0	Mar 03, 2023		Soil	S23-Ma0022459					X							
99	SD05_0.5	Mar 06, 2023		Soil	S23-Ma0022460					X							
100	SD06_0.5	Mar 02, 2023		Soil	S23-Ma0022461					X							
101	SD07_0.5	Mar 03, 2023		Soil	S23-Ma0022462					X							
102	SD08_1.0	Mar 03, 2023		Soil	S23-Ma0022463					X							
103	PD01_0.5	Mar 06, 2023		Soil	S23-Ma0022464					X							
104	PD02_0.5	Mar 03, 2023		Soil	S23-Ma0022465					X							
105	PD03_0.5	Mar 06, 2023		Soil	S23-Ma0022466					X							
106	PD04_1.0	Mar 03, 2023		Soil	S23-Ma0022467					X							
107	PD05_1.0	Mar 03, 2023		Soil	S23-Ma0022468					X							



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Melbourne Laboratory - NATA # 1261 Site # 1254																	
Sydney Laboratory - NATA # 1261 Site # 18217						X	X	X	X		X		X	X	X	X	X
Brisbane Laboratory - NATA # 1261 Site # 20794												X	X	X			
135	BH45_0.3	Mar 06, 2023		Soil	S23-Ma0022496			X									
136	BH45_0.5	Mar 06, 2023		Soil	S23-Ma0022497			X									
137	BH45_1.0	Mar 06, 2023		Soil	S23-Ma0022498			X									
Test Counts						1	1	19	87	13	10	4	98	98	10	1	1

EP Risk Management (NSW)

**80 Mount Street,
North Sydney
NSW 2060**


NATA Accredited
Accreditation Number 1261
Site Number 18217

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: Troy Chatman
Report 970423-AID
Project Name **BOURKE ROAD**
Project ID **EP3072**
Received Date Mar 07, 2023
Date Reported Mar 30, 2023

Methodology:

Asbestos Fibre
Identification

Conducted in accordance with the Australian Standard AS 4964 – 2004: Method for the Qualitative Identification of Asbestos in Bulk Samples and in-house Method LTM-ASB-8020 by polarised light microscopy (PLM) and dispersion staining (DS) techniques.

NOTE: Positive Trace Analysis results indicate the sample contains detectable respirable fibres.

Unknown Mineral
Fibres

Mineral fibres of unknown type, as determined by PLM with DS, may require another analytical technique, such as Electron Microscopy, to confirm unequivocal identity.

NOTE: While Actinolite, Anthophyllite and Tremolite asbestos may be detected by PLM with DS, due to variability in the optical properties of these materials, AS4964 requires that these are reported as UMF unless confirmed by an independent technique.

Subsampling Soil
Samples

The whole sample submitted is first dried and then passed through a 10mm sieve followed by a 2mm sieve. All fibrous matter greater than 10mm, greater than 2mm as well as the material passing through the 2mm sieve are retained and analysed for the presence of asbestos. If the sub 2mm fraction is greater than approximately 30 to 60g then a sub-sampling routine based on ISO 3082:2009(E) is employed.

NOTE: Depending on the nature and size of the soil sample, the sub-2 mm residue material may need to be sub-sampled for trace analysis, in accordance with AS 4964-2004.

Bonded asbestos-
containing material
(ACM)

The material is first examined and any fibres isolated for identification by PLM and DS. Where required, interfering matrices may be removed by disintegration using a range of heat, chemical or physical treatments, possibly in combination. The resultant material is then further examined in accordance with AS 4964 - 2004.

NOTE: Even after disintegration it may be difficult to detect the presence of asbestos in some asbestos-containing bulk materials using PLM and DS. This is due to the low grade or small length or diameter of the asbestos fibres present in the material, or to the fact that very fine fibres have been distributed intimately throughout the materials. Vinyl/asbestos floor tiles, some asbestos-containing sealants and mastics, asbestos-containing epoxy resins and some ore samples are examples of these types of material, which are difficult to analyse.

Limit of Reporting

The performance limitation of the AS 4964 (2004) method for non-homogeneous samples is around 0.1 g/kg (equivalent to 0.01% (w/w)). Where no asbestos is found by PLM and DS, including Trace Analysis, this is considered to be at the nominal reporting limit of 0.01% (w/w).

The NEPM screening level of 0.001% (w/w) is intended as an on-site determination, not a laboratory Limit of Reporting (LOR), per se. Examination of a large sample size (e.g. 500 mL) may improve the likelihood of detecting asbestos, particularly AF, to aid assessment against the NEPM criteria. Gravimetric determinations to this level of accuracy are outside of AS 4964 and hence NATA Accreditation does not cover the performance of this service (non-NATA results shown with an asterisk).

NOTE: NATA News March 2014, p.7, states in relation to AS 4964: "This is a qualitative method with a nominal reporting limit of 0.01 % " and that currently in Australia "there is no validated method available for the quantification of asbestos". This report is consistent with the analytical procedures and reporting recommendations in the NEPM and the WA DoH.

Project Name BOURKE ROAD
Project ID EP3072
Date Sampled Mar 02, 2023
Report 970423-AID

Client Sample ID	Eurofins Sample No.	Date Sampled	Sample Description	Result
BH23_MS01	23-Ma0022477	Mar 02, 2023	Approximate Sample 18g / 50x40x5mm Sample consisted of: Grey fibre cement material	Chrysotile asbestos detected.

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
Asbestos - LTM-ASB-8020	Sydney	Mar 14, 2023	Indefinite

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Eurofins Analytical Services Manager : Quinn Raw

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Melbourne Laboratory - NATA # 1261 Site # 1254																	
Sydney Laboratory - NATA # 1261 Site # 18217						X	X	X	X		X		X	X	X	X	X
Brisbane Laboratory - NATA # 1261 Site # 20794												X	X	X			
External Laboratory										X							
No	Sample ID	Sample Date	Sampling Time	Matrix	LAB ID												
1	BH18 0.4	Mar 06, 2023		Soil	S23-Ma0022352						X			X	X		
2	BH18 1.0	Mar 06, 2023		Soil	S23-Ma0022353						X			X	X		
3	BH19 0.3	Mar 06, 2023		Soil	S23-Ma0022354						X			X	X		
4	BH19 0.5	Mar 06, 2023		Soil	S23-Ma0022355						X			X	X		
5	BH20 0.5	Mar 06, 2023		Soil	S23-Ma0022356						X			X	X		
6	BH20 1.0	Mar 06, 2023		Soil	S23-Ma0022357						X			X	X		
7	BH21 0.3	Mar 06, 2023		Soil	S23-Ma0022358						X			X	X		
8	BH21 0.5	Mar 06, 2023		Soil	S23-Ma0022359						X			X	X		
9	BH22 0.1	Mar 03, 2023		Soil	S23-Ma0022360						X			X	X		
10	BH22 0.5	Mar 03, 2023		Soil	S23-Ma0022361						X			X	X		
11	BH23 0.3	Mar 02, 2023		Soil	S23-Ma0022362				X					X			

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Melbourne Laboratory - NATA # 1261 Site # 1254																	
Sydney Laboratory - NATA # 1261 Site # 18217						X	X	X	X		X		X	X	X	X	X
Brisbane Laboratory - NATA # 1261 Site # 20794												X	X	X			
12	BH23_0.5	Mar 02, 2023		Soil	S23-Ma0022363				X					X			
13	BH23_1.0	Mar 02, 2023		Soil	S23-Ma0022364				X					X			
14	BH23_2.0	Mar 02, 2023		Soil	S23-Ma0022365				X					X			
15	BH24_0.3	Mar 02, 2023		Soil	S23-Ma0022366				X					X			
16	BH24_0.5	Mar 02, 2023		Soil	S23-Ma0022367				X					X			
17	BH24_1.0	Mar 02, 2023		Soil	S23-Ma0022368				X					X			
18	BH24_1.5	Mar 02, 2023		Soil	S23-Ma0022369				X					X			
19	BH25_0.3	Mar 03, 2023		Soil	S23-Ma0022370				X					X			
20	BH25_0.5	Mar 03, 2023		Soil	S23-Ma0022371				X					X			
21	BH25_1.0	Mar 03, 2023		Soil	S23-Ma0022372				X					X			
22	BH25_2.0	Mar 03, 2023		Soil	S23-Ma0022373				X					X			
23	BH26_0.3	Mar 06, 2023		Soil	S23-Ma0022374				X					X			
24	BH26_0.5	Mar 06, 2023		Soil	S23-Ma0022375				X					X			
25	BH26_1.0	Mar 06, 2023		Soil	S23-Ma0022376				X					X			

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Melbourne Laboratory - NATA # 1261 Site # 1254																	
Sydney Laboratory - NATA # 1261 Site # 18217						X	X	X	X		X		X	X	X	X	X
Brisbane Laboratory - NATA # 1261 Site # 20794												X	X	X			
26	BH26_2.0	Mar 06, 2023		Soil	S23-Ma0022377				X					X			
27	BH27_0.3	Mar 03, 2023		Soil	S23-Ma0022378				X					X			
28	BH27_0.5	Mar 03, 2023		Soil	S23-Ma0022379				X					X			
29	BH27_1.0	Mar 03, 2023		Soil	S23-Ma0022380				X					X			
30	BH27_2.0	Mar 03, 2023		Soil	S23-Ma0022381				X					X			
31	BH28_0.3	Mar 03, 2023		Soil	S23-Ma0022382				X					X			
32	BH28_0.5	Mar 03, 2023		Soil	S23-Ma0022383				X					X			
33	BH28_1.0	Mar 03, 2023		Soil	S23-Ma0022384				X					X			
34	BH28_2.0	Mar 03, 2023		Soil	S23-Ma0022385				X					X			
35	BH29_0.3	Mar 06, 2023		Soil	S23-Ma0022386				X					X			
36	BH29_0.5	Mar 06, 2023		Soil	S23-Ma0022387				X					X			
37	BH29_1.0	Mar 06, 2023		Soil	S23-Ma0022388				X					X			
38	BH29_2.0	Mar 06, 2023		Soil	S23-Ma0022389				X					X			
39	BH30_0.1	Mar 02, 2023		Soil	S23-Ma0022390				X					X			

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Melbourne Laboratory - NATA # 1261 Site # 1254																	
Sydney Laboratory - NATA # 1261 Site # 18217						X	X	X	X		X		X	X	X	X	X
Brisbane Laboratory - NATA # 1261 Site # 20794												X	X	X			
40	BH30_0.5	Mar 02, 2023		Soil	S23-Ma0022391				X					X			
41	BH30_0.7	Mar 02, 2023		Soil	S23-Ma0022392				X					X			
42	BH30_2.0	Mar 02, 2023		Soil	S23-Ma0022393				X					X			
43	BH31_0.3	Mar 03, 2023		Soil	S23-Ma0022394				X					X			
44	BH31_0.5	Mar 03, 2023		Soil	S23-Ma0022395				X					X			
45	BH31_1.0	Mar 03, 2023		Soil	S23-Ma0022396				X					X			
46	BH31_2.0	Mar 03, 2023		Soil	S23-Ma0022397				X					X			
47	BH32_0.1	Mar 06, 2023		Soil	S23-Ma0022398				X					X			
48	BH32_0.5	Mar 06, 2023		Soil	S23-Ma0022399				X					X			
49	BH32_1.0	Mar 06, 2023		Soil	S23-Ma0022400				X					X			
50	BH32_2.0	Mar 06, 2023		Soil	S23-Ma0022401				X					X			
51	BH33_0.3	Mar 03, 2023		Soil	S23-Ma0022402				X					X			
52	BH33_0.5	Mar 03, 2023		Soil	S23-Ma0022403				X					X			
53	BH33_1.0	Mar 03, 2023		Soil	S23-Ma0022404				X					X			

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Melbourne Laboratory - NATA # 1261 Site # 1254																	
Sydney Laboratory - NATA # 1261 Site # 18217						X	X	X	X		X		X	X	X	X	X
Brisbane Laboratory - NATA # 1261 Site # 20794												X	X	X			
54	BH33_2.0	Mar 03, 2023		Soil	S23-Ma0022405				X					X			
55	BH34_0.3	Mar 02, 2023		Soil	S23-Ma0022406				X					X			
56	BH34_0.5	Mar 02, 2023		Soil	S23-Ma0022407				X					X			
57	BH34_1.0	Mar 02, 2023		Soil	S23-Ma0022408				X					X			
58	BH34_2.0	Mar 02, 2023		Soil	S23-Ma0022409				X					X			
59	BH35_0.3	Mar 03, 2023		Soil	S23-Ma0022410				X					X			
60	BH35_0.5	Mar 03, 2023		Soil	S23-Ma0022411				X					X			
61	BH35_1.0	Mar 03, 2023		Soil	S23-Ma0022412				X					X			
62	BH35_2.0	Mar 03, 2023		Soil	S23-Ma0022413				X					X			
63	BH36_0.1	Mar 03, 2023		Soil	S23-Ma0022414				X					X			
64	BH36_0.3	Mar 03, 2023		Soil	S23-Ma0022415				X					X			
65	BH36_1.0	Mar 03, 2023		Soil	S23-Ma0022416				X					X			
66	BH36_2.0	Mar 03, 2023		Soil	S23-Ma0022417				X					X			
67	BH37_0.3	Mar 03, 2023		Soil	S23-Ma0022418				X					X			

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Sample Detail						Asbestos Absence /Presence	CANCELLED	HOLD	Lead	Particle Size Distribution	Eurofins Suite B15	Chromium Reducible Sulfur Suite	Moisture Set	Moisture Set	Eurofins Suite B7	BTEXN and Volatile TRH	BTEXN and Volatile TRH
Melbourne Laboratory - NATA # 1261 Site # 1254																	
Sydney Laboratory - NATA # 1261 Site # 18217						X	X	X	X		X		X	X	X	X	X
Brisbane Laboratory - NATA # 1261 Site # 20794												X	X	X			
68	BH37_0.5	Mar 03, 2023		Soil	S23-Ma0022419				X					X			
69	BH37_1.0	Mar 03, 2023		Soil	S23-Ma0022420				X					X			
70	BH37_2.0	Mar 03, 2023		Soil	S23-Ma0022421				X					X			
71	BH38_0.1	Mar 03, 2023		Soil	S23-Ma0022422				X					X			
72	BH38_0.5	Mar 03, 2023		Soil	S23-Ma0022423				X					X			
73	BH38_0.7	Mar 03, 2023		Soil	S23-Ma0022424				X					X			
74	BH39_0.1	Mar 03, 2023		Soil	S23-Ma0022425				X					X			
75	BH39_0.5	Mar 03, 2023		Soil	S23-Ma0022426				X					X			
76	BH39_1.0	Mar 03, 2023		Soil	S23-Ma0022427				X					X			
77	BH39_2.0	Mar 03, 2023		Soil	S23-Ma0022428				X					X			
78	BH40_0.1	Mar 03, 2023		Soil	S23-Ma0022429				X					X			
79	BH40_0.5	Mar 03, 2023		Soil	S23-Ma0022430				X					X			
80	BH40_1.0	Mar 03, 2023		Soil	S23-Ma0022431				X					X			
81	BH41_0.3	Mar 02, 2023		Soil	S23-Ma0022432				X					X			

Company Name: EP Risk Management (NSW)
Address: 80 Mount Street,
North Sydney
NSW 2060

Project Name: BOURKE ROAD
Project ID: EP3072

Order No.:
Report #: 970423
Phone: 02 99225021
Fax:

Received: Mar 7, 2023 1:16 PM
Due: Mar 14, 2023
Priority: 5 Day
Contact Name: Troy Chatman

Eurofins Analytical Services Manager : Quinn Raw

Sample Detail						Asbestos Absence /Presence	CANCELLED	HOLD	Lead	Particle Size Distribution	Eurofins Suite B15	Chromium Reducible Sulfur Suite	Moisture Set	Moisture Set	Eurofins Suite B7	BTEXN and Volatile TRH	BTEXN and Volatile TRH
Melbourne Laboratory - NATA # 1261 Site # 1254																	
Sydney Laboratory - NATA # 1261 Site # 18217						X	X	X	X		X		X	X	X	X	X
Brisbane Laboratory - NATA # 1261 Site # 20794												X	X	X			
82	BH41_0.5	Mar 02, 2023		Soil	S23-Ma0022433				X					X			
83	BH41_1.0	Mar 02, 2023		Soil	S23-Ma0022434				X					X			
84	BH41_2.0	Mar 02, 2023		Soil	S23-Ma0022435				X					X			
85	BH42_0.1	Mar 03, 2023		Soil	S23-Ma0022436				X					X			
86	BH42_0.5	Mar 03, 2023		Soil	S23-Ma0022437				X					X			
87	BH42_1.0	Mar 03, 2023		Soil	S23-Ma0022438				X					X			
88	BH42_2.0	Mar 03, 2023		Soil	S23-Ma0022439				X					X			
89	BH43_0.3	Mar 06, 2023		Soil	S23-Ma0022440				X					X			
90	BH43_0.5	Mar 06, 2023		Soil	S23-Ma0022441				X					X			
91	DUP01	Mar 06, 2023		Soil	S23-Ma0022448				X					X			
92	DUP01 (Should be DUP02)	Mar 02, 2023		Soil	S23-Ma0022449				X					X			
93	DUP03	Mar 02, 2023		Soil	S23-Ma0022450				X					X			

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Melbourne Laboratory - NATA # 1261 Site # 1254																	
Sydney Laboratory - NATA # 1261 Site # 18217						X	X	X	X		X		X	X	X	X	X
Brisbane Laboratory - NATA # 1261 Site # 20794											X	X	X	X			
94	DUP04	Mar 03, 2023		Soil	S23-Ma0022451				X					X			
95	SD01_1.0	Mar 06, 2023		Soil	S23-Ma0022456					X							
96	SD02_0.5	Mar 03, 2023		Soil	S23-Ma0022457					X							
97	SD03_0.5	Mar 06, 2023		Soil	S23-Ma0022458					X							
98	SD04_1.0	Mar 03, 2023		Soil	S23-Ma0022459					X							
99	SD05_0.5	Mar 06, 2023		Soil	S23-Ma0022460					X							
100	SD06_0.5	Mar 02, 2023		Soil	S23-Ma0022461					X							
101	SD07_0.5	Mar 03, 2023		Soil	S23-Ma0022462					X							
102	SD08_1.0	Mar 03, 2023		Soil	S23-Ma0022463					X							
103	PD01_0.5	Mar 06, 2023		Soil	S23-Ma0022464					X							
104	PD02_0.5	Mar 03, 2023		Soil	S23-Ma0022465					X							
105	PD03_0.5	Mar 06, 2023		Soil	S23-Ma0022466					X							
106	PD04_1.0	Mar 03, 2023		Soil	S23-Ma0022467					X							
107	PD05_1.0	Mar 03, 2023		Soil	S23-Ma0022468					X							

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Sample Detail						Asbestos Absence /Presence	CANCELLED	HOLD	Lead	Particle Size Distribution	Eurofins Suite B15	Chromium Reducible Sulfur Suite	Moisture Set	Moisture Set	Eurofins Suite B7	BTEXN and Volatile TRH	BTEXN and Volatile TRH
Melbourne Laboratory - NATA # 1261 Site # 1254																	
Sydney Laboratory - NATA # 1261 Site # 18217						X	X	X	X		X		X	X	X	X	X
Brisbane Laboratory - NATA # 1261 Site # 20794												X	X	X			
108	BH19_1.0	Mar 06, 2023		Soil	S23-Ma0022469		X										
109	BH25	Mar 03, 2023		Soil	S23-Ma0022470							X	X				
110	BH28_2.0	Mar 03, 2023		Soil	S23-Ma0022471							X	X				
111	BH33	Mar 03, 2023		Soil	S23-Ma0022472							X	X				
112	BH41	Mar 02, 2023		Soil	S23-Ma0022473							X	X				
113	RB01	Mar 02, 2023		Water	S23-Ma0022474				X								
114	RB02	Mar 03, 2023		Water	S23-Ma0022475				X								
115	RB03	Mar 06, 2023		Water	S23-Ma0022476				X								
116	BH23_MS01	Mar 02, 2023		Building Materials	S23-Ma0022477	X											
117	Trip Spike	Mar 06, 2023		Soil	S23-Ma0022478												X
118	Trip Blank	Mar 06, 2023		Soil	S23-Ma0022479											X	
119	BH18_0.5	Mar 06, 2023		Soil	S23-Ma0022480			X									
120	BH19_1.0	Mar 06, 2023		Soil	S23-Ma0022481			X									

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Melbourne Laboratory - NATA # 1261 Site # 1254																	
Sydney Laboratory - NATA # 1261 Site # 18217						X	X	X	X		X		X	X	X	X	X
Brisbane Laboratory - NATA # 1261 Site # 20794												X	X	X			
121	BH20_0.3	Mar 06, 2023		Soil	S23-Ma0022482			X									
122	BH20_2.0	Mar 06, 2023		Soil	S23-Ma0022483			X									
123	BH21_1.0	Mar 06, 2023		Soil	S23-Ma0022484			X									
124	BH21_2.0	Mar 06, 2023		Soil	S23-Ma0022485			X									
125	BH22_1.0	Mar 03, 2023		Soil	S23-Ma0022486			X									
126	BH22_2.0	Mar 03, 2023		Soil	S23-Ma0022487			X									
127	BH30_5.0	Mar 02, 2023		Soil	S23-Ma0022488			X									
128	BH34_5.0	Mar 02, 2023		Soil	S23-Ma0022489			X									
129	BH41_5.0	Mar 02, 2023		Soil	S23-Ma0022490			X									
130	BH43_1.0	Mar 06, 2023		Soil	S23-Ma0022491			X									
131	BH43_2.0	Mar 06, 2023		Soil	S23-Ma0022492			X									
132	BH44_0.3	Mar 06, 2023		Water	S23-Ma0022493			X									
133	BH44_0.5	Mar 06, 2023		Water	S23-Ma0022494			X									
134	BH44_1.0	Mar 06, 2023		Water	S23-Ma0022495			X									

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Melbourne Laboratory - NATA # 1261 Site # 1254																	
Sydney Laboratory - NATA # 1261 Site # 18217						X	X	X	X		X		X	X	X	X	X
Brisbane Laboratory - NATA # 1261 Site # 20794												X	X	X			
135	BH45_0.3	Mar 06, 2023		Soil	S23-Ma0022496			X									
136	BH45_0.5	Mar 06, 2023		Soil	S23-Ma0022497			X									
137	BH45_1.0	Mar 06, 2023		Soil	S23-Ma0022498			X									
Test Counts						1	1	19	87	13	10	4	98	98	10	1	1

Internal Quality Control Review and Glossary General

1. QC data may be available on request.
2. All soil results are reported on a dry basis, unless otherwise stated.
3. Samples were analysed on an 'as received' basis.
4. Information identified on this report with the colour **blue** indicates data provided by customer that may have an impact on the results.
5. This report replaces any interim results previously issued.

Holding Times

Please refer to the most recent version of the 'Sample Preservation and Container Guide' for holding times (QS3001).

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.

Units

% w/w:	Percentage weight-for-weight basis, e.g. of asbestos in asbestos-containing finds in soil samples (% w/w)
F/fld	Airborne fibre filter loading as Fibres (N) per Fields counted (n)
F/mL	Airborne fibre reported concentration as Fibres per millilitre of air drawn over the sampler membrane (C)
g, kg	Mass, e.g. of whole sample (M) or asbestos-containing find within the sample (m)
g/kg	Concentration in grams per kilogram
L, mL	Volume, e.g. of air as measured in AFM (V = r x t)
L/min	Airborne fibre sampling Flowrate as litres per minute of air drawn over the sampler membrane (r)
min	Time (t), e.g. of air sample collection period

Calculations

Airborne Fibre Concentration: $C = \left(\frac{A}{a}\right) \times \left(\frac{N}{n}\right) \times \left(\frac{1}{r}\right) \times \left(\frac{1}{t}\right) = K \times \left(\frac{N}{n}\right) \times \left(\frac{1}{r}\right)$

Asbestos Content (as asbestos): $\% w/w = \frac{(m \times P_A)}{M}$

Weighted Average (of asbestos): $\%_{WA} = \sum \frac{(m \times P_A) \times x}{x}$

Terms

%asbestos	Estimated percentage of asbestos in a given matrix. May be derived from knowledge or experience of the material, informed by HSG264 <i>Appendix 2</i> , else assumed to be 15% in accordance with WA DOH <i>Appendix 2</i> (P_A).
ACM	Asbestos Containing Materials. Asbestos contained within a non-asbestos matrix, typically presented in bonded (non-friable) condition. For the purposes of the NEPM and WA DOH, ACM corresponds to material larger than 7 mm x 7 mm.
AF	Asbestos Fines. Asbestos contamination within a soil sample, as defined by WA DOH. Includes loose fibre bundles and small pieces of friable and non-friable material such as asbestos cement fragments mixed with soil. Considered under the NEPM as equivalent to "non-bonded / friable".
AFM	Airborne Fibre Monitoring, e.g. by the MFM.
Amosite	Amosite Asbestos Detected. Amosite may also refer to Fibrous Grunerite or Brown Asbestos. Identified in accordance with AS 4964-2004.
AS	Australian Standard.
Asbestos Content (as asbestos)	Total % w/w asbestos content in asbestos-containing finds in a soil sample (% w/w).
Chrysotile	Chrysotile Asbestos Detected. Chrysotile may also refer to Fibrous Serpentine or White Asbestos. Identified in accordance with AS 4964-2004.
COC	Chain of Custody.
Crocidolite	Crocidolite Asbestos Detected. Crocidolite may also refer to Fibrous Riebeckite or Blue Asbestos. Identified in accordance with AS 4964-2004.
Dry	Sample is dried by heating prior to analysis.
DS	Dispersion Staining. Technique required for Unequivocal Identification of asbestos fibres by PLM.
FA	Fibrous Asbestos. Asbestos containing material that is wholly or in part friable, including materials with higher asbestos content with a propensity to become friable with handling, and any material that was previously non-friable and in a severely degraded condition. For the purposes of the NEPM and WA DOH, FA generally corresponds to material larger than 7 mm x 7 mm, although FA may be more difficult to visibly distinguish and may be assessed as AF.
Fibre Count	Total of all fibres (whether asbestos or not) meeting the counting criteria set out in the NOHSC:3003
Fibre ID	Fibre Identification. Unequivocal identification of asbestos fibres according to AS 4964-2004. Includes Chrysotile, Amosite (Grunerite) or Crocidolite asbestos.
Friable	Asbestos-containing materials of any size that may be broken or crumbled by hand pressure. For the purposes of the NEPM, this includes both AF and FA. It is outside of the laboratory's remit to assess degree of friability.
HSG248	UK HSE HSG248, <i>Asbestos: The Analysts Guide</i> , 2nd Edition (2021).
HSG264	UK HSE HSG264, <i>Asbestos: The Survey Guide</i> (2012).
ISO (also ISO/IEC)	International Organization for Standardization / International Electrotechnical Commission.
K Factor	Microscope constant (K) as derived from the effective filter area of the given AFM membrane used for collecting the sample (A) and the projected eyepiece graticule area of the specific microscope used for the analysis (a).
LOR	Limit of Reporting.
MFM (also NOHSC:3003)	Membrane Filter Method. As described by the Australian Government National Occupational Health and Safety Commission, <i>Guidance Note on the Membrane Filter Method for Estimating Airborne Asbestos Fibres</i> , 2nd Edition [NOHSC:3003(2005)].
NEPM (also ASC NEPM)	National Environment Protection (Assessment of Site Contamination) Measure, (2013, as amended).
Organic	Organic Fibres Detected. Organic may refer to Natural or Man-Made Polymeric Fibres. Identified in accordance with AS 4964-2004.
PCM	Phase Contrast Microscopy. As used for Fibre Counting according to the MFM.
PLM	Polarised Light Microscopy. As used for Fibre Identification and Trace Analysis according to AS 4964-2004.
Sampling	Unless otherwise stated Eurofins are not responsible for sampling equipment or the sampling process.
SMF	Synthetic Mineral Fibre Detected. SMF may also refer to Man Made Vitreous Fibres. Identified in accordance with AS 4964-2004.
SRA	Sample Receipt Advice.
Trace Analysis	Analytical procedure used to detect the presence of respirable fibres (particularly asbestos) in a given sample matrix.
UK HSE HSG	United Kingdom, Health and Safety Executive, Health and Safety Guidance, publication.
UMF	Unidentified Mineral Fibre Detected. Fibrous minerals that are detected but have not been unequivocally identified by PLM with DS according the AS 4964-2004. May include (but not limited to) Actinolite, Anthophyllite or Tremolite asbestos.
WA DOH	Reference document for the NEPM. Government of Western Australia, <i>Guidelines for the Assessment, Remediation and Management of Asbestos-Contaminated Sites in Western Australia</i> (updated 2021), including Appendix Four: <i>Laboratory analysis</i>
Weighted Average	Combined average % w/w asbestos content of all asbestos-containing finds in the given aliquot or total soil sample (%_{WA}).

Comments
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

Asbestos Counter/Identifier:

Bennel Jiri Senior Analyst-Asbestos

Authorised by:

Chamath JHM Annakkage Senior Analyst-Asbestos



Glenn Jackson
General Manager

Final Report – this report replaces any previously issued Report

- Indicates Not Requested

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

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

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EP Risk Management (NSW)
80 Mount Street,
North Sydney
NSW 2060



NATA Accredited
Accreditation Number 1261
Site Number 18217

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: **Troy Chatman**

Report **970423-S**
Project name **BOURKE ROAD**
Project ID **EP3072**
Received Date **Mar 07, 2023**

Client Sample ID			G01 BH18_04	BH18_10	BH19_03	G01 BH19_05
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			S23- Ma0022352	S23- Ma0022353	S23- Ma0022354	S23- Ma0022355
Date Sampled			Mar 06, 2023	Mar 06, 2023	Mar 06, 2023	Mar 06, 2023
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	110	< 50	53	110
TRH C29-C36	50	mg/kg	< 50	< 50	< 50	< 50
TRH C10-C36 (Total)	50	mg/kg	110	< 50	53	110
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	130	< 100	< 100	140
TRH >C34-C40	100	mg/kg	< 100	< 100	< 100	< 100
TRH >C10-C40 (total)*	100	mg/kg	130	< 100	< 100	140
BTEX						
Benzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Toluene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Ethylbenzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
m&p-Xylenes	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
o-Xylene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Xylenes - Total*	0.3	mg/kg	< 0.3	< 0.3	< 0.3	< 0.3
4-Bromofluorobenzene (surr.)	1	%	97	108	95	95
Total Recoverable Hydrocarbons - 2013 NEPM Fractions						
Naphthalene ^{N02}	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Polycyclic Aromatic Hydrocarbons						
Benzo(a)pyrene TEQ (lower bound) *	0.5	mg/kg	0.9	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene TEQ (medium bound) *	0.5	mg/kg	1.1	0.6	0.6	0.6
Benzo(a)pyrene TEQ (upper bound) *	0.5	mg/kg	1.4	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	0.9	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene	0.5	mg/kg	0.6	< 0.5	< 0.5	< 0.5
Benzo(b&j)fluoranthene ^{N07}	0.5	mg/kg	0.8	< 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	0.7	< 0.5	< 0.5	< 0.5
Chrysene	0.5	mg/kg	1.0	< 0.5	< 0.5	< 0.5

Client Sample ID			G01 BH18_0.4	BH18_1.0	BH19_0.3	G01 BH19_0.5
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			S23-Ma0022352	S23-Ma0022353	S23-Ma0022354	S23-Ma0022355
Date Sampled			Mar 06, 2023	Mar 06, 2023	Mar 06, 2023	Mar 06, 2023
Test/Reference	LOR	Unit				
Polycyclic Aromatic Hydrocarbons						
Dibenz(a,h)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Fluoranthene	0.5	mg/kg	0.8	< 0.5	0.6	0.7
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	0.7	< 0.5	0.5	0.8
Total PAH*	0.5	mg/kg	5.5	< 0.5	1.1	1.5
2-Fluorobiphenyl (surr.)	1	%	136	100	106	126
p-Terphenyl-d14 (surr.)	1	%	129	69	79	134
Organochlorine Pesticides						
Chlordanes - Total	0.1	mg/kg	< 1	< 0.1	< 0.1	< 1
4.4'-DDD	0.05	mg/kg	< 0.5	< 0.05	< 0.05	< 0.5
4.4'-DDE	0.05	mg/kg	< 0.5	< 0.05	< 0.05	< 0.5
4.4'-DDT	0.05	mg/kg	< 0.5	< 0.05	< 0.05	< 0.5
a-HCH	0.05	mg/kg	< 0.5	< 0.05	< 0.05	< 0.5
Aldrin	0.05	mg/kg	< 0.5	< 0.05	< 0.05	< 0.5
b-HCH	0.05	mg/kg	< 0.5	< 0.05	< 0.05	< 0.5
d-HCH	0.05	mg/kg	< 0.5	< 0.05	< 0.05	< 0.5
Dieldrin	0.05	mg/kg	< 0.5	< 0.05	< 0.05	< 0.5
Endosulfan I	0.05	mg/kg	< 0.5	< 0.05	< 0.05	< 0.5
Endosulfan II	0.05	mg/kg	< 0.5	< 0.05	< 0.05	< 0.5
Endosulfan sulphate	0.05	mg/kg	< 0.5	< 0.05	< 0.05	< 0.5
Endrin	0.05	mg/kg	< 0.5	< 0.05	< 0.05	< 0.5
Endrin aldehyde	0.05	mg/kg	< 0.5	< 0.05	< 0.05	< 0.5
Endrin ketone	0.05	mg/kg	< 0.5	< 0.05	< 0.05	< 0.5
g-HCH (Lindane)	0.05	mg/kg	< 0.5	< 0.05	< 0.05	< 0.5
Heptachlor	0.05	mg/kg	< 0.5	< 0.05	< 0.05	< 0.5
Heptachlor epoxide	0.05	mg/kg	< 0.5	< 0.05	< 0.05	< 0.5
Hexachlorobenzene	0.05	mg/kg	< 0.5	< 0.05	< 0.05	< 0.5
Methoxychlor	0.05	mg/kg	< 0.5	< 0.05	< 0.05	< 0.5
Toxaphene	0.5	mg/kg	< 10	< 0.5	< 0.5	< 10
Aldrin and Dieldrin (Total)*	0.05	mg/kg	< 0.5	< 0.05	< 0.05	< 0.5
DDT + DDE + DDD (Total)*	0.05	mg/kg	< 0.5	< 0.05	< 0.05	< 0.5
Vic EPA IWRG 621 OCP (Total)*	0.1	mg/kg	< 1	< 0.1	< 0.1	< 1
Vic EPA IWRG 621 Other OCP (Total)*	0.1	mg/kg	< 1	< 0.1	< 0.1	< 1
Dibutylchloroendate (surr.)	1	%	51	65	77	62
Tetrachloro-m-xylene (surr.)	1	%	142	84	109	144
Organophosphorus Pesticides						
Azinphos-methyl	0.2	mg/kg	< 0.5	< 0.2	< 0.2	< 0.5
Bolstar	0.2	mg/kg	< 0.5	< 0.2	< 0.2	< 0.5
Chlorfenvinphos	0.2	mg/kg	< 0.5	< 0.2	< 0.2	< 0.5
Chlorpyrifos	0.2	mg/kg	< 0.5	< 0.2	< 0.2	< 0.5
Chlorpyrifos-methyl	0.2	mg/kg	< 0.5	< 0.2	< 0.2	< 0.5
Coumaphos	2	mg/kg	< 5	< 2	< 2	< 5
Demeton-S	0.2	mg/kg	< 0.5	< 0.2	< 0.2	< 0.5
Demeton-O	0.2	mg/kg	< 0.5	< 0.2	< 0.2	< 0.5
Diazinon	0.2	mg/kg	< 0.5	< 0.2	< 0.2	< 0.5
Dichlorvos	0.2	mg/kg	< 0.5	< 0.2	< 0.2	< 0.5

Client Sample ID			G01 BH18_0.4	BH18_1.0	BH19_0.3	G01 BH19_0.5
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			S23-Ma0022352	S23-Ma0022353	S23-Ma0022354	S23-Ma0022355
Date Sampled			Mar 06, 2023	Mar 06, 2023	Mar 06, 2023	Mar 06, 2023
Test/Reference	LOR	Unit				
Organophosphorus Pesticides						
Dimethoate	0.2	mg/kg	< 0.5	< 0.2	< 0.2	< 0.5
Disulfoton	0.2	mg/kg	< 0.5	< 0.2	< 0.2	< 0.5
EPN	0.2	mg/kg	< 0.5	< 0.2	< 0.2	< 0.5
Ethion	0.2	mg/kg	< 0.5	< 0.2	< 0.2	< 0.5
Ethoprop	0.2	mg/kg	< 0.5	< 0.2	< 0.2	< 0.5
Ethyl parathion	0.2	mg/kg	< 0.5	< 0.2	< 0.2	< 0.5
Fenitrothion	0.2	mg/kg	< 0.5	< 0.2	< 0.2	< 0.5
Fensulfothion	0.2	mg/kg	< 0.5	< 0.2	< 0.2	< 0.5
Fenthion	0.2	mg/kg	< 0.5	< 0.2	< 0.2	< 0.5
Malathion	0.2	mg/kg	< 0.5	< 0.2	< 0.2	< 0.5
Merphos	0.2	mg/kg	< 0.5	< 0.2	< 0.2	< 0.5
Methyl parathion	0.2	mg/kg	< 0.5	< 0.2	< 0.2	< 0.5
Mevinphos	0.2	mg/kg	< 0.5	< 0.2	< 0.2	< 0.5
Monocrotophos	2	mg/kg	< 5	< 2	< 2	< 5
Naled	0.2	mg/kg	< 0.5	< 0.2	< 0.2	< 0.5
Omethoate	2	mg/kg	< 5	< 2	< 2	< 5
Phorate	0.2	mg/kg	< 0.5	< 0.2	< 0.2	< 0.5
Pirimiphos-methyl	0.2	mg/kg	< 0.5	< 0.2	< 0.2	< 0.5
Pyrazophos	0.2	mg/kg	< 0.5	< 0.2	< 0.2	< 0.5
Ronnel	0.2	mg/kg	< 0.5	< 0.2	< 0.2	< 0.5
Terbufos	0.2	mg/kg	< 0.5	< 0.2	< 0.2	< 0.5
Tetrachlorvinphos	0.2	mg/kg	< 0.5	< 0.2	< 0.2	< 0.5
Tokuthion	0.2	mg/kg	< 0.5	< 0.2	< 0.2	< 0.5
Trichloronate	0.2	mg/kg	< 0.5	< 0.2	< 0.2	< 0.5
Triphenylphosphate (surr.)	1	%	77	82	73	138
Polychlorinated Biphenyls						
Aroclor-1016	0.1	mg/kg	< 1	< 0.1	< 0.1	< 1
Aroclor-1221	0.1	mg/kg	< 1	< 0.1	< 0.1	< 1
Aroclor-1232	0.1	mg/kg	< 1	< 0.1	< 0.1	< 1
Aroclor-1242	0.1	mg/kg	< 1	< 0.1	< 0.1	< 1
Aroclor-1248	0.1	mg/kg	< 1	< 0.1	< 0.1	< 1
Aroclor-1254	0.1	mg/kg	< 1	< 0.1	< 0.1	< 1
Aroclor-1260	0.1	mg/kg	< 1	< 0.1	< 0.1	< 1
Total PCB*	0.1	mg/kg	< 1	< 0.1	< 0.1	< 1
Dibutylchlorendate (surr.)	1	%	51	65	77	62
Tetrachloro-m-xylene (surr.)	1	%	142	84	109	144
Heavy Metals						
Arsenic	2	mg/kg	5.9	< 2	5.3	2.3
Cadmium	0.4	mg/kg	< 0.4	< 0.4	0.5	< 0.4
Chromium	5	mg/kg	27	5.4	13	< 5
Copper	5	mg/kg	63	11	210	29
Lead	5	mg/kg	79	20	890	95
Mercury	0.1	mg/kg	0.2	< 0.1	0.6	0.3
Nickel	5	mg/kg	14	< 5	6.8	< 5
Zinc	5	mg/kg	110	44	200	170
Sample Properties						
% Moisture	1	%	14	9.2	13	12

Client Sample ID			G01BH20_0.5	BH20_1.0	G01BH21_0.3	G01BH21_0.5
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			S23-Ma0022356	S23-Ma0022357	S23-Ma0022358	S23-Ma0022359
Date Sampled			Mar 06, 2023	Mar 06, 2023	Mar 06, 2023	Mar 06, 2023
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	450	< 50	390	210
TRH C29-C36	50	mg/kg	340	< 50	230	150
TRH C10-C36 (Total)	50	mg/kg	790	< 50	620	360
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	740	< 100	590	330
TRH >C34-C40	100	mg/kg	130	< 100	< 100	< 100
TRH >C10-C40 (total)*	100	mg/kg	870	< 100	590	330
BTEX						
Benzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Toluene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Ethylbenzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
m&p-Xylenes	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
o-Xylene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Xylenes - Total*	0.3	mg/kg	< 0.3	< 0.3	< 0.3	< 0.3
4-Bromofluorobenzene (surr.)	1	%	95	94	100	95
Total Recoverable Hydrocarbons - 2013 NEPM Fractions						
Naphthalene ^{N02}	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Polycyclic Aromatic Hydrocarbons						
Benzo(a)pyrene TEQ (lower bound) *	0.5	mg/kg	2.6	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene TEQ (medium bound) *	0.5	mg/kg	2.9	0.6	0.6	0.6
Benzo(a)pyrene TEQ (upper bound) *	0.5	mg/kg	3.1	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	1.7	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene	0.5	mg/kg	2.0	< 0.5	< 0.5	< 0.5
Benzo(b&j)fluoranthene ^{N07}	0.5	mg/kg	1.5	< 0.5	< 0.5	< 0.5
Benzo(g,h,i)perylene	0.5	mg/kg	2.1	< 0.5	< 0.5	< 0.5
Benzo(k)fluoranthene	0.5	mg/kg	1.5	< 0.5	< 0.5	< 0.5
Chrysene	0.5	mg/kg	2.1	< 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	2.6	< 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	1.2	< 0.5	< 0.5	< 0.5
Naphthalene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Phenanthrene	0.5	mg/kg	0.8	< 0.5	< 0.5	< 0.5
Pyrene	0.5	mg/kg	2.9	< 0.5	0.5	< 0.5
Total PAH*	0.5	mg/kg	18	< 0.5	0.5	< 0.5
2-Fluorobiphenyl (surr.)	1	%	119	88	122	131
p-Terphenyl-d14 (surr.)	1	%	122	83	110	112

Client Sample ID			G01BH20_0.5	BH20_1.0	G01BH21_0.3	G01BH21_0.5
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			S23-Ma0022356	S23-Ma0022357	S23-Ma0022358	S23-Ma0022359
Date Sampled			Mar 06, 2023	Mar 06, 2023	Mar 06, 2023	Mar 06, 2023
Test/Reference	LOR	Unit				
Organochlorine Pesticides						
Chlordanes - Total	0.1	mg/kg	< 1	< 0.1	< 1	< 1
4,4'-DDD	0.05	mg/kg	< 0.5	< 0.05	< 0.5	< 0.5
4,4'-DDE	0.05	mg/kg	< 0.5	< 0.05	< 0.5	< 0.5
4,4'-DDT	0.05	mg/kg	< 0.5	< 0.05	< 0.5	< 0.5
a-HCH	0.05	mg/kg	< 0.5	< 0.05	< 0.5	< 0.5
Aldrin	0.05	mg/kg	< 0.5	< 0.05	< 0.5	< 0.5
b-HCH	0.05	mg/kg	< 0.5	< 0.05	< 0.5	< 0.5
d-HCH	0.05	mg/kg	< 0.5	< 0.05	< 0.5	< 0.5
Dieldrin	0.05	mg/kg	< 0.5	< 0.05	< 0.5	< 0.5
Endosulfan I	0.05	mg/kg	< 0.5	< 0.05	< 0.5	< 0.5
Endosulfan II	0.05	mg/kg	< 0.5	< 0.05	< 0.5	< 0.5
Endosulfan sulphate	0.05	mg/kg	< 0.5	< 0.05	< 0.5	< 0.5
Endrin	0.05	mg/kg	< 0.5	< 0.05	< 0.5	< 0.5
Endrin aldehyde	0.05	mg/kg	< 0.5	< 0.05	< 0.5	< 0.5
Endrin ketone	0.05	mg/kg	< 0.5	< 0.05	< 0.5	< 0.5
g-HCH (Lindane)	0.05	mg/kg	< 0.5	< 0.05	< 0.5	< 0.5
Heptachlor	0.05	mg/kg	< 0.5	< 0.05	< 0.5	< 0.5
Heptachlor epoxide	0.05	mg/kg	< 0.5	< 0.05	< 0.5	< 0.5
Hexachlorobenzene	0.05	mg/kg	< 0.5	< 0.05	< 0.5	< 0.5
Methoxychlor	0.05	mg/kg	< 0.5	< 0.05	< 0.5	< 0.5
Toxaphene	0.5	mg/kg	< 10	< 0.5	< 10	< 10
Aldrin and Dieldrin (Total)*	0.05	mg/kg	< 0.5	< 0.05	< 0.5	< 0.5
DDT + DDE + DDD (Total)*	0.05	mg/kg	< 0.5	< 0.05	< 0.5	< 0.5
Vic EPA IWRG 621 OCP (Total)*	0.1	mg/kg	< 1	< 0.1	< 1	< 1
Vic EPA IWRG 621 Other OCP (Total)*	0.1	mg/kg	< 1	< 0.1	< 1	< 1
Dibutylchloroendate (surr.)	1	%	89	Q09INT	92	79
Tetrachloro-m-xylene (surr.)	1	%	132	100	134	135
Organophosphorus Pesticides						
Azinphos-methyl	0.2	mg/kg	< 0.5	< 0.2	< 0.5	< 0.5
Bolstar	0.2	mg/kg	< 0.5	< 0.2	< 0.5	< 0.5
Chlorfenvinphos	0.2	mg/kg	< 0.5	< 0.2	< 0.5	< 0.5
Chlorpyrifos	0.2	mg/kg	< 0.5	< 0.2	< 0.5	< 0.5
Chlorpyrifos-methyl	0.2	mg/kg	< 0.5	< 0.2	< 0.5	< 0.5
Coumaphos	2	mg/kg	< 5	< 2	< 5	< 5
Demeton-S	0.2	mg/kg	< 0.5	< 0.2	< 0.5	< 0.2
Demeton-O	0.2	mg/kg	< 0.5	< 0.2	< 0.5	< 0.2
Diazinon	0.2	mg/kg	< 0.5	< 0.2	< 0.5	< 0.5
Dichlorvos	0.2	mg/kg	< 0.5	< 0.2	< 0.5	< 0.2
Dimethoate	0.2	mg/kg	< 0.5	< 0.2	< 0.5	< 0.2
Disulfoton	0.2	mg/kg	< 0.5	< 0.2	< 0.5	< 0.5
EPN	0.2	mg/kg	< 0.5	< 0.2	< 0.5	< 0.5
Ethion	0.2	mg/kg	< 0.5	< 0.2	< 0.5	< 0.5
Ethoprop	0.2	mg/kg	< 0.5	< 0.2	< 0.5	< 0.2
Ethyl parathion	0.2	mg/kg	< 0.5	< 0.2	< 0.5	< 0.5
Fenitrothion	0.2	mg/kg	< 0.5	< 0.2	< 0.5	< 0.5
Fensulfothion	0.2	mg/kg	< 0.5	< 0.2	< 0.5	< 0.5
Fenthion	0.2	mg/kg	< 0.5	< 0.2	< 0.5	< 0.5
Malathion	0.2	mg/kg	< 0.5	< 0.2	< 0.5	< 0.5
Merphos	0.2	mg/kg	< 0.5	< 0.2	< 0.5	< 0.5

Client Sample ID			G01 BH20_0.5	BH20_1.0	G01 BH21_0.3	G01 BH21_0.5
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			S23-Ma0022356	S23-Ma0022357	S23-Ma0022358	S23-Ma0022359
Date Sampled			Mar 06, 2023	Mar 06, 2023	Mar 06, 2023	Mar 06, 2023
Test/Reference	LOR	Unit				
Organophosphorus Pesticides						
Methyl parathion	0.2	mg/kg	< 0.5	< 0.2	< 0.5	< 0.5
Mevinphos	0.2	mg/kg	< 0.5	< 0.2	< 0.5	< 0.2
Monocrotophos	2	mg/kg	< 5	< 2	< 5	< 2
Naled	0.2	mg/kg	< 0.5	< 0.2	< 0.5	< 0.2
Omethoate	2	mg/kg	< 5	< 2	< 5	< 2
Phorate	0.2	mg/kg	< 0.5	< 0.2	< 0.5	< 0.2
Pirimiphos-methyl	0.2	mg/kg	< 0.5	< 0.2	< 0.5	< 0.5
Pyrazophos	0.2	mg/kg	< 0.5	< 0.2	< 0.5	< 0.5
Ronnel	0.2	mg/kg	< 0.5	< 0.2	< 0.5	< 0.5
Terbufos	0.2	mg/kg	< 0.5	< 0.2	< 0.5	< 0.5
Tetrachlorvinphos	0.2	mg/kg	< 0.5	< 0.2	< 0.5	< 0.5
Tokuthion	0.2	mg/kg	< 0.5	< 0.2	< 0.5	< 0.5
Trichloronate	0.2	mg/kg	< 0.5	< 0.2	< 0.5	< 0.5
Triphenylphosphate (surr.)	1	%	126	100	124	92
Polychlorinated Biphenyls						
Aroclor-1016	0.1	mg/kg	< 1	< 0.1	< 1	< 1
Aroclor-1221	0.1	mg/kg	< 1	< 0.1	< 1	< 1
Aroclor-1232	0.1	mg/kg	< 1	< 0.1	< 1	< 1
Aroclor-1242	0.1	mg/kg	< 1	< 0.1	< 1	< 1
Aroclor-1248	0.1	mg/kg	< 1	< 0.1	< 1	< 1
Aroclor-1254	0.1	mg/kg	< 1	< 0.1	< 1	< 1
Aroclor-1260	0.1	mg/kg	< 1	< 0.1	< 1	< 1
Total PCB*	0.1	mg/kg	< 1	< 0.1	< 1	< 1
Dibutylchlorendate (surr.)	1	%	89	Q09 INT	92	79
Tetrachloro-m-xylene (surr.)	1	%	132	100	134	135
Heavy Metals						
Arsenic	2	mg/kg	3.5	< 2	13	14
Cadmium	0.4	mg/kg	< 0.4	< 0.4	< 0.4	< 0.4
Chromium	5	mg/kg	6.1	< 5	16	49
Copper	5	mg/kg	210	11	170	140
Lead	5	mg/kg	79	36	310	290
Mercury	0.1	mg/kg	0.2	0.2	0.4	0.3
Nickel	5	mg/kg	10	< 5	56	47
Zinc	5	mg/kg	240	17	200	160
Sample Properties						
% Moisture	1	%	14	8.1	7.3	7.7

