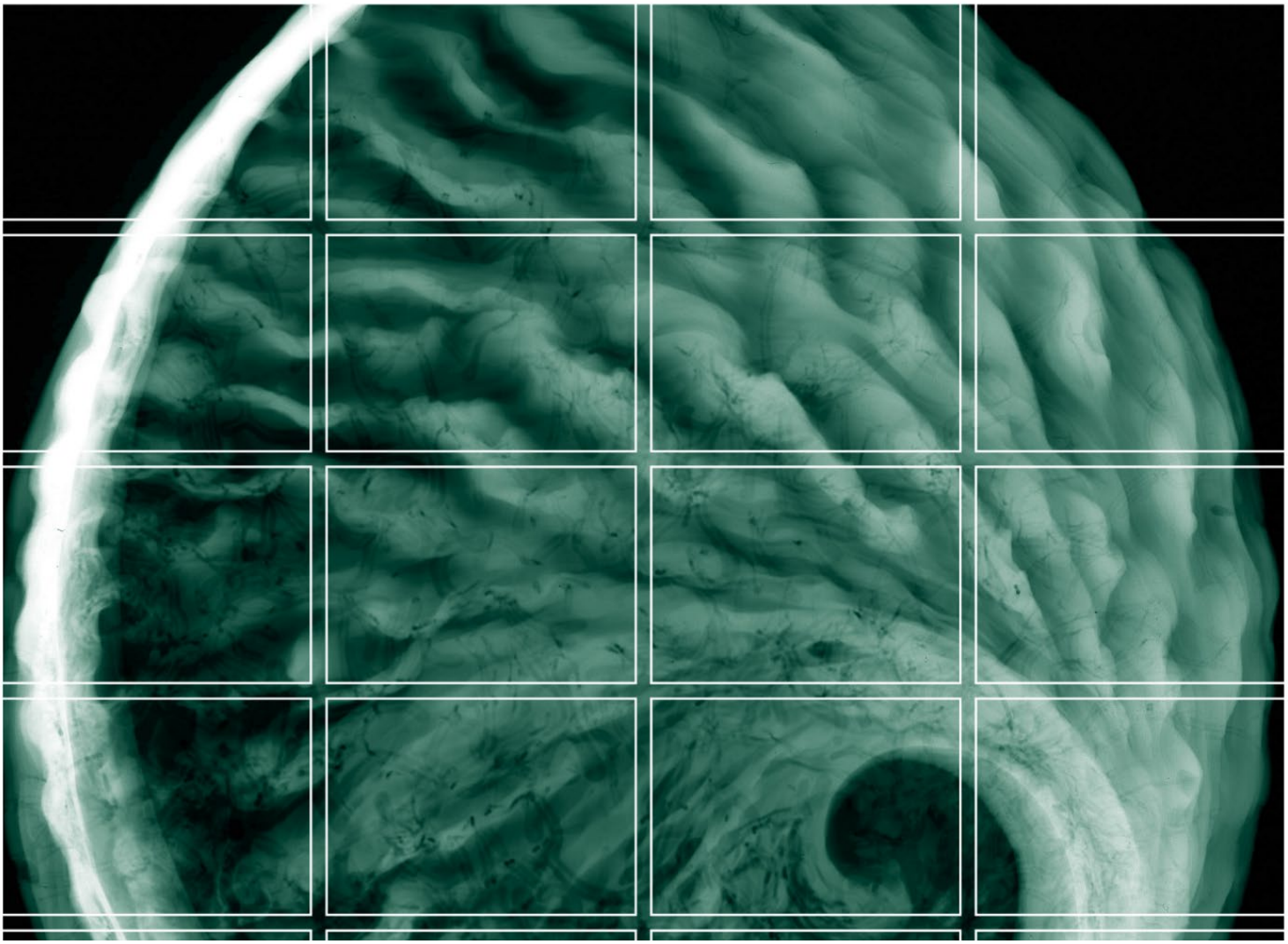


Detailed Site Investigation

Acciona Construction Pty Ltd & Ferrovial Construction Pty Ltd Joint Venture.

Sydney Olympic Park Construction Site, Sydney Metro West; Central Tunnelling Package

18 July 2022

Project No.: 0628507_02_R02

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18 July 2022

Detailed Site Investigation

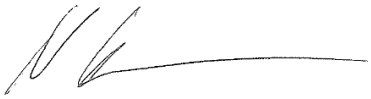
Sydney Olympic Park Construction Site, Sydney Metro West; Central Tunnelling Package



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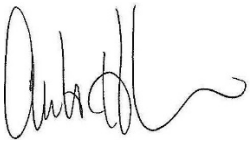
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EXECUTIVE SUMMARY

Environmental Resources Management Australia Pty Ltd (ERM) was engaged by Acciona Construction Pty Ltd & Ferrovial Construction Pty Ltd Joint Venture (AFJV) to conduct a Detailed Site Investigation (DSI) at the Sydney Olympic Park (SOP) Construction Site. The SOP Construction Site is located at the corner of Olympic Boulevard and Figtree Drive, Sydney Olympic Park, NSW 2127 (the Site). The Site comprises land that will form the Sydney Olympic Park Metro Station, as well as land used for