Client Sample ID Sample Matrix Eurofins Sample No. Date Sampled Test/Reference	LOR	Unit	BH22_0.1 Soil S23- Ma0022360 Mar 03, 2023	BH22_0.5 Soil S23- Ma0022361 Mar 03, 2023	BH23_0.3 Soil S23- Ma0022362 Mar 02, 2023	BH23_0.5 Soil S23- Ma0022363 Mar 02, 2023
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	60	-	-
TRH C29-C36	50	mg/kg	< 50	< 50	-	-
TRH C10-C36 (Total)	50	mg/kg	< 50	60	-	-
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	-	-
BTEX						
Benzene	0.1	mg/kg	< 0.1	< 0.1	-	-
Toluene	0.1	mg/kg	< 0.1	< 0.1	-	-
Ethylbenzene	0.1	mg/kg	< 0.1	< 0.1	-	-
m&p-Xylenes	0.2	mg/kg	< 0.2	< 0.2	-	-
o-Xylene	0.1	mg/kg	< 0.1	< 0.1	-	-
Xylenes - Total*	0.3	mg/kg	< 0.3	< 0.3	-	-
4-Bromofluorobenzene (surr.)	1	%	90	86	-	-
Total Recoverable Hydrocarbons - 2013 NEPM Fractions						
Naphthalene ^{N02}	0.5	mg/kg	< 0.5	< 0.5	-	-
Polycyclic Aromatic Hydrocarbons						
Benzo(a)pyrene TEQ (lower bound) *	0.5	mg/kg	< 0.5	< 0.5	-	-
Benzo(a)pyrene TEQ (medium bound) *	0.5	mg/kg	0.6	0.6	-	-
Benzo(a)pyrene TEQ (upper bound) *	0.5	mg/kg	1.2	1.2	-	-
Acenaphthene	0.5	mg/kg	< 0.5	< 0.5	-	-
Acenaphthylene	0.5	mg/kg	< 0.5	< 0.5	-	-
Anthracene	0.5	mg/kg	< 0.5	< 0.5	-	-
Benz(a)anthracene	0.5	mg/kg	< 0.5	< 0.5	-	-
Benzo(a)pyrene	0.5	mg/kg	< 0.5	< 0.5	-	-
Benzo(b&j)fluoranthene ^{N07}	0.5	mg/kg	< 0.5	< 0.5	-	-
Benzo(g,h,i)perylene	0.5	mg/kg	< 0.5	< 0.5	-	-
Benzo(k)fluoranthene	0.5	mg/kg	< 0.5	< 0.5	-	-
Chrysene	0.5	mg/kg	< 0.5	< 0.5	-	-
Dibenz(a,h)anthracene	0.5	mg/kg	< 0.5	< 0.5	-	-
Fluoranthene	0.5	mg/kg	< 0.5	< 0.5	-	-
Fluorene	0.5	mg/kg	< 0.5	< 0.5	-	-
Indeno(1,2,3-cd)pyrene	0.5	mg/kg	< 0.5	< 0.5	-	-
Naphthalene	0.5	mg/kg	< 0.5	< 0.5	-	-
Phenanthrene	0.5	mg/kg	< 0.5	< 0.5	-	-
Pyrene	0.5	mg/kg	< 0.5	< 0.5	-	-
Total PAH*	0.5	mg/kg	< 0.5	< 0.5	-	-
2-Fluorobiphenyl (surr.)	1	%	92	92	-	-
p-Terphenyl-d14 (surr.)	1	%	84	88	-	-

Client Sample ID			BH22_0.1	BH22_0.5	BH23_0.3	BH23_0.5
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			S23-Ma0022360	S23-Ma0022361	S23-Ma0022362	S23-Ma0022363
Date Sampled			Mar 03, 2023	Mar 03, 2023	Mar 02, 2023	Mar 02, 2023
Test/Reference	LOR	Unit				
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	-	-
Dibutylchloroendate (surr.)	1	%	57	88	-	-
Tetrachloro-m-xylene (surr.)	1	%	96	96	-	-
Organophosphorus Pesticides						
Azinphos-methyl	0.2	mg/kg	< 0.2	< 0.2	-	-
Bolstar	0.2	mg/kg	< 0.2	< 0.2	-	-
Chlorfenvinphos	0.2	mg/kg	< 0.2	< 0.2	-	-
Chlorpyrifos	0.2	mg/kg	< 0.2	< 0.2	-	-
Chlorpyrifos-methyl	0.2	mg/kg	< 0.2	< 0.2	-	-
Coumaphos	2	mg/kg	< 2	< 2	-	-
Demeton-S	0.2	mg/kg	< 0.2	< 0.2	-	-
Demeton-O	0.2	mg/kg	< 0.2	< 0.2	-	-
Diazinon	0.2	mg/kg	< 0.2	< 0.2	-	-
Dichlorvos	0.2	mg/kg	< 0.2	< 0.2	-	-
Dimethoate	0.2	mg/kg	< 0.2	< 0.2	-	-
Disulfoton	0.2	mg/kg	< 0.2	< 0.2	-	-
EPN	0.2	mg/kg	< 0.2	< 0.2	-	-
Ethion	0.2	mg/kg	< 0.2	< 0.2	-	-
Ethoprop	0.2	mg/kg	< 0.2	< 0.2	-	-
Ethyl parathion	0.2	mg/kg	< 0.2	< 0.2	-	-
Fenitrothion	0.2	mg/kg	< 0.2	< 0.2	-	-
Fensulfothion	0.2	mg/kg	< 0.2	< 0.2	-	-
Fenthion	0.2	mg/kg	< 0.2	< 0.2	-	-
Malathion	0.2	mg/kg	< 0.2	< 0.2	-	-
Merphos	0.2	mg/kg	< 0.2	< 0.2	-	-

Client Sample ID			BH22_0.1	BH22_0.5	BH23_0.3	BH23_0.5
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			S23-Ma0022360	S23-Ma0022361	S23-Ma0022362	S23-Ma0022363
Date Sampled			Mar 03, 2023	Mar 03, 2023	Mar 02, 2023	Mar 02, 2023
Test/Reference	LOR	Unit				
Organophosphorus Pesticides						
Methyl parathion	0.2	mg/kg	< 0.2	< 0.2	-	-
Mevinphos	0.2	mg/kg	< 0.2	< 0.2	-	-
Monocrotophos	2	mg/kg	< 2	< 2	-	-
Naled	0.2	mg/kg	< 0.2	< 0.2	-	-
Omethoate	2	mg/kg	< 2	< 2	-	-
Phorate	0.2	mg/kg	< 0.2	< 0.2	-	-
Pirimiphos-methyl	0.2	mg/kg	< 0.2	< 0.2	-	-
Pyrazophos	0.2	mg/kg	0.2	< 0.2	-	-
Ronnel	0.2	mg/kg	< 0.2	< 0.2	-	-
Terbufos	0.2	mg/kg	< 0.2	< 0.2	-	-
Tetrachlorvinphos	0.2	mg/kg	< 0.2	< 0.2	-	-
Tokuthion	0.2	mg/kg	< 0.2	< 0.2	-	-
Trichloronate	0.2	mg/kg	< 0.2	< 0.2	-	-
Triphenylphosphate (surr.)	1	%	70	83	-	-
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	-	-
Dibutylchloredate (surr.)	1	%	57	88	-	-
Tetrachloro-m-xylene (surr.)	1	%	96	96	-	-
Heavy Metals						
Arsenic	2	mg/kg	12	48	-	-
Cadmium	0.4	mg/kg	0.8	2.1	-	-
Chromium	5	mg/kg	8.5	17	-	-
Copper	5	mg/kg	220	1100	-	-
Lead	5	mg/kg	400	860	36000	13000
Mercury	0.1	mg/kg	0.4	0.8	-	-
Nickel	5	mg/kg	14	36	-	-
Zinc	5	mg/kg	680	680	-	-
Sample Properties						
% Moisture	1	%	22	26	18	22

Client Sample ID			BH23_1.0	BH23_2.0	BH24_0.3	BH24_0.5
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			S23-Ma0022364	S23-Ma0022365	S23-Ma0022366	S23-Ma0022367
Date Sampled			Mar 02, 2023	Mar 02, 2023	Mar 02, 2023	Mar 02, 2023
Test/Reference	LOR	Unit				
Heavy Metals						
Lead	5	mg/kg	3200	3200	31000	27000
Sample Properties						
% Moisture	1	%	19	26	12	13

Client Sample ID			BH24_1.0	BH24_1.5	BH25_0.3	BH25_0.5
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			S23-Ma0022368	S23-Ma0022369	S23-Ma0022370	S23-Ma0022371
Date Sampled			Mar 02, 2023	Mar 02, 2023	Mar 03, 2023	Mar 03, 2023
Test/Reference	LOR	Unit				
Heavy Metals						
Lead	5	mg/kg	33000	47000	4600	1400
Sample Properties						
% Moisture	1	%	21	36	9.8	13

Client Sample ID			BH25_1.0	BH25_2.0	BH26_0.3	BH26_0.5
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			S23-Ma0022372	S23-Ma0022373	S23-Ma0022374	S23-Ma0022375
Date Sampled			Mar 03, 2023	Mar 03, 2023	Mar 06, 2023	Mar 06, 2023
Test/Reference	LOR	Unit				
Heavy Metals						
Lead	5	mg/kg	210	33	1300	380
Sample Properties						
% Moisture	1	%	18	14	24	30

Client Sample ID			BH26_1.0	BH26_2.0	BH27_0.3	BH27_0.5
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			S23-Ma0022376	S23-Ma0022377	S23-Ma0022378	S23-Ma0022379
Date Sampled			Mar 06, 2023	Mar 06, 2023	Mar 03, 2023	Mar 03, 2023
Test/Reference	LOR	Unit				
Heavy Metals						
Lead	5	mg/kg	210	11	18000	8100
Sample Properties						
% Moisture	1	%	7.9	16	11	11

Client Sample ID			BH27_1.0	BH27_2.0	BH28_0.3	BH28_0.5
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			S23-Ma0022380	S23-Ma0022381	S23-Ma0022382	S23-Ma0022383
Date Sampled			Mar 03, 2023	Mar 03, 2023	Mar 03, 2023	Mar 03, 2023
Test/Reference	LOR	Unit				
Heavy Metals						
Lead	5	mg/kg	1300	310	9300	790
Sample Properties						
% Moisture	1	%	22	19	16	13

Client Sample ID			BH28_1.0	BH28_2.0	BH29_0.3	BH29_0.5
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			S23-Ma0022384	S23-Ma0022385	S23-Ma0022386	S23-Ma0022387
Date Sampled			Mar 03, 2023	Mar 03, 2023	Mar 06, 2023	Mar 06, 2023
Test/Reference	LOR	Unit				
Heavy Metals						
Lead	5	mg/kg	1900	66	3900	15000
Sample Properties						
% Moisture	1	%	13	14	14	13

Client Sample ID			BH29_1.0	BH29_2.0	BH30_0.1	BH30_0.5
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			S23-Ma0022388	S23-Ma0022389	S23-Ma0022390	S23-Ma0022391
Date Sampled			Mar 06, 2023	Mar 06, 2023	Mar 02, 2023	Mar 02, 2023
Test/Reference	LOR	Unit				
Heavy Metals						
Lead	5	mg/kg	2100	91	300	340
Sample Properties						
% Moisture	1	%	21	13	13	12

Client Sample ID			BH30_0.7	BH30_2.0	BH31_0.3	BH31_0.5
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			S23-Ma0022392	S23-Ma0022393	S23-Ma0022394	S23-Ma0022395
Date Sampled			Mar 02, 2023	Mar 02, 2023	Mar 03, 2023	Mar 03, 2023
Test/Reference	LOR	Unit				
Heavy Metals						
Lead	5	mg/kg	110	15	10000	6600
Sample Properties						
% Moisture	1	%	9.9	20	14	19

Client Sample ID			BH31_1.0	BH31_2.0	BH32_0.1	BH32_0.5
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			S23-Ma0022396	S23-Ma0022397	S23-Ma0022398	S23-Ma0022399
Date Sampled			Mar 03, 2023	Mar 03, 2023	Mar 06, 2023	Mar 06, 2023
Test/Reference	LOR	Unit				
Heavy Metals						
Lead	5	mg/kg	460	240	2300	110
Sample Properties						
% Moisture	1	%	20	18	6.5	11

Client Sample ID			BH32_1.0	BH32_2.0	BH33_0.3	BH33_0.5
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			S23-Ma0022400	S23-Ma0022401	S23-Ma0022402	S23-Ma0022403
Date Sampled			Mar 06, 2023	Mar 06, 2023	Mar 03, 2023	Mar 03, 2023
Test/Reference	LOR	Unit				
Heavy Metals						
Lead	5	mg/kg	150	< 5	35000	39000
Sample Properties						
% Moisture	1	%	14	15	9.6	14

Client Sample ID			BH33_1.0	BH33_2.0	BH34_0.3	BH34_0.5
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			S23-Ma0022404	S23-Ma0022405	S23-Ma0022406	S23-Ma0022407
Date Sampled			Mar 03, 2023	Mar 03, 2023	Mar 02, 2023	Mar 02, 2023
Test/Reference	LOR	Unit				
Heavy Metals						
Lead	5	mg/kg	2100	59	180	100
Sample Properties						
% Moisture	1	%	11	21	9.1	6.0

Client Sample ID			BH34_1.0	BH34_2.0	BH35_0.3	BH35_0.5
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			S23-Ma0022408	S23-Ma0022409	S23-Ma0022410	S23-Ma0022411
Date Sampled			Mar 02, 2023	Mar 02, 2023	Mar 03, 2023	Mar 03, 2023
Test/Reference	LOR	Unit				
Heavy Metals						
Lead	5	mg/kg	280	8.4	36000	760
Sample Properties						
% Moisture	1	%	12	19	16	12

Client Sample ID			BH35_1.0	BH35_2.0	BH36_0.1	BH36_0.3
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			S23-Ma0022412	S23-Ma0022413	S23-Ma0022414	S23-Ma0022415
Date Sampled			Mar 03, 2023	Mar 03, 2023	Mar 03, 2023	Mar 03, 2023
Test/Reference	LOR	Unit				
Heavy Metals						
Lead	5	mg/kg	1300	27	2600	450
Sample Properties						
% Moisture	1	%	13	22	21	18

Client Sample ID			BH36_1.0	BH36_2.0	BH37_0.3	BH37_0.5
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			S23-Ma0022416	S23-Ma0022417	S23-Ma0022418	S23-Ma0022419
Date Sampled			Mar 03, 2023	Mar 03, 2023	Mar 03, 2023	Mar 03, 2023
Test/Reference	LOR	Unit				
Heavy Metals						
Lead	5	mg/kg	16	< 5	7200	870
Sample Properties						
% Moisture	1	%	8.1	17	13	12

Client Sample ID			BH37_1.0	BH37_2.0	BH38_0.1	BH38_0.5
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			S23-Ma0022420	S23-Ma0022421	S23-Ma0022422	S23-Ma0022423
Date Sampled			Mar 03, 2023	Mar 03, 2023	Mar 03, 2023	Mar 03, 2023
Test/Reference	LOR	Unit				
Heavy Metals						
Lead	5	mg/kg	3000	7.5	4800	7100
Sample Properties						
% Moisture	1	%	19	17	9.8	13

Client Sample ID			BH38_0.7	BH39_0.1	BH39_0.5	BH39_1.0
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			S23-Ma0022424	S23-Ma0022425	S23-Ma0022426	S23-Ma0022427
Date Sampled			Mar 03, 2023	Mar 03, 2023	Mar 03, 2023	Mar 03, 2023
Test/Reference	LOR	Unit				
Heavy Metals						
Lead	5	mg/kg	9000	6500	31000	1200
Sample Properties						
% Moisture	1	%	13	8.7	7.9	11

Client Sample ID			BH39_2.0	BH40_0.1	BH40_0.5	BH40_1.0
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			S23-Ma0022428	S23-Ma0022429	S23-Ma0022430	S23-Ma0022431
Date Sampled			Mar 03, 2023	Mar 03, 2023	Mar 03, 2023	Mar 03, 2023
Test/Reference	LOR	Unit				
Heavy Metals						
Lead	5	mg/kg	130	1200	1800	1600
Sample Properties						
% Moisture	1	%	20	15	12	21

Client Sample ID			BH41_0.3	BH41_0.5	BH41_1.0	BH41_2.0
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			S23-Ma0022432	S23-Ma0022433	S23-Ma0022434	S23-Ma0022435
Date Sampled			Mar 02, 2023	Mar 02, 2023	Mar 02, 2023	Mar 02, 2023
Test/Reference	LOR	Unit				
Heavy Metals						
Lead	5	mg/kg	31000	32000	39000	1300
Sample Properties						
% Moisture	1	%	11	14	14	17

Client Sample ID			BH42_0.1	BH42_0.5	BH42_1.0	BH42_2.0
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			S23-Ma0022436	S23-Ma0022437	S23-Ma0022438	S23-Ma0022439
Date Sampled			Mar 03, 2023	Mar 03, 2023	Mar 03, 2023	Mar 03, 2023
Test/Reference	LOR	Unit				
Heavy Metals						
Lead	5	mg/kg	1200	460	31000	1200
Sample Properties						
% Moisture	1	%	12	12	26	19

Client Sample ID			BH43_0.3	BH43_0.5	DUP01	DUP01 (Should be DUP02)
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			S23-Ma0022440	S23-Ma0022441	S23-Ma0022448	S23-Ma0022449
Date Sampled			Mar 06, 2023	Mar 06, 2023	Mar 06, 2023	Mar 02, 2023
Test/Reference	LOR	Unit				
Heavy Metals						
Lead	5	mg/kg	1500	370	34000	570
Sample Properties						
% Moisture	1	%	12	16	14	15

Client Sample ID			DUP03	DUP04	SD01_1.0	SD02_0.5
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			S23-Ma0022450	S23-Ma0022451	S23-Ma0022456	S23-Ma0022457
Date Sampled			Mar 02, 2023	Mar 03, 2023	Mar 06, 2023	Mar 03, 2023
Test/Reference	LOR	Unit				
Heavy Metals						
Lead	5	mg/kg	760	1000	-	-
Sample Properties						
% Moisture	1	%	13	14	-	-
Particle Size Distribution			-	-	See attached	See attached

Client Sample ID			SD03_0.5	SD04_1.0	SD05_0.5	SD06_0.5
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			S23-Ma0022458	S23-Ma0022459	S23-Ma0022460	S23-Ma0022461
Date Sampled			Mar 06, 2023	Mar 03, 2023	Mar 06, 2023	Mar 02, 2023
Test/Reference	LOR	Unit				
Particle Size Distribution			See attached	See attached	See attached	See attached

Client Sample ID			SD07_0.5	SD08_1.0	PD01_0.5	PD02_0.5
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			S23-Ma0022462	S23-Ma0022463	S23-Ma0022464	S23-Ma0022465
Date Sampled			Mar 03, 2023	Mar 03, 2023	Mar 06, 2023	Mar 03, 2023
Test/Reference	LOR	Unit				
Particle Size Distribution			See attached	See attached	See attached	See attached

Client Sample ID			PD03_0.5	PD04_1.0	PD05_1.0	BH25
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			S23-Ma0022466	S23-Ma0022467	S23-Ma0022468	S23-Ma0022470
Date Sampled			Mar 06, 2023	Mar 03, 2023	Mar 03, 2023	Mar 03, 2023
Test/Reference	LOR	Unit				
Sample Properties						
% Moisture	1	%	-	-	-	14
Particle Size Distribution			See attached	See attached	See attached	-
Actual Acidity (NLM-3.2)						
pH-KCL (NLM-3.1)	0.1	pH Units	-	-	-	6.3
Titrateable Actual Acidity (NLM-3.2)	2	mol H+/t	-	-	-	2.4
Titrateable Actual Acidity (NLM-3.2)	0.003	% pyrite S	-	-	-	0.004
Potential Acidity - Chromium Reducible Sulfur						
Chromium Reducible Sulfur (s-SCr) (NLM-2.1) ^{S04}	0.005	% S	-	-	-	0.009
Chromium Reducible Sulfur (a-SCr) (NLM-2.1)	3	mol H+/t	-	-	-	5.8
Extractable Sulfur						
Sulfur - KCl Extractable	0.005	% S	-	-	-	N/A
HCl Extractable Sulfur	0.005	% S	-	-	-	N/A
Retained Acidity (S-NAS)						
Net Acid soluble sulfur (SNAS) NLM-4.1	0.005	% S	-	-	-	N/A
Net Acid soluble sulfur (s-SNAS) NLM-4.1 ^{S02}	0.005	% S	-	-	-	N/A
Net Acid soluble sulfur (a-SNAS) NLM-4.1	2	mol H+/t	-	-	-	N/A
HCl Extractable Sulfur Correction Factor	1	factor	-	-	-	2.0
Acid Neutralising Capacity (ANCbt)						
Acid Neutralising Capacity - (ANCbt) (NLM-5.2)	0.01	% CaCO3	-	-	-	N/A
Acid Neutralising Capacity - (s-ANCbt) (NLM-5.2) ^{S03}	0.02	% S	-	-	-	N/A
Acid Neutralising Capacity - (a-ANCbt) (NLM-5.2)	2	mol H+/t	-	-	-	N/A
ANC Fineness Factor		factor	-	-	-	1.5
Net Acidity (Including ANC)						
CRS Suite - Net Acidity - NASSG (Including ANC)	0.02	% S	-	-	-	< 0.02
CRS Suite - Net Acidity - NASSG (Including ANC)	10	mol H+/t	-	-	-	< 10
CRS Suite - Liming Rate - NASSG (Including ANC) ^{S01}	1	kg CaCO3/t	-	-	-	< 1

Client Sample ID			PD03_0.5	PD04_1.0	PD05_1.0	BH25
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			S23-Ma0022466	S23-Ma0022467	S23-Ma0022468	S23-Ma0022470
Date Sampled			Mar 06, 2023	Mar 03, 2023	Mar 03, 2023	Mar 03, 2023
Test/Reference	LOR	Unit				
Extraneous Material						
<2mm Fraction	0.005	g	-	-	-	200
>2mm Fraction	0.005	g	-	-	-	1.4
Analysed Material	0.1	%	-	-	-	99
Extraneous Material	0.1	%	-	-	-	0.7

Client Sample ID			BH28_2.0	BH33	BH41	Trip Spike
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			S23-Ma0022471	S23-Ma0022472	S23-Ma0022473	S23-Ma0022478
Date Sampled			Mar 03, 2023	Mar 03, 2023	Mar 02, 2023	Mar 06, 2023
Test/Reference	LOR	Unit				
Sample Properties						
% Moisture	1	%	14	26	16	-
TRH C6-C10	1	%	-	-	-	90
Actual Acidity (NLM-3.2)						
pH-KCL (NLM-3.1)	0.1	pH Units	5.5	5.9	7.3	-
Titrateable Actual Acidity (NLM-3.2)	2	mol H+/t	15	7.1	< 2	-
Titrateable Actual Acidity (NLM-3.2)	0.003	% pyrite S	0.024	0.011	< 0.003	-
Potential Acidity - Chromium Reducible Sulfur						
Chromium Reducible Sulfur (s-SCr) (NLM-2.1) ^{S04}	0.005	% S	0.007	0.027	0.007	-
Chromium Reducible Sulfur (a-SCr) (NLM-2.1)	3	mol H+/t	4.3	17	4.2	-
Extractable Sulfur						
Sulfur - KCl Extractable	0.005	% S	N/A	N/A	N/A	-
HCl Extractable Sulfur	0.005	% S	N/A	N/A	N/A	-
Retained Acidity (S-NAS)						
Net Acid soluble sulfur (SNAS) NLM-4.1	0.005	% S	N/A	N/A	N/A	-
Net Acid soluble sulfur (s-SNAS) NLM-4.1 ^{S02}	0.005	% S	N/A	N/A	N/A	-
Net Acid soluble sulfur (a-SNAS) NLM-4.1	2	mol H+/t	N/A	N/A	N/A	-
HCl Extractable Sulfur Correction Factor	1	factor	2.0	2.0	2.0	-
Acid Neutralising Capacity (ANCbt)						
Acid Neutralising Capacity - (ANCbt) (NLM-5.2)	0.01	% CaCO3	N/A	N/A	0.36	-
Acid Neutralising Capacity - (s-ANCbt) (NLM-5.2) ^{S03}	0.02	% S	N/A	N/A	0.12	-
Acid Neutralising Capacity - (a-ANCbt) (NLM-5.2)	2	mol H+/t	N/A	N/A	73	-
ANC Fineness Factor		factor	1.5	1.5	1.5	-
Net Acidity (Including ANC)						
CRS Suite - Net Acidity - NASSG (Including ANC)	0.02	% S	0.03	0.04	< 0.02	-
CRS Suite - Net Acidity - NASSG (Including ANC)	10	mol H+/t	19	24	< 10	-
CRS Suite - Liming Rate - NASSG (Including ANC) ^{S01}	1	kg CaCO3/t	1.4	1.8	< 1	-
Extraneous Material						
<2mm Fraction	0.005	g	270	250	160	-
>2mm Fraction	0.005	g	< 0.005	< 0.005	3.6	-
Analysed Material	0.1	%	100	100	98	-
Extraneous Material	0.1	%	< 0.1	< 0.1	2.2	-
Total Recoverable Hydrocarbons						
Naphthalene	1	%	-	-	-	71
TRH C6-C9	1	%	-	-	-	92

Client Sample ID			BH28_2.0	BH33	BH41	Trip Spike
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			S23-Ma0022471	S23-Ma0022472	S23-Ma0022473	S23-Ma0022478
Date Sampled			Mar 03, 2023	Mar 03, 2023	Mar 02, 2023	Mar 06, 2023
Test/Reference	LOR	Unit				
BTEX						
Benzene	1	%	-	-	-	86
Ethylbenzene	1	%	-	-	-	84
m&p-Xylenes	1	%	-	-	-	84
o-Xylene	1	%	-	-	-	83
Toluene	1	%	-	-	-	85
Xylenes - Total	1	%	-	-	-	83
4-Bromofluorobenzene (surr.)	1	%	-	-	-	55

Client Sample ID			Trip Blank
Sample Matrix			Soil
Eurofins Sample No.			S23-Ma0022479
Date Sampled			Mar 06, 2023
Test/Reference	LOR	Unit	
Total Recoverable Hydrocarbons			
TRH C6-C9	20	mg/kg	< 20
TRH C6-C10	20	mg/kg	< 20
TRH C6-C10 less BTEX (F1) ^{N04}	20	mg/kg	< 20
BTEX			
Benzene	0.1	mg/kg	< 0.1
Toluene	0.1	mg/kg	< 0.1
Ethylbenzene	0.1	mg/kg	< 0.1
m&p-Xylenes	0.2	mg/kg	< 0.2
o-Xylene	0.1	mg/kg	< 0.1
Xylenes - Total*	0.3	mg/kg	< 0.3
4-Bromofluorobenzene (surr.)	1	%	98
Naphthalene ^{N02}	0.5	mg/kg	< 0.5

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
Total Recoverable Hydrocarbons - 1999 NEPM Fractions - Method: LTM-ORG-2010 TRH C6-C40	Sydney	Mar 14, 2023	14 Days
Total Recoverable Hydrocarbons - 2013 NEPM Fractions - Method: LTM-ORG-2010 TRH C6-C40	Sydney	Mar 14, 2023	14 Days
Total Recoverable Hydrocarbons - Method: LTM-ORG-2010 TRH C6-C40	Sydney	Mar 14, 2023	14 Days
BTEX - Method: LTM-ORG-2010 BTEX and Volatile TRH	Sydney	Mar 14, 2023	14 Days
Total Recoverable Hydrocarbons - 2013 NEPM Fractions - Method: LTM-ORG-2010 TRH C6-C40	Sydney	Mar 14, 2023	14 Days
Polycyclic Aromatic Hydrocarbons - Method: LTM-ORG-2130 PAH and Phenols in Soil and Water	Sydney	Mar 14, 2023	14 Days
Metals M8 - Method: LTM-MET-3040 Metals in Waters, Soils & Sediments by ICP-MS	Sydney	Mar 14, 2023	28 Days
Eurofins Suite B15			
Organochlorine Pesticides - Method: LTM-ORG-2220 OCP & PCB in Soil and Water	Sydney	Mar 14, 2023	14 Days
Organophosphorus Pesticides - Method: LTM-ORG-2200 Organophosphorus Pesticides by GC-MS	Sydney	Mar 14, 2023	14 Days
Polychlorinated Biphenyls - Method: LTM-ORG-2220 OCP & PCB in Soil and Water	Sydney	Mar 14, 2023	28 Days
Heavy Metals - Method: LTM-MET-3040 Metals in Waters, Soils & Sediments by ICP-MS	Sydney	Mar 22, 2023	28 Days
% Moisture - Method: LTM-GEN-7080 Moisture	Sydney	Mar 14, 2023	14 Days
Chromium Reducible Sulfur Suite			
Chromium Suite - Method: LTM-GEN-7070 Chromium Reducible Sulfur Suite	Brisbane	Mar 22, 2023	6 Week
Extraneous Material - Method: LTM-GEN-7050/7070	Brisbane	Mar 22, 2023	6 Week

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Project Name: BOURKE ROAD
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Order No.:
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Phone: 02 99225021
Fax:

Received: Mar 7, 2023 1:16 PM
Due: Mar 14, 2023
Priority: 5 Day
Contact Name: Troy Chatman

Eurofins Analytical Services Manager : Quinn Raw

Sample Detail						Asbestos Absence /Presence	CANCELLED	HOLD	Lead	Particle Size Distribution	Eurofins Suite B15	Chromium Reducible Sulfur Suite	Moisture Set	Moisture Set	Eurofins Suite B7	BTEXN and Volatile TRH	BTEXN and Volatile TRH
Melbourne Laboratory - NATA # 1261 Site # 1254																	
Sydney Laboratory - NATA # 1261 Site # 18217						X	X	X	X		X		X	X	X	X	X
Brisbane Laboratory - NATA # 1261 Site # 20794												X	X	X			
External Laboratory										X							
No	Sample ID	Sample Date	Sampling Time	Matrix	LAB ID												
1	BH18 0.4	Mar 06, 2023		Soil	S23-Ma0022352						X			X	X		
2	BH18 1.0	Mar 06, 2023		Soil	S23-Ma0022353						X			X	X		
3	BH19 0.3	Mar 06, 2023		Soil	S23-Ma0022354						X			X	X		
4	BH19 0.5	Mar 06, 2023		Soil	S23-Ma0022355						X			X	X		
5	BH20 0.5	Mar 06, 2023		Soil	S23-Ma0022356						X			X	X		
6	BH20 1.0	Mar 06, 2023		Soil	S23-Ma0022357						X			X	X		
7	BH21 0.3	Mar 06, 2023		Soil	S23-Ma0022358						X			X	X		
8	BH21 0.5	Mar 06, 2023		Soil	S23-Ma0022359						X			X	X		
9	BH22 0.1	Mar 03, 2023		Soil	S23-Ma0022360						X			X	X		
10	BH22 0.5	Mar 03, 2023		Soil	S23-Ma0022361						X			X	X		
11	BH23 0.3	Mar 02, 2023		Soil	S23-Ma0022362				X					X			

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Melbourne Laboratory - NATA # 1261 Site # 1254																	
Sydney Laboratory - NATA # 1261 Site # 18217						X	X	X	X		X		X	X	X	X	X
Brisbane Laboratory - NATA # 1261 Site # 20794												X	X	X			
12	BH23_0.5	Mar 02, 2023		Soil	S23-Ma0022363				X					X			
13	BH23_1.0	Mar 02, 2023		Soil	S23-Ma0022364				X					X			
14	BH23_2.0	Mar 02, 2023		Soil	S23-Ma0022365				X					X			
15	BH24_0.3	Mar 02, 2023		Soil	S23-Ma0022366				X					X			
16	BH24_0.5	Mar 02, 2023		Soil	S23-Ma0022367				X					X			
17	BH24_1.0	Mar 02, 2023		Soil	S23-Ma0022368				X					X			
18	BH24_1.5	Mar 02, 2023		Soil	S23-Ma0022369				X					X			
19	BH25_0.3	Mar 03, 2023		Soil	S23-Ma0022370				X					X			
20	BH25_0.5	Mar 03, 2023		Soil	S23-Ma0022371				X					X			
21	BH25_1.0	Mar 03, 2023		Soil	S23-Ma0022372				X					X			
22	BH25_2.0	Mar 03, 2023		Soil	S23-Ma0022373				X					X			
23	BH26_0.3	Mar 06, 2023		Soil	S23-Ma0022374				X					X			
24	BH26_0.5	Mar 06, 2023		Soil	S23-Ma0022375				X					X			
25	BH26_1.0	Mar 06, 2023		Soil	S23-Ma0022376				X					X			

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Melbourne Laboratory - NATA # 1261 Site # 1254																	
Sydney Laboratory - NATA # 1261 Site # 18217						X	X	X	X		X		X	X	X	X	X
Brisbane Laboratory - NATA # 1261 Site # 20794												X	X	X			
26	BH26_2.0	Mar 06, 2023		Soil	S23-Ma0022377				X					X			
27	BH27_0.3	Mar 03, 2023		Soil	S23-Ma0022378				X					X			
28	BH27_0.5	Mar 03, 2023		Soil	S23-Ma0022379				X					X			
29	BH27_1.0	Mar 03, 2023		Soil	S23-Ma0022380				X					X			
30	BH27_2.0	Mar 03, 2023		Soil	S23-Ma0022381				X					X			
31	BH28_0.3	Mar 03, 2023		Soil	S23-Ma0022382				X					X			
32	BH28_0.5	Mar 03, 2023		Soil	S23-Ma0022383				X					X			
33	BH28_1.0	Mar 03, 2023		Soil	S23-Ma0022384				X					X			
34	BH28_2.0	Mar 03, 2023		Soil	S23-Ma0022385				X					X			
35	BH29_0.3	Mar 06, 2023		Soil	S23-Ma0022386				X					X			
36	BH29_0.5	Mar 06, 2023		Soil	S23-Ma0022387				X					X			
37	BH29_1.0	Mar 06, 2023		Soil	S23-Ma0022388				X					X			
38	BH29_2.0	Mar 06, 2023		Soil	S23-Ma0022389				X					X			
39	BH30_0.1	Mar 02, 2023		Soil	S23-Ma0022390				X					X			

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Melbourne Laboratory - NATA # 1261 Site # 1254																	
Sydney Laboratory - NATA # 1261 Site # 18217						X	X	X	X		X		X	X	X	X	X
Brisbane Laboratory - NATA # 1261 Site # 20794											X		X	X			
40	BH30_0.5	Mar 02, 2023		Soil	S23-Ma0022391				X					X			
41	BH30_0.7	Mar 02, 2023		Soil	S23-Ma0022392				X					X			
42	BH30_2.0	Mar 02, 2023		Soil	S23-Ma0022393				X					X			
43	BH31_0.3	Mar 03, 2023		Soil	S23-Ma0022394				X					X			
44	BH31_0.5	Mar 03, 2023		Soil	S23-Ma0022395				X					X			
45	BH31_1.0	Mar 03, 2023		Soil	S23-Ma0022396				X					X			
46	BH31_2.0	Mar 03, 2023		Soil	S23-Ma0022397				X					X			
47	BH32_0.1	Mar 06, 2023		Soil	S23-Ma0022398				X					X			
48	BH32_0.5	Mar 06, 2023		Soil	S23-Ma0022399				X					X			
49	BH32_1.0	Mar 06, 2023		Soil	S23-Ma0022400				X					X			
50	BH32_2.0	Mar 06, 2023		Soil	S23-Ma0022401				X					X			
51	BH33_0.3	Mar 03, 2023		Soil	S23-Ma0022402				X					X			
52	BH33_0.5	Mar 03, 2023		Soil	S23-Ma0022403				X					X			
53	BH33_1.0	Mar 03, 2023		Soil	S23-Ma0022404				X					X			

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Melbourne Laboratory - NATA # 1261 Site # 1254																	
Sydney Laboratory - NATA # 1261 Site # 18217						X	X	X	X		X		X	X	X	X	X
Brisbane Laboratory - NATA # 1261 Site # 20794												X	X	X			
54	BH33_2.0	Mar 03, 2023		Soil	S23-Ma0022405				X					X			
55	BH34_0.3	Mar 02, 2023		Soil	S23-Ma0022406				X					X			
56	BH34_0.5	Mar 02, 2023		Soil	S23-Ma0022407				X					X			
57	BH34_1.0	Mar 02, 2023		Soil	S23-Ma0022408				X					X			
58	BH34_2.0	Mar 02, 2023		Soil	S23-Ma0022409				X					X			
59	BH35_0.3	Mar 03, 2023		Soil	S23-Ma0022410				X					X			
60	BH35_0.5	Mar 03, 2023		Soil	S23-Ma0022411				X					X			
61	BH35_1.0	Mar 03, 2023		Soil	S23-Ma0022412				X					X			
62	BH35_2.0	Mar 03, 2023		Soil	S23-Ma0022413				X					X			
63	BH36_0.1	Mar 03, 2023		Soil	S23-Ma0022414				X					X			
64	BH36_0.3	Mar 03, 2023		Soil	S23-Ma0022415				X					X			
65	BH36_1.0	Mar 03, 2023		Soil	S23-Ma0022416				X					X			
66	BH36_2.0	Mar 03, 2023		Soil	S23-Ma0022417				X					X			
67	BH37_0.3	Mar 03, 2023		Soil	S23-Ma0022418				X					X			

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Melbourne Laboratory - NATA # 1261 Site # 1254																	
Sydney Laboratory - NATA # 1261 Site # 18217						X	X	X	X		X		X	X	X	X	X
Brisbane Laboratory - NATA # 1261 Site # 20794											X		X	X			
68	BH37_0.5	Mar 03, 2023		Soil	S23-Ma0022419				X					X			
69	BH37_1.0	Mar 03, 2023		Soil	S23-Ma0022420				X					X			
70	BH37_2.0	Mar 03, 2023		Soil	S23-Ma0022421				X					X			
71	BH38_0.1	Mar 03, 2023		Soil	S23-Ma0022422				X					X			
72	BH38_0.5	Mar 03, 2023		Soil	S23-Ma0022423				X					X			
73	BH38_0.7	Mar 03, 2023		Soil	S23-Ma0022424				X					X			
74	BH39_0.1	Mar 03, 2023		Soil	S23-Ma0022425				X					X			
75	BH39_0.5	Mar 03, 2023		Soil	S23-Ma0022426				X					X			
76	BH39_1.0	Mar 03, 2023		Soil	S23-Ma0022427				X					X			
77	BH39_2.0	Mar 03, 2023		Soil	S23-Ma0022428				X					X			
78	BH40_0.1	Mar 03, 2023		Soil	S23-Ma0022429				X					X			
79	BH40_0.5	Mar 03, 2023		Soil	S23-Ma0022430				X					X			
80	BH40_1.0	Mar 03, 2023		Soil	S23-Ma0022431				X					X			
81	BH41_0.3	Mar 02, 2023		Soil	S23-Ma0022432				X					X			

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Melbourne Laboratory - NATA # 1261 Site # 1254																	
Sydney Laboratory - NATA # 1261 Site # 18217						X	X	X	X		X		X	X	X	X	X
Brisbane Laboratory - NATA # 1261 Site # 20794											X	X	X	X			
82	BH41_0.5	Mar 02, 2023		Soil	S23-Ma0022433				X					X			
83	BH41_1.0	Mar 02, 2023		Soil	S23-Ma0022434				X					X			
84	BH41_2.0	Mar 02, 2023		Soil	S23-Ma0022435				X					X			
85	BH42_0.1	Mar 03, 2023		Soil	S23-Ma0022436				X					X			
86	BH42_0.5	Mar 03, 2023		Soil	S23-Ma0022437				X					X			
87	BH42_1.0	Mar 03, 2023		Soil	S23-Ma0022438				X					X			
88	BH42_2.0	Mar 03, 2023		Soil	S23-Ma0022439				X					X			
89	BH43_0.3	Mar 06, 2023		Soil	S23-Ma0022440				X					X			
90	BH43_0.5	Mar 06, 2023		Soil	S23-Ma0022441				X					X			
91	DUP01	Mar 06, 2023		Soil	S23-Ma0022448				X					X			
92	DUP01 (Should be DUP02)	Mar 02, 2023		Soil	S23-Ma0022449				X					X			
93	DUP03	Mar 02, 2023		Soil	S23-Ma0022450				X					X			

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Melbourne Laboratory - NATA # 1261 Site # 1254																	
Sydney Laboratory - NATA # 1261 Site # 18217						X	X	X	X		X		X	X	X	X	X
Brisbane Laboratory - NATA # 1261 Site # 20794											X	X	X	X			
94	DUP04	Mar 03, 2023		Soil	S23-Ma0022451				X					X			
95	SD01_1.0	Mar 06, 2023		Soil	S23-Ma0022456					X							
96	SD02_0.5	Mar 03, 2023		Soil	S23-Ma0022457					X							
97	SD03_0.5	Mar 06, 2023		Soil	S23-Ma0022458					X							
98	SD04_1.0	Mar 03, 2023		Soil	S23-Ma0022459					X							
99	SD05_0.5	Mar 06, 2023		Soil	S23-Ma0022460					X							
100	SD06_0.5	Mar 02, 2023		Soil	S23-Ma0022461					X							
101	SD07_0.5	Mar 03, 2023		Soil	S23-Ma0022462					X							
102	SD08_1.0	Mar 03, 2023		Soil	S23-Ma0022463					X							
103	PD01_0.5	Mar 06, 2023		Soil	S23-Ma0022464					X							
104	PD02_0.5	Mar 03, 2023		Soil	S23-Ma0022465					X							
105	PD03_0.5	Mar 06, 2023		Soil	S23-Ma0022466					X							
106	PD04_1.0	Mar 03, 2023		Soil	S23-Ma0022467					X							
107	PD05_1.0	Mar 03, 2023		Soil	S23-Ma0022468					X							

Company Name: EP Risk Management (NSW)
Address: 80 Mount Street,
North Sydney
NSW 2060

Project Name: BOURKE ROAD
Project ID: EP3072

Order No.:
Report #: 970423
Phone: 02 99225021
Fax:

Received: Mar 7, 2023 1:16 PM
Due: Mar 14, 2023
Priority: 5 Day
Contact Name: Troy Chatman

Eurofins Analytical Services Manager : Quinn Raw

Sample Detail						Asbestos Absence /Presence	CANCELLED	HOLD	Lead	Particle Size Distribution	Eurofins Suite B15	Chromium Reducible Sulfur Suite	Moisture Set	Moisture Set	Eurofins Suite B7	BTEXN and Volatile TRH	BTEXN and Volatile TRH
Melbourne Laboratory - NATA # 1261 Site # 1254																	
Sydney Laboratory - NATA # 1261 Site # 18217						X	X	X	X		X		X	X	X	X	X
Brisbane Laboratory - NATA # 1261 Site # 20794												X	X	X			
108	BH19_1.0	Mar 06, 2023		Soil	S23-Ma0022469		X										
109	BH25	Mar 03, 2023		Soil	S23-Ma0022470							X	X				
110	BH28_2.0	Mar 03, 2023		Soil	S23-Ma0022471							X	X				
111	BH33	Mar 03, 2023		Soil	S23-Ma0022472							X	X				
112	BH41	Mar 02, 2023		Soil	S23-Ma0022473							X	X				
113	RB01	Mar 02, 2023		Water	S23-Ma0022474				X								
114	RB02	Mar 03, 2023		Water	S23-Ma0022475				X								
115	RB03	Mar 06, 2023		Water	S23-Ma0022476				X								
116	BH23_MS01	Mar 02, 2023		Building Materials	S23-Ma0022477	X											
117	Trip Spike	Mar 06, 2023		Soil	S23-Ma0022478												X
118	Trip Blank	Mar 06, 2023		Soil	S23-Ma0022479											X	
119	BH18_0.5	Mar 06, 2023		Soil	S23-Ma0022480			X									
120	BH19_1.0	Mar 06, 2023		Soil	S23-Ma0022481			X									

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Melbourne Laboratory - NATA # 1261 Site # 1254																	
Sydney Laboratory - NATA # 1261 Site # 18217						X	X	X	X		X		X	X	X	X	X
Brisbane Laboratory - NATA # 1261 Site # 20794												X	X	X			
121	BH20_0.3	Mar 06, 2023		Soil	S23-Ma0022482			X									
122	BH20_2.0	Mar 06, 2023		Soil	S23-Ma0022483			X									
123	BH21_1.0	Mar 06, 2023		Soil	S23-Ma0022484			X									
124	BH21_2.0	Mar 06, 2023		Soil	S23-Ma0022485			X									
125	BH22_1.0	Mar 03, 2023		Soil	S23-Ma0022486			X									
126	BH22_2.0	Mar 03, 2023		Soil	S23-Ma0022487			X									
127	BH30_5.0	Mar 02, 2023		Soil	S23-Ma0022488			X									
128	BH34_5.0	Mar 02, 2023		Soil	S23-Ma0022489			X									
129	BH41_5.0	Mar 02, 2023		Soil	S23-Ma0022490			X									
130	BH43_1.0	Mar 06, 2023		Soil	S23-Ma0022491			X									
131	BH43_2.0	Mar 06, 2023		Soil	S23-Ma0022492			X									
132	BH44_0.3	Mar 06, 2023		Water	S23-Ma0022493			X									
133	BH44_0.5	Mar 06, 2023		Water	S23-Ma0022494			X									
134	BH44_1.0	Mar 06, 2023		Water	S23-Ma0022495			X									

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Melbourne Laboratory - NATA # 1261 Site # 1254																	
Sydney Laboratory - NATA # 1261 Site # 18217						X	X	X	X		X		X	X	X	X	X
Brisbane Laboratory - NATA # 1261 Site # 20794												X	X	X			
135	BH45_0.3	Mar 06, 2023		Soil	S23-Ma0022496			X									
136	BH45_0.5	Mar 06, 2023		Soil	S23-Ma0022497			X									
137	BH45_1.0	Mar 06, 2023		Soil	S23-Ma0022498			X									
Test Counts						1	1	19	87	13	10	4	98	98	10	1	1

Internal Quality Control Review and Glossary

General

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

Holding Times

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

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

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

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

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

Units

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

Terms

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

QC - Acceptance Criteria

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

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

Results <10 times the LOR: No Limit

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

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

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

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

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

QC Data General Comments

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

Quality Control Results

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Method Blank							
Total Recoverable Hydrocarbons							
TRH C6-C9	mg/kg	< 20			20	Pass	
TRH C10-C14	mg/kg	< 20			20	Pass	
TRH C15-C28	mg/kg	< 50			50	Pass	
TRH C29-C36	mg/kg	< 50			50	Pass	
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							
BTEX							
Benzene	mg/kg	< 0.1			0.1	Pass	
Toluene	mg/kg	< 0.1			0.1	Pass	
Ethylbenzene	mg/kg	< 0.1			0.1	Pass	
m&p-Xylenes	mg/kg	< 0.2			0.2	Pass	
o-Xylene	mg/kg	< 0.1			0.1	Pass	
Xylenes - Total*	mg/kg	< 0.3			0.3	Pass	
Method Blank							
Total Recoverable Hydrocarbons - 2013 NEPM Fractions							
Naphthalene	mg/kg	< 0.5			0.5	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	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
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	
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							
Organophosphorus Pesticides							
Azinphos-methyl	mg/kg	< 0.2			0.2	Pass	
Bolstar	mg/kg	< 0.2			0.2	Pass	
Chlorfenvinphos	mg/kg	< 0.2			0.2	Pass	
Chlorpyrifos	mg/kg	< 0.2			0.2	Pass	
Chlorpyrifos-methyl	mg/kg	< 0.2			0.2	Pass	
Coumaphos	mg/kg	< 2			2	Pass	
Demeton-S	mg/kg	< 0.2			0.2	Pass	
Demeton-O	mg/kg	< 0.2			0.2	Pass	
Diazinon	mg/kg	< 0.2			0.2	Pass	
Dichlorvos	mg/kg	< 0.2			0.2	Pass	
Dimethoate	mg/kg	< 0.2			0.2	Pass	
Disulfoton	mg/kg	< 0.2			0.2	Pass	
EPN	mg/kg	< 0.2			0.2	Pass	
Ethion	mg/kg	< 0.2			0.2	Pass	
Ethoprop	mg/kg	< 0.2			0.2	Pass	
Ethyl parathion	mg/kg	< 0.2			0.2	Pass	
Fenitrothion	mg/kg	< 0.2			0.2	Pass	
Fensulfothion	mg/kg	< 0.2			0.2	Pass	
Fenthion	mg/kg	< 0.2			0.2	Pass	
Malathion	mg/kg	< 0.2			0.2	Pass	
Merphos	mg/kg	< 0.2			0.2	Pass	
Methyl parathion	mg/kg	< 0.2			0.2	Pass	
Mevinphos	mg/kg	< 0.2			0.2	Pass	
Monocrotophos	mg/kg	< 2			2	Pass	
Naled	mg/kg	< 0.2			0.2	Pass	
Omethoate	mg/kg	< 2			2	Pass	
Phorate	mg/kg	< 0.2			0.2	Pass	
Pirimiphos-methyl	mg/kg	< 0.2			0.2	Pass	
Pyrazophos	mg/kg	< 0.2			0.2	Pass	
Ronnel	mg/kg	< 0.2			0.2	Pass	
Terbufos	mg/kg	< 0.2			0.2	Pass	
Tetrachlorvinphos	mg/kg	< 0.2			0.2	Pass	
Tokuthion	mg/kg	< 0.2			0.2	Pass	
Trichloronate	mg/kg	< 0.2			0.2	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	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Aroclor-1260	mg/kg	< 0.1			0.1	Pass	
Total PCB*	mg/kg	< 0.1			0.1	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	
Lead	mg/kg	< 5			5	Pass	
Mercury	mg/kg	< 0.1			0.1	Pass	
Nickel	mg/kg	< 5			5	Pass	
Zinc	mg/kg	< 5			5	Pass	
LCS - % Recovery							
Total Recoverable Hydrocarbons							
TRH C6-C9	%	114			70-130	Pass	
TRH C10-C14	%	70			70-130	Pass	
TRH C6-C10	%	112			70-130	Pass	
TRH >C10-C16	%	72			70-130	Pass	
LCS - % Recovery							
BTEX							
Benzene	%	110			70-130	Pass	
Toluene	%	114			70-130	Pass	
Ethylbenzene	%	106			70-130	Pass	
m&p-Xylenes	%	109			70-130	Pass	
o-Xylene	%	110			70-130	Pass	
Xylenes - Total*	%	109			70-130	Pass	
LCS - % Recovery							
Total Recoverable Hydrocarbons - 2013 NEPM Fractions							
Naphthalene	%	95			70-130	Pass	
LCS - % Recovery							
Polycyclic Aromatic Hydrocarbons							
Acenaphthene	%	89			70-130	Pass	
Acenaphthylene	%	85			70-130	Pass	
Anthracene	%	92			70-130	Pass	
Benz(a)anthracene	%	90			70-130	Pass	
Benzo(a)pyrene	%	82			70-130	Pass	
Benzo(b&j)fluoranthene	%	92			70-130	Pass	
Benzo(g,h,i)perylene	%	86			70-130	Pass	
Benzo(k)fluoranthene	%	90			70-130	Pass	
Chrysene	%	87			70-130	Pass	
Dibenz(a,h)anthracene	%	78			70-130	Pass	
Fluoranthene	%	97			70-130	Pass	
Fluorene	%	92			70-130	Pass	
Indeno(1,2,3-cd)pyrene	%	83			70-130	Pass	
Naphthalene	%	90			70-130	Pass	
Phenanthrene	%	89			70-130	Pass	
Pyrene	%	94			70-130	Pass	
LCS - % Recovery							
Organochlorine Pesticides							
Chlordanes - Total	%	89			70-130	Pass	
4,4'-DDD	%	92			70-130	Pass	
4,4'-DDE	%	97			70-130	Pass	
4,4'-DDT	%	96			70-130	Pass	

Test				Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
a-HCH				%	87			70-130	Pass	
Aldrin				%	87			70-130	Pass	
b-HCH				%	96			70-130	Pass	
d-HCH				%	83			70-130	Pass	
Dieldrin				%	103			70-130	Pass	
Endosulfan I				%	91			70-130	Pass	
Endosulfan II				%	92			70-130	Pass	
Endosulfan sulphate				%	86			70-130	Pass	
Endrin				%	101			70-130	Pass	
Endrin aldehyde				%	97			70-130	Pass	
Endrin ketone				%	89			70-130	Pass	
g-HCH (Lindane)				%	92			70-130	Pass	
Heptachlor				%	92			70-130	Pass	
Heptachlor epoxide				%	86			70-130	Pass	
Hexachlorobenzene				%	89			70-130	Pass	
Methoxychlor				%	96			70-130	Pass	
LCS - % Recovery										
Organophosphorus Pesticides										
Diazinon				%	117			70-130	Pass	
Dimethoate				%	88			70-130	Pass	
Ethion				%	109			70-130	Pass	
Fenitrothion				%	106			70-130	Pass	
Methyl parathion				%	110			70-130	Pass	
Mevinphos				%	98			70-130	Pass	
LCS - % Recovery										
Polychlorinated Biphenyls										
Aroclor-1016				%	85			70-130	Pass	
LCS - % Recovery										
Heavy Metals										
Arsenic				%	111			80-120	Pass	
Cadmium				%	114			80-120	Pass	
Chromium				%	110			80-120	Pass	
Copper				%	107			80-120	Pass	
Lead				%	100			80-120	Pass	
Lead				%	87			80-120	Pass	
Mercury				%	117			80-120	Pass	
Nickel				%	115			80-120	Pass	
Zinc				%	116			80-120	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	S23-Ma0032262	NCP	%	102				70-130	Pass	
TRH C10-C14	S23-Ma0020684	NCP	%	126				70-130	Pass	
TRH C6-C10	S23-Ma0032262	NCP	%	101				70-130	Pass	
TRH >C10-C16	S23-Ma0020684	NCP	%	128				70-130	Pass	
Spike - % Recovery										
BTEX					Result 1					
Benzene	S23-Ma0032262	NCP	%	87				70-130	Pass	
Toluene	S23-Ma0032262	NCP	%	92				70-130	Pass	
Ethylbenzene	S23-Ma0032262	NCP	%	97				70-130	Pass	
m&p-Xylenes	S23-Ma0032262	NCP	%	100				70-130	Pass	
o-Xylene	S23-Ma0032262	NCP	%	99				70-130	Pass	
Xylenes - Total*	S23-Ma0032262	NCP	%	100				70-130	Pass	
Spike - % Recovery										

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				Result 1					
Naphthalene	S23-Ma0032262	NCP	%	72			70-130	Pass	
Spike - % Recovery									
Polycyclic Aromatic Hydrocarbons				Result 1					
Acenaphthylene	R23-Ma0017475	NCP	%	74			70-130	Pass	
Anthracene	R23-Ma0017475	NCP	%	80			70-130	Pass	
Benzo(g,h,i)perylene	R23-Ma0017475	NCP	%	92			70-130	Pass	
Benzo(k)fluoranthene	R23-Ma0017475	NCP	%	78			70-130	Pass	
Dibenz(a,h)anthracene	R23-Ma0017475	NCP	%	82			70-130	Pass	
Fluoranthene	R23-Ma0017475	NCP	%	87			70-130	Pass	
Fluorene	R23-Ma0017475	NCP	%	83			70-130	Pass	
Indeno(1,2,3-cd)pyrene	R23-Ma0017475	NCP	%	83			70-130	Pass	
Phenanthrene	R23-Ma0017475	NCP	%	71			70-130	Pass	
Pyrene	R23-Ma0017475	NCP	%	75			70-130	Pass	
Spike - % Recovery									
Heavy Metals				Result 1					
Arsenic	S23-Ma0031356	NCP	%	81			75-125	Pass	
Cadmium	S23-Ma0031356	NCP	%	84			75-125	Pass	
Chromium	S23-Ma0027585	NCP	%	104			75-125	Pass	
Copper	S23-Ma0028859	NCP	%	84			75-125	Pass	
Lead	S23-Ma0027585	NCP	%	97			75-125	Pass	
Mercury	S23-Ma0031356	NCP	%	88			75-125	Pass	
Nickel	S23-Ma0031356	NCP	%	74			75-125	Fail	Q08
Zinc	S23-Ma0031356	NCP	%	76			75-125	Pass	
Spike - % Recovery									
Polycyclic Aromatic Hydrocarbons				Result 1					
Acenaphthene	S23-Ma0022353	CP	%	72			70-130	Pass	
Benz(a)anthracene	S23-Ma0022353	CP	%	79			70-130	Pass	
Benzo(a)pyrene	S23-Ma0022353	CP	%	81			70-130	Pass	
Benzo(b&j)fluoranthene	S23-Ma0022353	CP	%	71			70-130	Pass	
Chrysene	S23-Ma0022353	CP	%	79			70-130	Pass	
Naphthalene	S23-Ma0022353	CP	%	72			70-130	Pass	
Spike - % Recovery									
Organochlorine Pesticides				Result 1					
Chlordanes - Total	S23-Ma0022353	CP	%	72			70-130	Pass	
4,4'-DDE	S23-Ma0022353	CP	%	72			70-130	Pass	
a-HCH	S23-Ma0022353	CP	%	71			70-130	Pass	
Aldrin	S23-Ma0022353	CP	%	79			70-130	Pass	
b-HCH	S23-Ma0022353	CP	%	78			70-130	Pass	
d-HCH	S23-Ma0022353	CP	%	75			70-130	Pass	
Dieldrin	S23-Ma0022353	CP	%	91			70-130	Pass	
Endosulfan I	S23-Ma0022353	CP	%	72			70-130	Pass	
Endrin aldehyde	S23-Ma0022353	CP	%	78			70-130	Pass	
g-HCH (Lindane)	S23-Ma0022353	CP	%	85			70-130	Pass	
Spike - % Recovery									
Organophosphorus Pesticides				Result 1					
Diazinon	S23-Ma0022353	CP	%	97			70-130	Pass	
Ethion	S23-Ma0022353	CP	%	83			70-130	Pass	
Spike - % Recovery									
Polychlorinated Biphenyls				Result 1					
Aroclor-1016	S23-Ma0022353	CP	%	74			70-130	Pass	
Aroclor-1260	S23-Ma0022353	CP	%	98			70-130	Pass	
Spike - % Recovery									
Organochlorine Pesticides				Result 1					

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
4,4'-DDD	S23-Ma0027902	NCP	%	93			70-130	Pass	
4,4'-DDT	S23-Ma0027902	NCP	%	72			70-130	Pass	
Endosulfan II	S23-Ma0027902	NCP	%	99			70-130	Pass	
Endosulfan sulphate	S23-Ma0027902	NCP	%	70			70-130	Pass	
Endrin	S23-Ma0027902	NCP	%	93			70-130	Pass	
Endrin ketone	S23-Ma0027902	NCP	%	73			70-130	Pass	
Heptachlor	S23-Ma0027902	NCP	%	94			70-130	Pass	
Heptachlor epoxide	S23-Ma0027902	NCP	%	88			70-130	Pass	
Hexachlorobenzene	S23-Ma0027902	NCP	%	83			70-130	Pass	
Methoxychlor	S23-Ma0027902	NCP	%	123			70-130	Pass	
Spike - % Recovery									
Organophosphorus Pesticides				Result 1					
Mevinphos	S23-Ma0027293	NCP	%	0.098			70-130	Fail	Q08
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	S23-Ma0029741	NCP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH C15-C28	S23-Ma0029741	NCP	mg/kg	< 50	< 50	<1	30%	Pass	
TRH C29-C36	S23-Ma0029741	NCP	mg/kg	< 50	< 50	<1	30%	Pass	
TRH >C10-C16	S23-Ma0029741	NCP	mg/kg	< 50	< 50	<1	30%	Pass	
TRH >C16-C34	S23-Ma0029741	NCP	mg/kg	< 100	< 100	<1	30%	Pass	
TRH >C34-C40	S23-Ma0029741	NCP	mg/kg	< 100	< 100	<1	30%	Pass	
Duplicate									
Polychlorinated Biphenyls				Result 1	Result 2	RPD			
Aroclor-1016	S23-Ma0032878	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Aroclor-1221	S23-Ma0032878	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Aroclor-1232	S23-Ma0032878	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Aroclor-1242	S23-Ma0032878	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Aroclor-1248	S23-Ma0032878	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Aroclor-1254	S23-Ma0032878	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Aroclor-1260	S23-Ma0032878	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Total PCB*	S23-Ma0032878	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Duplicate									
Total Recoverable Hydrocarbons				Result 1	Result 2	RPD			
TRH C6-C9	S23-Ma0022356	CP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH C6-C10	S23-Ma0022356	CP	mg/kg	< 20	< 20	<1	30%	Pass	
Duplicate									
BTEX				Result 1	Result 2	RPD			
Benzene	S23-Ma0022356	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Toluene	S23-Ma0022356	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Ethylbenzene	S23-Ma0022356	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
m&p-Xylenes	S23-Ma0022356	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
o-Xylene	S23-Ma0022356	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Xylenes - Total*	S23-Ma0022356	CP	mg/kg	< 0.3	< 0.3	<1	30%	Pass	
Duplicate									
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				Result 1	Result 2	RPD			
Naphthalene	S23-Ma0022356	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
Polycyclic Aromatic Hydrocarbons				Result 1	Result 2	RPD			
Acenaphthene	S23-Ma0022357	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Acenaphthylene	S23-Ma0022357	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Anthracene	S23-Ma0022357	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benz(a)anthracene	S23-Ma0022357	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(a)pyrene	S23-Ma0022357	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	

Duplicate								
Polycyclic Aromatic Hydrocarbons				Result 1	Result 2	RPD		
Benzo(b&j)fluoranthene	S23-Ma0022357	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Benzo(g,h,i)perylene	S23-Ma0022357	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Benzo(k)fluoranthene	S23-Ma0022357	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Chrysene	S23-Ma0022357	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Dibenz(a,h)anthracene	S23-Ma0022357	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Fluoranthene	S23-Ma0022357	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Fluorene	S23-Ma0022357	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Indeno(1,2,3-cd)pyrene	S23-Ma0022357	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Naphthalene	S23-Ma0022357	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Phenanthrene	S23-Ma0022357	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Pyrene	S23-Ma0022357	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Duplicate								
Organochlorine Pesticides				Result 1	Result 2	RPD		
Chlordanes - Total	S23-Ma0022357	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass
4,4'-DDD	S23-Ma0022357	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
4,4'-DDE	S23-Ma0022357	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
4,4'-DDT	S23-Ma0022357	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
a-HCH	S23-Ma0022357	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Aldrin	S23-Ma0022357	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
b-HCH	S23-Ma0022357	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
d-HCH	S23-Ma0022357	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Dieldrin	S23-Ma0022357	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Endosulfan I	S23-Ma0022357	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Endosulfan II	S23-Ma0022357	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Endosulfan sulphate	S23-Ma0022357	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Endrin	S23-Ma0022357	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Endrin aldehyde	S23-Ma0022357	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Endrin ketone	S23-Ma0022357	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
g-HCH (Lindane)	S23-Ma0022357	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Heptachlor	S23-Ma0022357	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Heptachlor epoxide	S23-Ma0022357	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Hexachlorobenzene	S23-Ma0022357	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Methoxychlor	S23-Ma0022357	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass
Toxaphene	S23-Ma0022357	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass
Duplicate								
Organophosphorus Pesticides				Result 1	Result 2	RPD		
Azinphos-methyl	S23-Ma0022357	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
Bolstar	S23-Ma0022357	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
Chlorfenvinphos	S23-Ma0022357	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
Chlorpyrifos	S23-Ma0022357	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
Chlorpyrifos-methyl	S23-Ma0022357	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
Coumaphos	S23-Ma0022357	CP	mg/kg	< 2	< 2	<1	30%	Pass
Demeton-S	S23-Ma0022357	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
Demeton-O	S23-Ma0022357	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
Diazinon	S23-Ma0022357	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
Dichlorvos	S23-Ma0022357	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
Dimethoate	S23-Ma0022357	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
Disulfoton	S23-Ma0022357	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
EPN	S23-Ma0022357	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
Ethion	S23-Ma0022357	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
Ethoprop	S23-Ma0022357	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
Ethyl parathion	S23-Ma0022357	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
Fenitrothion	S23-Ma0022357	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
Fensulfthion	S23-Ma0022357	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass

Duplicate								
Organophosphorus Pesticides				Result 1	Result 2	RPD		
Fenthion	S23-Ma0022357	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
Malathion	S23-Ma0022357	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
Merphos	S23-Ma0022357	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
Methyl parathion	S23-Ma0022357	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
Mevinphos	S23-Ma0022357	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
Monocrotophos	S23-Ma0022357	CP	mg/kg	< 2	< 2	<1	30%	Pass
Naled	S23-Ma0022357	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
Omethoate	S23-Ma0022357	CP	mg/kg	< 2	< 2	<1	30%	Pass
Phorate	S23-Ma0022357	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
Pirimiphos-methyl	S23-Ma0022357	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
Pyrazophos	S23-Ma0022357	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
Ronnel	S23-Ma0022357	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
Terbufos	S23-Ma0022357	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
Tetrachlorvinphos	S23-Ma0022357	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
Tokuthion	S23-Ma0022357	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
Trichloronate	S23-Ma0022357	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass
Duplicate								
Heavy Metals				Result 1	Result 2	RPD		
Arsenic	S23-Ma0022357	CP	mg/kg	< 2	< 2	<1	30%	Pass
Cadmium	S23-Ma0022357	CP	mg/kg	< 0.4	< 0.4	<1	30%	Pass
Chromium	S23-Ma0022357	CP	mg/kg	< 5	< 5	<1	30%	Pass
Copper	S23-Ma0022357	CP	mg/kg	11	6.3	57	30%	Fail Q15
Lead	S23-Ma0022357	CP	mg/kg	36	14	91	30%	Fail Q15
Mercury	S23-Ma0022357	CP	mg/kg	0.2	< 0.1	79	30%	Fail Q15
Nickel	S23-Ma0022357	CP	mg/kg	< 5	< 5	<1	30%	Pass
Zinc	S23-Ma0022357	CP	mg/kg	17	14	17	30%	Pass
Duplicate								
Sample Properties				Result 1	Result 2	RPD		
% Moisture	S23-Ma0022357	CP	%	8.1	8.3	2.0	30%	Pass
Duplicate								
Heavy Metals				Result 1	Result 2	RPD		
Lead	S23-Ma0022367	CP	mg/kg	27000	33000	23	30%	Pass
Duplicate								
Sample Properties				Result 1	Result 2	RPD		
% Moisture	S23-Ma0022367	CP	%	13	16	18	30%	Pass
Duplicate								
Sample Properties				Result 1	Result 2	RPD		
% Moisture	S23-Ma0022377	CP	%	16	17	5.2	30%	Pass
Duplicate								
Sample Properties				Result 1	Result 2	RPD		
% Moisture	S23-Ma0022387	CP	%	13	14	4.4	30%	Pass
Duplicate								
Sample Properties				Result 1	Result 2	RPD		
% Moisture	S23-Ma0022397	CP	%	18	18	2.1	30%	Pass
Duplicate								
Heavy Metals				Result 1	Result 2	RPD		
Lead	S23-Ma0022427	CP	mg/kg	1200	1600	30	30%	Pass
Duplicate								
Sample Properties				Result 1	Result 2	RPD		
% Moisture	S23-Ma0022427	CP	%	11	13	16	30%	Pass
Duplicate								
Heavy Metals				Result 1	Result 2	RPD		
Lead	S23-Ma0022437	CP	mg/kg	460	350	27	30%	Pass

Duplicate								
Sample Properties				Result 1	Result 2	RPD		
% Moisture	S23-Ma0022437	CP	%	12	12	<1	30%	Pass

Comments

Particle size distribution analysed by: East West Geotechnical, NATA accreditation number 12360, report reference: EW230781

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
G01	The LORs have been raised due to matrix interference
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
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.
Q09	The Surrogate recovery is outside of the recommended acceptance criteria due to matrix interference. Acceptance criteria were met for all other QC
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.
S01	Liming rate is calculated and reported on a dry weight basis assuming use of fine agricultural lime (CaCO3) and using a safety factor of 1.5 to allow for non-homogeneous mixing and poor reactivity of lime. For conversion of Liming Rate from 'kg/t dry weight' to 'kg/m3 in-situ soil' multiply 'reported results' x 'wet bulk density of soil in t/m3'
S02	Retained Acidity is Reported when the pHKCl is less than pH 4.5
S03	Acid Neutralising Capacity is only required if the pHKCl is greater than or equal to pH 6.5
S04	Acid Sulfate Soil Samples have a 24 hour holding time unless frozen or dried within that period

Authorised by:

Bonnie Pu	Analytical Services Manager
Chamath JHM Annakkage	Senior Analyst-Asbestos
Fang Yee Tan	Senior Analyst-Metal
Jonathon Angell	Senior Analyst-Sample Properties
Jonathon Angell	Senior Analyst-SPOCAS
Maria Tian	Senior Analyst-Organic
Raymond Siu	Senior Analyst-Volatile
Roopesh Rangarajan	Senior Analyst-Organic



Glenn Jackson
General Manager

Final Report – this report replaces any previously issued Report

- Indicates Not Requested

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

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

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EP Risk Management (NSW)
80 Mount Street,
North Sydney
NSW 2060



NATA Accredited
Accreditation Number 1261
Site Number 18217

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: **Troy Chatman**

Report **970423-W**
Project name **BOURKE ROAD**
Project ID **EP3072**
Received Date **Mar 07, 2023**

Client Sample ID			RB01	RB02	RB03
Sample Matrix			Water	Water	Water
Eurofins Sample No.			S23- Ma0022474	S23- Ma0022475	S23- Ma0022476
Date Sampled			Mar 02, 2023	Mar 03, 2023	Mar 06, 2023
Test/Reference	LOR	Unit			
Heavy Metals					
Lead	0.001	mg/L	< 0.001	< 0.001	< 0.001

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

Heavy Metals

Testing Site

Sydney

Extracted

Mar 14, 2023

Holding Time

28 Days

- Method: LTM-MET-3040 Metals in Waters, Soils & Sediments by ICP-MS

Company Name: EP Risk Management (NSW)
Address: 80 Mount Street,
North Sydney
NSW 2060

Project Name: BOURKE ROAD
Project ID: EP3072

Order No.:
Report #: 970423
Phone: 02 99225021
Fax:

Received: Mar 7, 2023 1:16 PM
Due: Mar 14, 2023
Priority: 5 Day
Contact Name: Troy Chatman

Eurofins Analytical Services Manager : Quinn Raw

Sample Detail						Asbestos Absence /Presence	CANCELLED	HOLD	Lead	Particle Size Distribution	Eurofins Suite B15	Chromium Reducible Sulfur Suite	Moisture Set	Moisture Set	Eurofins Suite B7	BTEXN and Volatile TRH	BTEXN and Volatile TRH
Melbourne Laboratory - NATA # 1261 Site # 1254																	
Sydney Laboratory - NATA # 1261 Site # 18217						X	X	X	X		X		X	X	X	X	X
Brisbane Laboratory - NATA # 1261 Site # 20794												X	X	X			
External Laboratory										X							
No	Sample ID	Sample Date	Sampling Time	Matrix	LAB ID												
1	BH18 0.4	Mar 06, 2023		Soil	S23-Ma0022352						X			X	X		
2	BH18 1.0	Mar 06, 2023		Soil	S23-Ma0022353						X			X	X		
3	BH19 0.3	Mar 06, 2023		Soil	S23-Ma0022354						X			X	X		
4	BH19 0.5	Mar 06, 2023		Soil	S23-Ma0022355						X			X	X		
5	BH20 0.5	Mar 06, 2023		Soil	S23-Ma0022356						X			X	X		
6	BH20 1.0	Mar 06, 2023		Soil	S23-Ma0022357						X			X	X		
7	BH21 0.3	Mar 06, 2023		Soil	S23-Ma0022358						X			X	X		
8	BH21 0.5	Mar 06, 2023		Soil	S23-Ma0022359						X			X	X		
9	BH22 0.1	Mar 03, 2023		Soil	S23-Ma0022360						X			X	X		
10	BH22 0.5	Mar 03, 2023		Soil	S23-Ma0022361						X			X	X		
11	BH23 0.3	Mar 02, 2023		Soil	S23-Ma0022362				X					X			

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Received: Mar 7, 2023 1:16 PM
Due: Mar 14, 2023
Priority: 5 Day
Contact Name: Troy Chatman

Eurofins Analytical Services Manager : Quinn Raw

Sample Detail						Asbestos Absence /Presence	CANCELLED	HOLD	Lead	Particle Size Distribution	Eurofins Suite B15	Chromium Reducible Sulfur Suite	Moisture Set	Moisture Set	Eurofins Suite B7	BTEXN and Volatile TRH	BTEXN and Volatile TRH
Melbourne Laboratory - NATA # 1261 Site # 1254																	
Sydney Laboratory - NATA # 1261 Site # 18217						X	X	X	X		X		X	X	X	X	X
Brisbane Laboratory - NATA # 1261 Site # 20794											X		X	X			
12	BH23_0.5	Mar 02, 2023		Soil	S23-Ma0022363				X					X			
13	BH23_1.0	Mar 02, 2023		Soil	S23-Ma0022364				X					X			
14	BH23_2.0	Mar 02, 2023		Soil	S23-Ma0022365				X					X			
15	BH24_0.3	Mar 02, 2023		Soil	S23-Ma0022366				X					X			
16	BH24_0.5	Mar 02, 2023		Soil	S23-Ma0022367				X					X			
17	BH24_1.0	Mar 02, 2023		Soil	S23-Ma0022368				X					X			
18	BH24_1.5	Mar 02, 2023		Soil	S23-Ma0022369				X					X			
19	BH25_0.3	Mar 03, 2023		Soil	S23-Ma0022370				X					X			
20	BH25_0.5	Mar 03, 2023		Soil	S23-Ma0022371				X					X			
21	BH25_1.0	Mar 03, 2023		Soil	S23-Ma0022372				X					X			
22	BH25_2.0	Mar 03, 2023		Soil	S23-Ma0022373				X					X			
23	BH26_0.3	Mar 06, 2023		Soil	S23-Ma0022374				X					X			
24	BH26_0.5	Mar 06, 2023		Soil	S23-Ma0022375				X					X			
25	BH26_1.0	Mar 06, 2023		Soil	S23-Ma0022376				X					X			

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Melbourne Laboratory - NATA # 1261 Site # 1254																	
Sydney Laboratory - NATA # 1261 Site # 18217						X	X	X	X		X		X	X	X	X	X
Brisbane Laboratory - NATA # 1261 Site # 20794												X	X	X			
26	BH26_2.0	Mar 06, 2023		Soil	S23-Ma0022377				X					X			
27	BH27_0.3	Mar 03, 2023		Soil	S23-Ma0022378				X					X			
28	BH27_0.5	Mar 03, 2023		Soil	S23-Ma0022379				X					X			
29	BH27_1.0	Mar 03, 2023		Soil	S23-Ma0022380				X					X			
30	BH27_2.0	Mar 03, 2023		Soil	S23-Ma0022381				X					X			
31	BH28_0.3	Mar 03, 2023		Soil	S23-Ma0022382				X					X			
32	BH28_0.5	Mar 03, 2023		Soil	S23-Ma0022383				X					X			
33	BH28_1.0	Mar 03, 2023		Soil	S23-Ma0022384				X					X			
34	BH28_2.0	Mar 03, 2023		Soil	S23-Ma0022385				X					X			
35	BH29_0.3	Mar 06, 2023		Soil	S23-Ma0022386				X					X			
36	BH29_0.5	Mar 06, 2023		Soil	S23-Ma0022387				X					X			
37	BH29_1.0	Mar 06, 2023		Soil	S23-Ma0022388				X					X			
38	BH29_2.0	Mar 06, 2023		Soil	S23-Ma0022389				X					X			
39	BH30_0.1	Mar 02, 2023		Soil	S23-Ma0022390				X					X			

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Melbourne Laboratory - NATA # 1261 Site # 1254																	
Sydney Laboratory - NATA # 1261 Site # 18217						X	X	X	X		X		X	X	X	X	X
Brisbane Laboratory - NATA # 1261 Site # 20794											X		X	X			
40	BH30_0.5	Mar 02, 2023		Soil	S23-Ma0022391				X					X			
41	BH30_0.7	Mar 02, 2023		Soil	S23-Ma0022392				X					X			
42	BH30_2.0	Mar 02, 2023		Soil	S23-Ma0022393				X					X			
43	BH31_0.3	Mar 03, 2023		Soil	S23-Ma0022394				X					X			
44	BH31_0.5	Mar 03, 2023		Soil	S23-Ma0022395				X					X			
45	BH31_1.0	Mar 03, 2023		Soil	S23-Ma0022396				X					X			
46	BH31_2.0	Mar 03, 2023		Soil	S23-Ma0022397				X					X			
47	BH32_0.1	Mar 06, 2023		Soil	S23-Ma0022398				X					X			
48	BH32_0.5	Mar 06, 2023		Soil	S23-Ma0022399				X					X			
49	BH32_1.0	Mar 06, 2023		Soil	S23-Ma0022400				X					X			
50	BH32_2.0	Mar 06, 2023		Soil	S23-Ma0022401				X					X			
51	BH33_0.3	Mar 03, 2023		Soil	S23-Ma0022402				X					X			
52	BH33_0.5	Mar 03, 2023		Soil	S23-Ma0022403				X					X			
53	BH33_1.0	Mar 03, 2023		Soil	S23-Ma0022404				X					X			

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Melbourne Laboratory - NATA # 1261 Site # 1254																	
Sydney Laboratory - NATA # 1261 Site # 18217						X	X	X	X		X		X	X	X	X	X
Brisbane Laboratory - NATA # 1261 Site # 20794												X	X	X			
54	BH33_2.0	Mar 03, 2023		Soil	S23-Ma0022405				X					X			
55	BH34_0.3	Mar 02, 2023		Soil	S23-Ma0022406				X					X			
56	BH34_0.5	Mar 02, 2023		Soil	S23-Ma0022407				X					X			
57	BH34_1.0	Mar 02, 2023		Soil	S23-Ma0022408				X					X			
58	BH34_2.0	Mar 02, 2023		Soil	S23-Ma0022409				X					X			
59	BH35_0.3	Mar 03, 2023		Soil	S23-Ma0022410				X					X			
60	BH35_0.5	Mar 03, 2023		Soil	S23-Ma0022411				X					X			
61	BH35_1.0	Mar 03, 2023		Soil	S23-Ma0022412				X					X			
62	BH35_2.0	Mar 03, 2023		Soil	S23-Ma0022413				X					X			
63	BH36_0.1	Mar 03, 2023		Soil	S23-Ma0022414				X					X			
64	BH36_0.3	Mar 03, 2023		Soil	S23-Ma0022415				X					X			
65	BH36_1.0	Mar 03, 2023		Soil	S23-Ma0022416				X					X			
66	BH36_2.0	Mar 03, 2023		Soil	S23-Ma0022417				X					X			
67	BH37_0.3	Mar 03, 2023		Soil	S23-Ma0022418				X					X			

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Melbourne Laboratory - NATA # 1261 Site # 1254																	
Sydney Laboratory - NATA # 1261 Site # 18217						X	X	X	X		X		X	X	X	X	X
Brisbane Laboratory - NATA # 1261 Site # 20794												X	X	X			
68	BH37_0.5	Mar 03, 2023		Soil	S23-Ma0022419				X					X			
69	BH37_1.0	Mar 03, 2023		Soil	S23-Ma0022420				X					X			
70	BH37_2.0	Mar 03, 2023		Soil	S23-Ma0022421				X					X			
71	BH38_0.1	Mar 03, 2023		Soil	S23-Ma0022422				X					X			
72	BH38_0.5	Mar 03, 2023		Soil	S23-Ma0022423				X					X			
73	BH38_0.7	Mar 03, 2023		Soil	S23-Ma0022424				X					X			
74	BH39_0.1	Mar 03, 2023		Soil	S23-Ma0022425				X					X			
75	BH39_0.5	Mar 03, 2023		Soil	S23-Ma0022426				X					X			
76	BH39_1.0	Mar 03, 2023		Soil	S23-Ma0022427				X					X			
77	BH39_2.0	Mar 03, 2023		Soil	S23-Ma0022428				X					X			
78	BH40_0.1	Mar 03, 2023		Soil	S23-Ma0022429				X					X			
79	BH40_0.5	Mar 03, 2023		Soil	S23-Ma0022430				X					X			
80	BH40_1.0	Mar 03, 2023		Soil	S23-Ma0022431				X					X			
81	BH41_0.3	Mar 02, 2023		Soil	S23-Ma0022432				X					X			

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Melbourne Laboratory - NATA # 1261 Site # 1254																	
Sydney Laboratory - NATA # 1261 Site # 18217						X	X	X	X		X		X	X	X	X	X
Brisbane Laboratory - NATA # 1261 Site # 20794												X	X	X			
82	BH41_0.5	Mar 02, 2023		Soil	S23-Ma0022433				X					X			
83	BH41_1.0	Mar 02, 2023		Soil	S23-Ma0022434				X					X			
84	BH41_2.0	Mar 02, 2023		Soil	S23-Ma0022435				X					X			
85	BH42_0.1	Mar 03, 2023		Soil	S23-Ma0022436				X					X			
86	BH42_0.5	Mar 03, 2023		Soil	S23-Ma0022437				X					X			
87	BH42_1.0	Mar 03, 2023		Soil	S23-Ma0022438				X					X			
88	BH42_2.0	Mar 03, 2023		Soil	S23-Ma0022439				X					X			
89	BH43_0.3	Mar 06, 2023		Soil	S23-Ma0022440				X					X			
90	BH43_0.5	Mar 06, 2023		Soil	S23-Ma0022441				X					X			
91	DUP01	Mar 06, 2023		Soil	S23-Ma0022448				X					X			
92	DUP01 (Should be DUP02)	Mar 02, 2023		Soil	S23-Ma0022449				X					X			
93	DUP03	Mar 02, 2023		Soil	S23-Ma0022450				X					X			

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Melbourne Laboratory - NATA # 1261 Site # 1254																	
Sydney Laboratory - NATA # 1261 Site # 18217						X	X	X	X		X		X	X	X	X	X
Brisbane Laboratory - NATA # 1261 Site # 20794											X		X	X			
94	DUP04	Mar 03, 2023		Soil	S23-Ma0022451				X					X			
95	SD01_1.0	Mar 06, 2023		Soil	S23-Ma0022456					X							
96	SD02_0.5	Mar 03, 2023		Soil	S23-Ma0022457					X							
97	SD03_0.5	Mar 06, 2023		Soil	S23-Ma0022458					X							
98	SD04_1.0	Mar 03, 2023		Soil	S23-Ma0022459					X							
99	SD05_0.5	Mar 06, 2023		Soil	S23-Ma0022460					X							
100	SD06_0.5	Mar 02, 2023		Soil	S23-Ma0022461					X							
101	SD07_0.5	Mar 03, 2023		Soil	S23-Ma0022462					X							
102	SD08_1.0	Mar 03, 2023		Soil	S23-Ma0022463					X							
103	PD01_0.5	Mar 06, 2023		Soil	S23-Ma0022464					X							
104	PD02_0.5	Mar 03, 2023		Soil	S23-Ma0022465					X							
105	PD03_0.5	Mar 06, 2023		Soil	S23-Ma0022466					X							
106	PD04_1.0	Mar 03, 2023		Soil	S23-Ma0022467					X							
107	PD05_1.0	Mar 03, 2023		Soil	S23-Ma0022468					X							

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Melbourne Laboratory - NATA # 1261 Site # 1254																	
Sydney Laboratory - NATA # 1261 Site # 18217						X	X	X	X		X		X	X	X	X	X
Brisbane Laboratory - NATA # 1261 Site # 20794												X	X	X			
108	BH19_1.0	Mar 06, 2023		Soil	S23-Ma0022469		X										
109	BH25	Mar 03, 2023		Soil	S23-Ma0022470							X	X				
110	BH28_2.0	Mar 03, 2023		Soil	S23-Ma0022471							X	X				
111	BH33	Mar 03, 2023		Soil	S23-Ma0022472							X	X				
112	BH41	Mar 02, 2023		Soil	S23-Ma0022473							X	X				
113	RB01	Mar 02, 2023		Water	S23-Ma0022474				X								
114	RB02	Mar 03, 2023		Water	S23-Ma0022475				X								
115	RB03	Mar 06, 2023		Water	S23-Ma0022476				X								
116	BH23_MS01	Mar 02, 2023		Building Materials	S23-Ma0022477	X											
117	Trip Spike	Mar 06, 2023		Soil	S23-Ma0022478												X
118	Trip Blank	Mar 06, 2023		Soil	S23-Ma0022479											X	
119	BH18_0.5	Mar 06, 2023		Soil	S23-Ma0022480			X									
120	BH19_1.0	Mar 06, 2023		Soil	S23-Ma0022481			X									

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Melbourne Laboratory - NATA # 1261 Site # 1254																	
Sydney Laboratory - NATA # 1261 Site # 18217						X	X	X	X		X		X	X	X	X	X
Brisbane Laboratory - NATA # 1261 Site # 20794											X		X	X			
121	BH20_0.3	Mar 06, 2023		Soil	S23-Ma0022482			X									
122	BH20_2.0	Mar 06, 2023		Soil	S23-Ma0022483			X									
123	BH21_1.0	Mar 06, 2023		Soil	S23-Ma0022484			X									
124	BH21_2.0	Mar 06, 2023		Soil	S23-Ma0022485			X									
125	BH22_1.0	Mar 03, 2023		Soil	S23-Ma0022486			X									
126	BH22_2.0	Mar 03, 2023		Soil	S23-Ma0022487			X									
127	BH30_5.0	Mar 02, 2023		Soil	S23-Ma0022488			X									
128	BH34_5.0	Mar 02, 2023		Soil	S23-Ma0022489			X									
129	BH41_5.0	Mar 02, 2023		Soil	S23-Ma0022490			X									
130	BH43_1.0	Mar 06, 2023		Soil	S23-Ma0022491			X									
131	BH43_2.0	Mar 06, 2023		Soil	S23-Ma0022492			X									
132	BH44_0.3	Mar 06, 2023		Water	S23-Ma0022493			X									
133	BH44_0.5	Mar 06, 2023		Water	S23-Ma0022494			X									
134	BH44_1.0	Mar 06, 2023		Water	S23-Ma0022495			X									

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Melbourne Laboratory - NATA # 1261 Site # 1254																	
Sydney Laboratory - NATA # 1261 Site # 18217						X	X	X	X		X		X	X	X	X	X
Brisbane Laboratory - NATA # 1261 Site # 20794												X	X	X			
135	BH45_0.3	Mar 06, 2023		Soil	S23-Ma0022496			X									
136	BH45_0.5	Mar 06, 2023		Soil	S23-Ma0022497			X									
137	BH45_1.0	Mar 06, 2023		Soil	S23-Ma0022498			X									
Test Counts						1	1	19	87	13	10	4	98	98	10	1	1

Internal Quality Control Review and Glossary

General

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

Holding Times

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

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

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

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

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

Units

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

Terms

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

QC - Acceptance Criteria

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

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

Results <10 times the LOR: No Limit

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

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

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

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

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

QC Data General Comments

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

Quality Control Results

Test				Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Method Blank										
Heavy Metals										
Lead				mg/L	< 0.001			0.001	Pass	
LCS - % Recovery										
Heavy Metals										
Lead				%	86			80-120	Pass	
Test	Lab Sample ID	QA Source	Units	Result 1				Acceptance Limits	Pass Limits	Qualifying Code
Spike - % Recovery										
Heavy Metals										
Lead					Result 1					
Lead				%	81			75-125	Pass	
Test	Lab Sample ID	QA Source	Units	Result 1				Acceptance Limits	Pass Limits	Qualifying Code
Duplicate										
Heavy Metals										
Lead					Result 1	Result 2	RPD			
Lead				mg/L	< 0.001	< 0.001	<1	30%	Pass	
Duplicate										
Heavy Metals										
Lead					Result 1	Result 2	RPD			
Lead				mg/L	< 0.001	< 0.001	<1	30%	Pass	
Duplicate										
Heavy Metals										
Lead					Result 1	Result 2	RPD			
Lead				mg/L	< 0.001	< 0.001	<1	30%	Pass	

Comments

Particle size distribution analysed by: East West Geotechnical, NATA accreditation number 12360, report reference: EW230781

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

Authorised by:

Bonnie Pu	Analytical Services Manager
Mickael Ros	Senior Analyst-Metal



Glenn Jackson
General Manager

Final Report – this report replaces any previously issued Report

- Indicates Not Requested

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

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

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7/3/23 1:16 PM 9.6°C

[illegible]

[illegible]

Tax Invoice

EP Risk Management (NSW)
 80 Mount Street,
 North Sydney
 NSW 2060

Purchase Order #: Not provided
 Invoice #: 757997
 Date: Mar 22, 2023
 Report #: 970426
 Project Name: BOURKE ROAD
 Project ID: EP3072 LEACHATE
 SAMPLES
 Contact: Troy Chatman

Description	Quantity	Price	Total	Notes
Leachate Samples				
AUS Leaching Procedure	80	\$9.80	\$784.00	
Standard Metals (Solid)				
Pb	160	\$7.15	\$1,144.00	
USA Leaching Procedure	80	\$9.80	\$784.00	
Handling Charge	1	\$30.00	\$30.00	

Notes: Quote: 200323EPRN	Nett Total	\$2,742.00
	GST	\$274.20
	Total Inc GST	\$3,016.20

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 : 757997
Amount Inc GST : \$3,016.20
TERMS STRICTLY 30 DAYS

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Sample Receipt Advice

Company name:	EP Risk Management (NSW)
Contact name:	Troy Chatman
Project name:	BOURKE ROAD
Project ID:	EP3072 LEACHATE SAMPLES
Turnaround time:	5 Day
Date/Time received	Mar 7, 2023 1:16 PM
Eurofins reference	970426

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.
- N/A 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

leachates from report 970423

Contact

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

Quinn Raw on phone : or by email: QuinnRaw@eurofins.com

Results will be delivered electronically via email to Troy Chatman - troy.chatman@eprisk.com.au.

Note: A copy of these results will also be delivered to the general EP Risk Management (NSW) email address.



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Company Name: EP Risk Management (NSW)
Address: Level 4 73 Walker St
North Sydney
NSW 2060

Project Name: BOURKE ROAD
Project ID: EP3072 LEACHATE SAMPLES

Order No.:
Report #: 970426
Phone: 02 99225021
Fax:

Received: Mar 7, 2023 1:16 PM
Due: Mar 14, 2023
Priority: 5 Day
Contact Name: Troy Chatman

Eurofins Analytical Services Manager : Quinn Raw

Sample Detail						HOLD	Lead	AUS Leaching Procedure	USA Leaching Procedure
Sydney Laboratory - NATA # 1261 Site # 18217						X	X	X	X
External Laboratory									
No	Sample ID	Sample Date	Sampling Time	Matrix	LAB ID				
1	BH23 0.3	Mar 02, 2023		US Leachate	S23-Ma0022505		X		X
2	BH23 0.5	Mar 02, 2023		US Leachate	S23-Ma0022506		X		X
3	BH23 1.0	Mar 02, 2023		US Leachate	S23-Ma0022507		X		X
4	BH23 2.0	Mar 02, 2023		US Leachate	S23-Ma0022508		X		X
5	BH24 0.3	Mar 02, 2023		US Leachate	S23-Ma0022509		X		X
6	BH24 0.5	Mar 02, 2023		US Leachate	S23-Ma0022510		X		X
7	BH24 1.0	Mar 02, 2023		US Leachate	S23-Ma0022511		X		X
8	BH24 1.5	Mar 02, 2023		US Leachate	S23-Ma0022512		X		X
9	BH25 0.3	Mar 03, 2023		US Leachate	S23-Ma0022513		X		X
10	BH25 0.5	Mar 03, 2023		US Leachate	S23-Ma0022514		X		X
11	BH25 1.0	Mar 03, 2023		US Leachate	S23-Ma0022515		X		X
12	BH25 2.0	Mar 03, 2023		US Leachate	S23-Ma0022516		X		X
13	BH26 0.3	Mar 06, 2023		US Leachate	S23-Ma0022517		X		X



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Company Name: EP Risk Management (NSW)
Address: Level 4 73 Walker St
North Sydney
NSW 2060

Project Name: BOURKE ROAD
Project ID: EP3072 LEACHATE SAMPLES

Order No.:
Report #: 970426
Phone: 02 99225021
Fax:

Received: Mar 7, 2023 1:16 PM
Due: Mar 14, 2023
Priority: 5 Day
Contact Name: Troy Chatman

Eurofins Analytical Services Manager : Quinn Raw

Sample Detail						HOLD	Lead	AUS Leaching Procedure	USA Leaching Procedure
Sydney Laboratory - NATA # 1261 Site # 18217						X	X	X	X
14	BH26_0.5	Mar 06, 2023		US Leachate	S23-Ma0022518		X		X
15	BH26_1.0	Mar 06, 2023		US Leachate	S23-Ma0022519		X		X
16	BH26_2.0	Mar 06, 2023		US Leachate	S23-Ma0022520		X		X
17	BH27_0.3	Mar 03, 2023		US Leachate	S23-Ma0022521		X		X
18	BH27_0.5	Mar 03, 2023		US Leachate	S23-Ma0022522		X		X
19	BH27_1.0	Mar 03, 2023		US Leachate	S23-Ma0022523		X		X
20	BH27_2.0	Mar 03, 2023		US Leachate	S23-Ma0022524		X		X
21	BH28_0.3	Mar 03, 2023		US Leachate	S23-Ma0022525		X		X
22	BH28_0.5	Mar 03, 2023		US Leachate	S23-Ma0022526		X		X
23	BH28_1.0	Mar 03, 2023		US Leachate	S23-Ma0022527		X		X
24	BH28_2.0	Mar 03, 2023		US Leachate	S23-Ma0022528		X		X
25	BH29_0.3	Mar 06, 2023		US Leachate	S23-Ma0022529		X		X
26	BH29_0.5	Mar 06, 2023		US Leachate	S23-Ma0022530		X		X
27	BH29_1.0	Mar 06, 2023		US Leachate	S23-Ma0022531		X		X
28	BH29_2.0	Mar 06, 2023		US Leachate	S23-Ma0022532		X		X
29	BH30_0.1	Mar 02, 2023		US Leachate	S23-Ma0022533		X		X



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Phone: 02 99225021
Fax:

Received: Mar 7, 2023 1:16 PM
Due: Mar 14, 2023
Priority: 5 Day
Contact Name: Troy Chatman

Eurofins Analytical Services Manager : Quinn Raw

Sample Detail						HOLD	Lead	AUS Leaching Procedure	USA Leaching Procedure
Sydney Laboratory - NATA # 1261 Site # 18217						X	X	X	X
30	BH30_0.5	Mar 02, 2023		US Leachate	S23-Ma0022534		X		X
31	BH30_0.7	Mar 02, 2023		US Leachate	S23-Ma0022535		X		X
32	BH30_2.0	Mar 02, 2023		US Leachate	S23-Ma0022536		X		X
33	BH31_0.3	Mar 03, 2023		US Leachate	S23-Ma0022537		X		X
34	BH31_0.5	Mar 03, 2023		US Leachate	S23-Ma0022538		X		X
35	BH31_1.0	Mar 03, 2023		US Leachate	S23-Ma0022539		X		X
36	BH31_2.0	Mar 03, 2023		US Leachate	S23-Ma0022540		X		X
37	BH32_0.1	Mar 06, 2023		US Leachate	S23-Ma0022541		X		X
38	BH32_0.5	Mar 06, 2023		US Leachate	S23-Ma0022542		X		X
39	BH32_1.0	Mar 06, 2023		US Leachate	S23-Ma0022543		X		X
40	BH32_2.0	Mar 06, 2023		US Leachate	S23-Ma0022544		X		X
41	BH33_0.3	Mar 03, 2023		US Leachate	S23-Ma0022545		X		X
42	BH33_0.5	Mar 03, 2023		US Leachate	S23-Ma0022546		X		X
43	BH33_1.0	Mar 03, 2023		US Leachate	S23-Ma0022547		X		X
44	BH33_2.0	Mar 03, 2023		US Leachate	S23-Ma0022548		X		X
45	BH34_0.3	Mar 02, 2023		US Leachate	S23-Ma0022549		X		X



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Phone: 02 99225021
Fax:

Received: Mar 7, 2023 1:16 PM
Due: Mar 14, 2023
Priority: 5 Day
Contact Name: Troy Chatman

Eurofins Analytical Services Manager : Quinn Raw

Sample Detail						HOLD	Lead	AUS Leaching Procedure	USA Leaching Procedure
Sydney Laboratory - NATA # 1261 Site # 18217						X	X	X	X
46	BH34_0.5	Mar 02, 2023		US Leachate	S23-Ma0022550		X		X
47	BH34_1.0	Mar 02, 2023		US Leachate	S23-Ma0022551		X		X
48	BH34_2.0	Mar 02, 2023		US Leachate	S23-Ma0022552		X		X
49	BH35_0.3	Mar 03, 2023		US Leachate	S23-Ma0022553		X		X
50	BH35_0.5	Mar 03, 2023		US Leachate	S23-Ma0022554		X		X
51	BH35_1.0	Mar 03, 2023		US Leachate	S23-Ma0022555		X		X
52	BH35_2.0	Mar 03, 2023		US Leachate	S23-Ma0022556		X		X
53	BH36_0.1	Mar 03, 2023		US Leachate	S23-Ma0022557		X		X
54	BH36_0.3	Mar 03, 2023		US Leachate	S23-Ma0022558		X		X
55	BH36_1.0	Mar 03, 2023		US Leachate	S23-Ma0022559		X		X
56	BH36_2.0	Mar 03, 2023		US Leachate	S23-Ma0022560		X		X
57	BH37_0.3	Mar 03, 2023		US Leachate	S23-Ma0022561		X		X
58	BH37_0.5	Mar 03, 2023		US Leachate	S23-Ma0022562		X		X
59	BH37_1.0	Mar 03, 2023		US Leachate	S23-Ma0022563		X		X
60	BH37_2.0	Mar 03, 2023		US Leachate	S23-Ma0022564		X		X
61	BH38_0.1	Mar 03, 2023		US Leachate	S23-Ma0022565		X		X



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Project Name: BOURKE ROAD
Project ID: EP3072 LEACHATE SAMPLES

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Phone: 02 99225021
Fax:

Received: Mar 7, 2023 1:16 PM
Due: Mar 14, 2023
Priority: 5 Day
Contact Name: Troy Chatman

Eurofins Analytical Services Manager : Quinn Raw

Sample Detail						HOLD	Lead	AUS Leaching Procedure	USA Leaching Procedure
Sydney Laboratory - NATA # 1261 Site # 18217						X	X	X	X
62	BH38_0.5	Mar 03, 2023		US Leachate	S23-Ma0022566		X		X
63	BH38_0.7	Mar 03, 2023		US Leachate	S23-Ma0022567		X		X
64	BH39_0.1	Mar 03, 2023		US Leachate	S23-Ma0022568		X		X
65	BH39_0.5	Mar 03, 2023		US Leachate	S23-Ma0022569		X		X
66	BH39_1.0	Mar 03, 2023		US Leachate	S23-Ma0022570		X		X
67	BH39_2.0	Mar 03, 2023		US Leachate	S23-Ma0022571		X		X
68	BH40_0.1	Mar 03, 2023		US Leachate	S23-Ma0022572		X		X
69	BH40_0.5	Mar 03, 2023		US Leachate	S23-Ma0022573		X		X
70	BH40_1.0	Mar 03, 2023		US Leachate	S23-Ma0022574		X		X
71	BH41_0.3	Mar 02, 2023		US Leachate	S23-Ma0022575		X		X
72	BH41_0.5	Mar 02, 2023		US Leachate	S23-Ma0022576		X		X
73	BH41_1.0	Mar 02, 2023		US Leachate	S23-Ma0022577		X		X
74	BH41_2.0	Mar 02, 2023		US Leachate	S23-Ma0022578		X		X
75	BH42_0.1	Mar 03, 2023		US Leachate	S23-Ma0022579		X		X
76	BH42_0.5	Mar 03, 2023		US Leachate	S23-Ma0022580		X		X
77	BH42_1.0	Mar 03, 2023		US Leachate	S23-Ma0022581		X		X



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Company Name: EP Risk Management (NSW)
Address: Level 4 73 Walker St
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Project Name: BOURKE ROAD
Project ID: EP3072 LEACHATE SAMPLES

Order No.:
Report #: 970426
Phone: 02 99225021
Fax:

Received: Mar 7, 2023 1:16 PM
Due: Mar 14, 2023
Priority: 5 Day
Contact Name: Troy Chatman

Eurofins Analytical Services Manager : Quinn Raw

Sample Detail						HOLD	Lead	AUS Leaching Procedure	USA Leaching Procedure
Sydney Laboratory - NATA # 1261 Site # 18217						X	X	X	X
78	BH42_2.0	Mar 03, 2023		US Leachate	S23-Ma0022582		X		X
79	BH43_0.3	Mar 06, 2023		US Leachate	S23-Ma0022583		X		X
80	BH43_0.5	Mar 06, 2023		US Leachate	S23-Ma0022584		X		X
81	BH23_0.3	Mar 02, 2023		AUS Leachate	S23-Ma0022585		X	X	
82	BH23_0.5	Mar 02, 2023		AUS Leachate	S23-Ma0022586		X	X	
83	BH23_1.0	Mar 02, 2023		AUS Leachate	S23-Ma0022587		X	X	
84	BH23_2.0	Mar 02, 2023		AUS Leachate	S23-Ma0022588		X	X	
85	BH24_0.3	Mar 02, 2023		AUS Leachate	S23-Ma0022589		X	X	
86	BH24_0.5	Mar 02, 2023		AUS Leachate	S23-Ma0022590		X	X	
87	BH24_1.0	Mar 02, 2023		AUS Leachate	S23-Ma0022591		X	X	
88	BH24_1.5	Mar 02, 2023		AUS Leachate	S23-Ma0022592		X	X	
89	BH25_0.3	Mar 03, 2023		AUS Leachate	S23-Ma0022593		X	X	
90	BH25_0.5	Mar 03, 2023		AUS Leachate	S23-Ma0022594		X	X	
91	BH25_1.0	Mar 03, 2023		AUS Leachate	S23-Ma0022595		X	X	
92	BH25_2.0	Mar 03, 2023		AUS Leachate	S23-Ma0022596		X	X	
93	BH26_0.3	Mar 06, 2023		AUS Leachate	S23-Ma0022597		X	X	



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Project ID: EP3072 LEACHATE SAMPLES

Order No.:
Report #: 970426
Phone: 02 99225021
Fax:

Received: Mar 7, 2023 1:16 PM
Due: Mar 14, 2023
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Contact Name: Troy Chatman

Eurofins Analytical Services Manager : Quinn Raw

Sample Detail						HOLD	Lead	AUS Leaching Procedure	USA Leaching Procedure
Sydney Laboratory - NATA # 1261 Site # 18217						X	X	X	X
94	BH26_0.5	Mar 06, 2023		AUS Leachate	S23-Ma0022598		X	X	
95	BH26_1.0	Mar 06, 2023		AUS Leachate	S23-Ma0022599		X	X	
96	BH26_2.0	Mar 06, 2023		AUS Leachate	S23-Ma0022600		X	X	
97	BH27_0.3	Mar 03, 2023		AUS Leachate	S23-Ma0022601		X	X	
98	BH27_0.5	Mar 03, 2023		AUS Leachate	S23-Ma0022602		X	X	
99	BH27_1.0	Mar 03, 2023		AUS Leachate	S23-Ma0022603		X	X	
100	BH27_2.0	Mar 03, 2023		AUS Leachate	S23-Ma0022604		X	X	
101	BH28_0.3	Mar 03, 2023		AUS Leachate	S23-Ma0022605		X	X	
102	BH28_0.5	Mar 03, 2023		AUS Leachate	S23-Ma0022606		X	X	
103	BH28_1.0	Mar 03, 2023		AUS Leachate	S23-Ma0022607		X	X	
104	BH28_2.0	Mar 03, 2023		AUS Leachate	S23-Ma0022608		X	X	
105	BH29_0.3	Mar 06, 2023		AUS Leachate	S23-Ma0022609		X	X	
106	BH29_0.5	Mar 06, 2023		AUS Leachate	S23-Ma0022610		X	X	
107	BH29_1.0	Mar 06, 2023		AUS Leachate	S23-Ma0022611		X	X	
108	BH29_2.0	Mar 06, 2023		AUS Leachate	S23-Ma0022612		X	X	
109	BH30_0.1	Mar 02, 2023		AUS Leachate	S23-Ma0022613		X	X	



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Company Name: EP Risk Management (NSW)
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Project ID: EP3072 LEACHATE SAMPLES

Order No.:
Report #: 970426
Phone: 02 99225021
Fax:

Received: Mar 7, 2023 1:16 PM
Due: Mar 14, 2023
Priority: 5 Day
Contact Name: Troy Chatman

Eurofins Analytical Services Manager : Quinn Raw

Sample Detail						HOLD	Lead	AUS Leaching Procedure	USA Leaching Procedure
Sydney Laboratory - NATA # 1261 Site # 18217						X	X	X	X
110	BH30_0.5	Mar 02, 2023		AUS Leachate	S23-Ma0022614		X	X	
111	BH30_0.7	Mar 02, 2023		AUS Leachate	S23-Ma0022615		X	X	
112	BH30_2.0	Mar 02, 2023		AUS Leachate	S23-Ma0022616		X	X	
113	BH31_0.3	Mar 03, 2023		AUS Leachate	S23-Ma0022617		X	X	
114	BH31_0.5	Mar 03, 2023		AUS Leachate	S23-Ma0022618		X	X	
115	BH31_1.0	Mar 03, 2023		AUS Leachate	S23-Ma0022619		X	X	
116	BH31_2.0	Mar 03, 2023		AUS Leachate	S23-Ma0022620		X	X	
117	BH32_0.1	Mar 06, 2023		AUS Leachate	S23-Ma0022621		X	X	
118	BH32_0.5	Mar 06, 2023		AUS Leachate	S23-Ma0022622		X	X	
119	BH32_1.0	Mar 06, 2023		AUS Leachate	S23-Ma0022623		X	X	
120	BH32_2.0	Mar 06, 2023		AUS Leachate	S23-Ma0022624		X	X	
121	BH33_0.3	Mar 03, 2023		AUS Leachate	S23-Ma0022625		X	X	
122	BH33_0.5	Mar 03, 2023		AUS Leachate	S23-Ma0022626		X	X	
123	BH33_1.0	Mar 03, 2023		AUS Leachate	S23-Ma0022627		X	X	
124	BH33_2.0	Mar 03, 2023		AUS Leachate	S23-Ma0022628		X	X	
125	BH34_0.3	Mar 02, 2023		AUS Leachate	S23-Ma0022629		X	X	



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Project ID: EP3072 LEACHATE SAMPLES

Order No.:
Report #: 970426
Phone: 02 99225021
Fax:

Received: Mar 7, 2023 1:16 PM
Due: Mar 14, 2023
Priority: 5 Day
Contact Name: Troy Chatman

Eurofins Analytical Services Manager : Quinn Raw

Sample Detail						HOLD	Lead	AUS Leaching Procedure	USA Leaching Procedure
Sydney Laboratory - NATA # 1261 Site # 18217						X	X	X	X
126	BH34_0.5	Mar 02, 2023		AUS Leachate	S23-Ma0022630		X	X	
127	BH34_1.0	Mar 02, 2023		AUS Leachate	S23-Ma0022631		X	X	
128	BH34_2.0	Mar 02, 2023		AUS Leachate	S23-Ma0022632		X	X	
129	BH35_0.3	Mar 03, 2023		AUS Leachate	S23-Ma0022633		X	X	
130	BH35_0.5	Mar 03, 2023		AUS Leachate	S23-Ma0022634		X	X	
131	BH35_1.0	Mar 03, 2023		AUS Leachate	S23-Ma0022635		X	X	
132	BH35_2.0	Mar 03, 2023		AUS Leachate	S23-Ma0022636		X	X	
133	BH36_0.1	Mar 03, 2023		AUS Leachate	S23-Ma0022637		X	X	
134	BH36_0.3	Mar 03, 2023		AUS Leachate	S23-Ma0022638		X	X	
135	BH36_1.0	Mar 03, 2023		AUS Leachate	S23-Ma0022639		X	X	
136	BH36_2.0	Mar 03, 2023		AUS Leachate	S23-Ma0022640		X	X	
137	BH37_0.3	Mar 03, 2023		AUS Leachate	S23-Ma0022641		X	X	
138	BH37_0.5	Mar 03, 2023		AUS Leachate	S23-Ma0022642		X	X	
139	BH37_1.0	Mar 03, 2023		AUS Leachate	S23-Ma0022643		X	X	
140	BH37_2.0	Mar 03, 2023		AUS Leachate	S23-Ma0022644		X	X	
141	BH38_0.1	Mar 03, 2023		AUS Leachate	S23-Ma0022645		X	X	



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Eurofins Analytical Services Manager : Quinn Raw

Sample Detail						HOLD	Lead	AUS Leaching Procedure	USA Leaching Procedure
Sydney Laboratory - NATA # 1261 Site # 18217						X	X	X	X
142	BH38_0.5	Mar 03, 2023		AUS Leachate	S23-Ma0022646		X	X	
143	BH38_0.7	Mar 03, 2023		AUS Leachate	S23-Ma0022647		X	X	
144	BH39_0.1	Mar 03, 2023		AUS Leachate	S23-Ma0022648		X	X	
145	BH39_0.5	Mar 03, 2023		AUS Leachate	S23-Ma0022649		X	X	
146	BH39_1.0	Mar 03, 2023		AUS Leachate	S23-Ma0022650		X	X	
147	BH39_2.0	Mar 03, 2023		AUS Leachate	S23-Ma0022651		X	X	
148	BH40_0.1	Mar 03, 2023		AUS Leachate	S23-Ma0022652		X	X	
149	BH40_0.5	Mar 03, 2023		AUS Leachate	S23-Ma0022653		X	X	
150	BH40_1.0	Mar 03, 2023		AUS Leachate	S23-Ma0022654		X	X	
151	BH41_0.3	Mar 02, 2023		AUS Leachate	S23-Ma0022655		X	X	
152	BH41_0.5	Mar 02, 2023		AUS Leachate	S23-Ma0022656		X	X	
153	BH41_1.0	Mar 02, 2023		AUS Leachate	S23-Ma0022657		X	X	
154	BH41_2.0	Mar 02, 2023		AUS Leachate	S23-Ma0022658		X	X	
155	BH42_0.1	Mar 03, 2023		AUS Leachate	S23-Ma0022659		X	X	
156	BH42_0.5	Mar 03, 2023		AUS Leachate	S23-Ma0022660		X	X	
157	BH42_1.0	Mar 03, 2023		AUS Leachate	S23-Ma0022661		X	X	



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Contact Name: Troy Chatman

Eurofins Analytical Services Manager : Quinn Raw

Sample Detail						HOLD	Lead	AUS Leaching Procedure	USA Leaching Procedure
Sydney Laboratory - NATA # 1261 Site # 18217						X	X	X	X
158	BH42_2.0	Mar 03, 2023		AUS Leachate	S23-Ma0022662		X	X	
159	BH43_0.3	Mar 06, 2023		AUS Leachate	S23-Ma0022663		X	X	
160	BH43_0.5	Mar 06, 2023		AUS Leachate	S23-Ma0022664		X	X	
161	BH18_0.5	Mar 02, 2023		Soil	S23-Ma0023306	X			
162	BH18_1.3	Mar 02, 2023		Soil	S23-Ma0023307	X			
163	MEP02_0.5	Mar 02, 2023		Soil	S23-Ma0023308	X			
Test Counts						3	160	80	80

EP Risk Management (NSW)
80 Mount Street,
North Sydney
NSW 2060



NATA Accredited
Accreditation Number 1261
Site Number 18217

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: **Troy Chatman**

Report **970426-L**
Project name **BOURKE ROAD**
Project ID **EP3072 LEACHATE SAMPLES**
Received Date **Mar 07, 2023**

Client Sample ID			BH23_0.3	BH23_0.5	BH23_1.0	BH23_2.0
Sample Matrix			US Leachate	US Leachate	US Leachate	US Leachate
Eurofins Sample No.			S23-Ma0022505	S23-Ma0022506	S23-Ma0022507	S23-Ma0022508
Date Sampled			Mar 02, 2023	Mar 02, 2023	Mar 02, 2023	Mar 02, 2023
Test/Reference	LOR	Unit				
Heavy Metals						
Lead	0.01	mg/L	18	39	17	2.3
USA Leaching Procedure						
Leachate Fluid ^{C01}		comment	1.0	1.0	1.0	1.0
pH (initial)	0.1	pH Units	8.8	8.6	8.3	8.7
pH (off)	0.1	pH Units	6.2	5.4	5.3	5.2
pH (USA HCl addition)	0.1	pH Units	2.4	2.4	2.4	2.3

Client Sample ID			BH24_0.3	BH24_0.5	BH24_1.0	BH24_1.5
Sample Matrix			US Leachate	US Leachate	US Leachate	US Leachate
Eurofins Sample No.			S23-Ma0022509	S23-Ma0022510	S23-Ma0022511	S23-Ma0022512
Date Sampled			Mar 02, 2023	Mar 02, 2023	Mar 02, 2023	Mar 02, 2023
Test/Reference	LOR	Unit				
Heavy Metals						
Lead	0.01	mg/L	240	92	42	23
USA Leaching Procedure						
Leachate Fluid ^{C01}		comment	1.0	1.0	1.0	1.0
pH (initial)	0.1	pH Units	8.3	8.6	8.7	8.9
pH (off)	0.1	pH Units	5.5	5.6	5.8	6.2
pH (USA HCl addition)	0.1	pH Units	2.4	2.3	2.3	2.4

Client Sample ID			BH25_0.3	BH25_0.5	BH25_1.0	BH25_2.0
Sample Matrix			US Leachate	US Leachate	US Leachate	US Leachate
Eurofins Sample No.			S23-Ma0022513	S23-Ma0022514	S23-Ma0022515	S23-Ma0022516
Date Sampled			Mar 03, 2023	Mar 03, 2023	Mar 03, 2023	Mar 03, 2023
Test/Reference	LOR	Unit				
Heavy Metals						
Lead	0.01	mg/L	17	5.5	1.7	0.06
USA Leaching Procedure						
Leachate Fluid ^{C01}		comment	1.0	1.0	1.0	1.0
pH (initial)	0.1	pH Units	8.5	8.5	8.3	8.5
pH (off)	0.1	pH Units	5.3	5.3	5.2	5.1
pH (USA HCl addition)	0.1	pH Units	2.4	2.3	2.3	2.3

Client Sample ID			BH26_0.3	BH26_0.5	BH26_1.0	BH26_2.0
Sample Matrix			US Leachate	US Leachate	US Leachate	US Leachate
Eurofins Sample No.			S23-Ma0022517	S23-Ma0022518	S23-Ma0022519	S23-Ma0022520
Date Sampled			Mar 06, 2023	Mar 06, 2023	Mar 06, 2023	Mar 06, 2023
Test/Reference	LOR	Unit				
Heavy Metals						
Lead	0.01	mg/L	0.14	0.07	0.01	< 0.01
USA Leaching Procedure						
Leachate Fluid ^{C01}		comment	1.0	1.0	1.0	1.0
pH (initial)	0.1	pH Units	8.8	9.1	8.4	8.5
pH (off)	0.1	pH Units	5.3	6.3	5.3	5.5
pH (USA HCl addition)	0.1	pH Units	2.4	2.5	2.3	2.3

Client Sample ID			BH27_0.3	BH27_0.5	BH27_1.0	BH27_2.0
Sample Matrix			US Leachate	US Leachate	US Leachate	US Leachate
Eurofins Sample No.			S23-Ma0022521	S23-Ma0022522	S23-Ma0022523	S23-Ma0022524
Date Sampled			Mar 03, 2023	Mar 03, 2023	Mar 03, 2023	Mar 03, 2023
Test/Reference	LOR	Unit				
Heavy Metals						
Lead	0.01	mg/L	6.1	0.64	12	0.26
USA Leaching Procedure						
Leachate Fluid ^{C01}		comment	1.0	1.0	1.0	1.0
pH (initial)	0.1	pH Units	8.7	8.3	8.5	8.5
pH (off)	0.1	pH Units	6.1	6.4	5.7	5.2
pH (USA HCl addition)	0.1	pH Units	2.3	2.3	2.4	2.3

Client Sample ID			BH28_0.3	BH28_0.5	BH28_1.0	BH28_2.0
Sample Matrix			US Leachate	US Leachate	US Leachate	US Leachate
Eurofins Sample No.			S23-Ma0022525	S23-Ma0022526	S23-Ma0022527	S23-Ma0022528
Date Sampled			Mar 03, 2023	Mar 03, 2023	Mar 03, 2023	Mar 03, 2023
Test/Reference	LOR	Unit				
Heavy Metals						
Lead	0.01	mg/L	40	3.1	18	0.04
USA Leaching Procedure						
Leachate Fluid ^{C01}		comment	1.0	1.0	1.0	1.0
pH (initial)	0.1	pH Units	8.8	8.6	8.4	8.8
pH (off)	0.1	pH Units	5.7	5.6	5.5	5.1
pH (USA HCl addition)	0.1	pH Units	2.4	2.3	2.4	2.4

Client Sample ID			BH29_0.3	BH29_0.5	BH29_1.0	BH29_2.0
Sample Matrix			US Leachate	US Leachate	US Leachate	US Leachate
Eurofins Sample No.			S23-Ma0022529	S23-Ma0022530	S23-Ma0022531	S23-Ma0022532
Date Sampled			Mar 06, 2023	Mar 06, 2023	Mar 06, 2023	Mar 06, 2023
Test/Reference	LOR	Unit				
Heavy Metals						
Lead	0.01	mg/L	0.91	13	3.9	0.12

Client Sample ID			BH29_0.3	BH29_0.5	BH29_1.0	BH29_2.0
Sample Matrix			US Leachate	US Leachate	US Leachate	US Leachate
Eurofins Sample No.			S23-Ma0022529	S23-Ma0022530	S23-Ma0022531	S23-Ma0022532
Date Sampled			Mar 06, 2023	Mar 06, 2023	Mar 06, 2023	Mar 06, 2023
Test/Reference	LOR	Unit				
USA Leaching Procedure						
Leachate Fluid ^{C01}		comment	1.0	1.0	1.0	1.0
pH (initial)	0.1	pH Units	8.8	8.8	9.4	9.1
pH (off)	0.1	pH Units	6.1	5.8	5.4	5.1
pH (USA HCl addition)	0.1	pH Units	2.5	2.5	2.3	2.3

Client Sample ID			BH30_0.1	BH30_0.5	BH30_0.7	BH30_2.0
Sample Matrix			US Leachate	US Leachate	US Leachate	US Leachate
Eurofins Sample No.			S23-Ma0022533	S23-Ma0022534	S23-Ma0022535	S23-Ma0022536
Date Sampled			Mar 02, 2023	Mar 02, 2023	Mar 02, 2023	Mar 02, 2023
Test/Reference	LOR	Unit				
Heavy Metals						
Lead	0.01	mg/L	< 0.01	0.04	0.03	0.04
USA Leaching Procedure						
Leachate Fluid ^{C01}		comment	1.0	1.0	1.0	1.0
pH (initial)	0.1	pH Units	9.5	8.4	8.1	8.8
pH (off)	0.1	pH Units	6.1	5.7	5.5	5.1
pH (USA HCl addition)	0.1	pH Units	2.3	2.4	2.3	2.4

Client Sample ID			BH31_0.3	BH31_0.5	BH31_1.0	BH31_2.0
Sample Matrix			US Leachate	US Leachate	US Leachate	US Leachate
Eurofins Sample No.			S23-Ma0022537	S23-Ma0022538	S23-Ma0022539	S23-Ma0022540
Date Sampled			Mar 03, 2023	Mar 03, 2023	Mar 03, 2023	Mar 03, 2023
Test/Reference	LOR	Unit				
Heavy Metals						
Lead	0.01	mg/L	74	14	6.4	0.21
USA Leaching Procedure						
Leachate Fluid ^{C01}		comment	1.0	1.0	1.0	1.0
pH (initial)	0.1	pH Units	9.0	9.0	8.4	8.0
pH (off)	0.1	pH Units	5.7	5.6	5.2	5.1
pH (USA HCl addition)	0.1	pH Units	2.3	2.4	2.3	2.3

Client Sample ID			BH32_0.1	BH32_0.5	BH32_1.0	BH32_2.0
Sample Matrix			US Leachate	US Leachate	US Leachate	US Leachate
Eurofins Sample No.			S23-Ma0022541	S23-Ma0022542	S23-Ma0022543	S23-Ma0022544
Date Sampled			Mar 06, 2023	Mar 06, 2023	Mar 06, 2023	Mar 06, 2023
Test/Reference	LOR	Unit				
Heavy Metals						
Lead	0.01	mg/L	0.16	0.12	0.02	0.01
USA Leaching Procedure						
Leachate Fluid ^{C01}		comment	1.0	1.0	1.0	1.0
pH (initial)	0.1	pH Units	8.3	8.0	7.7	7.8
pH (off)	0.1	pH Units	5.7	5.1	5.1	5.2
pH (USA HCl addition)	0.1	pH Units	2.3	2.4	2.3	2.3

Client Sample ID			BH33_0.3	BH33_0.5	BH33_1.0	BH33_2.0
Sample Matrix			US Leachate	US Leachate	US Leachate	US Leachate
Eurofins Sample No.			S23-Ma0022545	S23-Ma0022546	S23-Ma0022547	S23-Ma0022548
Date Sampled			Mar 03, 2023	Mar 03, 2023	Mar 03, 2023	Mar 03, 2023
Test/Reference	LOR	Unit				
Heavy Metals						
Lead	0.01	mg/L	66	7.9	39	0.05
USA Leaching Procedure						
Leachate Fluid ^{C01}		comment	1.0	1.0	1.0	1.0
pH (initial)	0.1	pH Units	8.5	8.8	9.0	8.4
pH (off)	0.1	pH Units	5.7	6.1	5.5	5.1
pH (USA HCl addition)	0.1	pH Units	2.4	2.3	2.3	2.2

Client Sample ID			BH34_0.3	BH34_0.5	BH34_1.0	BH34_2.0
Sample Matrix			US Leachate	US Leachate	US Leachate	US Leachate
Eurofins Sample No.			S23-Ma0022549	S23-Ma0022550	S23-Ma0022551	S23-Ma0022552
Date Sampled			Mar 02, 2023	Mar 02, 2023	Mar 02, 2023	Mar 02, 2023
Test/Reference	LOR	Unit				
Heavy Metals						
Lead	0.01	mg/L	0.03	0.04	0.11	0.02
USA Leaching Procedure						
Leachate Fluid ^{C01}		comment	1.0	1.0	1.0	1.0
pH (initial)	0.1	pH Units	9.0	8.8	8.3	8.1
pH (off)	0.1	pH Units	6.4	5.5	5.2	5.1
pH (USA HCl addition)	0.1	pH Units	2.3	2.3	2.3	2.4

Client Sample ID			BH35_0.3	BH35_0.5	BH35_1.0	BH35_2.0
Sample Matrix			US Leachate	US Leachate	US Leachate	US Leachate
Eurofins Sample No.			S23-Ma0022553	S23-Ma0022554	S23-Ma0022555	S23-Ma0022556
Date Sampled			Mar 03, 2023	Mar 03, 2023	Mar 03, 2023	Mar 03, 2023
Test/Reference	LOR	Unit				
Heavy Metals						
Lead	0.01	mg/L	280	3.8	32	0.29
USA Leaching Procedure						
Leachate Fluid ^{C01}		comment	1.0	1.0	1.0	1.0
pH (initial)	0.1	pH Units	9.4	8.9	8.5	8.3
pH (off)	0.1	pH Units	5.5	5.1	5.2	5.2
pH (USA HCl addition)	0.1	pH Units	2.3	2.4	2.3	2.3

Client Sample ID			BH36_0.1	BH36_0.3	BH36_1.0	BH36_2.0
Sample Matrix			US Leachate	US Leachate	US Leachate	US Leachate
Eurofins Sample No.			S23-Ma0022557	S23-Ma0022558	S23-Ma0022559	S23-Ma0022560
Date Sampled			Mar 03, 2023	Mar 03, 2023	Mar 03, 2023	Mar 03, 2023
Test/Reference	LOR	Unit				
Heavy Metals						
Lead	0.01	mg/L	4.1	0.41	0.04	0.02

Client Sample ID			BH36_0.1	BH36_0.3	BH36_1.0	BH36_2.0
Sample Matrix			US Leachate	US Leachate	US Leachate	US Leachate
Eurofins Sample No.			S23-Ma0022557	S23-Ma0022558	S23-Ma0022559	S23-Ma0022560
Date Sampled			Mar 03, 2023	Mar 03, 2023	Mar 03, 2023	Mar 03, 2023
Test/Reference	LOR	Unit				
USA Leaching Procedure						
Leachate Fluid ^{C01}		comment	1.0	1.0	1.0	1.0
pH (initial)	0.1	pH Units	8.8	8.0	7.8	7.9
pH (off)	0.1	pH Units	5.8	5.2	5.2	5.1
pH (USA HCl addition)	0.1	pH Units	2.4	2.3	2.3	2.4

Client Sample ID			BH37_0.3	BH37_0.5	BH37_1.0	BH37_2.0
Sample Matrix			US Leachate	US Leachate	US Leachate	US Leachate
Eurofins Sample No.			S23-Ma0022561	S23-Ma0022562	S23-Ma0022563	S23-Ma0022564
Date Sampled			Mar 03, 2023	Mar 03, 2023	Mar 03, 2023	Mar 03, 2023
Test/Reference	LOR	Unit				
Heavy Metals						
Lead	0.01	mg/L	190	6.3	0.92	0.14
USA Leaching Procedure						
Leachate Fluid ^{C01}		comment	1.0	1.0	1.0	1.0
pH (initial)	0.1	pH Units	7.6	7.2	6.3	8.0
pH (off)	0.1	pH Units	5.2	5.2	5.1	5.1
pH (USA HCl addition)	0.1	pH Units	2.5	2.5	2.5	2.4

Client Sample ID			BH38_0.1	BH38_0.5	BH38_0.7	BH39_0.1
Sample Matrix			US Leachate	US Leachate	US Leachate	US Leachate
Eurofins Sample No.			S23-Ma0022565	S23-Ma0022566	S23-Ma0022567	S23-Ma0022568
Date Sampled			Mar 03, 2023	Mar 03, 2023	Mar 03, 2023	Mar 03, 2023
Test/Reference	LOR	Unit				
Heavy Metals						
Lead	0.01	mg/L	150	120	58	240
USA Leaching Procedure						
Leachate Fluid ^{C01}		comment	1.0	1.0	1.0	1.0
pH (initial)	0.1	pH Units	7.7	8.5	8.8	8.7
pH (off)	0.1	pH Units	5.1	5.5	5.6	5.5
pH (USA HCl addition)	0.1	pH Units	2.4	2.9	3.3	2.6

Client Sample ID			BH39_0.5	BH39_1.0	BH39_2.0	BH40_0.1
Sample Matrix			US Leachate	US Leachate	US Leachate	US Leachate
Eurofins Sample No.			S23-Ma0022569	S23-Ma0022570	S23-Ma0022571	S23-Ma0022572
Date Sampled			Mar 03, 2023	Mar 03, 2023	Mar 03, 2023	Mar 03, 2023
Test/Reference	LOR	Unit				
Heavy Metals						
Lead	0.01	mg/L	10	14	17	0.06
USA Leaching Procedure						
Leachate Fluid ^{C01}		comment	1.0	1.0	1.0	1.0
pH (initial)	0.1	pH Units	9.0	9.1	9.2	8.6
pH (off)	0.1	pH Units	6.1	5.2	5.2	6.0
pH (USA HCl addition)	0.1	pH Units	2.3	2.3	2.4	4.6

Client Sample ID			BH40_0.5	BH40_1.0	BH41_0.3	BH41_0.5
Sample Matrix			US Leachate	US Leachate	US Leachate	US Leachate
Eurofins Sample No.			S23-Ma0022573	S23-Ma0022574	S23-Ma0022575	S23-Ma0022576
Date Sampled			Mar 03, 2023	Mar 03, 2023	Mar 02, 2023	Mar 02, 2023
Test/Reference	LOR	Unit				
Heavy Metals						
Lead	0.01	mg/L	81	0.34	450	340
USA Leaching Procedure						
Leachate Fluid ^{C01}		comment	1.0	1.0	1.0	1.0
pH (initial)	0.1	pH Units	8.6	8.2	7.8	7.7
pH (off)	0.1	pH Units	5.6	5.3	5.5	5.5
pH (USA HCl addition)	0.1	pH Units	2.6	3.2	2.4	2.4

Client Sample ID			BH41_1.0	BH41_2.0	BH42_0.1	BH42_0.5
Sample Matrix			US Leachate	US Leachate	US Leachate	US Leachate
Eurofins Sample No.			S23-Ma0022577	S23-Ma0022578	S23-Ma0022579	S23-Ma0022580
Date Sampled			Mar 02, 2023	Mar 02, 2023	Mar 03, 2023	Mar 03, 2023
Test/Reference	LOR	Unit				
Heavy Metals						
Lead	0.01	mg/L	130	6.1	0.73	0.50
USA Leaching Procedure						
Leachate Fluid ^{C01}		comment	1.0	1.0	1.0	1.0
pH (initial)	0.1	pH Units	6.9	5.6	6.0	7.3
pH (off)	0.1	pH Units	5.6	5.2	5.2	5.2
pH (USA HCl addition)	0.1	pH Units	2.4	2.3	2.4	2.3

Client Sample ID			BH42_1.0	BH42_2.0	BH43_0.3	BH43_0.5
Sample Matrix			US Leachate	US Leachate	US Leachate	US Leachate
Eurofins Sample No.			S23-Ma0022581	S23-Ma0022582	S23-Ma0022583	S23-Ma0022584
Date Sampled			Mar 03, 2023	Mar 03, 2023	Mar 06, 2023	Mar 06, 2023
Test/Reference	LOR	Unit				
Heavy Metals						
Lead	0.01	mg/L	480	1.5	0.06	0.08
USA Leaching Procedure						
Leachate Fluid ^{C01}		comment	1.0	1.0	1.0	1.0
pH (initial)	0.1	pH Units	7.2	7.5	7.5	7.4
pH (off)	0.1	pH Units	5.6	5.2	5.8	5.4
pH (USA HCl addition)	0.1	pH Units	2.3	2.4	2.4	2.5

Client Sample ID			BH23_0.3	BH23_0.5	BH23_1.0	BH23_2.0
Sample Matrix			AUS Leachate	AUS Leachate	AUS Leachate	AUS Leachate
Eurofins Sample No.			S23-Ma0022585	S23-Ma0022586	S23-Ma0022587	S23-Ma0022588
Date Sampled			Mar 02, 2023	Mar 02, 2023	Mar 02, 2023	Mar 02, 2023
Test/Reference	LOR	Unit				
Heavy Metals						
Lead	0.01	mg/L	0.02	2.6	0.60	0.84

Client Sample ID			BH23_0.3	BH23_0.5	BH23_1.0	BH23_2.0
Sample Matrix			AUS Leachate	AUS Leachate	AUS Leachate	AUS Leachate
Eurofins Sample No.			S23-Ma0022585	S23-Ma0022586	S23-Ma0022587	S23-Ma0022588
Date Sampled			Mar 02, 2023	Mar 02, 2023	Mar 02, 2023	Mar 02, 2023
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	8.8	8.6	8.3	8.7
pH (Leachate fluid)	0.1	pH Units	6.5	6.5	6.5	6.5
pH (off)	0.1	pH Units	9.4	8.1	8.2	8.8

Client Sample ID			BH24_0.3	BH24_0.5	BH24_1.0	BH24_1.5
Sample Matrix			AUS Leachate	AUS Leachate	AUS Leachate	AUS Leachate
Eurofins Sample No.			S23-Ma0022589	S23-Ma0022590	S23-Ma0022591	S23-Ma0022592
Date Sampled			Mar 02, 2023	Mar 02, 2023	Mar 02, 2023	Mar 02, 2023
Test/Reference	LOR	Unit				
Heavy Metals						
Lead	0.01	mg/L	0.29	0.05	0.46	< 0.01
AUS Leaching Procedure						
Leachate Fluid ^{C01}		comment	4.0	4.0	4.0	4.0
pH (initial)	0.1	pH Units	8.3	8.6	8.7	8.9
pH (Leachate fluid)	0.1	pH Units	6.5	6.5	6.5	6.5
pH (off)	0.1	pH Units	8.3	8.2	8.3	9.5

Client Sample ID			BH25_0.3	BH25_0.5	BH25_1.0	BH25_2.0
Sample Matrix			AUS Leachate	AUS Leachate	AUS Leachate	AUS Leachate
Eurofins Sample No.			S23-Ma0022593	S23-Ma0022594	S23-Ma0022595	S23-Ma0022596
Date Sampled			Mar 03, 2023	Mar 03, 2023	Mar 03, 2023	Mar 03, 2023
Test/Reference	LOR	Unit				
Heavy Metals						
Lead	0.01	mg/L	0.63	0.74	0.64	0.06
AUS Leaching Procedure						
Leachate Fluid ^{C01}		comment	4.0	4.0	4.0	4.0
pH (initial)	0.1	pH Units	8.5	8.6	8.4	7.3
pH (Leachate fluid)	0.1	pH Units	6.5	6.5	6.5	6.5
pH (off)	0.1	pH Units	8.5	8.3	7.6	8.0

Client Sample ID			BH26_0.3	BH26_0.5	BH26_1.0	BH26_2.0
Sample Matrix			AUS Leachate	AUS Leachate	AUS Leachate	AUS Leachate
Eurofins Sample No.			S23-Ma0022597	S23-Ma0022598	S23-Ma0022599	S23-Ma0022600
Date Sampled			Mar 06, 2023	Mar 06, 2023	Mar 06, 2023	Mar 06, 2023
Test/Reference	LOR	Unit				
Heavy Metals						
Lead	0.01	mg/L	0.09	0.24	0.12	< 0.01
AUS Leaching Procedure						
Leachate Fluid ^{C01}		comment	4.0	4.0	4.0	4.0
pH (initial)	0.1	pH Units	8.3	9.1	8.9	8.5
pH (Leachate fluid)	0.1	pH Units	6.5	6.5	6.5	6.5
pH (off)	0.1	pH Units	7.0	8.2	7.9	7.1

Client Sample ID			BH27_0.3	BH27_0.5	BH27_1.0	BH27_2.0
Sample Matrix			AUS Leachate	AUS Leachate	AUS Leachate	AUS Leachate
Eurofins Sample No.			S23-Ma0022601	S23-Ma0022602	S23-Ma0022603	S23-Ma0022604
Date Sampled			Mar 03, 2023	Mar 03, 2023	Mar 03, 2023	Mar 03, 2023
Test/Reference	LOR	Unit				
Heavy Metals						
Lead	0.01	mg/L	0.17	< 0.01	< 0.01	0.13
AUS Leaching Procedure						
Leachate Fluid ^{C01}		comment	4.0	4.0	4.0	4.0
pH (initial)	0.1	pH Units	8.7	9.2	8.9	8.5
pH (Leachate fluid)	0.1	pH Units	6.5	6.5	6.5	6.5
pH (off)	0.1	pH Units	8.3	8.6	7.6	7.9

Client Sample ID			BH28_0.3	BH28_0.5	BH28_1.0	BH28_2.0
Sample Matrix			AUS Leachate	AUS Leachate	AUS Leachate	AUS Leachate
Eurofins Sample No.			S23-Ma0022605	S23-Ma0022606	S23-Ma0022607	S23-Ma0022608
Date Sampled			Mar 03, 2023	Mar 03, 2023	Mar 03, 2023	Mar 03, 2023
Test/Reference	LOR	Unit				
Heavy Metals						
Lead	0.01	mg/L	0.80	< 0.01	0.12	0.03
AUS Leaching Procedure						
Leachate Fluid ^{C01}		comment	4.0	4.0	4.0	4.0
pH (initial)	0.1	pH Units	8.8	8.9	8.8	7.9
pH (Leachate fluid)	0.1	pH Units	6.7	6.5	6.5	6.5
pH (off)	0.1	pH Units	8.4	8.0	8.1	6.1

Client Sample ID			BH29_0.3	BH29_0.5	BH29_1.0	BH29_2.0
Sample Matrix			AUS Leachate	AUS Leachate	AUS Leachate	AUS Leachate
Eurofins Sample No.			S23-Ma0022609	S23-Ma0022610	S23-Ma0022611	S23-Ma0022612
Date Sampled			Mar 06, 2023	Mar 06, 2023	Mar 06, 2023	Mar 06, 2023
Test/Reference	LOR	Unit				
Heavy Metals						
Lead	0.01	mg/L	0.03	0.24	0.86	0.14
AUS Leaching Procedure						
Leachate Fluid ^{C01}		comment	4.0	4.0	4.0	4.0
pH (initial)	0.1	pH Units	8.8	8.8	8.6	8.4
pH (Leachate fluid)	0.1	pH Units	6.7	6.7	6.5	6.5
pH (off)	0.1	pH Units	8.2	8.2	8.1	7.0

Client Sample ID			BH30_0.1	BH30_0.5	BH30_0.7	BH30_2.0
Sample Matrix			AUS Leachate	AUS Leachate	AUS Leachate	AUS Leachate
Eurofins Sample No.			S23-Ma0022613	S23-Ma0022614	S23-Ma0022615	S23-Ma0022616
Date Sampled			Mar 02, 2023	Mar 02, 2023	Mar 02, 2023	Mar 02, 2023
Test/Reference	LOR	Unit				
Heavy Metals						
Lead	0.01	mg/L	< 0.01	< 0.01	< 0.01	0.02

Client Sample ID			BH30_0.1	BH30_0.5	BH30_0.7	BH30_2.0
Sample Matrix			AUS Leachate	AUS Leachate	AUS Leachate	AUS Leachate
Eurofins Sample No.			S23-Ma0022613	S23-Ma0022614	S23-Ma0022615	S23-Ma0022616
Date Sampled			Mar 02, 2023	Mar 02, 2023	Mar 02, 2023	Mar 02, 2023
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	7.9	8.4	8.1	8.8
pH (Leachate fluid)	0.1	pH Units	6.5	6.7	6.7	6.6
pH (off)	0.1	pH Units	7.2	7.8	7.3	7.9

Client Sample ID			BH31_0.3	BH31_0.5	BH31_1.0	BH31_2.0
Sample Matrix			AUS Leachate	AUS Leachate	AUS Leachate	AUS Leachate
Eurofins Sample No.			S23-Ma0022617	S23-Ma0022618	S23-Ma0022619	S23-Ma0022620
Date Sampled			Mar 03, 2023	Mar 03, 2023	Mar 03, 2023	Mar 03, 2023
Test/Reference	LOR	Unit				
Heavy Metals						
Lead	0.01	mg/L	0.02	0.06	0.29	0.31
AUS Leaching Procedure						
Leachate Fluid ^{C01}		comment	4.0	4.0	4.0	4.0
pH (initial)	0.1	pH Units	9.0	9.0	8.4	8.0
pH (Leachate fluid)	0.1	pH Units	6.6	6.6	6.6	6.6
pH (off)	0.1	pH Units	8.3	7.5	6.0	6.4

Client Sample ID			BH32_0.1	BH32_0.5	BH32_1.0	BH32_2.0
Sample Matrix			AUS Leachate	AUS Leachate	AUS Leachate	AUS Leachate
Eurofins Sample No.			S23-Ma0022621	S23-Ma0022622	S23-Ma0022623	S23-Ma0022624
Date Sampled			Mar 06, 2023	Mar 06, 2023	Mar 06, 2023	Mar 06, 2023
Test/Reference	LOR	Unit				
Heavy Metals						
Lead	0.01	mg/L	< 0.01	0.03	0.37	< 0.01
AUS Leaching Procedure						
Leachate Fluid ^{C01}		comment	4.0	4.0	4.0	4.0
pH (initial)	0.1	pH Units	8.3	8.0	7.7	7.8
pH (Leachate fluid)	0.1	pH Units	6.6	6.6	6.6	6.6
pH (off)	0.1	pH Units	7.5	7.9	6.7	7.0

Client Sample ID			BH33_0.3	BH33_0.5	BH33_1.0	BH33_2.0
Sample Matrix			AUS Leachate	AUS Leachate	AUS Leachate	AUS Leachate
Eurofins Sample No.			S23-Ma0022625	S23-Ma0022626	S23-Ma0022627	S23-Ma0022628
Date Sampled			Mar 03, 2023	Mar 03, 2023	Mar 03, 2023	Mar 03, 2023
Test/Reference	LOR	Unit				
Heavy Metals						
Lead	0.01	mg/L	0.26	< 0.01	< 0.01	0.20
AUS Leaching Procedure						
Leachate Fluid ^{C01}		comment	4.0	4.0	4.0	4.0
pH (initial)	0.1	pH Units	8.5	8.8	9.0	8.4
pH (Leachate fluid)	0.1	pH Units	6.6	6.6	6.6	6.6
pH (off)	0.1	pH Units	8.1	9.2	8.8	6.0

Client Sample ID			BH34_0.3	BH34_0.5	BH34_1.0	BH34_2.0
Sample Matrix			AUS Leachate	AUS Leachate	AUS Leachate	AUS Leachate
Eurofins Sample No.			S23-Ma0022629	S23-Ma0022630	S23-Ma0022631	S23-Ma0022632
Date Sampled			Mar 02, 2023	Mar 02, 2023	Mar 02, 2023	Mar 02, 2023
Test/Reference	LOR	Unit				
Heavy Metals						
Lead	0.01	mg/L	0.08	< 0.01	< 0.01	0.02
AUS Leaching Procedure						
Leachate Fluid ^{C01}		comment	4.0	4.0	4.0	4.0
pH (initial)	0.1	pH Units	9.0	8.8	8.3	8.1
pH (Leachate fluid)	0.1	pH Units	6.6	6.6	6.6	6.6
pH (off)	0.1	pH Units	9.1	8.4	6.5	6.4

Client Sample ID			BH35_0.3	BH35_0.5	BH35_1.0	BH35_2.0
Sample Matrix			AUS Leachate	AUS Leachate	AUS Leachate	AUS Leachate
Eurofins Sample No.			S23-Ma0022633	S23-Ma0022634	S23-Ma0022635	S23-Ma0022636
Date Sampled			Mar 03, 2023	Mar 03, 2023	Mar 03, 2023	Mar 03, 2023
Test/Reference	LOR	Unit				
Heavy Metals						
Lead	0.01	mg/L	0.11	1.4	0.20	0.09
AUS Leaching Procedure						
Leachate Fluid ^{C01}		comment	4.0	4.0	4.0	4.0
pH (initial)	0.1	pH Units	9.4	8.9	8.5	8.3
pH (Leachate fluid)	0.1	pH Units	6.5	6.5	6.5	6.5
pH (off)	0.1	pH Units	8.7	7.7	8.0	7.7

Client Sample ID			BH36_0.1	BH36_0.3	BH36_1.0	BH36_2.0
Sample Matrix			AUS Leachate	AUS Leachate	AUS Leachate	AUS Leachate
Eurofins Sample No.			S23-Ma0022637	S23-Ma0022638	S23-Ma0022639	S23-Ma0022640
Date Sampled			Mar 03, 2023	Mar 03, 2023	Mar 03, 2023	Mar 03, 2023
Test/Reference	LOR	Unit				
Heavy Metals						
Lead	0.01	mg/L	0.25	0.22	0.04	< 0.01
AUS Leaching Procedure						
Leachate Fluid ^{C01}		comment	4.0	4.0	4.0	4.0
pH (initial)	0.1	pH Units	8.8	8.0	7.8	7.9
pH (Leachate fluid)	0.1	pH Units	6.5	6.5	6.5	6.5
pH (off)	0.1	pH Units	8.6	6.2	7.8	8.2

Client Sample ID			BH37_0.3	BH37_0.5	BH37_1.0	BH37_2.0
Sample Matrix			AUS Leachate	AUS Leachate	AUS Leachate	AUS Leachate
Eurofins Sample No.			S23-Ma0022641	S23-Ma0022642	S23-Ma0022643	S23-Ma0022644
Date Sampled			Mar 03, 2023	Mar 03, 2023	Mar 03, 2023	Mar 03, 2023
Test/Reference	LOR	Unit				
Heavy Metals						
Lead	0.01	mg/L	0.38	< 0.01	0.03	0.11

Client Sample ID			BH37_0.3	BH37_0.5	BH37_1.0	BH37_2.0
Sample Matrix			AUS Leachate	AUS Leachate	AUS Leachate	AUS Leachate
Eurofins Sample No.			S23-Ma0022641	S23-Ma0022642	S23-Ma0022643	S23-Ma0022644
Date Sampled			Mar 03, 2023	Mar 03, 2023	Mar 03, 2023	Mar 03, 2023
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	9.0	8.5	8.1	7.9
pH (Leachate fluid)	0.1	pH Units	8.1	8.1	8.1	8.1
pH (off)	0.1	pH Units	7.9	5.5	5.5	6.1

Client Sample ID			BH38_0.1	BH38_0.5	BH38_0.7	BH39_0.1
Sample Matrix			AUS Leachate	AUS Leachate	AUS Leachate	AUS Leachate
Eurofins Sample No.			S23-Ma0022645	S23-Ma0022646	S23-Ma0022647	S23-Ma0022648
Date Sampled			Mar 03, 2023	Mar 03, 2023	Mar 03, 2023	Mar 03, 2023
Test/Reference	LOR	Unit				
Heavy Metals						
Lead	0.01	mg/L	2.8	2.0	2.6	3.7
AUS Leaching Procedure						
Leachate Fluid ^{C01}		comment	4.0	4.0	4.0	4.0
pH (initial)	0.1	pH Units	7.6	7.9	8.5	8.7
pH (Leachate fluid)	0.1	pH Units	6.2	6.2	6.2	6.2
pH (off)	0.1	pH Units	7.7	8.8	8.4	8.7

Client Sample ID			BH39_0.5	BH39_1.0	BH39_2.0	BH40_0.1
Sample Matrix			AUS Leachate	AUS Leachate	AUS Leachate	AUS Leachate
Eurofins Sample No.			S23-Ma0022649	S23-Ma0022650	S23-Ma0022651	S23-Ma0022652
Date Sampled			Mar 03, 2023	Mar 03, 2023	Mar 03, 2023	Mar 03, 2023
Test/Reference	LOR	Unit				
Heavy Metals						
Lead	0.01	mg/L	0.46	0.13	0.45	0.01
AUS Leaching Procedure						
Leachate Fluid ^{C01}		comment	4.0	4.0	4.0	4.0
pH (initial)	0.1	pH Units	8.5	8.6	7.7	8.5
pH (Leachate fluid)	0.1	pH Units	6.5	6.5	6.5	6.2
pH (off)	0.1	pH Units	9.1	8.3	7.7	8.3

Client Sample ID			BH40_0.5	BH40_1.0	BH41_0.3	BH41_0.5
Sample Matrix			AUS Leachate	AUS Leachate	AUS Leachate	AUS Leachate
Eurofins Sample No.			S23-Ma0022653	S23-Ma0022654	S23-Ma0022655	S23-Ma0022656
Date Sampled			Mar 03, 2023	Mar 03, 2023	Mar 02, 2023	Mar 02, 2023
Test/Reference	LOR	Unit				
Heavy Metals						
Lead	0.01	mg/L	0.02	0.15	0.11	0.23
AUS Leaching Procedure						
Leachate Fluid ^{C01}		comment	4.0	4.0	4.0	4.0
pH (initial)	0.1	pH Units	8.4	9.4	7.4	7.5
pH (Leachate fluid)	0.1	pH Units	6.2	8.1	6.7	6.7
pH (off)	0.1	pH Units	8.3	8.0	7.8	8.3

Client Sample ID			BH41_1.0	BH41_2.0	BH42_0.1	BH42_0.5
Sample Matrix			AUS Leachate	AUS Leachate	AUS Leachate	AUS Leachate
Eurofins Sample No.			S23-Ma0022657	S23-Ma0022658	S23-Ma0022659	S23-Ma0022660
Date Sampled			Mar 02, 2023	Mar 02, 2023	Mar 03, 2023	Mar 03, 2023
Test/Reference	LOR	Unit				
Heavy Metals						
Lead	0.01	mg/L	0.09	0.75	0.11	0.02
AUS Leaching Procedure						
Leachate Fluid ^{C01}		comment	4.0	4.0	4.0	4.0
pH (initial)	0.1	pH Units	7.5	7.2	7.7	6.9
pH (Leachate fluid)	0.1	pH Units	6.7	6.7	6.7	6.7
pH (off)	0.1	pH Units	7.9	7.8	8.5	7.4

Client Sample ID			BH42_1.0	BH42_2.0	BH43_0.3	BH43_0.5
Sample Matrix			AUS Leachate	AUS Leachate	AUS Leachate	AUS Leachate
Eurofins Sample No.			S23-Ma0022661	S23-Ma0022662	S23-Ma0022663	S23-Ma0022664
Date Sampled			Mar 03, 2023	Mar 03, 2023	Mar 06, 2023	Mar 06, 2023
Test/Reference	LOR	Unit				
Heavy Metals						
Lead	0.01	mg/L	1.4	0.70	0.01	0.31
AUS Leaching Procedure						
Leachate Fluid ^{C01}		comment	4.0	4.0	4.0	4.0
pH (initial)	0.1	pH Units	5.6	6.0	7.3	7.8
pH (Leachate fluid)	0.1	pH Units	6.7	6.7	6.7	6.7
pH (off)	0.1	pH Units	5.9	7.2	8.4	9.2

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
Heavy Metals - Method: LTM-MET-3040 Metals in Waters, Soils & Sediments by ICP-MS	Sydney	Mar 19, 2023	28 Days
USA Leaching Procedure - Method: LTM-GEN-7010 Leaching Procedure for Soils & Solid Wastes	Sydney	Mar 19, 2023	14 Days
AUS Leaching Procedure - Method: LTM-GEN-7010 Leaching Procedure for Soils & Solid Wastes	Sydney	Mar 19, 2023	7 Days

Company Name: EP Risk Management (NSW)
Address: Level 4 73 Walker St
North Sydney
NSW 2060

Project Name: BOURKE ROAD
Project ID: EP3072 LEACHATE SAMPLES

Order No.:
Report #: 970426
Phone: 02 99225021
Fax:

Received: Mar 7, 2023 1:16 PM
Due: Mar 14, 2023
Priority: 5 Day
Contact Name: Troy Chatman

Eurofins Analytical Services Manager : Quinn Raw

Sample Detail						HOLD	Lead	AUS Leaching Procedure	USA Leaching Procedure
Sydney Laboratory - NATA # 1261 Site # 18217						X	X	X	X
External Laboratory									
No	Sample ID	Sample Date	Sampling Time	Matrix	LAB ID				
1	BH23 0.3	Mar 02, 2023		US Leachate	S23-Ma0022505		X		X
2	BH23 0.5	Mar 02, 2023		US Leachate	S23-Ma0022506		X		X
3	BH23 1.0	Mar 02, 2023		US Leachate	S23-Ma0022507		X		X
4	BH23 2.0	Mar 02, 2023		US Leachate	S23-Ma0022508		X		X
5	BH24 0.3	Mar 02, 2023		US Leachate	S23-Ma0022509		X		X
6	BH24 0.5	Mar 02, 2023		US Leachate	S23-Ma0022510		X		X
7	BH24 1.0	Mar 02, 2023		US Leachate	S23-Ma0022511		X		X
8	BH24 1.5	Mar 02, 2023		US Leachate	S23-Ma0022512		X		X
9	BH25 0.3	Mar 03, 2023		US Leachate	S23-Ma0022513		X		X
10	BH25 0.5	Mar 03, 2023		US Leachate	S23-Ma0022514		X		X
11	BH25 1.0	Mar 03, 2023		US Leachate	S23-Ma0022515		X		X
12	BH25 2.0	Mar 03, 2023		US Leachate	S23-Ma0022516		X		X
13	BH26 0.3	Mar 06, 2023		US Leachate	S23-Ma0022517		X		X

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Sample Detail						HOLD	Lead	AUS Leaching Procedure	USA Leaching Procedure
Sydney Laboratory - NATA # 1261 Site # 18217						X	X	X	X
14	BH26_0.5	Mar 06, 2023		US Leachate	S23-Ma0022518		X		X
15	BH26_1.0	Mar 06, 2023		US Leachate	S23-Ma0022519		X		X
16	BH26_2.0	Mar 06, 2023		US Leachate	S23-Ma0022520		X		X
17	BH27_0.3	Mar 03, 2023		US Leachate	S23-Ma0022521		X		X
18	BH27_0.5	Mar 03, 2023		US Leachate	S23-Ma0022522		X		X
19	BH27_1.0	Mar 03, 2023		US Leachate	S23-Ma0022523		X		X
20	BH27_2.0	Mar 03, 2023		US Leachate	S23-Ma0022524		X		X
21	BH28_0.3	Mar 03, 2023		US Leachate	S23-Ma0022525		X		X
22	BH28_0.5	Mar 03, 2023		US Leachate	S23-Ma0022526		X		X
23	BH28_1.0	Mar 03, 2023		US Leachate	S23-Ma0022527		X		X
24	BH28_2.0	Mar 03, 2023		US Leachate	S23-Ma0022528		X		X
25	BH29_0.3	Mar 06, 2023		US Leachate	S23-Ma0022529		X		X
26	BH29_0.5	Mar 06, 2023		US Leachate	S23-Ma0022530		X		X
27	BH29_1.0	Mar 06, 2023		US Leachate	S23-Ma0022531		X		X
28	BH29_2.0	Mar 06, 2023		US Leachate	S23-Ma0022532		X		X
29	BH30_0.1	Mar 02, 2023		US Leachate	S23-Ma0022533		X		X

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Sample Detail						HOLD	Lead	AUS Leaching Procedure	USA Leaching Procedure
Sydney Laboratory - NATA # 1261 Site # 18217						X	X	X	X
30	BH30_0.5	Mar 02, 2023		US Leachate	S23-Ma0022534		X		X
31	BH30_0.7	Mar 02, 2023		US Leachate	S23-Ma0022535		X		X
32	BH30_2.0	Mar 02, 2023		US Leachate	S23-Ma0022536		X		X
33	BH31_0.3	Mar 03, 2023		US Leachate	S23-Ma0022537		X		X
34	BH31_0.5	Mar 03, 2023		US Leachate	S23-Ma0022538		X		X
35	BH31_1.0	Mar 03, 2023		US Leachate	S23-Ma0022539		X		X
36	BH31_2.0	Mar 03, 2023		US Leachate	S23-Ma0022540		X		X
37	BH32_0.1	Mar 06, 2023		US Leachate	S23-Ma0022541		X		X
38	BH32_0.5	Mar 06, 2023		US Leachate	S23-Ma0022542		X		X
39	BH32_1.0	Mar 06, 2023		US Leachate	S23-Ma0022543		X		X
40	BH32_2.0	Mar 06, 2023		US Leachate	S23-Ma0022544		X		X
41	BH33_0.3	Mar 03, 2023		US Leachate	S23-Ma0022545		X		X
42	BH33_0.5	Mar 03, 2023		US Leachate	S23-Ma0022546		X		X
43	BH33_1.0	Mar 03, 2023		US Leachate	S23-Ma0022547		X		X
44	BH33_2.0	Mar 03, 2023		US Leachate	S23-Ma0022548		X		X
45	BH34_0.3	Mar 02, 2023		US Leachate	S23-Ma0022549		X		X

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Sample Detail						HOLD	Lead	AUS Leaching Procedure	USA Leaching Procedure
Sydney Laboratory - NATA # 1261 Site # 18217						X	X	X	X
46	BH34_0.5	Mar 02, 2023		US Leachate	S23-Ma0022550		X		X
47	BH34_1.0	Mar 02, 2023		US Leachate	S23-Ma0022551		X		X
48	BH34_2.0	Mar 02, 2023		US Leachate	S23-Ma0022552		X		X
49	BH35_0.3	Mar 03, 2023		US Leachate	S23-Ma0022553		X		X
50	BH35_0.5	Mar 03, 2023		US Leachate	S23-Ma0022554		X		X
51	BH35_1.0	Mar 03, 2023		US Leachate	S23-Ma0022555		X		X
52	BH35_2.0	Mar 03, 2023		US Leachate	S23-Ma0022556		X		X
53	BH36_0.1	Mar 03, 2023		US Leachate	S23-Ma0022557		X		X
54	BH36_0.3	Mar 03, 2023		US Leachate	S23-Ma0022558		X		X
55	BH36_1.0	Mar 03, 2023		US Leachate	S23-Ma0022559		X		X
56	BH36_2.0	Mar 03, 2023		US Leachate	S23-Ma0022560		X		X
57	BH37_0.3	Mar 03, 2023		US Leachate	S23-Ma0022561		X		X
58	BH37_0.5	Mar 03, 2023		US Leachate	S23-Ma0022562		X		X
59	BH37_1.0	Mar 03, 2023		US Leachate	S23-Ma0022563		X		X
60	BH37_2.0	Mar 03, 2023		US Leachate	S23-Ma0022564		X		X
61	BH38_0.1	Mar 03, 2023		US Leachate	S23-Ma0022565		X		X

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Sample Detail						HOLD	Lead	AUS Leaching Procedure	USA Leaching Procedure
Sydney Laboratory - NATA # 1261 Site # 18217						X	X	X	X
62	BH38_0.5	Mar 03, 2023		US Leachate	S23-Ma0022566		X		X
63	BH38_0.7	Mar 03, 2023		US Leachate	S23-Ma0022567		X		X
64	BH39_0.1	Mar 03, 2023		US Leachate	S23-Ma0022568		X		X
65	BH39_0.5	Mar 03, 2023		US Leachate	S23-Ma0022569		X		X
66	BH39_1.0	Mar 03, 2023		US Leachate	S23-Ma0022570		X		X
67	BH39_2.0	Mar 03, 2023		US Leachate	S23-Ma0022571		X		X
68	BH40_0.1	Mar 03, 2023		US Leachate	S23-Ma0022572		X		X
69	BH40_0.5	Mar 03, 2023		US Leachate	S23-Ma0022573		X		X
70	BH40_1.0	Mar 03, 2023		US Leachate	S23-Ma0022574		X		X
71	BH41_0.3	Mar 02, 2023		US Leachate	S23-Ma0022575		X		X
72	BH41_0.5	Mar 02, 2023		US Leachate	S23-Ma0022576		X		X
73	BH41_1.0	Mar 02, 2023		US Leachate	S23-Ma0022577		X		X
74	BH41_2.0	Mar 02, 2023		US Leachate	S23-Ma0022578		X		X
75	BH42_0.1	Mar 03, 2023		US Leachate	S23-Ma0022579		X		X
76	BH42_0.5	Mar 03, 2023		US Leachate	S23-Ma0022580		X		X
77	BH42_1.0	Mar 03, 2023		US Leachate	S23-Ma0022581		X		X

Company Name: EP Risk Management (NSW)
Address: Level 4 73 Walker St
North Sydney
NSW 2060

Project Name: BOURKE ROAD
Project ID: EP3072 LEACHATE SAMPLES

Order No.:
Report #: 970426
Phone: 02 99225021
Fax:

Received: Mar 7, 2023 1:16 PM
Due: Mar 14, 2023
Priority: 5 Day
Contact Name: Troy Chatman

Eurofins Analytical Services Manager : Quinn Raw

Sample Detail						HOLD	Lead	AUS Leaching Procedure	USA Leaching Procedure
Sydney Laboratory - NATA # 1261 Site # 18217						X	X	X	X
78	BH42_2.0	Mar 03, 2023		US Leachate	S23-Ma0022582		X		X
79	BH43_0.3	Mar 06, 2023		US Leachate	S23-Ma0022583		X		X
80	BH43_0.5	Mar 06, 2023		US Leachate	S23-Ma0022584		X		X
81	BH23_0.3	Mar 02, 2023		AUS Leachate	S23-Ma0022585		X	X	
82	BH23_0.5	Mar 02, 2023		AUS Leachate	S23-Ma0022586		X	X	
83	BH23_1.0	Mar 02, 2023		AUS Leachate	S23-Ma0022587		X	X	
84	BH23_2.0	Mar 02, 2023		AUS Leachate	S23-Ma0022588		X	X	
85	BH24_0.3	Mar 02, 2023		AUS Leachate	S23-Ma0022589		X	X	
86	BH24_0.5	Mar 02, 2023		AUS Leachate	S23-Ma0022590		X	X	
87	BH24_1.0	Mar 02, 2023		AUS Leachate	S23-Ma0022591		X	X	
88	BH24_1.5	Mar 02, 2023		AUS Leachate	S23-Ma0022592		X	X	
89	BH25_0.3	Mar 03, 2023		AUS Leachate	S23-Ma0022593		X	X	
90	BH25_0.5	Mar 03, 2023		AUS Leachate	S23-Ma0022594		X	X	
91	BH25_1.0	Mar 03, 2023		AUS Leachate	S23-Ma0022595		X	X	
92	BH25_2.0	Mar 03, 2023		AUS Leachate	S23-Ma0022596		X	X	
93	BH26_0.3	Mar 06, 2023		AUS Leachate	S23-Ma0022597		X	X	

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Sydney Laboratory - NATA # 1261 Site # 18217						X	X	X	X
94	BH26_0.5	Mar 06, 2023		AUS Leachate	S23-Ma0022598		X	X	
95	BH26_1.0	Mar 06, 2023		AUS Leachate	S23-Ma0022599		X	X	
96	BH26_2.0	Mar 06, 2023		AUS Leachate	S23-Ma0022600		X	X	
97	BH27_0.3	Mar 03, 2023		AUS Leachate	S23-Ma0022601		X	X	
98	BH27_0.5	Mar 03, 2023		AUS Leachate	S23-Ma0022602		X	X	
99	BH27_1.0	Mar 03, 2023		AUS Leachate	S23-Ma0022603		X	X	
100	BH27_2.0	Mar 03, 2023		AUS Leachate	S23-Ma0022604		X	X	
101	BH28_0.3	Mar 03, 2023		AUS Leachate	S23-Ma0022605		X	X	
102	BH28_0.5	Mar 03, 2023		AUS Leachate	S23-Ma0022606		X	X	
103	BH28_1.0	Mar 03, 2023		AUS Leachate	S23-Ma0022607		X	X	
104	BH28_2.0	Mar 03, 2023		AUS Leachate	S23-Ma0022608		X	X	
105	BH29_0.3	Mar 06, 2023		AUS Leachate	S23-Ma0022609		X	X	
106	BH29_0.5	Mar 06, 2023		AUS Leachate	S23-Ma0022610		X	X	
107	BH29_1.0	Mar 06, 2023		AUS Leachate	S23-Ma0022611		X	X	
108	BH29_2.0	Mar 06, 2023		AUS Leachate	S23-Ma0022612		X	X	
109	BH30_0.1	Mar 02, 2023		AUS Leachate	S23-Ma0022613		X	X	

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Sample Detail						HOLD	Lead	AUS Leaching Procedure	USA Leaching Procedure
Sydney Laboratory - NATA # 1261 Site # 18217						X	X	X	X
110	BH30_0.5	Mar 02, 2023		AUS Leachate	S23-Ma0022614		X	X	
111	BH30_0.7	Mar 02, 2023		AUS Leachate	S23-Ma0022615		X	X	
112	BH30_2.0	Mar 02, 2023		AUS Leachate	S23-Ma0022616		X	X	
113	BH31_0.3	Mar 03, 2023		AUS Leachate	S23-Ma0022617		X	X	
114	BH31_0.5	Mar 03, 2023		AUS Leachate	S23-Ma0022618		X	X	
115	BH31_1.0	Mar 03, 2023		AUS Leachate	S23-Ma0022619		X	X	
116	BH31_2.0	Mar 03, 2023		AUS Leachate	S23-Ma0022620		X	X	
117	BH32_0.1	Mar 06, 2023		AUS Leachate	S23-Ma0022621		X	X	
118	BH32_0.5	Mar 06, 2023		AUS Leachate	S23-Ma0022622		X	X	
119	BH32_1.0	Mar 06, 2023		AUS Leachate	S23-Ma0022623		X	X	
120	BH32_2.0	Mar 06, 2023		AUS Leachate	S23-Ma0022624		X	X	
121	BH33_0.3	Mar 03, 2023		AUS Leachate	S23-Ma0022625		X	X	
122	BH33_0.5	Mar 03, 2023		AUS Leachate	S23-Ma0022626		X	X	
123	BH33_1.0	Mar 03, 2023		AUS Leachate	S23-Ma0022627		X	X	
124	BH33_2.0	Mar 03, 2023		AUS Leachate	S23-Ma0022628		X	X	
125	BH34_0.3	Mar 02, 2023		AUS Leachate	S23-Ma0022629		X	X	

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Sydney Laboratory - NATA # 1261 Site # 18217						X	X	X	X
126	BH34_0.5	Mar 02, 2023		AUS Leachate	S23-Ma0022630		X	X	
127	BH34_1.0	Mar 02, 2023		AUS Leachate	S23-Ma0022631		X	X	
128	BH34_2.0	Mar 02, 2023		AUS Leachate	S23-Ma0022632		X	X	
129	BH35_0.3	Mar 03, 2023		AUS Leachate	S23-Ma0022633		X	X	
130	BH35_0.5	Mar 03, 2023		AUS Leachate	S23-Ma0022634		X	X	
131	BH35_1.0	Mar 03, 2023		AUS Leachate	S23-Ma0022635		X	X	
132	BH35_2.0	Mar 03, 2023		AUS Leachate	S23-Ma0022636		X	X	
133	BH36_0.1	Mar 03, 2023		AUS Leachate	S23-Ma0022637		X	X	
134	BH36_0.3	Mar 03, 2023		AUS Leachate	S23-Ma0022638		X	X	
135	BH36_1.0	Mar 03, 2023		AUS Leachate	S23-Ma0022639		X	X	
136	BH36_2.0	Mar 03, 2023		AUS Leachate	S23-Ma0022640		X	X	
137	BH37_0.3	Mar 03, 2023		AUS Leachate	S23-Ma0022641		X	X	
138	BH37_0.5	Mar 03, 2023		AUS Leachate	S23-Ma0022642		X	X	
139	BH37_1.0	Mar 03, 2023		AUS Leachate	S23-Ma0022643		X	X	
140	BH37_2.0	Mar 03, 2023		AUS Leachate	S23-Ma0022644		X	X	
141	BH38_0.1	Mar 03, 2023		AUS Leachate	S23-Ma0022645		X	X	

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Sample Detail						HOLD	Lead	AUS Leaching Procedure	USA Leaching Procedure
Sydney Laboratory - NATA # 1261 Site # 18217						X	X	X	X
142	BH38_0.5	Mar 03, 2023		AUS Leachate	S23-Ma0022646		X	X	
143	BH38_0.7	Mar 03, 2023		AUS Leachate	S23-Ma0022647		X	X	
144	BH39_0.1	Mar 03, 2023		AUS Leachate	S23-Ma0022648		X	X	
145	BH39_0.5	Mar 03, 2023		AUS Leachate	S23-Ma0022649		X	X	
146	BH39_1.0	Mar 03, 2023		AUS Leachate	S23-Ma0022650		X	X	
147	BH39_2.0	Mar 03, 2023		AUS Leachate	S23-Ma0022651		X	X	
148	BH40_0.1	Mar 03, 2023		AUS Leachate	S23-Ma0022652		X	X	
149	BH40_0.5	Mar 03, 2023		AUS Leachate	S23-Ma0022653		X	X	
150	BH40_1.0	Mar 03, 2023		AUS Leachate	S23-Ma0022654		X	X	
151	BH41_0.3	Mar 02, 2023		AUS Leachate	S23-Ma0022655		X	X	
152	BH41_0.5	Mar 02, 2023		AUS Leachate	S23-Ma0022656		X	X	
153	BH41_1.0	Mar 02, 2023		AUS Leachate	S23-Ma0022657		X	X	
154	BH41_2.0	Mar 02, 2023		AUS Leachate	S23-Ma0022658		X	X	
155	BH42_0.1	Mar 03, 2023		AUS Leachate	S23-Ma0022659		X	X	
156	BH42_0.5	Mar 03, 2023		AUS Leachate	S23-Ma0022660		X	X	
157	BH42_1.0	Mar 03, 2023		AUS Leachate	S23-Ma0022661		X	X	

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Sample Detail						HOLD	Lead	AUS Leaching Procedure	USA Leaching Procedure
Sydney Laboratory - NATA # 1261 Site # 18217						X	X	X	X
158	BH42_2.0	Mar 03, 2023		AUS Leachate	S23-Ma0022662		X	X	
159	BH43_0.3	Mar 06, 2023		AUS Leachate	S23-Ma0022663		X	X	
160	BH43_0.5	Mar 06, 2023		AUS Leachate	S23-Ma0022664		X	X	
161	BH18_0.5	Mar 02, 2023		Soil	S23-Ma0023306	X			
162	BH18_1.3	Mar 02, 2023		Soil	S23-Ma0023307	X			
163	MEP02_0.5	Mar 02, 2023		Soil	S23-Ma0023308	X			
Test Counts						3	160	80	80

Internal Quality Control Review and Glossary

General

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

Holding Times

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

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

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

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

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

Units

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

Terms

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

QC - Acceptance Criteria

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

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

Results <10 times the LOR: No Limit

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

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

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

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

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

QC Data General Comments

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

Quality Control Results

Test				Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Method Blank										
Heavy Metals										
Lead				mg/L	< 0.01			0.01	Pass	
LCS - % Recovery										
Heavy Metals										
Lead				%	87			80-120	Pass	
Test	Lab Sample ID	QA Source	Units	Result 1				Acceptance Limits	Pass Limits	Qualifying Code
Spike - % Recovery										
Heavy Metals					Result 1					
Lead				S23-Ma0022518	CP	%	81		75-125	Pass
Spike - % Recovery										
Heavy Metals					Result 1					
Lead				S23-Ma0022552	CP	%	99		75-125	Pass
Spike - % Recovery										
Heavy Metals					Result 1					
Lead				S23-Ma0022560	CP	%	92		75-125	Pass
Spike - % Recovery										
Heavy Metals					Result 1					
Lead				S23-Ma0022584	CP	%	90		75-125	Pass
Spike - % Recovery										
Heavy Metals					Result 1					
Lead				S23-Ma0022598	CP	%	100		75-125	Pass
Spike - % Recovery										
Heavy Metals					Result 1					
Lead				S23-Ma0022632	CP	%	106		75-125	Pass
Spike - % Recovery										
Heavy Metals					Result 1					
Lead				S23-Ma0022640	CP	%	94		75-125	Pass
Spike - % Recovery										
Heavy Metals					Result 1					
Lead				S23-Ma0022651	CP	%	106		75-125	Pass
Spike - % Recovery										
Heavy Metals					Result 1					
Lead				S23-Ma0022653	CP	%	99		75-125	Pass
Spike - % Recovery										
Heavy Metals					Result 1					
Lead				S23-Ma0022654	CP	%	105		75-125	Pass
Spike - % Recovery										
Heavy Metals					Result 1					
Lead				S23-Ma0022664	CP	%	84		75-125	Pass
Test	Lab Sample ID	QA Source	Units	Result 1				Acceptance Limits	Pass Limits	Qualifying Code
Duplicate										
Heavy Metals					Result 1	Result 2	RPD			
Lead				S23-Ma0022505	CP	mg/L	18	19	2.8	30% Pass
Duplicate										
Heavy Metals					Result 1	Result 2	RPD			
Lead				S23-Ma0022514	CP	mg/L	5.5	6.1	10	30% Pass
Duplicate										
Heavy Metals					Result 1	Result 2	RPD			
Lead				S23-Ma0022521	CP	mg/L	6.1	6.5	7.0	30% Pass

Duplicate								
Heavy Metals				Result 1	Result 2	RPD		
Lead	S23-Ma0022525	CP	mg/L	40	43	8.1	30%	Pass
Duplicate								
Heavy Metals				Result 1	Result 2	RPD		
Lead	S23-Ma0022527	CP	mg/L	18	17	4.0	30%	Pass
Duplicate								
Heavy Metals				Result 1	Result 2	RPD		
Lead	S23-Ma0022536	CP	mg/L	0.04	0.05	16	30%	Pass
Duplicate								
Heavy Metals				Result 1	Result 2	RPD		
Lead	S23-Ma0022541	CP	mg/L	0.16	0.14	16	30%	Pass
Duplicate								
Heavy Metals				Result 1	Result 2	RPD		
Lead	S23-Ma0022579	CP	mg/L	0.73	0.73	<1	30%	Pass
Duplicate								
Heavy Metals				Result 1	Result 2	RPD		
Lead	S23-Ma0022585	CP	mg/L	0.02	0.02	7.1	30%	Pass
Duplicate								
Heavy Metals				Result 1	Result 2	RPD		
Lead	S23-Ma0022601	CP	mg/L	0.17	0.17	1.3	30%	Pass
Duplicate								
Heavy Metals				Result 1	Result 2	RPD		
Lead	S23-Ma0022605	CP	mg/L	0.80	0.81	1.6	30%	Pass
Duplicate								
Heavy Metals				Result 1	Result 2	RPD		
Lead	S23-Ma0022606	CP	mg/L	< 0.01	0.01	39	30%	Fail
Duplicate								
Heavy Metals				Result 1	Result 2	RPD		
Lead	S23-Ma0022616	CP	mg/L	0.02	0.02	15	30%	Pass
Duplicate								
Heavy Metals				Result 1	Result 2	RPD		
Lead	S23-Ma0022620	CP	mg/L	0.31	0.28	8.1	30%	Pass
Duplicate								
Heavy Metals				Result 1	Result 2	RPD		
Lead	S23-Ma0022645	CP	mg/L	2.8	2.8	2.7	30%	Pass

Comments
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	N/A
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
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:

Bonnie Pu	Analytical Services Manager
Fang Yee Tan	Senior Analyst-Metal
Mickael Ros	Senior Analyst-Metal



Glenn Jackson
General Manager

Final Report – this report replaces any previously issued Report

- Indicates Not Requested

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

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

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<EnviroSampleNSW@eurofins.com>

Subject: FW: COC for water samples

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 Bonnie,

I'm just following up to see when the water sample results (in the COC attached) submitted 16/03 will be in?

Also in regards to the lost MEP samples please see below substitute samples for MEP analysis. Can you please report them as what I have labelled them adjacent to each sample and push these through as quickly as possible.

BH24_0.3 (Label as MEP01_0.3)

BH27_0.5 (Label as MEP02_1.0)

BH35_0.5 (Label as MEP03_0.3)

BH39_0.1 (Label as MEP04_0.1)

BH42_1.0 (Label as MEP05_1.0)

Any questions let me know.

Cheers

Troy Chatman

Environmental Scientist

SafeWork NSW Licensed Asbestos Assessor

M 0402 226 226 | E troy.chatman@eprisk.com.au

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Eurofins Environment Testing Australia Pty Ltd

ABN: 50 005 085 521

Melbourne	Geelong	Sydney	Canberra	Brisbane	Newcastle
6 Monterey Road Dandenong South VIC 3175 Tel: +61 3 8564 5000 NATA# 1261 Site# 1254	19/8 Lewalan Street Grovedale VIC 3216 Tel: +61 3 8564 5000 NATA# 1261 Site# 25403	179 Magowar Road Girraween NSW 2145 Tel: +61 2 9900 8400 NATA# 1261 Site# 18217	Unit 1,2 Dacre Street Mitchell ACT 2911 Tel: +61 2 6113 8091 NATA# 1261 Site# 25466	1/21 Smallwood Place Murarrie QLD 4172 Tel: +61 7 3902 4600 NATA# 1261 Site# 20794	1/2 Frost Drive Mayfield West NSW 2304 Tel: +61 2 4968 8448 NATA# 1261 Site# 25079 & 25289

Eurofins ARL Pty Ltd

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Eurofins Environment Testing NZ Ltd

NZBN: 9429046024954

Auckland	Christchurch
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Sample Receipt Advice

Company name:	EP Risk Management (NSW)
Contact name:	Troy Chatman
Project name:	ADDITIONAL: BOURKE ROAD
Project ID:	ADDITIONAL: EP3072
Turnaround time:	15 Day
Date/Time received	Mar 30, 2023 9:36 AM
Eurofins reference	976846

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:

Quinn Raw on phone : or by email: QuinnRaw@eurofins.com

Results will be delivered electronically via email to Troy Chatman - troy.chatman@eprisk.com.au.

Note: A copy of these results will also be delivered to the general EP Risk Management (NSW) email address.



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email: EnviroSales@eurofins.com

Company Name: EP Risk Management (NSW)
Address: 80 Mount Street,
North Sydney
NSW 2060

Project Name: ADDITIONAL: BOURKE ROAD
Project ID: ADDITIONAL: EP3072

Order No.:
Report #: 976846
Phone: 02 99225021
Fax:

Received: Mar 30, 2023 9:36 AM
Due: Apr 17, 2023
Priority: 10 Day
Contact Name: Troy Chatman

Eurofins Analytical Services Manager : Quinn Raw

Sample Detail

CANCELLED

Lead

USA Leaching Procedure

Sydney Laboratory - NATA # 1261 Site # 18217

Brisbane Laboratory - NATA # 1261 Site # 20794

External Laboratory

No	Sample ID	Sample Date	Sampling Time	Matrix	LAB ID			
1	MEP01_0.3_D AY 1	Mar 02, 2023		US Leachate	S23-Ma0072546		x	x
2	MEP02_1.0_D AY 1	Mar 03, 2023		US Leachate	S23-Ma0072547		x	x
3	MEP03_0.3_D AY 1	Mar 03, 2023		US Leachate	S23-Ma0072548		x	x
4	MEP04_0.1_D AY 1	Mar 03, 2023		US Leachate	S23-Ma0072549		x	x
5	MEP05_1.0_D AY 1	Mar 03, 2023		US Leachate	S23-Ma0072550	x		
6	MEP01_0.3_D AY 2	Mar 02, 2023		US Leachate	S23-Ma0072551		x	x
7	MEP02_1.0_D AY 2	Mar 03, 2023		US Leachate	S23-Ma0072552		x	x



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Sample Detail						CANCELLED	Lead	USA Leaching Procedure
Sydney Laboratory - NATA # 1261 Site # 18217						X		
Brisbane Laboratory - NATA # 1261 Site # 20794							X	X
8	MEP03_0.3_D AY 2	Mar 03, 2023		US Leachate	S23-Ma0072553		X	X
9	MEP04_0.1_D AY 2	Mar 03, 2023		US Leachate	S23-Ma0072554		X	X
10	MEP05_1.0_D AY 2	Mar 03, 2023		US Leachate	S23-Ma0072555	X		
11	MEP01_0.3_D AY 3	Mar 02, 2023		US Leachate	S23-Ma0072556		X	X
12	MEP02_1.0_D AY 3	Mar 03, 2023		US Leachate	S23-Ma0072557		X	X
13	MEP03_0.3_D AY 3	Mar 03, 2023		US Leachate	S23-Ma0072558		X	X
14	MEP04_0.1_D AY 3	Mar 03, 2023		US Leachate	S23-Ma0072559		X	X
15	MEP05_1.0_D AY 3	Mar 03, 2023		US Leachate	S23-Ma0072560	X		
16	MEP01_0.3_D AY 4	Mar 02, 2023		US Leachate	S23-Ma0072561		X	X



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Company Name: EP Risk Management (NSW)
Address: 80 Mount Street,
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Project Name: ADDITIONAL: BOURKE ROAD
Project ID: ADDITIONAL: EP3072

Order No.:
Report #: 976846
Phone: 02 99225021
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Contact Name: Troy Chatman

Eurofins Analytical Services Manager : Quinn Raw

Sample Detail						CANCELLED	Lead	USA Leaching Procedure
Sydney Laboratory - NATA # 1261 Site # 18217						X		
Brisbane Laboratory - NATA # 1261 Site # 20794							X	X
17	MEP02_1.0_D AY 4	Mar 03, 2023		US Leachate	S23-Ma0072562		X	X
18	MEP03_0.3_D AY 4	Mar 03, 2023		US Leachate	S23-Ma0072563		X	X
19	MEP04_0.1_D AY 4	Mar 03, 2023		US Leachate	S23-Ma0072564		X	X
20	MEP05_1.0_D AY 4	Mar 03, 2023		US Leachate	S23-Ma0072565	X		
21	MEP01_0.3_D AY 5	Mar 02, 2023		US Leachate	S23-Ma0072566		X	X
22	MEP02_1.0_D AY 5	Mar 03, 2023		US Leachate	S23-Ma0072567		X	X
23	MEP03_0.3_D AY 5	Mar 03, 2023		US Leachate	S23-Ma0072568		X	X
24	MEP04_0.1_D AY 5	Mar 03, 2023		US Leachate	S23-Ma0072569		X	X
25	MEP05_1.0_D AY 5	Mar 03, 2023		US Leachate	S23-Ma0072570	X		



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Company Name: EP Risk Management (NSW)
Address: 80 Mount Street,
North Sydney
NSW 2060

Project Name: ADDITIONAL: BOURKE ROAD
Project ID: ADDITIONAL: EP3072

Order No.:
Report #: 976846
Phone: 02 99225021
Fax:

Received: Mar 30, 2023 9:36 AM
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Contact Name: Troy Chatman

Eurofins Analytical Services Manager : Quinn Raw

Sample Detail						CANCELLED	Lead	USA Leaching Procedure
Sydney Laboratory - NATA # 1261 Site # 18217						X		
Brisbane Laboratory - NATA # 1261 Site # 20794							X	X
26	MEP01_0.3_D AY 6	Mar 02, 2023		US Leachate	S23-Ma0072571		X	X
27	MEP02_1.0_D AY 6	Mar 03, 2023		US Leachate	S23-Ma0072572		X	X
28	MEP03_0.3_D AY 6	Mar 03, 2023		US Leachate	S23-Ma0072573		X	X
29	MEP04_0.1_D AY 6	Mar 03, 2023		US Leachate	S23-Ma0072574		X	X
30	MEP05_1.0_D AY 6	Mar 03, 2023		US Leachate	S23-Ma0072575	X		
31	MEP01_0.3_D AY 7	Mar 02, 2023		US Leachate	S23-Ma0072576		X	X
32	MEP02_1.0_D AY 7	Mar 03, 2023		US Leachate	S23-Ma0072577		X	X
33	MEP03_0.3_D AY 7	Mar 03, 2023		US Leachate	S23-Ma0072578		X	X
34	MEP04_0.1_D AY 7	Mar 03, 2023		US Leachate	S23-Ma0072579		X	X



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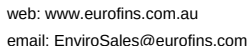
Project Name: ADDITIONAL: BOURKE ROAD
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Eurofins Analytical Services Manager : Quinn Raw

Sample Detail						CANCELLED	Lead	USA Leaching Procedure
Sydney Laboratory - NATA # 1261 Site # 18217						X		
Brisbane Laboratory - NATA # 1261 Site # 20794							X	X
35	MEP05_1.0_D AY 7	Mar 03, 2023		US Leachate	S23-Ma0072580	X		
36	MEP01_0.3_D AY 8	Mar 02, 2023		US Leachate	S23-Ma0072581		X	X
37	MEP02_1.0_D AY 8	Mar 03, 2023		US Leachate	S23-Ma0072582		X	X
38	MEP03_0.3_D AY 8	Mar 03, 2023		US Leachate	S23-Ma0072583		X	X
39	MEP04_0.1_D AY 8	Mar 03, 2023		US Leachate	S23-Ma0072584		X	X
40	MEP05_1.0_D AY 8	Mar 03, 2023		US Leachate	S23-Ma0072585	X		
41	MEP01_0.3_D AY 9	Mar 02, 2023		US Leachate	S23-Ma0072586		X	X
42	MEP02_1.0_D AY 9	Mar 03, 2023		US Leachate	S23-Ma0072587		X	X
43	MEP03_0.3_D AY 9	Mar 03, 2023		US Leachate	S23-Ma0072588		X	X



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Sample Detail						CANCELLED	Lead	USA Leaching Procedure
Sydney Laboratory - NATA # 1261 Site # 18217						X		
Brisbane Laboratory - NATA # 1261 Site # 20794							X	X
44	MEP04_0.1_D AY 9	Mar 03, 2023		US Leachate	S23-Ma0072589		X	X
45	MEP05_1.0_D AY 9	Mar 03, 2023		US Leachate	S23-Ma0072590	X		
46	MEP01_0.3_D AY 10	Mar 02, 2023		US Leachate	S23-Ma0072591		X	X
47	MEP02_1.0_D AY 10	Mar 03, 2023		US Leachate	S23-Ma0072592		X	X
48	MEP03_0.3_D AY 10	Mar 03, 2023		US Leachate	S23-Ma0072593		X	X
49	MEP04_0.1_D AY 10	Mar 03, 2023		US Leachate	S23-Ma0072594		X	X
50	MEP05_1.0_D AY 10	Mar 03, 2023		US Leachate	S23-Ma0072595	X		
Test Counts						10	40	40

EP Risk Management (NSW)
80 Mount Street,
North Sydney
NSW 2060



NATA Accredited
Accreditation Number 1261
Site Number 20794

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: Troy Chatman

Report 976846-L
Project name ADDITIONAL: BOURKE ROAD
Project ID ADDITIONAL: EP3072
Received Date Mar 30, 2023

Client Sample ID			MEP01_0.3_D Y 1	MEP02_1.0_D Y 1	MEP03_0.3_D Y 1	MEP04_0.1_D Y 1
Sample Matrix			US Leachate	US Leachate	US Leachate	US Leachate
Eurofins Sample No.			S23- Ma0072546	S23- Ma0072547	S23- Ma0072548	S23- Ma0072549
Date Sampled			Mar 02, 2023	Mar 03, 2023	Mar 03, 2023	Mar 03, 2023
Test/Reference	LOR	Unit				
Heavy Metals						
Lead	0.01	mg/L	78	3.9	6.3	160
USA Leaching Procedure						
Leachate Fluid ^{C01}		comment	1.0	1.0	1.0	1.0
pH (initial)	0.1	pH Units	8.8	9.3	8.0	9.4
pH (Leachate fluid)	0.1	pH Units	5	5	5	5
pH (off)	0.1	pH Units	5.6	6.2	5.0	5.3
pH (USA HCl addition)	0.1	pH Units	1.5	4.5	1.4	1.5

Client Sample ID			MEP01_0.3_D Y 2	MEP02_1.0_D Y 2	MEP03_0.3_D Y 2	MEP04_0.1_D Y 2
Sample Matrix			US Leachate	US Leachate	US Leachate	US Leachate
Eurofins Sample No.			S23- Ma0072551	S23- Ma0072552	S23- Ma0072553	S23- Ma0072554
Date Sampled			Mar 02, 2023	Mar 03, 2023	Mar 03, 2023	Mar 03, 2023
Test/Reference	LOR	Unit				
Heavy Metals						
Lead	0.01	mg/L	550	17	2.5	130
USA 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	5	5	5
pH (off)	0.1	pH Units	5.2	5.8	5.0	5.0
pH (USA HCl addition)	0.1	pH Units	N/A	N/A	N/A	N/A

Client Sample ID			MEP01_0.3_DA Y 3	MEP02_1.0_DA Y 3	MEP03_0.3_DA Y 3	MEP04_0.1_DA Y 3
Sample Matrix			US Leachate	US Leachate	US Leachate	US Leachate
Eurofins Sample No.			S23- Ma0072556	S23- Ma0072557	S23- Ma0072558	S23- Ma0072559
Date Sampled			Mar 02, 2023	Mar 03, 2023	Mar 03, 2023	Mar 03, 2023
Test/Reference	LOR	Unit				
Heavy Metals						
Lead	0.01	mg/L	460	170	1.6	74
USA 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	5	5	5
pH (off)	0.1	pH Units	5.2	5.3	5.0	5.0
pH (USA HCl addition)	0.1	pH Units	N/A	N/A	N/A	N/A

Client Sample ID			MEP01_0.3_DA Y 4	MEP02_1.0_DA Y 4	MEP03_0.3_DA Y 4	MEP04_0.1_DA Y 4
Sample Matrix			US Leachate	US Leachate	US Leachate	US Leachate
Eurofins Sample No.			S23- Ma0072561	S23- Ma0072562	S23- Ma0072563	S23- Ma0072564
Date Sampled			Mar 02, 2023	Mar 03, 2023	Mar 03, 2023	Mar 03, 2023
Test/Reference	LOR	Unit				
Heavy Metals						
Lead	0.01	mg/L	150	94	1.2	44
USA 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	5	5	5
pH (off)	0.1	pH Units	5.0	5.0	4.9	4.9
pH (USA HCl addition)	0.1	pH Units	N/A	N/A	N/A	N/A

Client Sample ID			MEP01_0.3_DA Y 5	MEP02_1.0_DA Y 5	MEP03_0.3_DA Y 5	MEP04_0.1_DA Y 5
Sample Matrix			US Leachate	US Leachate	US Leachate	US Leachate
Eurofins Sample No.			S23- Ma0072566	S23- Ma0072567	S23- Ma0072568	S23- Ma0072569
Date Sampled			Mar 02, 2023	Mar 03, 2023	Mar 03, 2023	Mar 03, 2023
Test/Reference	LOR	Unit				
Heavy Metals						
Lead	0.01	mg/L	66	31	0.68	22
USA 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	5	5	5
pH (off)	0.1	pH Units	5.0	5.0	5.0	5.0
pH (USA HCl addition)	0.1	pH Units	N/A	N/A	N/A	N/A

Client Sample ID			MEP01_0.3_DA Y 6	MEP02_1.0_DA Y 6	MEP03_0.3_DA Y 6	MEP04_0.1_DA Y 6
Sample Matrix			US Leachate	US Leachate	US Leachate	US Leachate
Eurofins Sample No.			S23- Ma0072571	S23- Ma0072572	S23- Ma0072573	S23- Ma0072574
Date Sampled			Mar 02, 2023	Mar 03, 2023	Mar 03, 2023	Mar 03, 2023
Test/Reference	LOR	Unit				
Heavy Metals						
Lead	0.01	mg/L	25	14	0.40	12
USA 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	5	5	5
pH (off)	0.1	pH Units	5.0	5.0	4.9	4.9
pH (USA HCl addition)	0.1	pH Units	N/A	N/A	N/A	N/A

Client Sample ID			MEP01_0.3_DA Y 7	MEP02_1.0_DA Y 7	MEP03_0.3_DA Y 7	MEP04_0.1_DA Y 7
Sample Matrix			US Leachate	US Leachate	US Leachate	US Leachate
Eurofins Sample No.			S23- Ma0072576	S23- Ma0072577	S23- Ma0072578	S23- Ma0072579
Date Sampled			Mar 02, 2023	Mar 03, 2023	Mar 03, 2023	Mar 03, 2023
Test/Reference	LOR	Unit				
Heavy Metals						
Lead	0.01	mg/L	13	8.4	0.25	6.5
USA 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	5	5	5
pH (off)	0.1	pH Units	4.9	4.9	4.9	4.9
pH (USA HCl addition)	0.1	pH Units	N/A	N/A	N/A	N/A

Client Sample ID			MEP01_0.3_DA Y 8	MEP02_1.0_DA Y 8	MEP03_0.3_DA Y 8	MEP04_0.1_DA Y 8
Sample Matrix			US Leachate	US Leachate	US Leachate	US Leachate
Eurofins Sample No.			S23- Ma0072581	S23- Ma0072582	S23- Ma0072583	S23- Ma0072584
Date Sampled			Mar 02, 2023	Mar 03, 2023	Mar 03, 2023	Mar 03, 2023
Test/Reference	LOR	Unit				
Heavy Metals						
Lead	0.01	mg/L	6.3	5.1	0.18	3.5
USA 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	5	5	5
pH (off)	0.1	pH Units	5.1	5.0	5.0	5.0
pH (USA HCl addition)	0.1	pH Units	N/A	N/A	N/A	N/A

Client Sample ID			MEP01_0.3_D Y 9	MEP02_1.0_D Y 9	MEP03_0.3_D Y 9	MEP04_0.1_D Y 9
Sample Matrix			US Leachate	US Leachate	US Leachate	US Leachate
Eurofins Sample No.			S23- Ma0072586	S23- Ma0072587	S23- Ma0072588	S23- Ma0072589
Date Sampled			Mar 02, 2023	Mar 03, 2023	Mar 03, 2023	Mar 03, 2023
Test/Reference	LOR	Unit				
Heavy Metals						
Lead	0.01	mg/L	7.6	3.3	0.18	3.4
USA 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	5	5	5
pH (off)	0.1	pH Units	5.0	5.0	5.0	5.0
pH (USA HCl addition)	0.1	pH Units	N/A	N/A	N/A	N/A

Client Sample ID			MEP01_0.3_D Y 10	MEP02_1.0_D Y 10	MEP03_0.3_D Y 10	MEP04_0.1_D Y 10
Sample Matrix			US Leachate	US Leachate	US Leachate	US Leachate
Eurofins Sample No.			S23- Ma0072591	S23- Ma0072592	S23- Ma0072593	S23- Ma0072594
Date Sampled			Mar 02, 2023	Mar 03, 2023	Mar 03, 2023	Mar 03, 2023
Test/Reference	LOR	Unit				
Heavy Metals						
Lead	0.01	mg/L	4.2	1.5	0.15	3.2
USA 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	5	5	5
pH (off)	0.1	pH Units	5.0	5.0	5.0	5.0
pH (USA HCl addition)	0.1	pH Units	N/A	N/A	N/A	N/A

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
Heavy Metals	Brisbane	Apr 03, 2023	28 Days
- Method: LTM-MET-3040 Metals in Waters, Soils & Sediments by ICP-MS			
USA Leaching Procedure	Brisbane	Apr 03, 2023	14 Days
- Method: LTM-GEN-7010 Leaching Procedure for Soils & Solid Wastes			

Company Name: EP Risk Management (NSW)
Address: 80 Mount Street,
North Sydney
NSW 2060

Project Name: ADDITIONAL: BOURKE ROAD
Project ID: ADDITIONAL: EP3072

Order No.:
Report #: 976846
Phone: 02 99225021
Fax:

Received: Mar 30, 2023 9:36 AM
Due: Apr 17, 2023
Priority: 10 Day
Contact Name: Troy Chatman

Eurofins Analytical Services Manager : Quinn Raw

Sample Detail						CANCELLED	Lead	USA Leaching Procedure
Sydney Laboratory - NATA # 1261 Site # 18217						X		
Brisbane Laboratory - NATA # 1261 Site # 20794							X	X
External Laboratory								
No	Sample ID	Sample Date	Sampling Time	Matrix	LAB ID			
1	MEP01_0.3_D AY 1	Mar 02, 2023		US Leachate	S23-Ma0072546		X	X
2	MEP02_1.0_D AY 1	Mar 03, 2023		US Leachate	S23-Ma0072547		X	X
3	MEP03_0.3_D AY 1	Mar 03, 2023		US Leachate	S23-Ma0072548		X	X
4	MEP04_0.1_D AY 1	Mar 03, 2023		US Leachate	S23-Ma0072549		X	X
5	MEP05_1.0_D AY 1	Mar 03, 2023		US Leachate	S23-Ma0072550	X		
6	MEP01_0.3_D AY 2	Mar 02, 2023		US Leachate	S23-Ma0072551		X	X
7	MEP02_1.0_D AY 2	Mar 03, 2023		US Leachate	S23-Ma0072552		X	X

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Sample Detail						CANCELLED	Lead	USA Leaching Procedure
Sydney Laboratory - NATA # 1261 Site # 18217						X		
Brisbane Laboratory - NATA # 1261 Site # 20794							X	X
8	MEP03_0.3_D AY 2	Mar 03, 2023		US Leachate	S23-Ma0072553		X	X
9	MEP04_0.1_D AY 2	Mar 03, 2023		US Leachate	S23-Ma0072554		X	X
10	MEP05_1.0_D AY 2	Mar 03, 2023		US Leachate	S23-Ma0072555	X		
11	MEP01_0.3_D AY 3	Mar 02, 2023		US Leachate	S23-Ma0072556		X	X
12	MEP02_1.0_D AY 3	Mar 03, 2023		US Leachate	S23-Ma0072557		X	X
13	MEP03_0.3_D AY 3	Mar 03, 2023		US Leachate	S23-Ma0072558		X	X
14	MEP04_0.1_D AY 3	Mar 03, 2023		US Leachate	S23-Ma0072559		X	X
15	MEP05_1.0_D AY 3	Mar 03, 2023		US Leachate	S23-Ma0072560	X		
16	MEP01_0.3_D AY 4	Mar 02, 2023		US Leachate	S23-Ma0072561		X	X

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Sample Detail

CANCELLED

Lead

USA Leaching Procedure

Sydney Laboratory - NATA # 1261 Site # 18217

Brisbane Laboratory - NATA # 1261 Site # 20794

17	MEP02_1.0_D AY 4	Mar 03, 2023		US Leachate	S23-Ma0072562		x	x
18	MEP03_0.3_D AY 4	Mar 03, 2023		US Leachate	S23-Ma0072563		x	x
19	MEP04_0.1_D AY 4	Mar 03, 2023		US Leachate	S23-Ma0072564		x	x
20	MEP05_1.0_D AY 4	Mar 03, 2023		US Leachate	S23-Ma0072565	x		
21	MEP01_0.3_D AY 5	Mar 02, 2023		US Leachate	S23-Ma0072566		x	x
22	MEP02_1.0_D AY 5	Mar 03, 2023		US Leachate	S23-Ma0072567		x	x
23	MEP03_0.3_D AY 5	Mar 03, 2023		US Leachate	S23-Ma0072568		x	x
24	MEP04_0.1_D AY 5	Mar 03, 2023		US Leachate	S23-Ma0072569		x	x
25	MEP05_1.0_D AY 5	Mar 03, 2023		US Leachate	S23-Ma0072570	x		

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Sample Detail

CANCELLED

Lead

USA Leaching Procedure

Sydney Laboratory - NATA # 1261 Site # 18217

Brisbane Laboratory - NATA # 1261 Site # 20794

26	MEP01_0.3_D AY 6	Mar 02, 2023		US Leachate	S23-Ma0072571		x	x
27	MEP02_1.0_D AY 6	Mar 03, 2023		US Leachate	S23-Ma0072572		x	x
28	MEP03_0.3_D AY 6	Mar 03, 2023		US Leachate	S23-Ma0072573		x	x
29	MEP04_0.1_D AY 6	Mar 03, 2023		US Leachate	S23-Ma0072574		x	x
30	MEP05_1.0_D AY 6	Mar 03, 2023		US Leachate	S23-Ma0072575	x		
31	MEP01_0.3_D AY 7	Mar 02, 2023		US Leachate	S23-Ma0072576		x	x
32	MEP02_1.0_D AY 7	Mar 03, 2023		US Leachate	S23-Ma0072577		x	x
33	MEP03_0.3_D AY 7	Mar 03, 2023		US Leachate	S23-Ma0072578		x	x
34	MEP04_0.1_D AY 7	Mar 03, 2023		US Leachate	S23-Ma0072579		x	x

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CANCELLED

Lead

USA Leaching Procedure

Sydney Laboratory - NATA # 1261 Site # 18217

Brisbane Laboratory - NATA # 1261 Site # 20794

35	MEP05_1.0_D AY 7	Mar 03, 2023		US Leachate	S23-Ma0072580	x		
36	MEP01_0.3_D AY 8	Mar 02, 2023		US Leachate	S23-Ma0072581		x	x
37	MEP02_1.0_D AY 8	Mar 03, 2023		US Leachate	S23-Ma0072582		x	x
38	MEP03_0.3_D AY 8	Mar 03, 2023		US Leachate	S23-Ma0072583		x	x
39	MEP04_0.1_D AY 8	Mar 03, 2023		US Leachate	S23-Ma0072584		x	x
40	MEP05_1.0_D AY 8	Mar 03, 2023		US Leachate	S23-Ma0072585	x		
41	MEP01_0.3_D AY 9	Mar 02, 2023		US Leachate	S23-Ma0072586		x	x
42	MEP02_1.0_D AY 9	Mar 03, 2023		US Leachate	S23-Ma0072587		x	x
43	MEP03_0.3_D AY 9	Mar 03, 2023		US Leachate	S23-Ma0072588		x	x

Company Name: EP Risk Management (NSW)
Address: 80 Mount Street,
North Sydney
NSW 2060

Project Name: ADDITIONAL: BOURKE ROAD
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Sample Detail

CANCELLED

Lead

USA Leaching Procedure

Sydney Laboratory - NATA # 1261 Site # 18217

Brisbane Laboratory - NATA # 1261 Site # 20794

44	MEP04_0.1_D AY 9	Mar 03, 2023		US Leachate	S23-Ma0072589		x	x
45	MEP05_1.0_D AY 9	Mar 03, 2023		US Leachate	S23-Ma0072590	x		
46	MEP01_0.3_D AY 10	Mar 02, 2023		US Leachate	S23-Ma0072591		x	x
47	MEP02_1.0_D AY 10	Mar 03, 2023		US Leachate	S23-Ma0072592		x	x
48	MEP03_0.3_D AY 10	Mar 03, 2023		US Leachate	S23-Ma0072593		x	x
49	MEP04_0.1_D AY 10	Mar 03, 2023		US Leachate	S23-Ma0072594		x	x
50	MEP05_1.0_D AY 10	Mar 03, 2023		US Leachate	S23-Ma0072595	x		
Test Counts						10	40	40

Internal Quality Control Review and Glossary

General

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

Holding Times

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

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

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

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

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

Units

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

Terms

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

QC - Acceptance Criteria

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

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

Results <10 times the LOR: No Limit

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

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

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

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

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

QC Data General Comments

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

Quality Control Results

Test				Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Method Blank										
Heavy Metals										
Lead				mg/L	< 0.01			0.01	Pass	
LCS - % Recovery										
Heavy Metals										
Lead				%	90			80-120	Pass	
Test	Lab Sample ID	QA Source		Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Spike - % Recovery										
Heavy Metals										
Lead					Result 1					
Lead				%	115			75-125	Pass	
Spike - % Recovery										
Heavy Metals										
Lead					Result 1					
Lead				%	100			75-125	Pass	
Spike - % Recovery										
Heavy Metals										
Lead					Result 1					
Lead				%	116			75-125	Pass	
Spike - % Recovery										
Heavy Metals										
Lead					Result 1					
Lead				%	111			75-125	Pass	
Test	Lab Sample ID	QA Source		Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Duplicate										
Heavy Metals										
Lead					Result 1	Result 2	RPD			
Lead				mg/L	78	78	<1	30%	Pass	
Duplicate										
Heavy Metals										
Lead					Result 1	Result 2	RPD			
Lead				mg/L	1.6	1.7	3.2	30%	Pass	
Duplicate										
Heavy Metals										
Lead					Result 1	Result 2	RPD			
Lead				mg/L	25	24	2.0	30%	Pass	
Duplicate										
Heavy Metals										
Lead					Result 1	Result 2	RPD			
Lead				mg/L	0.18	0.17	1.9	30%	Pass	

Comments

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

Authorised by:

Bonnie Pu	Analytical Services Manager
Jonathon Angell	Senior Analyst-Metal
Jonathon Angell	Senior Analyst-Sample Properties



Glenn Jackson
General Manager

Final Report – this report replaces any previously issued Report

- Indicates Not Requested

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

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

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FW: Eurofins Test Results - Report 970423 : Site BOURKE ROAD (EP3072)

Troy Chatman <troy.chatman@eprisk.com.au>

Tue 2023-03-28 1:22 PM

To: Bonnie Pu <BonniePu@eurofins.com>

Cc: #AU25_Enviro_Sample_NSW <EnviroSampleNSW@eurofins.com>

CAUTION: EXTERNAL EMAIL - Sent from an email domain that is not formally trusted by Eurofins.

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Hey Bonnie,

Can I please get TCLP for Nickel on samples BH21_0.5 and BH21_0.3 as well please. 5 day TAT too.

Cheers

Troy Chatman

Environmental Scientist

SafeWork NSW Licensed Asbestos Assessor

M 0402 226 226 | E troy.chatman@eprisk.com.au

EP Risk Management Pty Ltd | ABN 81147147591

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NEWCASTLE
SYDNEY
MELBOURNE



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From: Troy Chatman

Sent: Tuesday, March 28, 2023 12:39 PM

To: BonniePu@eurofins.com

Subject: RE: Eurofins Test Results - Report 970423 : Site BOURKE ROAD (EP3072)

Hi Bonnie,

Can I please get Lead TCLP for the following samples on a 5 day TAT:

- BH19_0.3
- BH21_0.3
- BH21_0.5
- BH22_0.1
- BH22_0.5

Cheers

Troy Chatman

Environmental Scientist

SafeWork NSW Licensed Asbestos Assessor

M 0402 226 226 | E troy.chatman@eprisk.com.au

EP Risk Management Pty Ltd | ABN 81147147591
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From: BonniePu@eurofins.com <BonniePu@eurofins.com>
Sent: Tuesday, March 28, 2023 11:54 AM
To: Troy Chatman <troy.chatman@eprisk.com.au>
Subject: Eurofins Test Results - Report 970423 : Site BOURKE ROAD (EP3072)

Please find the attached updated draft reports - all results but particle size distribution are in

Kind regards,

Bonnie Pu
Assistant Analytical Services Manager
My hours are 10 am - 6 pm

Eurofins Environment Testing Australia Pty Ltd
179 Magowar Road
Giraween, NSW, 2145
Mobile: 0429 195 949

Email: bonniepu@eurofins.com
Website: www.eurofins.com.au/environmental-testing

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Eurofins Environment Testing NZ Ltd

NZBN: 9429046024954

Auckland	Christchurch
35 O'Rourke Road Penrose, Auckland 1061 Tel: +64 9 526 45 51 IANZ# 1327	43 Detroit Drive Rolleston, Christchurch 7675 Tel: 0800 856 450 IANZ# 1290

Sample Receipt Advice

Company name:	EP Risk Management (NSW)
Contact name:	Troy Chatman
Project name:	ADDITIONAL: BOURKE ROAD
Project ID:	ADDITIONAL: EP3072
Turnaround time:	5 Day
Date/Time received	Mar 28, 2023 12:39 PM
Eurofins reference	977650

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:

Quinn Raw on phone : or by email: QuinnRaw@eurofins.com

Results will be delivered electronically via email to Troy Chatman - troy.chatman@eprisk.com.au.

Note: A copy of these results will also be delivered to the general EP Risk Management (NSW) email address.



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NATA# 1261 Site# 20794

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

Company Name: EP Risk Management (NSW)
Address: 80 Mount Street,
North Sydney
NSW 2060

Project Name: ADDITIONAL: BOURKE ROAD
Project ID: ADDITIONAL: EP3072

Order No.:
Report #: 977650
Phone: 02 99225021
Fax:

Received: Mar 28, 2023 12:39 PM
Due: Apr 4, 2023
Priority: 5 Day
Contact Name: Troy Chatman

Eurofins Analytical Services Manager : Quinn Raw

Sample Detail

Lead

Nickel

USA Leaching Procedure

Sydney Laboratory - NATA # 1261 Site # 18217

X

X

X

External Laboratory

No	Sample ID	Sample Date	Sampling Time	Matrix	LAB ID			
1	BH19 0.3	Mar 06, 2023		US Leachate	S23-Ap0002618	X		X
2	BH21 0.3	Mar 06, 2023		US Leachate	S23-Ap0002619	X	X	X
3	BH21 0.5	Mar 06, 2023		US Leachate	S23-Ap0002620	X	X	X
4	BH22 0.1	Mar 03, 2023		US Leachate	S23-Ap0002621	X		X
5	BH22 0.5	Mar 03, 2023		US Leachate	S23-Ap0002622	X		X

Test Counts

5

2

5

EP Risk Management (NSW)
80 Mount Street,
North Sydney
NSW 2060



NATA Accredited
Accreditation Number 1261
Site Number 18217

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: **Troy Chatman**

Report **977650-L**
Project name **ADDITIONAL: BOURKE ROAD**
Project ID **ADDITIONAL: EP3072**
Received Date **Mar 28, 2023**

Client Sample ID			BH19_0.3	BH21_0.3	BH21_0.5	BH22_0.1
Sample Matrix			US Leachate	US Leachate	US Leachate	US Leachate
Eurofins Sample No.			S23- Ap0002618	S23- Ap0002619	S23- Ap0002620	S23- Ap0002621
Date Sampled			Mar 06, 2023	Mar 06, 2023	Mar 06, 2023	Mar 03, 2023
Test/Reference	LOR	Unit				
Heavy Metals						
Lead	0.01	mg/L	34	0.87	0.28	0.18
Nickel	0.01	mg/L	-	0.21	0.11	-
USA Leaching Procedure						
Leachate Fluid ^{C01}		comment	1.0	1.0	1.0	1.0
pH (initial)	0.1	pH Units	8.3	8.1	8.2	8.3
pH (off)	0.1	pH Units	5.2	5.1	5.1	5.1
pH (USA HCl addition)	0.1	pH Units	2.3	2.2	2.2	2.3

Client Sample ID			BH22_0.5
Sample Matrix			US Leachate
Eurofins Sample No.			S23- Ap0002622
Date Sampled			Mar 03, 2023
Test/Reference	LOR	Unit	
Heavy Metals			
Lead	0.01	mg/L	1.3
USA Leaching Procedure			
Leachate Fluid ^{C01}		comment	1.0
pH (initial)	0.1	pH Units	8.2
pH (off)	0.1	pH Units	5.1
pH (USA HCl addition)	0.1	pH Units	2.3

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
Heavy Metals	Sydney	Apr 03, 2023	28 Days
- Method: LTM-MET-3040 Metals in Waters, Soils & Sediments by ICP-MS			
USA Leaching Procedure	Sydney	Apr 03, 2023	14 Days
- Method: LTM-GEN-7010 Leaching Procedure for Soils & Solid Wastes			

Company Name: EP Risk Management (NSW)
Address: 80 Mount Street,
North Sydney
NSW 2060

Project Name: ADDITIONAL: BOURKE ROAD
Project ID: ADDITIONAL: EP3072

Order No.:
Report #: 977650
Phone: 02 99225021
Fax:

Received: Mar 28, 2023 12:39 PM
Due: Apr 4, 2023
Priority: 5 Day
Contact Name: Troy Chatman

Eurofins Analytical Services Manager : Quinn Raw

Sample Detail						Lead	Nickel	USA Leaching Procedure
Sydney Laboratory - NATA # 1261 Site # 18217						X	X	X
External Laboratory								
No	Sample ID	Sample Date	Sampling Time	Matrix	LAB ID			
1	BH19 0.3	Mar 06, 2023		US Leachate	S23-Ap0002618	X		X
2	BH21 0.3	Mar 06, 2023		US Leachate	S23-Ap0002619	X	X	X
3	BH21 0.5	Mar 06, 2023		US Leachate	S23-Ap0002620	X	X	X
4	BH22 0.1	Mar 03, 2023		US Leachate	S23-Ap0002621	X		X
5	BH22 0.5	Mar 03, 2023		US Leachate	S23-Ap0002622	X		X
Test Counts						5	2	5

Internal Quality Control Review and Glossary

General

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

Holding Times

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

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

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

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

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

Units

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

Terms

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

QC - Acceptance Criteria

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

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

Results <10 times the LOR: No Limit

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

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

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

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

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

QC Data General Comments

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

Quality Control Results

Test				Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Method Blank										
Heavy Metals										
Lead				mg/L	< 0.01			0.01	Pass	
Nickel				mg/L	< 0.01			0.01	Pass	
LCS - % Recovery										
Heavy Metals										
Lead				%	91			80-120	Pass	
Nickel				%	95			80-120	Pass	
Test	Lab Sample ID	QA Source		Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Spike - % Recovery										
Heavy Metals										
Nickel	S23-Ap0002662	NCP		%	87			75-125	Pass	
Test	Lab Sample ID	QA Source		Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Duplicate										
Heavy Metals										
Lead	S23-Ap0002067	NCP		mg/L	0.71	0.70	RPD	30%	Pass	
Duplicate										
Heavy Metals										
Nickel	S23-Ap0002067	NCP		mg/L	0.21	0.22	3.2	30%	Pass	

Comments
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

Authorised by:

Adam Bateup	Analytical Services Manager
Fang Yee Tan	Senior Analyst-Metal



Glenn Jackson
General Manager

Final Report – this report replaces any previously issued Report

- Indicates Not Requested

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

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

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#973330

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Sample Receipt Advice

Company name:	EP Risk Management (NSW)
Contact name:	Troy Chatman
Project name:	BOURKE ROAD
Project ID:	EP3072.002
Turnaround time:	5 Day
Date/Time received	Mar 16, 2023 4:14 PM
Eurofins reference	973330

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.
- N/A 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

TRP02 has been sent to ALS.

Contact

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

Quinn Raw on phone : or by email: QuinnRaw@eurofins.com

Results will be delivered electronically via email to Troy Chatman - troy.chatman@eprisk.com.au.

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email: EnviroSales@eurofins.com

Company Name: EP Risk Management (NSW)
Address: 80 Mount Street,
North Sydney
NSW 2060

Project Name: BOURKE ROAD
Project ID: EP3072.002

Order No.:
Report #: 973330
Phone: 02 99225021
Fax:

Received: Mar 16, 2023 4:14 PM
Due: Mar 23, 2023
Priority: 5 Day
Contact Name: Troy Chatman

Eurofins Analytical Services Manager : Quinn Raw

Sample Detail

Melbourne Laboratory - NATA # 1261 Site # 1254

External Laboratory

No	Sample ID	Sample Date	Sampling Time	Matrix	LAB ID			
1	MW05	Mar 16, 2023		Water	S23-Ma0045347	X	X	X
2	MW06	Mar 16, 2023		Water	S23-Ma0045348	X	X	X
3	MW07	Mar 16, 2023		Water	S23-Ma0045349	X	X	X
4	DUP01	Mar 16, 2023		Water	S23-Ma0045350	X	X	
5	RB01	Mar 16, 2023		Water	S23-Ma0045351	X	X	

Test Counts

5 5 3

EP Risk Management (NSW)
80 Mount Street,
North Sydney
NSW 2060



NATA Accredited
Accreditation Number 1261
Site Number 1254

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equivalence of testing, medical testing, calibration,
inspection, proficiency testing scheme providers and
reference materials producers reports and certificates.

Attention: **Troy Chatman**

Report **973330-W**
Project name **BOURKE ROAD**
Project ID **EP3072.002**
Received Date **Mar 16, 2023**

Client Sample ID			MW05	MW06	MW07	DUP01
Sample Matrix			Water	Water	Water	Water
Eurofins Sample No.			S23- Ma0045347	S23- Ma0045348	S23- Ma0045349	S23- Ma0045350
Date Sampled			Mar 16, 2023	Mar 16, 2023	Mar 16, 2023	Mar 16, 2023
Test/Reference	LOR	Unit				
Total Recoverable Hydrocarbons						
TRH C6-C9	0.02	mg/L	< 0.02	< 0.02	< 0.02	< 0.02
TRH C10-C14	0.05	mg/L	0.30	< 0.05	< 0.05	< 0.05
TRH C15-C28	0.1	mg/L	< 0.1	0.3	< 0.1	0.3
TRH C29-C36	0.1	mg/L	< 0.1	< 0.1	< 0.1	< 0.1
TRH C10-C36 (Total)	0.1	mg/L	0.3	0.3	< 0.1	0.3
TRH C6-C10	0.02	mg/L	< 0.02	< 0.02	< 0.02	< 0.02
TRH C6-C10 less BTEX (F1) ^{N04}	0.02	mg/L	< 0.02	< 0.02	< 0.02	< 0.02
TRH >C10-C16	0.05	mg/L	< 0.05	0.13	< 0.05	0.13
TRH >C10-C16 less Naphthalene (F2) ^{N01}	0.05	mg/L	< 0.05	0.13	< 0.05	0.13
TRH >C16-C34	0.1	mg/L	< 0.1	0.3	< 0.1	0.3
TRH >C34-C40	0.1	mg/L	< 0.1	< 0.1	< 0.1	< 0.1
TRH >C10-C40 (total)*	0.1	mg/L	< 0.1	0.43	< 0.1	0.43
BTEX						
Benzene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Toluene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Ethylbenzene	0.001	mg/L	0.002	0.003	< 0.001	< 0.001
m&p-Xylenes	0.002	mg/L	< 0.002	< 0.002	< 0.002	< 0.002
o-Xylene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Xylenes - Total*	0.003	mg/L	< 0.003	< 0.003	< 0.003	< 0.003
4-Bromofluorobenzene (surr.)	1	%	118	120	110	100
Volatile Organics						
1.1-Dichloroethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
1.1-Dichloroethene	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
1.1.1-Trichloroethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
1.1.1.2-Tetrachloroethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
1.1.2-Trichloroethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
1.1.2.2-Tetrachloroethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
1.2-Dibromoethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
1.2-Dichlorobenzene	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
1.2-Dichloroethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
1.2-Dichloropropane	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
1.2.3-Trichloropropane	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
1.2.4-Trimethylbenzene	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
1.3-Dichlorobenzene	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
1.3-Dichloropropane	0.001	mg/L	< 0.001	< 0.001	< 0.001	-

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Volatile Organics						
1,3,5-Trimethylbenzene	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
1,4-Dichlorobenzene	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
2-Butanone (MEK)	0.005	mg/L	< 0.005	< 0.005	< 0.005	-
2-Propanone (Acetone)	0.005	mg/L	0.012	< 0.005	< 0.005	-
4-Chlorotoluene	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
4-Methyl-2-pentanone (MIBK)	0.005	mg/L	< 0.005	< 0.005	< 0.005	-
Allyl chloride	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
Benzene	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
Bromobenzene	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
Bromochloromethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
Bromodichloromethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
Bromoform	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
Bromomethane	0.005	mg/L	< 0.005	< 0.005	< 0.005	-
Carbon disulfide	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
Carbon Tetrachloride	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
Chlorobenzene	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
Chloroethane	0.005	mg/L	< 0.005	< 0.005	< 0.005	-
Chloroform	0.005	mg/L	< 0.005	< 0.005	< 0.005	-
Chloromethane	0.005	mg/L	< 0.005	< 0.005	< 0.005	-
cis-1,2-Dichloroethene	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
cis-1,3-Dichloropropene	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
Dibromochloromethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
Dibromomethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
Dichlorodifluoromethane	0.005	mg/L	< 0.005	< 0.005	< 0.005	-
Ethylbenzene	0.001	mg/L	0.002	0.003	< 0.001	-
Iodomethane	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
Isopropyl benzene (Cumene)	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
m&p-Xylenes	0.002	mg/L	< 0.002	< 0.002	< 0.002	-
Methylene Chloride	0.005	mg/L	< 0.005	< 0.005	< 0.005	-
o-Xylene	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
Styrene	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
Tetrachloroethene	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
Toluene	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
trans-1,2-Dichloroethene	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
trans-1,3-Dichloropropene	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
Trichloroethene	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
Trichlorofluoromethane	0.005	mg/L	< 0.005	< 0.005	< 0.005	-
Vinyl chloride	0.005	mg/L	< 0.005	< 0.005	< 0.005	-
Xylenes - Total*	0.003	mg/L	< 0.003	< 0.003	< 0.003	-
Total MAH*	0.003	mg/L	< 0.003	0.003	< 0.003	-
Vic EPA IWRG 621 CHC (Total)*	0.005	mg/L	< 0.005	< 0.005	< 0.005	-
Vic EPA IWRG 621 Other CHC (Total)*	0.005	mg/L	< 0.005	< 0.005	< 0.005	-
4-Bromofluorobenzene (surr.)	1	%	118	120	110	-
Toluene-d8 (surr.)	1	%	98	96	106	-
Total Recoverable Hydrocarbons - 2013 NEPM Fractions						
Naphthalene ^{NO2}	0.01	mg/L	< 0.01	< 0.01	< 0.01	< 0.01

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Polycyclic Aromatic Hydrocarbons						
Acenaphthene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Acenaphthylene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Anthracene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Benz(a)anthracene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Benzo(a)pyrene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Benzo(b&j)fluoranthene ^{N07}	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Benzo(g,h,i)perylene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Benzo(k)fluoranthene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Chrysene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Dibenz(a,h)anthracene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Fluoranthene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Fluorene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Indeno(1.2.3-cd)pyrene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Naphthalene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Phenanthrene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Pyrene	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Total PAH*	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
2-Fluorobiphenyl (surr.)	1	%	83	61	99	65
p-Terphenyl-d14 (surr.)	1	%	92	75	63	82
Organochlorine Pesticides						
Chlordanes - Total	0.002	mg/L	< 0.002	< 0.002	< 0.002	< 0.002
4,4'-DDD	0.0002	mg/L	< 0.0002	< 0.0002	< 0.0002	< 0.0002
4,4'-DDE	0.0002	mg/L	< 0.0002	< 0.0002	< 0.0002	< 0.0002
4,4'-DDT	0.0002	mg/L	< 0.0002	< 0.0002	< 0.0002	< 0.0002
α-HCH	0.0002	mg/L	< 0.0002	< 0.0002	< 0.0002	< 0.0002
Aldrin	0.0002	mg/L	< 0.0002	< 0.0002	< 0.0002	< 0.0002
β-HCH	0.0002	mg/L	< 0.0002	< 0.0002	< 0.0002	< 0.0002
δ-HCH	0.0002	mg/L	< 0.0002	< 0.0002	< 0.0002	< 0.0002
Dieldrin	0.0002	mg/L	< 0.0002	< 0.0002	< 0.0002	< 0.0002
Endosulfan I	0.0002	mg/L	< 0.0002	< 0.0002	< 0.0002	< 0.0002
Endosulfan II	0.0002	mg/L	< 0.0002	< 0.0002	< 0.0002	< 0.0002
Endosulfan sulphate	0.0002	mg/L	< 0.0002	< 0.0002	< 0.0002	< 0.0002
Endrin	0.0002	mg/L	< 0.0002	< 0.0002	< 0.0002	< 0.0002
Endrin aldehyde	0.0002	mg/L	< 0.0002	< 0.0002	< 0.0002	< 0.0002
Endrin ketone	0.0002	mg/L	< 0.0002	< 0.0002	< 0.0002	< 0.0002
γ-HCH (Lindane)	0.0002	mg/L	< 0.0002	< 0.0002	< 0.0002	< 0.0002
Heptachlor	0.0002	mg/L	< 0.0002	< 0.0002	< 0.0002	< 0.0002
Heptachlor epoxide	0.0002	mg/L	< 0.0002	< 0.0002	< 0.0002	< 0.0002
Hexachlorobenzene	0.0002	mg/L	< 0.0002	< 0.0002	< 0.0002	< 0.0002
Methoxychlor	0.0002	mg/L	< 0.0002	< 0.0002	< 0.0002	< 0.0002
Toxaphene	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
Aldrin and Dieldrin (Total)*	0.0002	mg/L	< 0.0002	< 0.0002	< 0.0002	< 0.0002
DDT + DDE + DDD (Total)*	0.0002	mg/L	< 0.0002	< 0.0002	< 0.0002	< 0.0002
Vic EPA IWRG 621 OCP (Total)*	0.002	mg/L	< 0.002	< 0.002	< 0.002	< 0.002
Vic EPA IWRG 621 Other OCP (Total)*	0.002	mg/L	< 0.002	< 0.002	< 0.002	< 0.002
Dibutylchloroendate (surr.)	1	%	80	66	62	77
Tetrachloro-m-xylene (surr.)	1	%	77	52	87	58

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Organophosphorus Pesticides						
Azinphos-methyl	0.002	mg/L	< 0.002	< 0.002	< 0.002	< 0.002
Bolstar	0.002	mg/L	< 0.002	< 0.002	< 0.002	< 0.002
Chlorfenvinphos	0.02	mg/L	< 0.02	< 0.02	< 0.02	< 0.02
Chlorpyrifos	0.002	mg/L	< 0.002	< 0.002	< 0.002	< 0.002
Chlorpyrifos-methyl	0.002	mg/L	< 0.002	< 0.002	< 0.002	< 0.002
Coumaphos	0.02	mg/L	< 0.02	< 0.02	< 0.02	< 0.02
Demeton-S	0.002	mg/L	< 0.002	< 0.002	< 0.002	< 0.002
Demeton-O	0.002	mg/L	< 0.002	< 0.002	< 0.002	< 0.002
Diazinon	0.002	mg/L	< 0.002	< 0.002	< 0.002	< 0.002
Dichlorvos	0.002	mg/L	< 0.002	< 0.002	< 0.002	< 0.002
Dimethoate	0.002	mg/L	< 0.002	< 0.002	< 0.002	< 0.002
Disulfoton	0.002	mg/L	< 0.002	< 0.002	< 0.002	< 0.002
EPN	0.002	mg/L	< 0.002	< 0.002	< 0.002	< 0.002
Ethion	0.002	mg/L	< 0.002	< 0.002	< 0.002	< 0.002
Ethoprop	0.002	mg/L	< 0.002	< 0.002	< 0.002	< 0.002
Ethyl parathion	0.002	mg/L	< 0.002	< 0.002	< 0.002	< 0.002
Fenitrothion	0.002	mg/L	< 0.002	< 0.002	< 0.002	< 0.002
Fensulfothion	0.002	mg/L	< 0.002	< 0.002	< 0.002	< 0.002
Fenthion	0.002	mg/L	< 0.002	< 0.002	< 0.002	< 0.002
Malathion	0.002	mg/L	< 0.002	< 0.002	< 0.002	< 0.002
Merphos	0.002	mg/L	< 0.002	< 0.002	< 0.002	< 0.002
Methyl parathion	0.002	mg/L	< 0.002	< 0.002	< 0.002	< 0.002
Mevinphos	0.002	mg/L	< 0.002	< 0.002	< 0.002	< 0.002
Monocrotophos	0.002	mg/L	< 0.002	< 0.002	< 0.002	< 0.002
Naled	0.002	mg/L	< 0.002	< 0.002	< 0.002	< 0.002
Omethoate	0.02	mg/L	< 0.02	< 0.02	< 0.02	< 0.02
Phorate	0.002	mg/L	< 0.002	< 0.002	< 0.002	< 0.002
Pirimiphos-methyl	0.02	mg/L	< 0.02	< 0.02	< 0.02	< 0.02
Pyrazophos	0.002	mg/L	< 0.002	< 0.002	< 0.002	< 0.002
Ronnel	0.002	mg/L	< 0.002	< 0.002	< 0.002	< 0.002
Terbufos	0.002	mg/L	< 0.002	< 0.002	< 0.002	< 0.002
Tetrachlorvinphos	0.002	mg/L	< 0.002	< 0.002	< 0.002	< 0.002
Tokuthion	0.002	mg/L	< 0.002	< 0.002	< 0.002	< 0.002
Trichloronate	0.002	mg/L	< 0.002	< 0.002	< 0.002	< 0.002
Triphenylphosphate (surr.)	1	%	58	67	54	78
Polychlorinated Biphenyls						
Aroclor-1016	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
Aroclor-1221	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
Aroclor-1232	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
Aroclor-1242	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
Aroclor-1248	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
Aroclor-1254	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
Aroclor-1260	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
Total PCB*	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
Dibutylchlorendate (surr.)	1	%	80	66	62	77
Tetrachloro-m-xylene (surr.)	1	%	77	52	87	58

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	LOR	Unit				
Semivolatile Organics						
2-Methyl-4,6-dinitrophenol	0.03	mg/L	< 0.03	< 0.03	< 0.03	-
1-Chloronaphthalene	0.005	mg/L	< 0.005	< 0.005	< 0.005	-
1-Naphthylamine	0.005	mg/L	< 0.005	< 0.005	< 0.005	-
1,2-Dichlorobenzene	0.005	mg/L	< 0.005	< 0.005	< 0.005	-
1,2,3-Trichlorobenzene	0.005	mg/L	< 0.005	< 0.005	< 0.005	-
1,2,3,4-Tetrachlorobenzene	0.005	mg/L	< 0.005	< 0.005	< 0.005	-
1,2,3,5-Tetrachlorobenzene	0.005	mg/L	< 0.005	< 0.005	< 0.005	-
1,2,4-Trichlorobenzene	0.005	mg/L	< 0.005	< 0.005	< 0.005	-
1,2,4,5-Tetrachlorobenzene	0.005	mg/L	< 0.005	< 0.005	< 0.005	-
1,3-Dichlorobenzene	0.005	mg/L	< 0.005	< 0.005	< 0.005	-
1,3,5-Trichlorobenzene	0.005	mg/L	< 0.005	< 0.005	< 0.005	-
1,4-Dichlorobenzene	0.005	mg/L	< 0.005	< 0.005	< 0.005	-
2-Chloronaphthalene	0.005	mg/L	< 0.005	< 0.005	< 0.005	-
2-Chlorophenol	0.003	mg/L	< 0.003	< 0.003	< 0.003	-
2-Fluorobiphenyl (surr.)	1	%	83	61	99	-
2-Methylnaphthalene	0.005	mg/L	< 0.005	< 0.005	< 0.005	-
2-Methylphenol (o-Cresol)	0.003	mg/L	< 0.003	< 0.003	< 0.003	-
2-Naphthylamine	0.005	mg/L	< 0.005	< 0.005	< 0.005	-
2-Nitroaniline	0.005	mg/L	< 0.005	< 0.005	< 0.005	-
2-Nitrophenol	0.01	mg/L	< 0.01	< 0.01	< 0.01	-
2-Picoline	0.005	mg/L	< 0.005	< 0.005	< 0.005	-
2,3,4,6-Tetrachlorophenol	0.01	mg/L	< 0.01	< 0.01	< 0.01	-
2,4-Dichlorophenol	0.003	mg/L	< 0.003	< 0.003	< 0.003	-
2,4-Dimethylphenol	0.003	mg/L	< 0.003	< 0.003	< 0.003	-
2,4-Dinitrophenol	0.03	mg/L	< 0.03	< 0.03	< 0.03	-
2,4-Dinitrotoluene	0.005	mg/L	< 0.005	< 0.005	< 0.005	-
2,4,5-Trichlorophenol	0.01	mg/L	< 0.01	< 0.01	< 0.01	-
2,4,6-Tribromophenol (surr.)	1	%	54	93	68	-
2,4,6-Trichlorophenol	0.01	mg/L	< 0.01	< 0.01	< 0.01	-
2,6-Dichlorophenol	0.003	mg/L	< 0.003	< 0.003	< 0.003	-
2,6-Dinitrotoluene	0.005	mg/L	< 0.005	< 0.005	< 0.005	-
3&4-Methylphenol (m&p-Cresol)	0.006	mg/L	< 0.006	< 0.006	< 0.006	-
3-Methylcholanthrene	0.005	mg/L	< 0.005	< 0.005	< 0.005	-
3,3'-Dichlorobenzidine	0.005	mg/L	< 0.005	< 0.005	< 0.005	-
4-Aminobiphenyl	0.005	mg/L	< 0.005	< 0.005	< 0.005	-
4-Chloro-3-methylphenol	0.01	mg/L	< 0.01	< 0.01	< 0.01	-
4-Nitrophenol	0.03	mg/L	< 0.03	< 0.03	< 0.03	-
4,4'-DDD	0.005	mg/L	< 0.005	< 0.005	< 0.005	-
4,4'-DDE	0.005	mg/L	< 0.005	< 0.005	< 0.005	-
4,4'-DDT	0.005	mg/L	< 0.005	< 0.005	< 0.005	-
7,12-Dimethylbenz(a)anthracene	0.005	mg/L	< 0.005	< 0.005	< 0.005	-
a-HCH	0.005	mg/L	< 0.005	< 0.005	< 0.005	-
Acenaphthene	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
Acenaphthylene	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
Acetophenone	0.005	mg/L	< 0.005	< 0.005	< 0.005	-
Aldrin	0.005	mg/L	< 0.005	< 0.005	< 0.005	-
Aniline	0.005	mg/L	< 0.005	< 0.005	< 0.005	-
Anthracene	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
b-HCH	0.005	mg/L	< 0.005	< 0.005	< 0.005	-

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Semivolatile Organics						
Benz(a)anthracene	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
Benzo(a)pyrene	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
Benzo(b&j)fluoranthene ^{N07}	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
Benzo(g,h,i)perylene	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
Benzo(k)fluoranthene	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
Benzyl chloride	0.005	mg/L	< 0.005	< 0.005	< 0.005	-
Bis(2-ethylhexyl)phthalate	0.005	mg/L	< 0.005	< 0.005	< 0.005	-
Butyl benzyl phthalate	0.005	mg/L	< 0.005	< 0.005	< 0.005	-
Chrysene	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
d-HCH	0.005	mg/L	< 0.005	< 0.005	< 0.005	-
Di-n-butyl phthalate	0.005	mg/L	< 0.005	< 0.005	< 0.005	-
Di-n-octyl phthalate	0.005	mg/L	< 0.005	< 0.005	< 0.005	-
Dibenz(a,h)anthracene	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
Dibenz(a,j)acridine	0.005	mg/L	< 0.005	< 0.005	< 0.005	-
Dibenzofuran	0.005	mg/L	< 0.005	< 0.005	< 0.005	-
Dieldrin	0.005	mg/L	< 0.005	< 0.005	< 0.005	-
Diethyl phthalate	0.005	mg/L	< 0.005	< 0.005	< 0.005	-
Dimethyl phthalate	0.005	mg/L	< 0.005	< 0.005	< 0.005	-
Dimethylaminoazobenzene	0.005	mg/L	< 0.005	< 0.005	< 0.005	-
Diphenylamine	0.005	mg/L	< 0.005	< 0.005	< 0.005	-
Endosulfan I	0.005	mg/L	< 0.005	< 0.005	< 0.005	-
Endosulfan II	0.005	mg/L	< 0.005	< 0.005	< 0.005	-
Endosulfan sulphate	0.005	mg/L	< 0.005	< 0.005	< 0.005	-
Endrin	0.005	mg/L	< 0.005	< 0.005	< 0.005	-
Endrin aldehyde	0.005	mg/L	< 0.005	< 0.005	< 0.005	-
Endrin ketone	0.005	mg/L	< 0.005	< 0.005	< 0.005	-
Fluoranthene	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
Fluorene	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
g-HCH (Lindane)	0.005	mg/L	< 0.005	< 0.005	< 0.005	-
Heptachlor	0.005	mg/L	< 0.005	< 0.005	< 0.005	-
Heptachlor epoxide	0.005	mg/L	< 0.005	< 0.005	< 0.005	-
Hexachlorobenzene	0.005	mg/L	< 0.005	< 0.005	< 0.005	-
Hexachlorobutadiene	0.005	mg/L	< 0.005	< 0.005	< 0.005	-
Hexachlorocyclopentadiene	0.005	mg/L	< 0.005	< 0.005	< 0.005	-
Hexachloroethane	0.005	mg/L	< 0.005	< 0.005	< 0.005	-
Indeno(1.2.3-cd)pyrene	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
Methoxychlor	0.005	mg/L	< 0.005	< 0.005	< 0.005	-
N-Nitrosodibutylamine	0.005	mg/L	< 0.005	< 0.005	< 0.005	-
N-Nitrosodipropylamine	0.005	mg/L	< 0.005	< 0.005	< 0.005	-
N-Nitrosopiperidine	0.005	mg/L	< 0.005	< 0.005	< 0.005	-
Naphthalene	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
Nitrobenzene	0.05	mg/L	< 0.05	< 0.05	< 0.05	-
Nitrobenzene-d5 (surr.)	1	%	63	55	52	-
Pentachlorobenzene	0.005	mg/L	< 0.005	< 0.005	< 0.005	-
Pentachloronitrobenzene	0.005	mg/L	< 0.005	< 0.005	< 0.005	-
Pentachlorophenol	0.01	mg/L	< 0.01	< 0.01	< 0.01	-
Phenanthrene	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
Phenol	0.003	mg/L	< 0.003	< 0.003	< 0.003	-
Phenol-d6 (surr.)	1	%	25	53	30	-

Client Sample ID			MW05	MW06	MW07	DUP01
Sample Matrix			Water	Water	Water	Water
Eurofins Sample No.			S23-Ma0045347	S23-Ma0045348	S23-Ma0045349	S23-Ma0045350
Date Sampled			Mar 16, 2023	Mar 16, 2023	Mar 16, 2023	Mar 16, 2023
Test/Reference	LOR	Unit				
Semivolatile Organics						
Pronamide	0.005	mg/L	< 0.005	< 0.005	< 0.005	-
Pyrene	0.001	mg/L	< 0.001	< 0.001	< 0.001	-
Trifluralin	0.005	mg/L	< 0.005	< 0.005	< 0.005	-
Haloethers						
4-Bromophenyl phenyl ether	0.005	mg/L	< 0.005	< 0.005	< 0.005	-
4-Chlorophenyl phenyl ether	0.005	mg/L	< 0.005	< 0.005	< 0.005	-
Bis(2-chloroethoxy)methane	0.005	mg/L	< 0.005	< 0.005	< 0.005	-
Bis(2-chloroisopropyl)ether	0.005	mg/L	< 0.005	< 0.005	< 0.005	-
Heavy Metals						
Arsenic	0.001	mg/L	0.013	0.003	0.003	0.003
Cadmium	0.0002	mg/L	< 0.002	< 0.0002	0.0012	< 0.0002
Chromium	0.001	mg/L	0.040	0.005	0.001	0.004
Copper	0.001	mg/L	0.029	0.004	0.006	0.003
Lead	0.001	mg/L	0.045	0.005	0.040	0.003
Mercury	0.0001	mg/L	< 0.001	< 0.0001	< 0.0001	< 0.0001
Nickel	0.001	mg/L	0.091	0.015	0.058	0.013
Zinc	0.005	mg/L	0.60	0.069	0.20	0.050

Client Sample ID			RB01
Sample Matrix			Water
Eurofins Sample No.			S23-Ma0045351
Date Sampled			Mar 16, 2023
Test/Reference	LOR	Unit	
Total Recoverable Hydrocarbons			
TRH C6-C9	0.02	mg/L	< 0.02
TRH C10-C14	0.05	mg/L	< 0.05
TRH C15-C28	0.1	mg/L	< 0.1
TRH C29-C36	0.1	mg/L	< 0.1
TRH C10-C36 (Total)	0.1	mg/L	< 0.1
TRH C6-C10	0.02	mg/L	< 0.02
TRH C6-C10 less BTEX (F1) ^{N04}	0.02	mg/L	< 0.02
TRH >C10-C16	0.05	mg/L	< 0.05
TRH >C10-C16 less Naphthalene (F2) ^{N01}	0.05	mg/L	< 0.05
TRH >C16-C34	0.1	mg/L	< 0.1
TRH >C34-C40	0.1	mg/L	< 0.1
TRH >C10-C40 (total)*	0.1	mg/L	< 0.1
BTEX			
Benzene	0.001	mg/L	< 0.001
Toluene	0.001	mg/L	< 0.001
Ethylbenzene	0.001	mg/L	< 0.001
m&p-Xylenes	0.002	mg/L	< 0.002
o-Xylene	0.001	mg/L	< 0.001
Xylenes - Total*	0.003	mg/L	< 0.003
4-Bromofluorobenzene (surr.)	1	%	104
Total Recoverable Hydrocarbons - 2013 NEPM Fractions			
Naphthalene ^{N02}	0.01	mg/L	< 0.01

Client Sample ID			RB01
Sample Matrix			Water
Eurofins Sample No.			S23-Ma0045351
Date Sampled			Mar 16, 2023
Test/Reference	LOR	Unit	
Polycyclic Aromatic Hydrocarbons			
Acenaphthene	0.001	mg/L	< 0.001
Acenaphthylene	0.001	mg/L	< 0.001
Anthracene	0.001	mg/L	< 0.001
Benz(a)anthracene	0.001	mg/L	< 0.001
Benzo(a)pyrene	0.001	mg/L	< 0.001
Benzo(b&j)fluoranthene ^{N07}	0.001	mg/L	< 0.001
Benzo(g,h,i)perylene	0.001	mg/L	< 0.001
Benzo(k)fluoranthene	0.001	mg/L	< 0.001
Chrysene	0.001	mg/L	< 0.001
Dibenz(a,h)anthracene	0.001	mg/L	< 0.001
Fluoranthene	0.001	mg/L	< 0.001
Fluorene	0.001	mg/L	< 0.001
Indeno(1,2,3-cd)pyrene	0.001	mg/L	< 0.001
Naphthalene	0.001	mg/L	< 0.001
Phenanthrene	0.001	mg/L	< 0.001
Pyrene	0.001	mg/L	< 0.001
Total PAH*	0.001	mg/L	< 0.001
2-Fluorobiphenyl (surr.)	1	%	60
p-Terphenyl-d14 (surr.)	1	%	89
Organochlorine Pesticides			
Chlordanes - Total	0.002	mg/L	< 0.002
4,4'-DDD	0.0002	mg/L	< 0.0002
4,4'-DDE	0.0002	mg/L	< 0.0002
4,4'-DDT	0.0002	mg/L	< 0.0002
α-HCH	0.0002	mg/L	< 0.0002
Aldrin	0.0002	mg/L	< 0.0002
β-HCH	0.0002	mg/L	< 0.0002
δ-HCH	0.0002	mg/L	< 0.0002
Dieldrin	0.0002	mg/L	< 0.0002
Endosulfan I	0.0002	mg/L	< 0.0002
Endosulfan II	0.0002	mg/L	< 0.0002
Endosulfan sulphate	0.0002	mg/L	< 0.0002
Endrin	0.0002	mg/L	< 0.0002
Endrin aldehyde	0.0002	mg/L	< 0.0002
Endrin ketone	0.0002	mg/L	< 0.0002
γ-HCH (Lindane)	0.0002	mg/L	< 0.0002
Heptachlor	0.0002	mg/L	< 0.0002
Heptachlor epoxide	0.0002	mg/L	< 0.0002
Hexachlorobenzene	0.0002	mg/L	< 0.0002
Methoxychlor	0.0002	mg/L	< 0.0002
Toxaphene	0.005	mg/L	< 0.005
Aldrin and Dieldrin (Total)*	0.0002	mg/L	< 0.0002
DDT + DDE + DDD (Total)*	0.0002	mg/L	< 0.0002
Vic EPA IWRG 621 OCP (Total)*	0.002	mg/L	< 0.002
Vic EPA IWRG 621 Other OCP (Total)*	0.002	mg/L	< 0.002
Dibutylchloroendate (surr.)	1	%	70
Tetrachloro-m-xylene (surr.)	1	%	56

Client Sample ID			RB01
Sample Matrix			Water
Eurofins Sample No.			S23-Ma0045351
Date Sampled			Mar 16, 2023
Test/Reference	LOR	Unit	
Organophosphorus Pesticides			
Azinphos-methyl	0.002	mg/L	< 0.002
Bolstar	0.002	mg/L	< 0.002
Chlorfenvinphos	0.02	mg/L	< 0.02
Chlorpyrifos	0.002	mg/L	< 0.002
Chlorpyrifos-methyl	0.002	mg/L	< 0.002
Coumaphos	0.02	mg/L	< 0.02
Demeton-S	0.002	mg/L	< 0.002
Demeton-O	0.002	mg/L	< 0.002
Diazinon	0.002	mg/L	< 0.002
Dichlorvos	0.002	mg/L	< 0.002
Dimethoate	0.002	mg/L	< 0.002
Disulfoton	0.002	mg/L	< 0.002
EPN	0.002	mg/L	< 0.002
Ethion	0.002	mg/L	< 0.002
Ethoprop	0.002	mg/L	< 0.002
Ethyl parathion	0.002	mg/L	< 0.002
Fenitrothion	0.002	mg/L	< 0.002
Fensulfothion	0.002	mg/L	< 0.002
Fenthion	0.002	mg/L	< 0.002
Malathion	0.002	mg/L	< 0.002
Merphos	0.002	mg/L	< 0.002
Methyl parathion	0.002	mg/L	< 0.002
Mevinphos	0.002	mg/L	< 0.002
Monocrotophos	0.002	mg/L	< 0.002
Naled	0.002	mg/L	< 0.002
Omethoate	0.02	mg/L	< 0.02
Phorate	0.002	mg/L	< 0.002
Pirimiphos-methyl	0.02	mg/L	< 0.02
Pyrazophos	0.002	mg/L	< 0.002
Ronnel	0.002	mg/L	< 0.002
Terbufos	0.002	mg/L	< 0.002
Tetrachlorvinphos	0.002	mg/L	< 0.002
Tokuthion	0.002	mg/L	< 0.002
Trichloronate	0.002	mg/L	< 0.002
Triphenylphosphate (surr.)	1	%	71
Polychlorinated Biphenyls			
Aroclor-1016	0.005	mg/L	< 0.005
Aroclor-1221	0.005	mg/L	< 0.005
Aroclor-1232	0.005	mg/L	< 0.005
Aroclor-1242	0.005	mg/L	< 0.005
Aroclor-1248	0.005	mg/L	< 0.005
Aroclor-1254	0.005	mg/L	< 0.005
Aroclor-1260	0.005	mg/L	< 0.005
Total PCB*	0.005	mg/L	< 0.005
Dibutylchloredate (surr.)	1	%	70
Tetrachloro-m-xylene (surr.)	1	%	56

Client Sample ID			RB01
Sample Matrix			Water
Eurofins Sample No.			S23- Ma0045351
Date Sampled			Mar 16, 2023
Test/Reference	LOR	Unit	
Heavy Metals			
Arsenic	0.001	mg/L	< 0.001
Cadmium	0.0002	mg/L	< 0.0002
Chromium	0.001	mg/L	< 0.001
Copper	0.001	mg/L	< 0.001
Lead	0.001	mg/L	< 0.001
Mercury	0.0001	mg/L	< 0.0001
Nickel	0.001	mg/L	< 0.001
Zinc	0.005	mg/L	< 0.005

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
Eurofins Suite B7			
Total Recoverable Hydrocarbons - 1999 NEPM Fractions - Method: LTM-ORG-2010 TRH C6-C40	Melbourne	Mar 27, 2023	7 Days
Total Recoverable Hydrocarbons - 2013 NEPM Fractions - Method: LTM-ORG-2010 TRH C6-C40	Melbourne	Mar 20, 2023	7 Days
Total Recoverable Hydrocarbons - 2013 NEPM Fractions - Method: LTM-ORG-2010 TRH C6-C40	Melbourne	Mar 27, 2023	7 Days
BTEX - Method: LTM-ORG-2010 BTEX and Volatile TRH	Melbourne	Mar 21, 2023	14 Days
Polycyclic Aromatic Hydrocarbons - Method: LTM-ORG-2130 PAH and Phenols in Soil and Water	Melbourne	Mar 27, 2023	7 Days
Metals M8 - Method: LTM-MET-3040 Metals in Waters, Soils & Sediments by ICP-MS	Melbourne	Mar 21, 2023	28 Days
Volatile Organics - Method: LTM-ORG-2150 VOCs in Soils Liquid and other Aqueous Matrices (USEPA 8260)	Melbourne	Mar 21, 2023	7 Days
Semivolatile Organics - Method: USEPA SW 846 8270	Melbourne	Mar 27, 2023	7 Days
Eurofins Suite B15			
Organochlorine Pesticides - Method: LTM-ORG-2220 OCP & PCB in Soil and Water (USEPA 8270)	Melbourne	Mar 27, 2023	7 Days
Organophosphorus Pesticides - Method: LTM-ORG-2200 Organophosphorus Pesticides by GC-MS (USEPA 8270)	Melbourne	Mar 27, 2023	7 Days
Polychlorinated Biphenyls - Method: LTM-ORG-2220 OCP & PCB in Soil and Water (USEPA 8082)	Melbourne	Mar 27, 2023	7 Days

Company Name: EP Risk Management (NSW)
Address: 80 Mount Street,
North Sydney
NSW 2060

Project Name: BOURKE ROAD
Project ID: EP3072.002

Order No.:
Report #: 973330
Phone: 02 99225021
Fax:

Received: Mar 16, 2023 4:14 PM
Due: Mar 23, 2023
Priority: 5 Day
Contact Name: Troy Chatman

Eurofins Analytical Services Manager : Quinn Raw

Sample Detail

Melbourne Laboratory - NATA # 1261 Site # 1254

External Laboratory

No	Sample ID	Sample Date	Sampling Time	Matrix	LAB ID			
1	MW05	Mar 16, 2023		Water	S23-Ma0045347	X	X	X
2	MW06	Mar 16, 2023		Water	S23-Ma0045348	X	X	X
3	MW07	Mar 16, 2023		Water	S23-Ma0045349	X	X	X
4	DUP01	Mar 16, 2023		Water	S23-Ma0045350	X	X	
5	RB01	Mar 16, 2023		Water	S23-Ma0045351	X	X	
Test Counts						5	5	3

Internal Quality Control Review and Glossary

General

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

Holding Times

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

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

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

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

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

Units

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

Terms

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

QC - Acceptance Criteria

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

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

Results <10 times the LOR: No Limit

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

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

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

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

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

QC Data General Comments

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

Quality Control Results

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Method Blank							
Total Recoverable Hydrocarbons							
TRH C6-C9	mg/L	< 0.02			0.02	Pass	
TRH C10-C14	mg/L	< 0.05			0.05	Pass	
TRH C15-C28	mg/L	< 0.1			0.1	Pass	
TRH C29-C36	mg/L	< 0.1			0.1	Pass	
TRH C6-C10	mg/L	< 0.02			0.02	Pass	
TRH >C10-C16	mg/L	< 0.05			0.05	Pass	
TRH >C16-C34	mg/L	< 0.1			0.1	Pass	
TRH >C34-C40	mg/L	< 0.1			0.1	Pass	
Method Blank							
BTEX							
Benzene	mg/L	< 0.001			0.001	Pass	
Toluene	mg/L	< 0.001			0.001	Pass	
Ethylbenzene	mg/L	< 0.001			0.001	Pass	
m&p-Xylenes	mg/L	< 0.002			0.002	Pass	
o-Xylene	mg/L	< 0.001			0.001	Pass	
Xylenes - Total*	mg/L	< 0.003			0.003	Pass	
Method Blank							
Volatile Organics							
1.1-Dichloroethane	mg/L	< 0.001			0.001	Pass	
1.1-Dichloroethene	mg/L	< 0.001			0.001	Pass	
1.1.1-Trichloroethane	mg/L	< 0.001			0.001	Pass	
1.1.1.2-Tetrachloroethane	mg/L	< 0.001			0.001	Pass	
1.1.2-Trichloroethane	mg/L	< 0.001			0.001	Pass	
1.1.2.2-Tetrachloroethane	mg/L	< 0.001			0.001	Pass	
1.2-Dibromoethane	mg/L	< 0.001			0.001	Pass	
1.2-Dichlorobenzene	mg/L	< 0.001			0.001	Pass	
1.2-Dichloroethane	mg/L	< 0.001			0.001	Pass	
1.2-Dichloropropane	mg/L	< 0.001			0.001	Pass	
1.2.3-Trichloropropane	mg/L	< 0.001			0.001	Pass	
1.2.4-Trimethylbenzene	mg/L	< 0.001			0.001	Pass	
1.3-Dichlorobenzene	mg/L	< 0.001			0.001	Pass	
1.3-Dichloropropane	mg/L	< 0.001			0.001	Pass	
1.3.5-Trimethylbenzene	mg/L	< 0.001			0.001	Pass	
1.4-Dichlorobenzene	mg/L	< 0.001			0.001	Pass	
2-Butanone (MEK)	mg/L	< 0.005			0.005	Pass	
2-Propanone (Acetone)	mg/L	< 0.005			0.005	Pass	
4-Chlorotoluene	mg/L	< 0.001			0.001	Pass	
4-Methyl-2-pentanone (MIBK)	mg/L	< 0.005			0.005	Pass	
Allyl chloride	mg/L	< 0.001			0.001	Pass	
Bromobenzene	mg/L	< 0.001			0.001	Pass	
Bromochloromethane	mg/L	< 0.001			0.001	Pass	
Bromodichloromethane	mg/L	< 0.001			0.001	Pass	
Bromoform	mg/L	< 0.001			0.001	Pass	
Bromomethane	mg/L	< 0.005			0.005	Pass	
Carbon disulfide	mg/L	< 0.001			0.001	Pass	
Carbon Tetrachloride	mg/L	< 0.001			0.001	Pass	
Chlorobenzene	mg/L	< 0.001			0.001	Pass	
Chloroethane	mg/L	< 0.005			0.005	Pass	
Chloroform	mg/L	< 0.005			0.005	Pass	
Chloromethane	mg/L	< 0.005			0.005	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
cis-1.2-Dichloroethene	mg/L	< 0.001			0.001	Pass	
cis-1.3-Dichloropropene	mg/L	< 0.001			0.001	Pass	
Dibromochloromethane	mg/L	< 0.001			0.001	Pass	
Dibromomethane	mg/L	< 0.001			0.001	Pass	
Dichlorodifluoromethane	mg/L	< 0.005			0.005	Pass	
Iodomethane	mg/L	< 0.001			0.001	Pass	
Isopropyl benzene (Cumene)	mg/L	< 0.001			0.001	Pass	
Methylene Chloride	mg/L	< 0.005			0.005	Pass	
Styrene	mg/L	< 0.001			0.001	Pass	
Tetrachloroethene	mg/L	< 0.001			0.001	Pass	
trans-1.2-Dichloroethene	mg/L	< 0.001			0.001	Pass	
trans-1.3-Dichloropropene	mg/L	< 0.001			0.001	Pass	
Trichloroethene	mg/L	< 0.001			0.001	Pass	
Trichlorofluoromethane	mg/L	< 0.005			0.005	Pass	
Vinyl chloride	mg/L	< 0.005			0.005	Pass	
Method Blank							
Total Recoverable Hydrocarbons - 2013 NEPM Fractions							
Naphthalene	mg/L	< 0.01			0.01	Pass	
Method Blank							
Polycyclic Aromatic Hydrocarbons							
Acenaphthene	mg/L	< 0.001			0.001	Pass	
Acenaphthylene	mg/L	< 0.001			0.001	Pass	
Anthracene	mg/L	< 0.001			0.001	Pass	
Benz(a)anthracene	mg/L	< 0.001			0.001	Pass	
Benzo(a)pyrene	mg/L	< 0.001			0.001	Pass	
Benzo(b&j)fluoranthene	mg/L	< 0.001			0.001	Pass	
Benzo(g,h,i)perylene	mg/L	< 0.001			0.001	Pass	
Benzo(k)fluoranthene	mg/L	< 0.001			0.001	Pass	
Chrysene	mg/L	< 0.001			0.001	Pass	
Dibenz(a,h)anthracene	mg/L	< 0.001			0.001	Pass	
Fluoranthene	mg/L	< 0.001			0.001	Pass	
Fluorene	mg/L	< 0.001			0.001	Pass	
Indeno(1.2.3-cd)pyrene	mg/L	< 0.001			0.001	Pass	
Naphthalene	mg/L	< 0.001			0.001	Pass	
Phenanthrene	mg/L	< 0.001			0.001	Pass	
Pyrene	mg/L	< 0.001			0.001	Pass	
Method Blank							
Organochlorine Pesticides							
Chlordanes - Total	mg/L	< 0.002			0.002	Pass	
4.4'-DDD	mg/L	< 0.0002			0.0002	Pass	
4.4'-DDE	mg/L	< 0.0002			0.0002	Pass	
4.4'-DDT	mg/L	< 0.0002			0.0002	Pass	
a-HCH	mg/L	< 0.0002			0.0002	Pass	
Aldrin	mg/L	< 0.0002			0.0002	Pass	
b-HCH	mg/L	< 0.0002			0.0002	Pass	
d-HCH	mg/L	< 0.0002			0.0002	Pass	
Dieldrin	mg/L	< 0.0002			0.0002	Pass	
Endosulfan I	mg/L	< 0.0002			0.0002	Pass	
Endosulfan II	mg/L	< 0.0002			0.0002	Pass	
Endosulfan sulphate	mg/L	< 0.0002			0.0002	Pass	
Endrin	mg/L	< 0.0002			0.0002	Pass	
Endrin aldehyde	mg/L	< 0.0002			0.0002	Pass	
Endrin ketone	mg/L	< 0.0002			0.0002	Pass	
g-HCH (Lindane)	mg/L	< 0.0002			0.0002	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Heptachlor	mg/L	< 0.0002			0.0002	Pass	
Heptachlor epoxide	mg/L	< 0.0002			0.0002	Pass	
Hexachlorobenzene	mg/L	< 0.0002			0.0002	Pass	
Methoxychlor	mg/L	< 0.0002			0.0002	Pass	
Toxaphene	mg/L	< 0.005			0.005	Pass	
Method Blank							
Organophosphorus Pesticides							
Azinphos-methyl	mg/L	< 0.002			0.002	Pass	
Bolstar	mg/L	< 0.002			0.002	Pass	
Chlorfenvinphos	mg/L	< 0.02			0.02	Pass	
Chlorpyrifos	mg/L	< 0.002			0.002	Pass	
Chlorpyrifos-methyl	mg/L	< 0.002			0.002	Pass	
Coumaphos	mg/L	< 0.02			0.02	Pass	
Demeton-S	mg/L	< 0.002			0.002	Pass	
Demeton-O	mg/L	< 0.002			0.002	Pass	
Diazinon	mg/L	< 0.002			0.002	Pass	
Dichlorvos	mg/L	< 0.002			0.002	Pass	
Dimethoate	mg/L	< 0.002			0.002	Pass	
Disulfoton	mg/L	< 0.002			0.002	Pass	
EPN	mg/L	< 0.002			0.002	Pass	
Ethion	mg/L	< 0.002			0.002	Pass	
Ethoprop	mg/L	< 0.002			0.002	Pass	
Ethyl parathion	mg/L	< 0.002			0.002	Pass	
Fenitrothion	mg/L	< 0.002			0.002	Pass	
Fensulfothion	mg/L	< 0.002			0.002	Pass	
Fenthion	mg/L	< 0.002			0.002	Pass	
Malathion	mg/L	< 0.002			0.002	Pass	
Merphos	mg/L	< 0.002			0.002	Pass	
Methyl parathion	mg/L	< 0.002			0.002	Pass	
Mevinphos	mg/L	< 0.002			0.002	Pass	
Monocrotophos	mg/L	< 0.002			0.002	Pass	
Naled	mg/L	< 0.002			0.002	Pass	
Omethoate	mg/L	< 0.02			0.02	Pass	
Phorate	mg/L	< 0.002			0.002	Pass	
Pirimiphos-methyl	mg/L	< 0.02			0.02	Pass	
Pyrazophos	mg/L	< 0.002			0.002	Pass	
Ronnel	mg/L	< 0.002			0.002	Pass	
Terbufos	mg/L	< 0.002			0.002	Pass	
Tetrachlorvinphos	mg/L	< 0.002			0.002	Pass	
Tokuthion	mg/L	< 0.002			0.002	Pass	
Trichloronate	mg/L	< 0.002			0.002	Pass	
Method Blank							
Polychlorinated Biphenyls							
Aroclor-1016	mg/L	< 0.005			0.005	Pass	
Aroclor-1221	mg/L	< 0.005			0.005	Pass	
Aroclor-1232	mg/L	< 0.005			0.005	Pass	
Aroclor-1242	mg/L	< 0.005			0.005	Pass	
Aroclor-1248	mg/L	< 0.005			0.005	Pass	
Aroclor-1254	mg/L	< 0.005			0.005	Pass	
Aroclor-1260	mg/L	< 0.005			0.005	Pass	
Total PCB*	mg/L	< 0.005			0.005	Pass	
Method Blank							
Semivolatile Organics							
2-Methyl-4,6-dinitrophenol	mg/L	< 0.03			0.03	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
1-Chloronaphthalene	mg/L	< 0.005			0.005	Pass	
1-Naphthylamine	mg/L	< 0.005			0.005	Pass	
1.2-Dichlorobenzene	mg/L	< 0.005			0.005	Pass	
1.2.3-Trichlorobenzene	mg/L	< 0.005			0.005	Pass	
1.2.3.4-Tetrachlorobenzene	mg/L	< 0.005			0.005	Pass	
1.2.3.5-Tetrachlorobenzene	mg/L	< 0.005			0.005	Pass	
1.2.4-Trichlorobenzene	mg/L	< 0.005			0.005	Pass	
1.2.4.5-Tetrachlorobenzene	mg/L	< 0.005			0.005	Pass	
1.3-Dichlorobenzene	mg/L	< 0.005			0.005	Pass	
1.3.5-Trichlorobenzene	mg/L	< 0.005			0.005	Pass	
1.4-Dichlorobenzene	mg/L	< 0.005			0.005	Pass	
2-Chloronaphthalene	mg/L	< 0.005			0.005	Pass	
2-Chlorophenol	mg/L	< 0.003			0.003	Pass	
2-Methylnaphthalene	mg/L	< 0.005			0.005	Pass	
2-Methylphenol (o-Cresol)	mg/L	< 0.003			0.003	Pass	
2-Naphthylamine	mg/L	< 0.005			0.005	Pass	
2-Nitroaniline	mg/L	< 0.005			0.005	Pass	
2-Nitrophenol	mg/L	< 0.01			0.01	Pass	
2-Picoline	mg/L	< 0.005			0.005	Pass	
2.3.4.6-Tetrachlorophenol	mg/L	< 0.01			0.01	Pass	
2.4-Dichlorophenol	mg/L	< 0.003			0.003	Pass	
2.4-Dimethylphenol	mg/L	< 0.003			0.003	Pass	
2.4-Dinitrophenol	mg/L	< 0.03			0.03	Pass	
2.4-Dinitrotoluene	mg/L	< 0.005			0.005	Pass	
2.4.5-Trichlorophenol	mg/L	< 0.01			0.01	Pass	
2.4.6-Trichlorophenol	mg/L	< 0.01			0.01	Pass	
2.6-Dichlorophenol	mg/L	< 0.003			0.003	Pass	
2.6-Dinitrotoluene	mg/L	< 0.005			0.005	Pass	
3&4-Methylphenol (m&p-Cresol)	mg/L	< 0.006			0.006	Pass	
3-Methylcholanthrene	mg/L	< 0.005			0.005	Pass	
3.3'-Dichlorobenzidine	mg/L	< 0.005			0.005	Pass	
4-Aminobiphenyl	mg/L	< 0.005			0.005	Pass	
4-Chloro-3-methylphenol	mg/L	< 0.01			0.01	Pass	
4-Nitrophenol	mg/L	< 0.03			0.03	Pass	
4.4'-DDD	mg/L	< 0.005			0.005	Pass	
4.4'-DDE	mg/L	< 0.005			0.005	Pass	
4.4'-DDT	mg/L	< 0.005			0.005	Pass	
7.12-Dimethylbenz(a)anthracene	mg/L	< 0.005			0.005	Pass	
a-HCH	mg/L	< 0.005			0.005	Pass	
Acetophenone	mg/L	< 0.005			0.005	Pass	
Aldrin	mg/L	< 0.005			0.005	Pass	
Aniline	mg/L	< 0.005			0.005	Pass	
b-HCH	mg/L	< 0.005			0.005	Pass	
Benzyl chloride	mg/L	< 0.005			0.005	Pass	
Bis(2-ethylhexyl)phthalate	mg/L	< 0.005			0.005	Pass	
Butyl benzyl phthalate	mg/L	< 0.005			0.005	Pass	
d-HCH	mg/L	< 0.005			0.005	Pass	
Di-n-butyl phthalate	mg/L	< 0.005			0.005	Pass	
Di-n-octyl phthalate	mg/L	< 0.005			0.005	Pass	
Dibenz(a,j)acridine	mg/L	< 0.005			0.005	Pass	
Dibenzofuran	mg/L	< 0.005			0.005	Pass	
Dieldrin	mg/L	< 0.005			0.005	Pass	
Diethyl phthalate	mg/L	< 0.005			0.005	Pass	
Dimethyl phthalate	mg/L	< 0.005			0.005	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Dimethylaminoazobenzene	mg/L	< 0.005			0.005	Pass	
Diphenylamine	mg/L	< 0.005			0.005	Pass	
Endosulfan I	mg/L	< 0.005			0.005	Pass	
Endosulfan II	mg/L	< 0.005			0.005	Pass	
Endosulfan sulphate	mg/L	< 0.005			0.005	Pass	
Endrin	mg/L	< 0.005			0.005	Pass	
Endrin aldehyde	mg/L	< 0.005			0.005	Pass	
Endrin ketone	mg/L	< 0.005			0.005	Pass	
g-HCH (Lindane)	mg/L	< 0.005			0.005	Pass	
Heptachlor	mg/L	< 0.005			0.005	Pass	
Heptachlor epoxide	mg/L	< 0.005			0.005	Pass	
Hexachlorobenzene	mg/L	< 0.005			0.005	Pass	
Hexachlorobutadiene	mg/L	< 0.005			0.005	Pass	
Hexachlorocyclopentadiene	mg/L	< 0.005			0.005	Pass	
Hexachloroethane	mg/L	< 0.005			0.005	Pass	
Methoxychlor	mg/L	< 0.005			0.005	Pass	
N-Nitrosodibutylamine	mg/L	< 0.005			0.005	Pass	
N-Nitrosodipropylamine	mg/L	< 0.005			0.005	Pass	
N-Nitrosopiperidine	mg/L	< 0.005			0.005	Pass	
Nitrobenzene	mg/L	< 0.05			0.05	Pass	
Pentachlorobenzene	mg/L	< 0.005			0.005	Pass	
Pentachloronitrobenzene	mg/L	< 0.005			0.005	Pass	
Pentachlorophenol	mg/L	< 0.01			0.01	Pass	
Phenol	mg/L	< 0.003			0.003	Pass	
Pronamide	mg/L	< 0.005			0.005	Pass	
Trifluralin	mg/L	< 0.005			0.005	Pass	
Method Blank							
Haloethers							
4-Bromophenyl phenyl ether	mg/L	< 0.005			0.005	Pass	
4-Chlorophenyl phenyl ether	mg/L	< 0.005			0.005	Pass	
Bis(2-chloroethoxy)methane	mg/L	< 0.005			0.005	Pass	
Bis(2-chloroisopropyl)ether	mg/L	< 0.005			0.005	Pass	
Method Blank							
Heavy Metals							
Arsenic	mg/L	< 0.001			0.001	Pass	
Cadmium	mg/L	< 0.0002			0.0002	Pass	
Chromium	mg/L	< 0.001			0.001	Pass	
Copper	mg/L	< 0.001			0.001	Pass	
Lead	mg/L	< 0.001			0.001	Pass	
Mercury	mg/L	< 0.0001			0.0001	Pass	
Nickel	mg/L	< 0.001			0.001	Pass	
Zinc	mg/L	< 0.005			0.005	Pass	
LCS - % Recovery							
Total Recoverable Hydrocarbons							
TRH C6-C9	%	117			70-130	Pass	
TRH C10-C14	%	83			70-130	Pass	
TRH C6-C10	%	118			70-130	Pass	
TRH >C10-C16	%	85			70-130	Pass	
LCS - % Recovery							
BTEX							
Benzene	%	103			70-130	Pass	
Toluene	%	112			70-130	Pass	
Ethylbenzene	%	100			70-130	Pass	
m&p-Xylenes	%	101			70-130	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Xylenes - Total*	%	102			70-130	Pass	
LCS - % Recovery							
Volatile Organics							
1.1-Dichloroethene	%	121			70-130	Pass	
1.1.1-Trichloroethane	%	106			70-130	Pass	
1.2-Dichlorobenzene	%	101			70-130	Pass	
1.2-Dichloroethane	%	113			70-130	Pass	
Trichloroethene	%	105			70-130	Pass	
LCS - % Recovery							
Total Recoverable Hydrocarbons - 2013 NEPM Fractions							
Naphthalene	%	94			70-130	Pass	
LCS - % Recovery							
Polycyclic Aromatic Hydrocarbons							
Acenaphthene	%	89			70-130	Pass	
Acenaphthylene	%	87			70-130	Pass	
Anthracene	%	84			70-130	Pass	
Benz(a)anthracene	%	98			70-130	Pass	
Benzo(a)pyrene	%	105			70-130	Pass	
Benzo(b&j)fluoranthene	%	78			70-130	Pass	
Benzo(g,h,i)perylene	%	82			70-130	Pass	
Benzo(k)fluoranthene	%	120			70-130	Pass	
Chrysene	%	107			70-130	Pass	
Dibenz(a,h)anthracene	%	98			70-130	Pass	
Fluoranthene	%	87			70-130	Pass	
Fluorene	%	87			70-130	Pass	
Indeno(1,2,3-cd)pyrene	%	97			70-130	Pass	
Naphthalene	%	87			70-130	Pass	
Phenanthrene	%	81			70-130	Pass	
Pyrene	%	88			70-130	Pass	
LCS - % Recovery							
Organochlorine Pesticides							
Chlordanes - Total	%	93			70-130	Pass	
4,4'-DDD	%	78			70-130	Pass	
4,4'-DDE	%	76			70-130	Pass	
4,4'-DDT	%	88			70-130	Pass	
α-HCH	%	91			70-130	Pass	
Aldrin	%	88			70-130	Pass	
β-HCH	%	86			70-130	Pass	
δ-HCH	%	87			70-130	Pass	
Dieldrin	%	97			70-130	Pass	
Endosulfan I	%	86			70-130	Pass	
Endosulfan II	%	81			70-130	Pass	
Endosulfan sulphate	%	89			70-130	Pass	
Endrin	%	92			70-130	Pass	
Endrin aldehyde	%	85			70-130	Pass	
Endrin ketone	%	82			70-130	Pass	
γ-HCH (Lindane)	%	87			70-130	Pass	
Heptachlor	%	105			70-130	Pass	
Heptachlor epoxide	%	102			70-130	Pass	
Hexachlorobenzene	%	80			70-130	Pass	
Methoxychlor	%	85			70-130	Pass	
LCS - % Recovery							
Organophosphorus Pesticides							
Diazinon	%	96			70-130	Pass	

Test			Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Dimethoate			%	76			70-130	Pass	
Ethion			%	100			70-130	Pass	
Fenitrothion			%	77			70-130	Pass	
Methyl parathion			%	73			70-130	Pass	
Mevinphos			%	85			70-130	Pass	
LCS - % Recovery									
Polychlorinated Biphenyls									
Aroclor-1260			%	89			70-130	Pass	
LCS - % Recovery									
Semivolatile Organics									
2-Methyl-4,6-dinitrophenol			%	90			25-140	Pass	
1,2,3-Trichlorobenzene			%	75			75-125	Pass	
1,2,4-Trichlorobenzene			%	79			70-130	Pass	
1,4-Dichlorobenzene			%	73			70-130	Pass	
2-Chlorophenol			%	78			25-140	Pass	
2-Methylphenol (o-Cresol)			%	45			25-140	Pass	
2-Nitrophenol			%	83			25-140	Pass	
2,4-Dichlorophenol			%	90			25-140	Pass	
2,4-Dimethylphenol			%	28			25-140	Pass	
2,4-Dinitrophenol			%	58			25-140	Pass	
2,4-Dinitrotoluene			%	79			70-130	Pass	
2,4,5-Trichlorophenol			%	91			25-140	Pass	
2,4,6-Trichlorophenol			%	112			25-140	Pass	
2,6-Dichlorophenol			%	80			25-140	Pass	
3&4-Methylphenol (m&p-Cresol)			%	65			25-140	Pass	
4-Chloro-3-methylphenol			%	80			25-140	Pass	
4-Nitrophenol			%	70			25-140	Pass	
N-Nitrosodipropylamine			%	81			70-130	Pass	
Pentachlorophenol			%	58			25-140	Pass	
Phenol			%	45			25-140	Pass	
LCS - % Recovery									
Heavy Metals									
Arsenic			%	86			80-120	Pass	
Cadmium			%	85			80-120	Pass	
Chromium			%	87			80-120	Pass	
Copper			%	88			80-120	Pass	
Lead			%	87			80-120	Pass	
Mercury			%	80			80-120	Pass	
Nickel			%	88			80-120	Pass	
Zinc			%	89			80-120	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	M23-Ma0053182	NCP	%	125			70-130	Pass	
TRH C10-C14	M23-Ma0057892	NCP	%	112			70-130	Pass	
TRH C6-C10	M23-Ma0053182	NCP	%	121			70-130	Pass	
TRH >C10-C16	M23-Ma0057892	NCP	%	115			70-130	Pass	
Spike - % Recovery									
BTEX				Result 1					
Benzene	M23-Ma0053182	NCP	%	110			70-130	Pass	
Toluene	M23-Ma0053182	NCP	%	123			70-130	Pass	
Ethylbenzene	M23-Ma0053182	NCP	%	102			70-130	Pass	
m&p-Xylenes	M23-Ma0053182	NCP	%	101			70-130	Pass	
o-Xylene	M23-Ma0053182	NCP	%	105			70-130	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Xylenes - Total*	M23-Ma0053182	NCP	%	102			70-130	Pass	
Spike - % Recovery									
Volatile Organics				Result 1					
1.1-Dichloroethene	M23-Ma0053182	NCP	%	121			70-130	Pass	
1.1.1-Trichloroethane	M23-Ma0053182	NCP	%	119			70-130	Pass	
1.2-Dichlorobenzene	M23-Ma0053182	NCP	%	118			70-130	Pass	
1.2-Dichloroethane	M23-Ma0053182	NCP	%	122			70-130	Pass	
Trichloroethene	M23-Ma0053182	NCP	%	129			70-130	Pass	
Spike - % Recovery									
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				Result 1					
Naphthalene	M23-Ma0053182	NCP	%	117			70-130	Pass	
Spike - % Recovery									
Heavy Metals				Result 1					
Arsenic	M23-Ma0055544	NCP	%	99			75-125	Pass	
Cadmium	M23-Ma0055544	NCP	%	95			75-125	Pass	
Chromium	M23-Ma0055544	NCP	%	99			75-125	Pass	
Copper	M23-Ma0055544	NCP	%	97			75-125	Pass	
Lead	M23-Ma0055544	NCP	%	97			75-125	Pass	
Mercury	M23-Ma0055544	NCP	%	100			75-125	Pass	
Nickel	M23-Ma0055544	NCP	%	91			75-125	Pass	
Zinc	M23-Ma0055544	NCP	%	95			75-125	Pass	
Spike - % Recovery									
Polycyclic Aromatic Hydrocarbons				Result 1					
Acenaphthene	S23-Ma0042894	NCP	%	126			70-130	Pass	
Acenaphthylene	M23-Ma0053689	NCP	%	83			70-130	Pass	
Anthracene	M23-Ma0053689	NCP	%	78			70-130	Pass	
Benz(a)anthracene	M23-Ma0053689	NCP	%	76			70-130	Pass	
Benzo(a)pyrene	M23-Ma0053689	NCP	%	85			70-130	Pass	
Benzo(b&j)fluoranthene	M23-Ma0053689	NCP	%	79			70-130	Pass	
Benzo(g,h,i)perylene	M23-Ma0053689	NCP	%	73			70-130	Pass	
Benzo(k)fluoranthene	M23-Ma0053689	NCP	%	71			70-130	Pass	
Chrysene	M23-Ma0053689	NCP	%	75			70-130	Pass	
Dibenz(a,h)anthracene	M23-Ma0053689	NCP	%	81			70-130	Pass	
Fluoranthene	M23-Ma0053689	NCP	%	78			70-130	Pass	
Fluorene	M23-Ma0053689	NCP	%	81			70-130	Pass	
Indeno(1,2,3-cd)pyrene	M23-Ma0053689	NCP	%	80			70-130	Pass	
Naphthalene	M23-Ma0053689	NCP	%	77			70-130	Pass	
Phenanthrene	M23-Ma0053689	NCP	%	77			70-130	Pass	
Pyrene	S23-Ma0042894	NCP	%	114			70-130	Pass	
Spike - % Recovery									
Organochlorine Pesticides				Result 1					
Chlordanes - Total	M23-Ma0053689	NCP	%	94			70-130	Pass	
4,4'-DDD	M23-Ma0053689	NCP	%	116			70-130	Pass	
4,4'-DDE	M23-Ma0053689	NCP	%	83			70-130	Pass	
4,4'-DDT	M23-Ma0053689	NCP	%	110			70-130	Pass	
a-HCH	M23-Ma0053689	NCP	%	102			70-130	Pass	
Aldrin	M23-Ma0053689	NCP	%	104			70-130	Pass	
b-HCH	M23-Ma0053689	NCP	%	104			70-130	Pass	
d-HCH	M23-Ma0053689	NCP	%	103			70-130	Pass	
Dieldrin	M23-Ma0053689	NCP	%	101			70-130	Pass	
Endosulfan I	M23-Ma0053689	NCP	%	94			70-130	Pass	
Endosulfan II	M23-Ma0053689	NCP	%	100			70-130	Pass	
Endosulfan sulphate	M23-Ma0053689	NCP	%	101			70-130	Pass	
Endrin	M23-Ma0053689	NCP	%	120			70-130	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Endrin aldehyde	M23-Ma0053689	NCP	%	98			70-130	Pass	
Endrin ketone	M23-Ma0053689	NCP	%	101			70-130	Pass	
g-HCH (Lindane)	M23-Ma0053689	NCP	%	108			70-130	Pass	
Heptachlor	M23-Ma0053689	NCP	%	110			70-130	Pass	
Heptachlor epoxide	M23-Ma0053689	NCP	%	103			70-130	Pass	
Hexachlorobenzene	M23-Ma0053689	NCP	%	95			70-130	Pass	
Methoxychlor	M23-Ma0053689	NCP	%	110			70-130	Pass	
Spike - % Recovery									
Organophosphorus Pesticides				Result 1					
Diazinon	M23-Ma0053689	NCP	%	84			70-130	Pass	
Dimethoate	M23-Ma0053689	NCP	%	97			70-130	Pass	
Ethion	M23-Ma0053689	NCP	%	89			70-130	Pass	
Fenitrothion	M23-Ma0053689	NCP	%	109			70-130	Pass	
Methyl parathion	M23-Ma0041446	NCP	%	88			70-130	Pass	
Mevinphos	M23-Ma0053689	NCP	%	81			70-130	Pass	
Spike - % Recovery									
Polychlorinated Biphenyls				Result 1					
Aroclor-1016	M23-Ma0053689	NCP	%	82			70-130	Pass	
Aroclor-1260	M23-Ma0053689	NCP	%	77			70-130	Pass	
Spike - % Recovery									
Semivolatile Organics				Result 1					
2-Methyl-4,6-dinitrophenol	M23-Ma0053689	NCP	%	73			30-130	Pass	
1,2-Dichlorobenzene	S23-Ma0042894	NCP	%	83			70-130	Pass	
1,2,4-Trichlorobenzene	S23-Ma0042894	NCP	%	95			70-130	Pass	
1,4-Dichlorobenzene	S23-Ma0042894	NCP	%	91			70-130	Pass	
2-Chlorophenol	S23-Ma0042894	NCP	%	64			30-130	Pass	
2-Methylphenol (o-Cresol)	M23-Ma0053689	NCP	%	61			30-130	Pass	
2-Nitrophenol	S23-Ma0042894	NCP	%	68			30-130	Pass	
2,4-Dichlorophenol	M23-Ma0053689	NCP	%	54			30-130	Pass	
2,4-Dimethylphenol	M23-Ma0053689	NCP	%	63			30-130	Pass	
2,4-Dinitrophenol	M23-Ma0053689	NCP	%	34			30-130	Pass	
2,4,5-Trichlorophenol	M23-Ma0053689	NCP	%	47			30-130	Pass	
2,4,6-Trichlorophenol	M23-Ma0053689	NCP	%	42			30-130	Pass	
2,6-Dichlorophenol	M23-Ma0053689	NCP	%	50			30-130	Pass	
3&4-Methylphenol (m&p-Cresol)	M23-Ma0053689	NCP	%	63			30-130	Pass	
4-Chloro-3-methylphenol	M23-Ma0053689	NCP	%	47			30-130	Pass	
4-Nitrophenol	M23-Ma0053689	NCP	%	74			30-130	Pass	
Hexachlorobenzene	M23-Ma0053689	NCP	%	95			70-130	Pass	
N-Nitrosodipropylamine	S23-Ma0042894	NCP	%	113			70-130	Pass	
Pentachlorophenol	S23-Ma0042894	NCP	%	66			30-130	Pass	
Phenol	M23-Ma0053689	NCP	%	34			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 C6-C9	M23-Ma0050223	NCP	mg/L	< 0.02	< 0.02	<1	30%	Pass	
TRH C6-C10	M23-Ma0050223	NCP	mg/L	< 0.02	< 0.02	<1	30%	Pass	
Duplicate									
BTEX				Result 1	Result 2	RPD			
Benzene	M23-Ma0050223	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Toluene	M23-Ma0050223	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Ethylbenzene	M23-Ma0050223	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
m&p-Xylenes	M23-Ma0050223	NCP	mg/L	< 0.002	< 0.002	<1	30%	Pass	
o-Xylene	M23-Ma0050223	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Xylenes - Total*	M23-Ma0050223	NCP	mg/L	< 0.003	< 0.003	<1	30%	Pass	

Duplicate								
Volatile Organics				Result 1	Result 2	RPD		
1.1-Dichloroethane	M23-Ma0050223	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass
1.1-Dichloroethene	M23-Ma0050223	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass
1.1.1-Trichloroethane	M23-Ma0050223	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass
1.1.1.2-Tetrachloroethane	M23-Ma0050223	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass
1.1.2-Trichloroethane	M23-Ma0050223	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass
1.1.2.2-Tetrachloroethane	M23-Ma0050223	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass
1.2-Dibromoethane	M23-Ma0050223	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass
1.2-Dichlorobenzene	M23-Ma0050223	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass
1.2-Dichloroethane	M23-Ma0050223	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass
1.2-Dichloropropane	M23-Ma0050223	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass
1.2.3-Trichloropropane	M23-Ma0050223	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass
1.2.4-Trimethylbenzene	M23-Ma0050223	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass
1.3-Dichlorobenzene	M23-Ma0050223	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass
1.3-Dichloropropane	M23-Ma0050223	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass
1.3.5-Trimethylbenzene	M23-Ma0050223	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass
1.4-Dichlorobenzene	M23-Ma0050223	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass
2-Butanone (MEK)	M23-Ma0050223	NCP	mg/L	< 0.005	< 0.005	<1	30%	Pass
2-Propanone (Acetone)	M23-Ma0050223	NCP	mg/L	< 0.005	< 0.005	<1	30%	Pass
4-Chlorotoluene	M23-Ma0050223	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass
4-Methyl-2-pentanone (MIBK)	M23-Ma0050223	NCP	mg/L	< 0.005	< 0.005	<1	30%	Pass
Allyl chloride	M23-Ma0050223	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass
Bromobenzene	M23-Ma0050223	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass
Bromochloromethane	M23-Ma0050223	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass
Bromodichloromethane	M23-Ma0050223	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass
Bromoform	M23-Ma0050223	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass
Bromomethane	M23-Ma0050223	NCP	mg/L	< 0.005	< 0.005	<1	30%	Pass
Carbon disulfide	M23-Ma0050223	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass
Carbon Tetrachloride	M23-Ma0050223	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass
Chlorobenzene	M23-Ma0050223	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass
Chloroethane	M23-Ma0050223	NCP	mg/L	< 0.005	< 0.005	<1	30%	Pass
Chloroform	M23-Ma0050223	NCP	mg/L	< 0.005	< 0.005	<1	30%	Pass
Chloromethane	M23-Ma0050223	NCP	mg/L	< 0.005	< 0.005	<1	30%	Pass
cis-1.2-Dichloroethene	M23-Ma0050223	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass
cis-1.3-Dichloropropene	M23-Ma0050223	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass
Dibromochloromethane	M23-Ma0050223	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass
Dibromomethane	M23-Ma0050223	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass
Dichlorodifluoromethane	M23-Ma0050223	NCP	mg/L	< 0.005	< 0.005	<1	30%	Pass
Iodomethane	M23-Ma0050223	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass
Isopropyl benzene (Cumene)	M23-Ma0050223	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass
Methylene Chloride	M23-Ma0050223	NCP	mg/L	< 0.005	< 0.005	<1	30%	Pass
Styrene	M23-Ma0050223	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass
Tetrachloroethene	M23-Ma0050223	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass
trans-1.2-Dichloroethene	M23-Ma0050223	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass
trans-1.3-Dichloropropene	M23-Ma0050223	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass
Trichloroethene	M23-Ma0050223	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass
Trichlorofluoromethane	M23-Ma0050223	NCP	mg/L	< 0.005	< 0.005	<1	30%	Pass
Vinyl chloride	M23-Ma0050223	NCP	mg/L	< 0.005	< 0.005	<1	30%	Pass
Duplicate								
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				Result 1	Result 2	RPD		
Naphthalene	M23-Ma0050223	NCP	mg/L	< 0.01	< 0.01	<1	30%	Pass

Duplicate								
Heavy Metals				Result 1	Result 2	RPD		
Arsenic	M23-Ma0055544	NCP	mg/L	0.001	0.002	15	30%	Pass
Cadmium	M23-Ma0055544	NCP	mg/L	< 0.0002	< 0.0002	<1	30%	Pass
Chromium	M23-Ma0055544	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass
Copper	M23-Ma0055544	NCP	mg/L	0.003	0.003	2.8	30%	Pass
Lead	M23-Ma0055544	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass
Mercury	M23-Ma0055544	NCP	mg/L	< 0.0001	< 0.0001	<1	30%	Pass
Nickel	M23-Ma0055544	NCP	mg/L	0.055	0.053	3.7	30%	Pass
Zinc	M23-Ma0055544	NCP	mg/L	0.022	0.022	1.9	30%	Pass
Duplicate								
Total Recoverable Hydrocarbons				Result 1	Result 2	RPD		
TRH C10-C14	S23-Ma0045351	CP	mg/L	< 0.05	< 0.05	<1	30%	Pass
TRH C15-C28	S23-Ma0045351	CP	mg/L	< 0.1	< 0.1	<1	30%	Pass
TRH C29-C36	S23-Ma0045351	CP	mg/L	< 0.1	< 0.1	<1	30%	Pass
TRH >C10-C16	S23-Ma0045351	CP	mg/L	< 0.05	< 0.05	<1	30%	Pass
TRH >C16-C34	S23-Ma0045351	CP	mg/L	< 0.1	< 0.1	<1	30%	Pass
TRH >C34-C40	S23-Ma0045351	CP	mg/L	< 0.1	< 0.1	<1	30%	Pass
Duplicate								
Polycyclic Aromatic Hydrocarbons				Result 1	Result 2	RPD		
Acenaphthene	S23-Ma0045351	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass
Acenaphthylene	S23-Ma0045351	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass
Anthracene	S23-Ma0045351	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass
Benz(a)anthracene	S23-Ma0045351	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass
Benzo(a)pyrene	S23-Ma0045351	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass
Benzo(b&j)fluoranthene	S23-Ma0045351	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass
Benzo(g,h,i)perylene	S23-Ma0045351	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass
Benzo(k)fluoranthene	S23-Ma0045351	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass
Chrysene	S23-Ma0045351	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass
Dibenz(a,h)anthracene	S23-Ma0045351	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass
Fluoranthene	S23-Ma0045351	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass
Fluorene	S23-Ma0045351	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass
Indeno(1,2,3-cd)pyrene	S23-Ma0045351	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass
Naphthalene	S23-Ma0045351	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass
Phenanthrene	S23-Ma0045351	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass
Pyrene	S23-Ma0045351	CP	mg/L	< 0.001	< 0.001	<1	30%	Pass
Duplicate								
Organochlorine Pesticides				Result 1	Result 2	RPD		
Chlordanes - Total	S23-Ma0045351	CP	mg/L	< 0.002	< 0.002	<1	30%	Pass
4,4'-DDD	S23-Ma0045351	CP	mg/L	< 0.0002	< 0.0002	<1	30%	Pass
4,4'-DDE	S23-Ma0045351	CP	mg/L	< 0.0002	< 0.0002	<1	30%	Pass
4,4'-DDT	S23-Ma0045351	CP	mg/L	< 0.0002	< 0.0002	<1	30%	Pass
a-HCH	S23-Ma0045351	CP	mg/L	< 0.0002	< 0.0002	<1	30%	Pass
Aldrin	S23-Ma0045351	CP	mg/L	< 0.0002	< 0.0002	<1	30%	Pass
b-HCH	S23-Ma0045351	CP	mg/L	< 0.0002	< 0.0002	<1	30%	Pass
d-HCH	S23-Ma0045351	CP	mg/L	< 0.0002	< 0.0002	<1	30%	Pass
Dieldrin	S23-Ma0045351	CP	mg/L	< 0.0002	< 0.0002	<1	30%	Pass
Endosulfan I	S23-Ma0045351	CP	mg/L	< 0.0002	< 0.0002	<1	30%	Pass
Endosulfan II	S23-Ma0045351	CP	mg/L	< 0.0002	< 0.0002	<1	30%	Pass
Endosulfan sulphate	S23-Ma0045351	CP	mg/L	< 0.0002	< 0.0002	<1	30%	Pass
Endrin	S23-Ma0045351	CP	mg/L	< 0.0002	< 0.0002	<1	30%	Pass
Endrin aldehyde	S23-Ma0045351	CP	mg/L	< 0.0002	< 0.0002	<1	30%	Pass
Endrin ketone	S23-Ma0045351	CP	mg/L	< 0.0002	< 0.0002	<1	30%	Pass
g-HCH (Lindane)	S23-Ma0045351	CP	mg/L	< 0.0002	< 0.0002	<1	30%	Pass
Heptachlor	S23-Ma0045351	CP	mg/L	< 0.0002	< 0.0002	<1	30%	Pass
Heptachlor epoxide	S23-Ma0045351	CP	mg/L	< 0.0002	< 0.0002	<1	30%	Pass

Duplicate								
Organochlorine Pesticides				Result 1	Result 2	RPD		
Hexachlorobenzene	S23-Ma0045351	CP	mg/L	< 0.0002	< 0.0002	<1	30%	Pass
Methoxychlor	S23-Ma0045351	CP	mg/L	< 0.0002	< 0.0002	<1	30%	Pass
Toxaphene	S23-Ma0045351	CP	mg/L	< 0.005	< 0.005	<1	30%	Pass
Duplicate								
Organophosphorus Pesticides				Result 1	Result 2	RPD		
Azinphos-methyl	S23-Ma0045351	CP	mg/L	< 0.002	< 0.002	<1	30%	Pass
Bolstar	S23-Ma0045351	CP	mg/L	< 0.002	< 0.002	<1	30%	Pass
Chlorfenvinphos	S23-Ma0045351	CP	mg/L	< 0.02	< 0.02	<1	30%	Pass
Chlorpyrifos	S23-Ma0045351	CP	mg/L	< 0.002	< 0.002	<1	30%	Pass
Chlorpyrifos-methyl	S23-Ma0045351	CP	mg/L	< 0.002	< 0.002	<1	30%	Pass
Coumaphos	S23-Ma0045351	CP	mg/L	< 0.02	< 0.02	<1	30%	Pass
Demeton-S	S23-Ma0045351	CP	mg/L	< 0.002	< 0.002	<1	30%	Pass
Demeton-O	S23-Ma0045351	CP	mg/L	< 0.002	< 0.002	<1	30%	Pass
Diazinon	S23-Ma0045351	CP	mg/L	< 0.002	< 0.002	<1	30%	Pass
Dichlorvos	S23-Ma0045351	CP	mg/L	< 0.002	< 0.002	<1	30%	Pass
Dimethoate	S23-Ma0045351	CP	mg/L	< 0.002	< 0.002	<1	30%	Pass
Disulfoton	S23-Ma0045351	CP	mg/L	< 0.002	< 0.002	<1	30%	Pass
EPN	S23-Ma0045351	CP	mg/L	< 0.002	< 0.002	<1	30%	Pass
Ethion	S23-Ma0045351	CP	mg/L	< 0.002	< 0.002	<1	30%	Pass
Ethoprop	S23-Ma0045351	CP	mg/L	< 0.002	< 0.002	<1	30%	Pass
Ethyl parathion	S23-Ma0045351	CP	mg/L	< 0.002	< 0.002	<1	30%	Pass
Fenitrothion	S23-Ma0045351	CP	mg/L	< 0.002	< 0.002	<1	30%	Pass
Fensulfothion	S23-Ma0045351	CP	mg/L	< 0.002	< 0.002	<1	30%	Pass
Fenthion	S23-Ma0045351	CP	mg/L	< 0.002	< 0.002	<1	30%	Pass
Malathion	S23-Ma0045351	CP	mg/L	< 0.002	< 0.002	<1	30%	Pass
Merphos	S23-Ma0045351	CP	mg/L	< 0.002	< 0.002	<1	30%	Pass
Methyl parathion	S23-Ma0045351	CP	mg/L	< 0.002	< 0.002	<1	30%	Pass
Mevinphos	S23-Ma0045351	CP	mg/L	< 0.002	< 0.002	<1	30%	Pass
Monocrotophos	S23-Ma0045351	CP	mg/L	< 0.002	< 0.002	<1	30%	Pass
Naled	S23-Ma0045351	CP	mg/L	< 0.002	< 0.002	<1	30%	Pass
Omethoate	S23-Ma0045351	CP	mg/L	< 0.02	< 0.02	<1	30%	Pass
Phorate	S23-Ma0045351	CP	mg/L	< 0.002	< 0.002	<1	30%	Pass
Pirimiphos-methyl	S23-Ma0045351	CP	mg/L	< 0.02	< 0.02	<1	30%	Pass
Pyrazophos	S23-Ma0045351	CP	mg/L	< 0.002	< 0.002	<1	30%	Pass
Ronnel	S23-Ma0045351	CP	mg/L	< 0.002	< 0.002	<1	30%	Pass
Terbufos	S23-Ma0045351	CP	mg/L	< 0.002	< 0.002	<1	30%	Pass
Tetrachlorvinphos	S23-Ma0045351	CP	mg/L	< 0.002	< 0.002	<1	30%	Pass
Tokuthion	S23-Ma0045351	CP	mg/L	< 0.002	< 0.002	<1	30%	Pass
Trichloronate	S23-Ma0045351	CP	mg/L	< 0.002	< 0.002	<1	30%	Pass
Duplicate								
Polychlorinated Biphenyls				Result 1	Result 2	RPD		
Aroclor-1016	S23-Ma0045351	CP	mg/L	< 0.005	< 0.005	<1	30%	Pass
Aroclor-1221	S23-Ma0045351	CP	mg/L	< 0.005	< 0.005	<1	30%	Pass
Aroclor-1232	S23-Ma0045351	CP	mg/L	< 0.005	< 0.005	<1	30%	Pass
Aroclor-1242	S23-Ma0045351	CP	mg/L	< 0.005	< 0.005	<1	30%	Pass
Aroclor-1248	S23-Ma0045351	CP	mg/L	< 0.005	< 0.005	<1	30%	Pass
Aroclor-1254	S23-Ma0045351	CP	mg/L	< 0.005	< 0.005	<1	30%	Pass
Aroclor-1260	S23-Ma0045351	CP	mg/L	< 0.005	< 0.005	<1	30%	Pass
Total PCB*	S23-Ma0045351	CP	mg/L	< 0.005	< 0.005	<1	30%	Pass

Duplicate								
Semivolatile Organics				Result 1	Result 2	RPD		
2-Methyl-4,6-dinitrophenol	S23-Ma0045351	CP	mg/L	< 0.03	< 0.03	<1	30%	Pass
1-Chloronaphthalene	S23-Ma0045351	CP	mg/L	< 0.005	< 0.005	<1	30%	Pass
1-Naphthylamine	S23-Ma0045351	CP	mg/L	< 0.005	< 0.005	<1	30%	Pass
1,2-Dichlorobenzene	S23-Ma0045351	CP	mg/L	< 0.005	< 0.005	<1	30%	Pass
1,2,3-Trichlorobenzene	S23-Ma0045351	CP	mg/L	< 0.005	< 0.005	<1	30%	Pass
1,2,3,4-Tetrachlorobenzene	S23-Ma0045351	CP	mg/L	< 0.005	< 0.005	<1	30%	Pass
1,2,3,5-Tetrachlorobenzene	S23-Ma0045351	CP	mg/L	< 0.005	< 0.005	<1	30%	Pass
1,2,4-Trichlorobenzene	S23-Ma0045351	CP	mg/L	< 0.005	< 0.005	<1	30%	Pass
1,2,4,5-Tetrachlorobenzene	S23-Ma0045351	CP	mg/L	< 0.005	< 0.005	<1	30%	Pass
1,3-Dichlorobenzene	S23-Ma0045351	CP	mg/L	< 0.005	< 0.005	<1	30%	Pass
1,3,5-Trichlorobenzene	S23-Ma0045351	CP	mg/L	< 0.005	< 0.005	<1	30%	Pass
1,4-Dichlorobenzene	S23-Ma0045351	CP	mg/L	< 0.005	< 0.005	<1	30%	Pass
2-Chloronaphthalene	S23-Ma0045351	CP	mg/L	< 0.005	< 0.005	<1	30%	Pass
2-Chlorophenol	S23-Ma0045351	CP	mg/L	< 0.003	< 0.003	<1	30%	Pass
2-Methylnaphthalene	S23-Ma0045351	CP	mg/L	< 0.005	< 0.005	<1	30%	Pass
2-Methylphenol (o-Cresol)	S23-Ma0045351	CP	mg/L	< 0.003	< 0.003	<1	30%	Pass
2-Naphthylamine	S23-Ma0045351	CP	mg/L	< 0.005	< 0.005	<1	30%	Pass
2-Nitroaniline	S23-Ma0045351	CP	mg/L	< 0.005	< 0.005	<1	30%	Pass
2-Nitrophenol	S23-Ma0045351	CP	mg/L	< 0.01	< 0.01	<1	30%	Pass
2-Picoline	S23-Ma0045351	CP	mg/L	< 0.005	< 0.005	<1	30%	Pass
2,3,4,6-Tetrachlorophenol	S23-Ma0045351	CP	mg/L	< 0.01	< 0.01	<1	30%	Pass
2,4-Dichlorophenol	S23-Ma0045351	CP	mg/L	< 0.003	< 0.003	<1	30%	Pass
2,4-Dimethylphenol	S23-Ma0045351	CP	mg/L	< 0.003	< 0.003	<1	30%	Pass
2,4-Dinitrophenol	S23-Ma0045351	CP	mg/L	< 0.03	< 0.03	<1	30%	Pass
2,4-Dinitrotoluene	S23-Ma0045351	CP	mg/L	< 0.005	< 0.005	<1	30%	Pass
2,4,5-Trichlorophenol	S23-Ma0045351	CP	mg/L	< 0.01	< 0.01	<1	30%	Pass
2,4,6-Trichlorophenol	S23-Ma0045351	CP	mg/L	< 0.01	< 0.01	<1	30%	Pass
2,6-Dichlorophenol	S23-Ma0045351	CP	mg/L	< 0.003	< 0.003	<1	30%	Pass
2,6-Dinitrotoluene	S23-Ma0045351	CP	mg/L	< 0.005	< 0.005	<1	30%	Pass
3&4-Methylphenol (m&p-Cresol)	S23-Ma0045351	CP	mg/L	< 0.006	< 0.006	<1	30%	Pass
3-Methylcholanthrene	S23-Ma0045351	CP	mg/L	< 0.005	< 0.005	<1	30%	Pass
3,3'-Dichlorobenzidine	S23-Ma0045351	CP	mg/L	< 0.005	< 0.005	<1	30%	Pass
4-Aminobiphenyl	S23-Ma0045351	CP	mg/L	< 0.005	< 0.005	<1	30%	Pass
4-Chloro-3-methylphenol	S23-Ma0045351	CP	mg/L	< 0.01	< 0.01	<1	30%	Pass
4-Nitrophenol	S23-Ma0045351	CP	mg/L	< 0.03	< 0.03	<1	30%	Pass
4,4'-DDD	S23-Ma0045351	CP	mg/L	< 0.005	< 0.005	<1	30%	Pass
4,4'-DDE	S23-Ma0045351	CP	mg/L	< 0.005	< 0.005	<1	30%	Pass
4,4'-DDT	S23-Ma0045351	CP	mg/L	< 0.005	< 0.005	<1	30%	Pass
7,12-Dimethylbenz(a)anthracene	S23-Ma0045351	CP	mg/L	< 0.005	< 0.005	<1	30%	Pass
a-HCH	S23-Ma0045351	CP	mg/L	< 0.005	< 0.005	<1	30%	Pass
Acetophenone	S23-Ma0045351	CP	mg/L	< 0.005	< 0.005	<1	30%	Pass
Aldrin	S23-Ma0045351	CP	mg/L	< 0.005	< 0.005	<1	30%	Pass
Aniline	S23-Ma0045351	CP	mg/L	< 0.005	< 0.005	<1	30%	Pass
b-HCH	S23-Ma0045351	CP	mg/L	< 0.005	< 0.005	<1	30%	Pass
Benzyl chloride	S23-Ma0045351	CP	mg/L	< 0.005	< 0.005	<1	30%	Pass
Bis(2-ethylhexyl)phthalate	S23-Ma0045351	CP	mg/L	< 0.005	< 0.005	<1	30%	Pass
Butyl benzyl phthalate	S23-Ma0045351	CP	mg/L	< 0.005	< 0.005	<1	30%	Pass
d-HCH	S23-Ma0045351	CP	mg/L	< 0.005	< 0.005	<1	30%	Pass
Di-n-butyl phthalate	S23-Ma0045351	CP	mg/L	< 0.005	< 0.005	<1	30%	Pass
Di-n-octyl phthalate	S23-Ma0045351	CP	mg/L	< 0.005	< 0.005	<1	30%	Pass
Dibenz(a,j)acridine	S23-Ma0045351	CP	mg/L	< 0.005	< 0.005	<1	30%	Pass
Dibenzofuran	S23-Ma0045351	CP	mg/L	< 0.005	< 0.005	<1	30%	Pass
Dieldrin	S23-Ma0045351	CP	mg/L	< 0.005	< 0.005	<1	30%	Pass
Diethyl phthalate	S23-Ma0045351	CP	mg/L	< 0.005	< 0.005	<1	30%	Pass

Duplicate								
Semivolatile Organics				Result 1	Result 2	RPD		
Dimethyl phthalate	S23-Ma0045351	CP	mg/L	< 0.005	< 0.005	<1	30%	Pass
Dimethylaminoazobenzene	S23-Ma0045351	CP	mg/L	< 0.005	< 0.005	<1	30%	Pass
Diphenylamine	S23-Ma0045351	CP	mg/L	< 0.005	< 0.005	<1	30%	Pass
Endosulfan I	S23-Ma0045351	CP	mg/L	< 0.005	< 0.005	<1	30%	Pass
Endosulfan II	S23-Ma0045351	CP	mg/L	< 0.005	< 0.005	<1	30%	Pass
Endosulfan sulphate	S23-Ma0045351	CP	mg/L	< 0.005	< 0.005	<1	30%	Pass
Endrin	S23-Ma0045351	CP	mg/L	< 0.005	< 0.005	<1	30%	Pass
Endrin aldehyde	S23-Ma0045351	CP	mg/L	< 0.005	< 0.005	<1	30%	Pass
Endrin ketone	S23-Ma0045351	CP	mg/L	< 0.005	< 0.005	<1	30%	Pass
g-HCH (Lindane)	S23-Ma0045351	CP	mg/L	< 0.005	< 0.005	<1	30%	Pass
Heptachlor	S23-Ma0045351	CP	mg/L	< 0.005	< 0.005	<1	30%	Pass
Heptachlor epoxide	S23-Ma0045351	CP	mg/L	< 0.005	< 0.005	<1	30%	Pass
Hexachlorobenzene	S23-Ma0045351	CP	mg/L	< 0.005	< 0.005	<1	30%	Pass
Hexachlorobutadiene	S23-Ma0045351	CP	mg/L	< 0.005	< 0.005	<1	30%	Pass
Hexachlorocyclopentadiene	S23-Ma0045351	CP	mg/L	< 0.005	< 0.005	<1	30%	Pass
Hexachloroethane	S23-Ma0045351	CP	mg/L	< 0.005	< 0.005	<1	30%	Pass
Methoxychlor	S23-Ma0045351	CP	mg/L	< 0.005	< 0.005	<1	30%	Pass
N-Nitrosodibutylamine	S23-Ma0045351	CP	mg/L	< 0.005	< 0.005	<1	30%	Pass
N-Nitrosodipropylamine	S23-Ma0045351	CP	mg/L	< 0.005	< 0.005	<1	30%	Pass
N-Nitrosopiperidine	S23-Ma0045351	CP	mg/L	< 0.005	< 0.005	<1	30%	Pass
Nitrobenzene	S23-Ma0045351	CP	mg/L	< 0.05	< 0.05	<1	30%	Pass
Pentachlorobenzene	S23-Ma0045351	CP	mg/L	< 0.005	< 0.005	<1	30%	Pass
Pentachloronitrobenzene	S23-Ma0045351	CP	mg/L	< 0.005	< 0.005	<1	30%	Pass
Pentachlorophenol	S23-Ma0045351	CP	mg/L	< 0.01	< 0.01	<1	30%	Pass
Phenol	S23-Ma0045351	CP	mg/L	< 0.003	< 0.003	<1	30%	Pass
Pronamide	S23-Ma0045351	CP	mg/L	< 0.005	< 0.005	<1	30%	Pass
Trifluralin	S23-Ma0045351	CP	mg/L	< 0.005	< 0.005	<1	30%	Pass
Duplicate								
Haloethers				Result 1	Result 2	RPD		
4-Bromophenyl phenyl ether	S23-Ma0045351	CP	mg/L	< 0.005	< 0.005	<1	30%	Pass
4-Chlorophenyl phenyl ether	S23-Ma0045351	CP	mg/L	< 0.005	< 0.005	<1	30%	Pass
Bis(2-chloroethoxy)methane	S23-Ma0045351	CP	mg/L	< 0.005	< 0.005	<1	30%	Pass
Bis(2-chloroisopropyl)ether	S23-Ma0045351	CP	mg/L	< 0.005	< 0.005	<1	30%	Pass

Comments

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	N/A
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

Authorised by:

Bonnie Pu	Analytical Services Manager
Edward Lee	Senior Analyst-Organic
Harry Bacalis	Senior Analyst-Volatile
Joseph Edouard	Senior Analyst-Organic
Joseph Edouard	Senior Analyst-Volatile
Mary Makarios	Senior Analyst-Metal



Glenn Jackson
General Manager

Final Report – this report replaces any previously issued Report

- Indicates Not Requested

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

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

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CHAIN OF CUSTODY RECORD

1. This form is to be completed by the person who is responsible for the collection and handling of the sample.

2. This form is to be completed by the person who is responsible for the analysis of the sample.

3. This form is to be completed by the person who is responsible for the storage of the sample.

Company		Project No.		Project Name		Project Location		Project Date		Project Status		Project Comments	
Address		Suite 13.01, 80 Mount St, North Sydney		Suite B7		Suite B15		Lead		Bulk Asbestos ID		Chromium Reducible Sulfur	
Contact Name		Troy Chetman		Lead		Bulk Asbestos ID		Chromium Reducible Sulfur		Lead TGLP		Lead ASLP	
Phone No.		0402 226 226		Multiple Extraction Procedure (Lead)		HOLD		TRH / BTEX		Soil Density		Particle Density	
Special Direction		S DAY TAT		Soil Density		Particle Density		Soil Density		Particle Density		Soil Density	
Purchase Order		260323EPRN		Soil Density		Particle Density		Soil Density		Particle Density		Soil Density	
Client Sample ID		Date		Moisture		Soil Density		Particle Density		Soil Density		Particle Density	
1	BH18.0.4	6/03/23	Soil	X	X								
2	BH18.0.5	6/03/23	Soil	X	X								
3	BH18.1.0	6/03/23	Soil	X	X								
4	BH19.0.3	6/03/23	Soil	X	X								
5	BH19.0.6	6/03/23	Soil	X	X								
6	BH19.1.0	6/03/23	Soil	X	X								
7	BH20.0.3	6/03/23	Soil	X	X								
8	BH20.0.5	6/03/23	Soil	X	X								
9	BH20.1.0	6/03/23	Soil	X	X								
10	BH20.2.0	6/03/23	Soil	X	X								
11	BH21.0.3	6/03/23	Soil	X	X								
12	BH21.0.5	6/03/23	Soil	X	X								
13	BH21.1.0	6/03/23	Soil	X	X								
14	BH21.2.0	6/03/23	Soil	X	X								
15	BH22.0.1	6/03/23	Soil	X	X								
16	BH22.0.5	6/03/23	Soil	X	X								
17	BH22.1.0	6/03/23	Soil	X	X								
18	BH22.2.0	6/03/23	Soil	X	X								
19	BH23.0.3	6/03/23	Soil	X	X								
20	BH23.0.5	6/03/23	Soil	X	X								
21	BH23.1.0	6/03/23	Soil	X	X								
22	BH23.2.0	6/03/23	Soil	X	X								
23	BH24.0.3	6/03/23	Soil	X	X								
24	BH24.0.5	6/03/23	Soil	X	X								
25	BH24.1.0	6/03/23	Soil	X	X								
26	BH24.1.5	6/03/23	Soil	X	X								
27	BH25.0.3	6/03/23	Soil	X	X								
28	BH25.0.5	6/03/23	Soil	X	X								
29	BH25.1.0	6/03/23	Soil	X	X								
30	BH25.2.0	6/03/23	Soil	X	X								
31	BH26.0.3	6/03/23	Soil	X	X								
32	BH26.0.5	6/03/23	Soil	X	X								
33	BH26.1.0	6/03/23	Soil	X	X								
34	BH26.2.0	6/03/23	Soil	X	X								
35	BH27.0.3	6/03/23	Soil	X	X								
36	BH27.0.5	6/03/23	Soil	X	X								
37	BH27.1.0	6/03/23	Soil	X	X								
38	BH27.2.0	6/03/23	Soil	X	X								
39	BH28.0.3	6/03/23	Soil	X	X								
40	BH28.0.5	6/03/23	Soil	X	X								
41	BH28.1.0	6/03/23	Soil	X	X								
42	BH28.2.0	6/03/23	Soil	X	X								
43	BH29.0.3	6/03/23	Soil	X	X								
44	BH29.0.5	6/03/23	Soil	X	X								

rec. from 23/3/23 12:44

470 923

7/3/23 11:16 AM 9.6°C

Customer call

Environmental Division
Sydney
Work Order Reference
ES2309613



Telephone : + 61-2-8784 8555

1 Day
Overnight (Sat)
3 Day
5 Day
Other

Line	Item	QTY	UNIT	PRICE	AMOUNT	TAX	TOTAL
1	BH23.10	600023	Sol				
2	BH23.20	600023	Sol				
3	BH30.01	200023	Sol				
4	BH30.05	200023	Sol				
5	BH30.07	200023	Sol				
6	BH30.20	200023	Sol				
7	BH30.50	200023	Sol				
8	BH31.03	200023	Sol				
9	BH31.05	200023	Sol				
10	BH31.10	200023	Sol				
11	BH31.20	200023	Sol				
12	BH32.01	200023	Sol				
13	BH32.05	200023	Sol				
14	BH32.10	200023	Sol				
15	BH32.20	200023	Sol				
16	BH33.03	200023	Sol				
17	BH33.05	200023	Sol				
18	BH33.10	200023	Sol				
19	BH33.20	200023	Sol				
20	BH34.03	200023	Sol				
21	BH34.05	200023	Sol				
22	BH34.10	200023	Sol				
23	BH34.20	200023	Sol				
24	BH35.03	200023	Sol				
25	BH35.05	200023	Sol				
26	BH35.10	200023	Sol				
27	BH35.20	200023	Sol				
28	BH36.03	200023	Sol				
29	BH36.10	200023	Sol				
30	BH37.03	200023	Sol				
31	BH37.05	200023	Sol				
32	BH37.10	200023	Sol				
33	BH37.20	200023	Sol				
34	BH38.01	200023	Sol				
35	BH38.03	200023	Sol				
36	BH38.07	200023	Sol				
37	BH38.09	200023	Sol				
38	BH39.01	200023	Sol				
39	BH39.03	200023	Sol				
40	BH39.07	200023	Sol				
41	BH39.09	200023	Sol				
42	BH40.01	200023	Sol				
43	BH40.03	200023	Sol				
44	BH40.07	200023	Sol				
45	BH40.09	200023	Sol				
46	BH41.01	200023	Sol				
47	BH41.03	200023	Sol				
48	BH41.07	200023	Sol				
49	BH41.09	200023	Sol				
50	BH42.01	200023	Sol				
51	BH42.03	200023	Sol				
52	BH42.07	200023	Sol				
53	BH42.09	200023	Sol				
54	BH43.01	200023	Sol				
55	BH43.03	200023	Sol				
56	BH43.07	200023	Sol				
57	BH43.09	200023	Sol				
58	BH44.01	200023	Sol				
59	BH44.03	200023	Sol				
60	BH44.07	200023	Sol				
61	BH44.09	200023	Sol				
62	BH45.01	200023	Sol				
63	BH45.03	200023	Sol				
64	BH45.07	200023	Sol				
65	BH45.09	200023	Sol				

Method of Shipment		Carrier	Hand Delivered	TO BNE		MEL		PER		ADL		NEW		ID		Signature		Date		Time		Temperature		Report to	
Lab	Use Only	Received By		10	19	91	1	60	6	19	2	8	5	10	0	6	5								
105	BH45.10		50123	Soil																					
110	MEP01.05		20123	Soil																					
111	MEP04.10 (Should be MEP02.10)		20123	Soil																					
112	MEP03.05		30123	Soil																					
113	MEP04.05		30123	Soil																					
114	MEP05.05		30123	Soil																					
115	MEP06.05		30123	Soil																					
116	DUP01		60123	Soil																					
117	DUP01 (Should be DUP02)		60123	Soil																					
118	DUP02		20123	Soil																					
119	DUP03		20123	Soil																					
120	DUP04		30123	Soil																					
121	TR001 (Should be TR002)		60123	Soil																					
122	TR001		20123	Soil																					
123	TR003		20123	Soil																					
124	TR004		30123	Soil																					
125	SD01.10		60123	Soil																					
126	SD02.05		30123	Soil																					
127	SD03.05		30123	Soil																					
128	SD04.10		60123	Soil																					
129	SD05.05		30123	Soil																					
130	SD06.05		60123	Soil																					
131	SD07.05		20123	Soil																					
132	SD08.10		30123	Soil																					
133	PD01.05		60123	Soil																					
134	PD02.05		30123	Soil																					
135	PD03.05		60123	Soil																					
136	PD04.10		30123	Soil																					
137	PD05.05		60123	Soil																					
138	PD06.10		30123	Soil																					
139	BH10.10		60123	Soil																					
140	BH12.20		20123	Soil																					
141	BH13		30123	Soil																					
142	BH14		20123	Soil																					
143	BH15		30123	Soil																					
144	BH16		20123	Water																					
145	BH17		30123	Water																					
146	BH18		20123	Water																					
147	DH123 LHS01		20123	Water																					
148	Top Spike																								
149	Top Blank																								
150																									
151																									
152																									
153																									
154																									
155																									
156																									

Please forward to ALS
Please forward to ALS
Please forward to ALS
Please forward to ALS

CERTIFICATE OF ANALYSIS

Work Order : **ES2309613**
Client : **EP RISK MANAGEMENT**
Contact : **TROY CHATMAN**
Address : **LEVEL 13 Suite 1301, 80 Mount Street**
NORTH SYDNEY 2060
Telephone : **----**
Project : **EP3072.002 Bourke Road**
Order number : **----**
C-O-C number : **----**
Sampler : **----**
Site : **----**
Quote number : **EN/222**
No. of samples received : **4**
No. of samples analysed : **4**

Page : 1 of 2
Laboratory : Environmental Division Sydney
Contact : Jason Dighton
Address : 277-289 Woodpark Road Smithfield NSW Australia 2164
Telephone : +61-2-8784 8555
Date Samples Received : 23-Mar-2023 12:45
Date Analysis Commenced : 27-Mar-2023
Issue Date : 29-Mar-2023 16:55



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

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
Ankit Joshi	Senior Chemist - Inorganics	Sydney Inorganics, Smithfield, NSW
Edwandy Fadjar	Organic Coordinator	Sydney Inorganics, Smithfield, NSW



General Comments

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

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

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

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

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

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

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

Analytical Results

Sub-Matrix: SOIL
 (Matrix: SOIL)

Sample ID

				TRP01	TRP01 (SHOULD BE TRP02)	TRP03	TRP04	----
Sampling date / time				06-Mar-2023 00:00	02-Mar-2023 00:00	02-Mar-2023 00:00	03-Mar-2023 00:00	----
Compound	CAS Number	LOR	Unit	ES2309613-001	ES2309613-002	ES2309613-003	ES2309613-004	-----
				Result	Result	Result	Result	----
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	-----	0.1	%	12.0	19.0	14.7	16.7	----
EG005(ED093)T: Total Metals by ICP-AES								
Lead	7439-92-1	5	mg/kg	44200	117	205	772	----

QUALITY CONTROL REPORT

Work Order	: ES2309613	Page	: 1 of 3
Client	: EP RISK MANAGEMENT	Laboratory	: Environmental Division Sydney
Contact	: TROY CHATMAN	Contact	: Jason Dighton
Address	: LEVEL 13 Suite 1301, 80 Mount Street NORTH SYDNEY 2060	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
Telephone	: ----	Telephone	: +61-2-8784 8555
Project	: EP3072.002 Bourke Road	Date Samples Received	: 23-Mar-2023
Order number	: ----	Date Analysis Commenced	: 27-Mar-2023
C-O-C number	: ----	Issue Date	: 29-Mar-2023
Sampler	: ----		
Site	: ----		
Quote number	: EN/222		
No. of samples received	: 4		
No. of samples analysed	: 4		



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

This Quality Control Report contains the following information:

- Laboratory Duplicate (DUP) Report; Relative Percentage Difference (RPD) and Acceptance Limits
- Method Blank (MB) and Laboratory Control Spike (LCS) Report; Recovery and Acceptance Limits
- Matrix Spike (MS) Report; Recovery and Acceptance Limits

Signatories

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

<i>Signatories</i>	<i>Position</i>	<i>Accreditation Category</i>
Ankit Joshi	Senior Chemist - Inorganics	Sydney Inorganics, Smithfield, NSW
Edwandy Fadjar	Organic Coordinator	Sydney Inorganics, Smithfield, NSW



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: 4953553)									
ES2309613-002	TRP01 (SHOULD BE TRP02)	EG005T: Lead	7439-92-1	5	mg/kg	117	128	9.2	0% - 20%
ES2309353-001	Anonymous	EG005T: Lead	7439-92-1	5	mg/kg	<5	<5	0.0	No Limit
EA055: Moisture Content (Dried @ 105-110°C) (QC Lot: 4953559)									
ES2309353-003	Anonymous	EA055: Moisture Content	----	0.1	%	1.3	1.4	0.0	No Limit
ES2309613-004	TRP04	EA055: Moisture Content	----	0.1	%	16.7	15.8	5.8	0% - 20%



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

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

Sub-Matrix: **SOIL**

Sub-Matrix: SOIL				Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike Concentration	Spike Recovery (%)	Acceptable Limits (%)	
Method: Compound	CAS Number	LOR	Unit			Result	LCS	Low
EG005(ED093)T: Total Metals by ICP-AES (QCLot: 4953553)								
EG005T: Lead	7439-92-1	5	mg/kg	<5	60.8 mg/kg	100	82.0	119

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 Concentration	SpikeRecovery(%) MS	Acceptable Limits (%)	
Laboratory sample ID	Sample ID	Method: Compound	CAS Number			Low	High
EG005(ED093)T: Total Metals by ICP-AES (QCLot: 4953553)							
ES2309353-001	Anonymous	EG005T: Lead	7439-92-1	250 mg/kg	97.9	70.0	130

QA/QC Compliance Assessment to assist with Quality Review

Work Order	: ES2309613	Page	: 1 of 4
Client	: EP RISK MANAGEMENT	Laboratory	: Environmental Division Sydney
Contact	: TROY CHATMAN	Telephone	: +61-2-8784 8555
Project	: EP3072.002 Bourke Road	Date Samples Received	: 23-Mar-2023
Site	: ----	Issue Date	: 29-Mar-2023
Sampler	: ----	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.
- **NO** Matrix Spike outliers occur.
- 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 : 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
EA055: Moisture Content (Dried @ 105-110°C)						
Soil Glass Jar - Unpreserved TRP01 (SHOULD BE TRP02), TRP03	----	----	----	27-Mar-2023	16-Mar-2023	11
Soil Glass Jar - Unpreserved TRP04	----	----	----	27-Mar-2023	17-Mar-2023	10
Soil Glass Jar - Unpreserved TRP01	----	----	----	27-Mar-2023	20-Mar-2023	7

Analysis Holding Time Compliance

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

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

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

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

Matrix: **SOIL**

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

Method	Sample Date	Extraction / Preparation			Analysis		
Container / Client Sample ID(s)		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EA055: Moisture Content (Dried @ 105-110°C)							
Soil Glass Jar - Unpreserved (EA055) TRP01 (SHOULD BE TRP02), TRP03	02-Mar-2023	----	----	----	27-Mar-2023	16-Mar-2023	✖
Soil Glass Jar - Unpreserved (EA055) TRP04	03-Mar-2023	----	----	----	27-Mar-2023	17-Mar-2023	✖
Soil Glass Jar - Unpreserved (EA055) TRP01	06-Mar-2023	----	----	----	27-Mar-2023	20-Mar-2023	✖
EG005(ED093)T: Total Metals by ICP-AES							
Soil Glass Jar - Unpreserved (EG005T) TRP01 (SHOULD BE TRP02), TRP03	02-Mar-2023	27-Mar-2023	29-Aug-2023	✔	28-Mar-2023	29-Aug-2023	✔
Soil Glass Jar - Unpreserved (EG005T) TRP04	03-Mar-2023	27-Mar-2023	30-Aug-2023	✔	28-Mar-2023	30-Aug-2023	✔
Soil Glass Jar - Unpreserved (EG005T) TRP01	06-Mar-2023	27-Mar-2023	02-Sep-2023	✔	28-Mar-2023	02-Sep-2023	✔



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)							
Moisture Content	EA055	2	20	10.00	10.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	2	11	18.18	10.00	✓	NEPM 2013 B3 & ALS QC Standard
Laboratory Control Samples (LCS)							
Total Metals by ICP-AES	EG005T	1	11	9.09	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Method Blanks (MB)							
Total Metals by ICP-AES	EG005T	1	11	9.09	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Matrix Spikes (MS)							
Total Metals by ICP-AES	EG005T	1	11	9.09	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
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)
Preparation Methods	Method	Matrix	Method Descriptions
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).

CHAIN OF CUSTODY RECORD

Form C-100 (Rev. 01/01)

Client Information
Name: EP Risk Management Pty Ltd
Address: Suite 13.01, 80 Mount Street, North Sydney
Phone: 0402 228 226
Special Direction: 5 DAY TAT
Purchase Order: 200323EPRN
Quote ID: 200323EPRN

Project Information
Project Name: Suite B7 (Filtered Metals)
Project No: EP2072.002
Report Format: Suite B15
Analysis: (Note: Where metals are requested, please specify "Total" or "Filtered")

Requisitioned by: Troy Chahman
Email for Results: 200323EPRN@ep.com.au
Containers: 1L Plastic, 250mL Plastic, 125mL Plastic, 200mL Amber Glass, 40mL vial, 125mL Amber Glass, 125 mL Jar, 250 mL Jar, Plastic bag
Turn Around Requirements: Overnight (Sat), 1 Day, 2 Day, 3 Day, 5 Day, Other ()
Sample Comments / Hazard Warning: None

No	Client Sample ID	Date	Matrix	Total Counts										Signature	Date	Time	Temperature	Report No
				5	6	3	Postel	ADL	NEW	DI	ADL	NEW	DI					
1	MM05	16/03/23	Water	X	X	X	X											
2	MM06	16/03/23	Water	X	X	X	X											
3	MM07	16/03/23	Water	X	X	X	X											
4	DUP01	16/03/23	Water	X	X	X	X											
5	TRP02 (Pis forward to ALS)	16/03/23	Water	X	X	X	X											
6	RB01	16/03/23	Water	X	X	X	X											
55																		
56																		
57																		
98																		
99																		
100																		
101																		
102																		

Method of Shipment	Counter #	Received By	Received By	Hand Delivered	Signature	Date	Time	Temperature	Report No
Laboratory Use Only									

Environmental Division
Sydney
Work Order Reference
ES2309197



Telephone : + 61-2-8794 8555

rec: Fax
21/3/23 12:20

#913330

CERTIFICATE OF ANALYSIS

Work Order : **ES2309197**
Client : **EP RISK MANAGEMENT**
Contact : **TROY CHATMAN**
Address : **LEVEL 13 Suite 1301, 80 Mount Street**
NORTH SYDNEY 2060
Telephone : **----**
Project : **EP3072.002 Bourke Road**
Order number : **----**
C-O-C number : **----**
Sampler : **TROY CHATMAN**
Site : **Alexandria**
Quote number : **EN/222**
No. of samples received : **1**
No. of samples analysed : **1**

Page : 1 of 7
Laboratory : Environmental Division Sydney
Contact : Jason Dighton
Address : 277-289 Woodpark Road Smithfield NSW Australia 2164
Telephone : +61-2-8784 8555
Date Samples Received : 21-Mar-2023 12:20
Date Analysis Commenced : 21-Mar-2023
Issue Date : 27-Mar-2023 18:05



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

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results
- Surrogate Control Limits

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

Signatories

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

<i>Signatories</i>	<i>Position</i>	<i>Accreditation Category</i>
Ankit Joshi	Senior Chemist - Inorganics	Sydney Inorganics, Smithfield, NSW
Edwandy Fadjar	Organic Coordinator	Sydney Organics, Smithfield, NSW
Wisam Marassa	Inorganics Coordinator	Sydney Inorganics, Smithfield, NSW



General Comments

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

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

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

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

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

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

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

- EP075 (SIM): Where reported, 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.
- EP068: Where reported, Total Chlordane (sum) is the sum of the reported concentrations of cis-Chlordane and trans-Chlordane at or above the LOR.
- EP080: Where reported, Total Xylenes is the sum of the reported concentrations of m&p-Xylene and o-Xylene at or above the LOR.
- EP075(SIM): Where reported, Total Cresol is the sum of the reported concentrations of 2-Methylphenol and 3- & 4-Methylphenol at or above the LOR.



Analytical Results

Sub-Matrix: **WATER**
 (Matrix: **WATER**)

Sample ID

				TRP01	----	----	----	----
Sampling date / time				16-Mar-2023 00:00	----	----	----	----
Compound	CAS Number	LOR	Unit	ES2309197-001	-----	-----	-----	-----
Result				Result	----	----	----	----
EG020F: Dissolved Metals by ICP-MS								
Arsenic	7440-38-2	0.001	mg/L	0.001	----	----	----	----
Cadmium	7440-43-9	0.0001	mg/L	<0.0001	----	----	----	----
Chromium	7440-47-3	0.001	mg/L	0.002	----	----	----	----
Copper	7440-50-8	0.001	mg/L	<0.001	----	----	----	----
Lead	7439-92-1	0.001	mg/L	<0.001	----	----	----	----
Nickel	7440-02-0	0.001	mg/L	0.012	----	----	----	----
Zinc	7440-66-6	0.005	mg/L	<0.005	----	----	----	----
EG035F: Dissolved Mercury by FIMS								
Mercury	7439-97-6	0.0001	mg/L	<0.0001	----	----	----	----
EP066: Polychlorinated Biphenyls (PCB)								
^ Total Polychlorinated biphenyls	----	1	µg/L	<1	----	----	----	----
EP068A: Organochlorine Pesticides (OC)								
alpha-BHC	319-84-6	0.5	µg/L	<0.5	----	----	----	----
Hexachlorobenzene (HCB)	118-74-1	0.5	µg/L	<0.5	----	----	----	----
beta-BHC	319-85-7	0.5	µg/L	<0.5	----	----	----	----
gamma-BHC	58-89-9	0.5	µg/L	<0.5	----	----	----	----
delta-BHC	319-86-8	0.5	µg/L	<0.5	----	----	----	----
Heptachlor	76-44-8	0.5	µg/L	<0.5	----	----	----	----
Aldrin	309-00-2	0.5	µg/L	<0.5	----	----	----	----
Heptachlor epoxide	1024-57-3	0.5	µg/L	<0.5	----	----	----	----
trans-Chlordane	5103-74-2	0.5	µg/L	<0.5	----	----	----	----
alpha-Endosulfan	959-98-8	0.5	µg/L	<0.5	----	----	----	----
cis-Chlordane	5103-71-9	0.5	µg/L	<0.5	----	----	----	----
Dieldrin	60-57-1	0.5	µg/L	<0.5	----	----	----	----
4,4'-DDE	72-55-9	0.5	µg/L	<0.5	----	----	----	----
Endrin	72-20-8	0.5	µg/L	<0.5	----	----	----	----
beta-Endosulfan	33213-65-9	0.5	µg/L	<0.5	----	----	----	----
4,4'-DDD	72-54-8	0.5	µg/L	<0.5	----	----	----	----
Endrin aldehyde	7421-93-4	0.5	µg/L	<0.5	----	----	----	----
Endosulfan sulfate	1031-07-8	0.5	µg/L	<0.5	----	----	----	----
4,4'-DDT	50-29-3	2.0	µg/L	<2.0	----	----	----	----
Endrin ketone	53494-70-5	0.5	µg/L	<0.5	----	----	----	----
Methoxychlor	72-43-5	2.0	µg/L	<2.0	----	----	----	----
^ Total Chlordane (sum)	----	0.5	µg/L	<0.5	----	----	----	----



Analytical Results

Sub-Matrix: **WATER**
 (Matrix: **WATER**)

Sample ID

				TRP01	----	----	----	----
Sampling date / time				16-Mar-2023 00:00	----	----	----	----
Compound	CAS Number	LOR	Unit	ES2309197-001	-----	-----	-----	-----
Result				----	----	----	----	----

EP068A: Organochlorine Pesticides (OC) - Continued

^ Sum of DDD + DDE + DDT	72-54-8/72-55-9/5 0-2	0.5	µg/L	<0.5	----	----	----	----
^ Sum of Aldrin + Dieldrin	309-00-2/60-57-1	0.5	µg/L	<0.5	----	----	----	----

EP068B: Organophosphorus Pesticides (OP)

Dichlorvos	62-73-7	0.5	µg/L	<0.5	----	----	----	----
Demeton-S-methyl	919-86-8	0.5	µg/L	<0.5	----	----	----	----
Monocrotophos	6923-22-4	2.0	µg/L	<2.0	----	----	----	----
Dimethoate	60-51-5	0.5	µg/L	<0.5	----	----	----	----
Diazinon	333-41-5	0.5	µg/L	<0.5	----	----	----	----
Chlorpyrifos-methyl	5598-13-0	0.5	µg/L	<0.5	----	----	----	----
Parathion-methyl	298-00-0	2.0	µg/L	<2.0	----	----	----	----
Malathion	121-75-5	0.5	µg/L	<0.5	----	----	----	----
Fenthion	55-38-9	0.5	µg/L	<0.5	----	----	----	----
Chlorpyrifos	2921-88-2	0.5	µg/L	<0.5	----	----	----	----
Parathion	56-38-2	2.0	µg/L	<2.0	----	----	----	----
Pirimphos-ethyl	23505-41-1	0.5	µg/L	<0.5	----	----	----	----
Chlorfenvinphos	470-90-6	0.5	µg/L	<0.5	----	----	----	----
Bromophos-ethyl	4824-78-6	0.5	µg/L	<0.5	----	----	----	----
Fenamiphos	22224-92-6	0.5	µg/L	<0.5	----	----	----	----
Prothiofos	34643-46-4	0.5	µg/L	<0.5	----	----	----	----
Ethion	563-12-2	0.5	µg/L	<0.5	----	----	----	----
Carbophenothion	786-19-6	0.5	µg/L	<0.5	----	----	----	----
Azinphos Methyl	86-50-0	0.5	µg/L	<0.5	----	----	----	----

EP075(SIM)B: Polynuclear Aromatic Hydrocarbons

Naphthalene	91-20-3	1.0	µg/L	<1.0	----	----	----	----
Acenaphthylene	208-96-8	1.0	µg/L	<1.0	----	----	----	----
Acenaphthene	83-32-9	1.0	µg/L	<1.0	----	----	----	----
Fluorene	86-73-7	1.0	µg/L	<1.0	----	----	----	----
Phenanthrene	85-01-8	1.0	µg/L	<1.0	----	----	----	----
Anthracene	120-12-7	1.0	µg/L	<1.0	----	----	----	----
Fluoranthene	206-44-0	1.0	µg/L	<1.0	----	----	----	----
Pyrene	129-00-0	1.0	µg/L	<1.0	----	----	----	----
Benz(a)anthracene	56-55-3	1.0	µg/L	<1.0	----	----	----	----
Chrysene	218-01-9	1.0	µg/L	<1.0	----	----	----	----
Benzo(b+j)fluoranthene	205-99-2 205-82-3	1.0	µg/L	<1.0	----	----	----	----



Analytical Results

Sub-Matrix: **WATER**
 (Matrix: **WATER**)

Sample ID

				TRP01	----	----	----	----
Sampling date / time				16-Mar-2023 00:00	----	----	----	----
Compound	CAS Number	LOR	Unit	ES2309197-001	-----	-----	-----	-----
Result				----	----	----	----	----

EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued

Benzo(k)fluoranthene	207-08-9	1.0	µg/L	<1.0	----	----	----	----
Benzo(a)pyrene	50-32-8	0.5	µg/L	<0.5	----	----	----	----
Indeno(1.2.3.cd)pyrene	193-39-5	1.0	µg/L	<1.0	----	----	----	----
Dibenz(a.h)anthracene	53-70-3	1.0	µg/L	<1.0	----	----	----	----
Benzo(g.h.i)perylene	191-24-2	1.0	µg/L	<1.0	----	----	----	----
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	µg/L	<0.5	----	----	----	----
^ Benzo(a)pyrene TEQ (zero)	----	0.5	µg/L	<0.5	----	----	----	----

EP080/071: Total Petroleum Hydrocarbons

C6 - C9 Fraction	----	20	µg/L	<20	----	----	----	----
C10 - C14 Fraction	----	50	µg/L	<50	----	----	----	----
C15 - C28 Fraction	----	100	µg/L	<100	----	----	----	----
C29 - C36 Fraction	----	50	µg/L	<50	----	----	----	----
^ C10 - C36 Fraction (sum)	----	50	µg/L	<50	----	----	----	----

EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions

C6 - C10 Fraction	C6_C10	20	µg/L	<20	----	----	----	----
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	20	µg/L	<20	----	----	----	----
>C10 - C16 Fraction	----	100	µg/L	<100	----	----	----	----
>C16 - C34 Fraction	----	100	µg/L	<100	----	----	----	----
>C34 - C40 Fraction	----	100	µg/L	<100	----	----	----	----
^ >C10 - C40 Fraction (sum)	----	100	µg/L	<100	----	----	----	----
^ >C10 - C16 Fraction minus Naphthalene (F2)	----	100	µg/L	<100	----	----	----	----

EP080: BTEXN

Benzene	71-43-2	1	µg/L	<1	----	----	----	----
Toluene	108-88-3	2	µg/L	<2	----	----	----	----
Ethylbenzene	100-41-4	2	µg/L	<2	----	----	----	----
meta- & para-Xylene	108-38-3 106-42-3	2	µg/L	<2	----	----	----	----
ortho-Xylene	95-47-6	2	µg/L	<2	----	----	----	----
^ Total Xylenes	----	2	µg/L	<2	----	----	----	----
^ Sum of BTEX	----	1	µg/L	<1	----	----	----	----
Naphthalene	91-20-3	5	µg/L	<5	----	----	----	----

EP066S: PCB Surrogate

Decachlorobiphenyl	2051-24-3	1	%	74.9	----	----	----	----



Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	TRP01	----	----	----	----
Sampling date / time					16-Mar-2023 00:00	----	----	----	----
Compound	CAS Number	LOR	Unit		ES2309197-001	-----	-----	-----	-----
					Result	----	----	----	----
EP068S: Organochlorine Pesticide Surrogate									
Dibromo-DDE	21655-73-2	0.5	%		68.8	----	----	----	----
EP068T: Organophosphorus Pesticide Surrogate									
DEF	78-48-8	0.5	%		68.7	----	----	----	----
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	1.0	%		22.8	----	----	----	----
2-Chlorophenol-D4	93951-73-6	1.0	%		49.4	----	----	----	----
2,4,6-Tribromophenol	118-79-6	1.0	%		71.5	----	----	----	----
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	1.0	%		68.1	----	----	----	----
Anthracene-d10	1719-06-8	1.0	%		77.0	----	----	----	----
4-Terphenyl-d14	1718-51-0	1.0	%		76.2	----	----	----	----
EP080S: TPH(V)/BTEX Surrogates									
1,2-Dichloroethane-D4	17060-07-0	2	%		108	----	----	----	----
Toluene-D8	2037-26-5	2	%		105	----	----	----	----
4-Bromofluorobenzene	460-00-4	2	%		102	----	----	----	----



Surrogate Control Limits

Sub-Matrix: WATER		Recovery Limits (%)	
Compound	CAS Number	Low	High
EP066S: PCB Surrogate			
Decachlorobiphenyl	2051-24-3	45	134
EP068S: Organochlorine Pesticide Surrogate			
Dibromo-DDE	21655-73-2	67	111
EP068T: Organophosphorus Pesticide Surrogate			
DEF	78-48-8	67	111
EP075(SIM)S: Phenolic Compound Surrogates			
Phenol-d6	13127-88-3	10	44
2-Chlorophenol-D4	93951-73-6	14	94
2,4,6-Tribromophenol	118-79-6	17	125
EP075(SIM)T: PAH Surrogates			
2-Fluorobiphenyl	321-60-8	20	104
Anthracene-d10	1719-06-8	27	113
4-Terphenyl-d14	1718-51-0	32	112
EP080S: TPH(V)/BTEX Surrogates			
1,2-Dichloroethane-D4	17060-07-0	71	137
Toluene-D8	2037-26-5	79	131
4-Bromofluorobenzene	460-00-4	70	128

QUALITY CONTROL REPORT

Work Order	: ES2309197	Page	: 1 of 7
Client	: EP RISK MANAGEMENT	Laboratory	: Environmental Division Sydney
Contact	: TROY CHATMAN	Contact	: Jason Dighton
Address	: LEVEL 13 Suite 1301, 80 Mount Street NORTH SYDNEY 2060	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
Telephone	: ----	Telephone	: +61-2-8784 8555
Project	: EP3072.002 Bourke Road	Date Samples Received	: 21-Mar-2023
Order number	: ----	Date Analysis Commenced	: 21-Mar-2023
C-O-C number	: ----	Issue Date	: 27-Mar-2023
Sampler	: TROY CHATMAN		
Site	: Alexandria		
Quote number	: EN/222		
No. of samples received	: 1		
No. of samples analysed	: 1		



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

This Quality Control Report contains the following information:

- Laboratory Duplicate (DUP) Report; Relative Percentage Difference (RPD) and Acceptance Limits
- Method Blank (MB) and Laboratory Control Spike (LCS) Report; Recovery and Acceptance Limits
- Matrix Spike (MS) Report; Recovery and Acceptance Limits

Signatories

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

<i>Signatories</i>	<i>Position</i>	<i>Accreditation Category</i>
Ankit Joshi	Senior Chemist - Inorganics	Sydney Inorganics, Smithfield, NSW
Edwandy Fadjar	Organic Coordinator	Sydney Organics, Smithfield, NSW
Wisam Marassa	Inorganics Coordinator	Sydney Inorganics, Smithfield, NSW



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: **WATER**

Sub-Matrix: WATER				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Acceptable RPD (%)
EG020F: Dissolved Metals by ICP-MS (QC Lot: 4947330)									
ES2309242-001	Anonymous	EG020A-F: Cadmium	7440-43-9	0.0001	mg/L	<0.0001	<0.0001	0.0	No Limit
		EG020A-F: Arsenic	7440-38-2	0.001	mg/L	0.002	0.002	0.0	No Limit
		EG020A-F: Chromium	7440-47-3	0.001	mg/L	<0.001	<0.001	0.0	No Limit
		EG020A-F: Copper	7440-50-8	0.001	mg/L	0.007	0.004	68.4	No Limit
		EG020A-F: Lead	7439-92-1	0.001	mg/L	<0.001	<0.001	0.0	No Limit
		EG020A-F: Nickel	7440-02-0	0.001	mg/L	0.013	0.014	7.6	0% - 50%
		EG020A-F: Zinc	7440-66-6	0.005	mg/L	0.275	0.272	1.0	0% - 20%
ES2309283-003	Anonymous	EG020A-F: Cadmium	7440-43-9	0.0001	mg/L	<0.0001	<0.0001	0.0	No Limit
		EG020A-F: Arsenic	7440-38-2	0.001	mg/L	<0.001	<0.001	0.0	No Limit
		EG020A-F: Chromium	7440-47-3	0.001	mg/L	<0.001	<0.001	0.0	No Limit
		EG020A-F: Copper	7440-50-8	0.001	mg/L	<0.001	<0.001	0.0	No Limit
		EG020A-F: Lead	7439-92-1	0.001	mg/L	<0.001	<0.001	0.0	No Limit
		EG020A-F: Nickel	7440-02-0	0.001	mg/L	0.014	0.014	0.0	0% - 50%
		EG020A-F: Zinc	7440-66-6	0.005	mg/L	0.044	0.043	0.0	No Limit
EG035F: Dissolved Mercury by FIMS (QC Lot: 4947329)									
ES2309242-002	Anonymous	EG035F: Mercury	7439-97-6	0.0001	mg/L	<0.0001	<0.0001	0.0	No Limit
ES2309283-004	Anonymous	EG035F: Mercury	7439-97-6	0.0001	mg/L	<0.0001	<0.0001	0.0	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 4943659)									
CA2301586-001	Anonymous	EP080: C6 - C9 Fraction	----	20	µg/L	20	50	76.5	No Limit
ES2309208-001	Anonymous	EP080: C6 - C9 Fraction	----	20	µg/L	<20	<20	0.0	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 4943659)									
CA2301586-001	Anonymous	EP080: C6 - C10 Fraction	C6_C10	20	µg/L	<20	40	71.9	No Limit
ES2309208-001	Anonymous	EP080: C6 - C10 Fraction	C6_C10	20	µg/L	<20	<20	0.0	No Limit

Page : 3 of 7
 Work Order : ES2309197
 Client : EP RISK MANAGEMENT
 Project : EP3072.002 Bourke Road



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 (%)
EP080: BTEXN (QC Lot: 4943659)									
CA2301586-001	Anonymous	EP080: Benzene	71-43-2	1	µg/L	<1	<1	0.0	No Limit
		EP080: Toluene	108-88-3	2	µg/L	23	24	0.0	0% - 50%
		EP080: Ethylbenzene	100-41-4	2	µg/L	<2	<2	0.0	No Limit
		EP080: meta- & para-Xylene	108-38-3	2	µg/L	<2	<2	0.0	No Limit
			106-42-3						
		EP080: ortho-Xylene	95-47-6	2	µg/L	<2	<2	0.0	No Limit
ES2309208-001	Anonymous	EP080: Naphthalene	91-20-3	5	µg/L	<5	<5	0.0	No Limit
		EP080: Benzene	71-43-2	1	µg/L	<1	<1	0.0	No Limit
		EP080: Toluene	108-88-3	2	µg/L	<2	<2	0.0	No Limit
		EP080: Ethylbenzene	100-41-4	2	µg/L	<2	<2	0.0	No Limit
		EP080: meta- & para-Xylene	108-38-3	2	µg/L	<2	<2	0.0	No Limit
			106-42-3						
		EP080: ortho-Xylene	95-47-6	2	µg/L	<2	<2	0.0	No Limit
		EP080: Naphthalene	91-20-3	5	µg/L	<5	<5	0.0	No Limit

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.

<i>Method Blank (MB) Report</i>	<i>Laboratory Control Spike (LCS) Report</i>			
	<i>Spike Concentration</i>	<i>Spike Recovery (%) LCS</i>	<i>Acceptable Limits (%) Low High</i>	
	<0.001	0.1 mg/L	96.3	85.0 114
	<0.0001	0.1 mg/L	97.0	84.0 110
	<0.001	0.1 mg/L	91.1	85.0 111
	<0.001	0.1 mg/L	92.4	81.0 111
	<0.001	0.1 mg/L	91.1	83.0 111
	<0.001	0.1 mg/L	93.0	82.0 112
	<0.005	0.1 mg/L	95.7	81.0 117
	<0.0001	0.01 mg/L	96.2	83.0 105
	<1	10 µg/L	98.4	68.9 113
	<0.5	5 µg/L	80.2	64.9 107
	<0.5	5 µg/L	89.3	58.3 111
	<0.5	5 µg/L	91.6	69.0 117
	<0.5	5 µg/L	81.6	70.0 112
	<0.5	5 µg/L	86.4	68.9 110
	<0.5	5 µg/L	81.5	65.2 108
	<0.5	5 µg/L	80.1	65.8 109
	<0.5	5 µg/L	87.2	67.1 107
	<0.5	5 µg/L	83.1	64.1 110
	<0.5	5 µg/L	88.8	66.7 112
	<0.5	5 µg/L	87.2	63.2 111
	<0.5	5 µg/L	85.8	65.2 113
	<0.5	5 µg/L	87.1	66.0 112
	<0.5	5 µg/L	94.8	65.2 113
	<0.5	5 µg/L	88.0	67.3 114
	<0.5	5 µg/L	89.4	72.0 122
	<0.5	5 µg/L	81.0	66.9 109
	<0.5	5 µg/L	84.7	65.2 112
	<2.0	5 µg/L	87.7	65.2 112
	<0.5	5 µg/L	86.6	63.8 110
	<2.0	5 µg/L	88.9	61.1 114



Sub-Matrix: **WATER**

Method: Compound				Method Blank (MB) Report Result	Laboratory Control Spike (LCS) Report			
					Spike Concentration	Spike Recovery (%) LCS	Acceptable Limits (%)	
							Low	High
CAS Number	LOR	Unit						
EP068B: Organophosphorus Pesticides (OP) (QCLot: 4943504) - continued								
EP068: Dichlorvos	62-73-7	0.5	µg/L	<0.5	5 µg/L	84.7	65.6	114
EP068: Demeton-S-methyl	919-86-8	0.5	µg/L	<0.5	5 µg/L	99.6	63.7	113
EP068: Monocrotophos	6923-22-4	2	µg/L	<2.0	5 µg/L	26.6	19.7	48.0
EP068: Dimethoate	60-51-5	0.5	µg/L	<0.5	5 µg/L	98.9	69.5	110
EP068: Diazinon	333-41-5	0.5	µg/L	<0.5	5 µg/L	93.5	71.1	110
EP068: Chlorpyrifos-methyl	5598-13-0	0.5	µg/L	<0.5	5 µg/L	86.9	77.0	119
EP068: Parathion-methyl	298-00-0	2	µg/L	<2.0	5 µg/L	86.7	70.0	124
EP068: Malathion	121-75-5	0.5	µg/L	<0.5	5 µg/L	92.5	68.4	116
EP068: Fenthion	55-38-9	0.5	µg/L	<0.5	5 µg/L	89.6	68.6	112
EP068: Chlorpyrifos	2921-88-2	0.5	µg/L	<0.5	5 µg/L	88.2	75.0	119
EP068: Parathion	56-38-2	2	µg/L	<2.0	5 µg/L	84.4	67.0	121
EP068: Pirimphos-ethyl	23505-41-1	0.5	µg/L	<0.5	5 µg/L	88.8	69.0	121
EP068: Chlorfenvinphos	470-90-6	0.5	µg/L	<0.5	5 µg/L	97.0	71.8	110
EP068: Bromophos-ethyl	4824-78-6	0.5	µg/L	<0.5	5 µg/L	89.3	67.5	112
EP068: Fenamiphos	22224-92-6	0.5	µg/L	<0.5	5 µg/L	107	64.1	116
EP068: Prothiofos	34643-46-4	0.5	µg/L	<0.5	5 µg/L	91.0	67.8	114
EP068: Ethion	563-12-2	0.5	µg/L	<0.5	5 µg/L	89.6	74.0	120
EP068: Carbophenothion	786-19-6	0.5	µg/L	<0.5	5 µg/L	85.0	66.2	114
EP068: Azinphos Methyl	86-50-0	0.5	µg/L	<0.5	5 µg/L	103	51.6	128
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 4943505)								
EP075(SIM): Naphthalene	91-20-3	1	µg/L	<1.0	5 µg/L	63.3	50.0	94.0
EP075(SIM): Acenaphthylene	208-96-8	1	µg/L	<1.0	5 µg/L	73.8	63.6	114
EP075(SIM): Acenaphthene	83-32-9	1	µg/L	<1.0	5 µg/L	67.4	62.2	113
EP075(SIM): Fluorene	86-73-7	1	µg/L	<1.0	5 µg/L	73.8	63.9	115
EP075(SIM): Phenanthrene	85-01-8	1	µg/L	<1.0	5 µg/L	80.1	62.6	116
EP075(SIM): Anthracene	120-12-7	1	µg/L	<1.0	5 µg/L	75.4	64.3	116
EP075(SIM): Fluoranthene	206-44-0	1	µg/L	<1.0	5 µg/L	84.8	63.6	118
EP075(SIM): Pyrene	129-00-0	1	µg/L	<1.0	5 µg/L	85.2	63.1	118
EP075(SIM): Benz(a)anthracene	56-55-3	1	µg/L	<1.0	5 µg/L	88.8	64.1	117
EP075(SIM): Chrysene	218-01-9	1	µg/L	<1.0	5 µg/L	90.7	62.5	116
EP075(SIM): Benzo(b+j)fluoranthene	205-99-2	1	µg/L	<1.0	5 µg/L	89.7	61.7	119
	205-82-3							
EP075(SIM): Benzo(k)fluoranthene	207-08-9	1	µg/L	<1.0	5 µg/L	90.0	63.0	115
EP075(SIM): Benzo(a)pyrene	50-32-8	0.5	µg/L	<0.5	5 µg/L	93.0	63.3	117
EP075(SIM): Indeno(1.2.3.cd)pyrene	193-39-5	1	µg/L	<1.0	5 µg/L	92.0	59.9	118
EP075(SIM): Dibenz(a,h,i)anthracene	53-70-3	1	µg/L	<1.0	5 µg/L	92.4	61.2	117
EP075(SIM): Benzo(g,h,i)perylene	191-24-2	1	µg/L	<1.0	5 µg/L	92.2	59.1	118
EP080/071: Total Petroleum Hydrocarbons (QCLot: 4943506)								
EP071: C10 - C14 Fraction	----	50	µg/L	<50	400 µg/L	71.0	53.7	97.0

Method Blank (MB) Report

Spike Concentration	Spike Recovery (%)	Acceptable Limits (%)	
	LCS	Low	High

Matrix Spike (MS) Report

Sub-Matrix: **WATER**

<i>Spike</i>	<i>SpikeRecovery(%)</i>	<i>Acceptable Limits (%)</i>	
<i>Concentration</i>	<i>MS</i>	<i>Low</i>	<i>High</i>

Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Concentration	MS	Low	High
EG020F: Dissolved Metals by ICP-MS (QCLot: 4947330)							
ES2309197-001	TRP01	EG020A-F: Arsenic	7440-38-2	1 mg/L	118	70.0	130
		EG020A-F: Cadmium	7440-43-9	0.25 mg/L	118	70.0	130
		EG020A-F: Chromium	7440-47-3	1 mg/L	108	70.0	130
		EG020A-F: Copper	7440-50-8	1 mg/L	103	70.0	130
		EG020A-F: Lead	7439-92-1	1 mg/L	110	70.0	130
		EG020A-F: Nickel	7440-02-0	1 mg/L	113	70.0	130
		EG020A-F: Zinc	7440-66-6	1 mg/L	116	70.0	130
EG035F: Dissolved Mercury by FIMS (QCLot: 4947329)							
ES2309153-001	Anonymous	EG035F: Mercury	7439-97-6	0.01 mg/L	89.1	70.0	130
EP080/071: Total Petroleum Hydrocarbons (QCLot: 4943659)							



Sub-Matrix: **WATER**

				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: 4943659) - continued							
CA2301586-001	Anonymous	EP080: C6 - C9 Fraction	----	325 µg/L	114	70.0	130
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 4943659)							
CA2301586-001	Anonymous	EP080: C6 - C10 Fraction	C6_C10	375 µg/L	114	70.0	130
EP080: BTEXN (QCLot: 4943659)							
CA2301586-001	Anonymous	EP080: Benzene	71-43-2	25 µg/L	120	70.0	130
		EP080: Toluene	108-88-3	25 µg/L	96.5	70.0	130
		EP080: Ethylbenzene	100-41-4	25 µg/L	111	70.0	130
		EP080: meta- & para-Xylene	108-38-3	25 µg/L	111	70.0	130
			106-42-3				
		EP080: ortho-Xylene	95-47-6	25 µg/L	111	70.0	130
		EP080: Naphthalene	91-20-3	25 µg/L	90.5	70.0	130

QA/QC Compliance Assessment to assist with Quality Review

Work Order	: ES2309197	Page	: 1 of 5
Client	: EP RISK MANAGEMENT	Laboratory	: Environmental Division Sydney
Contact	: TROY CHATMAN	Telephone	: +61-2-8784 8555
Project	: EP3072.002 Bourke Road	Date Samples Received	: 21-Mar-2023
Site	: Alexandria	Issue Date	: 27-Mar-2023
Sampler	: TROY CHATMAN	No. of samples received	: 1
Order number	: ----	No. of samples analysed	: 1

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

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

Summary of Outliers

Outliers : Quality Control Samples

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

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

Outliers : Analysis Holding Time Compliance

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

Outliers : Frequency of Quality Control Samples

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



Outliers : Frequency of Quality Control Samples

Matrix: **WATER**

Quality Control Sample Type	Count		Rate (%)		Quality Control Specification
Method	QC	Regular	Actual	Expected	
Laboratory Duplicates (DUP)					
PAH/Phenols (GC/MS - SIM)	0	4	0.00	10.00	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	0	2	0.00	10.00	NEPM 2013 B3 & ALS QC Standard
Polychlorinated Biphenyls (PCB)	0	1	0.00	10.00	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	0	4	0.00	10.00	NEPM 2013 B3 & ALS QC Standard
Matrix Spikes (MS)					
PAH/Phenols (GC/MS - SIM)	0	4	0.00	5.00	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	0	2	0.00	5.00	NEPM 2013 B3 & ALS QC Standard
Polychlorinated Biphenyls (PCB)	0	1	0.00	5.00	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	0	4	0.00	5.00	NEPM 2013 B3 & ALS QC Standard

Analysis Holding Time Compliance

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

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

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

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

Matrix: **WATER**

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

Method	Sample Date	Extraction / Preparation			Analysis		
Container / Client Sample ID(s)		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EG020F: Dissolved Metals by ICP-MS							
Clear Plastic Bottle - Nitric Acid; Filtered (EG020A-F) TRP01	16-Mar-2023	----	----	----	23-Mar-2023	12-Sep-2023	✔
EG035F: Dissolved Mercury by FIMS							
Clear Plastic Bottle - Nitric Acid; Filtered (EG035F) TRP01	16-Mar-2023	----	----	----	24-Mar-2023	13-Apr-2023	✔
EP066: Polychlorinated Biphenyls (PCB)							
Amber Glass Bottle - Unpreserved (EP066) TRP01	16-Mar-2023	22-Mar-2023	23-Mar-2023	✔	24-Mar-2023	01-May-2023	✔
EP068A: Organochlorine Pesticides (OC)							
Amber Glass Bottle - Unpreserved (EP068) TRP01	16-Mar-2023	22-Mar-2023	23-Mar-2023	✔	25-Mar-2023	01-May-2023	✔
EP068B: Organophosphorus Pesticides (OP)							
Amber Glass Bottle - Unpreserved (EP068) TRP01	16-Mar-2023	22-Mar-2023	23-Mar-2023	✔	25-Mar-2023	01-May-2023	✔



Matrix: **WATER**

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

Method	Sample Date	Extraction / Preparation			Analysis		
Container / Client Sample ID(s)		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons							
Amber Glass Bottle - Unpreserved (EP075(SIM)) TRP01	16-Mar-2023	22-Mar-2023	23-Mar-2023	✓	24-Mar-2023	01-May-2023	✓
EP080/071: Total Petroleum Hydrocarbons							
Amber Glass Bottle - Unpreserved (EP071) TRP01	16-Mar-2023	22-Mar-2023	23-Mar-2023	✓	24-Mar-2023	01-May-2023	✓
Amber VOC Vial - Sulfuric Acid (EP080) TRP01	16-Mar-2023	21-Mar-2023	30-Mar-2023	✓	24-Mar-2023	30-Mar-2023	✓
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions							
Amber Glass Bottle - Unpreserved (EP071) TRP01	16-Mar-2023	22-Mar-2023	23-Mar-2023	✓	24-Mar-2023	01-May-2023	✓
Amber VOC Vial - Sulfuric Acid (EP080) TRP01	16-Mar-2023	21-Mar-2023	30-Mar-2023	✓	24-Mar-2023	30-Mar-2023	✓
EP080: BTEXN							
Amber VOC Vial - Sulfuric Acid (EP080) TRP01	16-Mar-2023	21-Mar-2023	30-Mar-2023	✓	24-Mar-2023	30-Mar-2023	✓



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: **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)							
Dissolved Mercury by FIMS	EG035F	2	20	10.00	10.00	✓	NEPM 2013 B3 & ALS QC Standard
Dissolved Metals by ICP-MS - Suite A	EG020A-F	2	20	10.00	10.00	✓	NEPM 2013 B3 & ALS QC Standard
PAH/Phenols (GC/MS - SIM)	EP075(SIM)	0	4	0.00	10.00	✗	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	EP068	0	2	0.00	10.00	✗	NEPM 2013 B3 & ALS QC Standard
Polychlorinated Biphenyls (PCB)	EP066	0	1	0.00	10.00	✗	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	0	4	0.00	10.00	✗	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	2	20	10.00	10.00	✓	NEPM 2013 B3 & ALS QC Standard
Laboratory Control Samples (LCS)							
Dissolved Mercury by FIMS	EG035F	1	20	5.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Dissolved Metals by ICP-MS - Suite A	EG020A-F	1	20	5.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
PAH/Phenols (GC/MS - SIM)	EP075(SIM)	1	4	25.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	EP068	1	2	50.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Polychlorinated Biphenyls (PCB)	EP066	1	1	100.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	1	4	25.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	1	20	5.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Method Blanks (MB)							
Dissolved Mercury by FIMS	EG035F	1	20	5.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Dissolved Metals by ICP-MS - Suite A	EG020A-F	1	20	5.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
PAH/Phenols (GC/MS - SIM)	EP075(SIM)	1	4	25.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	EP068	1	2	50.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Polychlorinated Biphenyls (PCB)	EP066	1	1	100.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	1	4	25.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	1	20	5.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Matrix Spikes (MS)							
Dissolved Mercury by FIMS	EG035F	1	20	5.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Dissolved Metals by ICP-MS - Suite A	EG020A-F	1	20	5.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
PAH/Phenols (GC/MS - SIM)	EP075(SIM)	0	4	0.00	5.00	✗	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	EP068	0	2	0.00	5.00	✗	NEPM 2013 B3 & ALS QC Standard
Polychlorinated Biphenyls (PCB)	EP066	0	1	0.00	5.00	✗	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	0	4	0.00	5.00	✗	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	1	20	5.00	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
Dissolved Metals by ICP-MS - Suite A	EG020A-F	WATER	In house: Referenced to APHA 3125; USEPA SW846 - 6020, ALS QWI-EN/EG020. Samples are 0.45µm filtered prior to analysis. The ICPMS technique utilizes a highly efficient argon plasma to ionize selected elements. Ions are then passed into a high vacuum mass spectrometer, which separates the analytes based on their distinct mass to charge ratios prior to their measurement by a discrete dynode ion detector.
Dissolved Mercury by FIMS	EG035F	WATER	In house: Referenced to APHA 3112 Hg - B (Flow-injection (SnCl ₂)(Cold Vapour generation) AAS) Samples are 0.45µm filtered prior to analysis. FIM-AAS is an automated flameless atomic absorption technique. A bromate/bromide reagent is used to oxidise any organic mercury compounds in the filtered sample. The ionic mercury is reduced online to atomic mercury vapour by SnCl ₂ which is then purged into a heated quartz cell. Quantification is by comparing absorbance against a calibration curve. This method is compliant with NEPM Schedule B(3).
Polychlorinated Biphenyls (PCB)	EP066	WATER	In house: Referenced to USEPA SW 846 - 8270 Sample 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)
Pesticides by GCMS	EP068	WATER	In house: Referenced to USEPA SW 846 - 8270 Sample 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	WATER	In house: Referenced to USEPA SW 846 - 8015 The sample extract is analysed by Capillary GC/FID and quantification is by comparison against an established 5 point calibration curve of n-Alkane standards. This method is compliant with the QC requirements of NEPM Schedule B(3)
PAH/Phenols (GC/MS - SIM)	EP075(SIM)	WATER	In house: Referenced to USEPA SW 846 - 8270 Sample extracts are analysed by Capillary GC/MS in SIM Mode and quantification is by comparison against an established 5 point calibration curve. This method is compliant with NEPM Schedule B(3)
TRH Volatiles/BTEX	EP080	WATER	In house: Referenced to USEPA SW 846 - 8260 Water samples are directly purged prior to analysis by Capillary GC/MS and quantification is by comparison against an established 5 point calibration curve. Alternatively, a sample is equilibrated in a headspace vial and a portion of the headspace determined by GCMS analysis. This method is compliant with the QC requirements of NEPM Schedule B(3)
Preparation Methods	Method	Matrix	Method Descriptions
Separatory Funnel Extraction of Liquids	ORG14	WATER	In house: Referenced to USEPA SW 846 - 3510 100 mL to 1L of sample is transferred to a separatory funnel and serially extracted three times using DCM for each extract. The resultant extracts are combined, dehydrated and concentrated for analysis. This method is compliant with NEPM Schedule B(3) . ALS default excludes sediment which may be resident in the container.
Volatiles Water Preparation	ORG16-W	WATER	A 5 mL aliquot or 5 mL of a diluted sample is added to a 40 mL VOC vial for purging.

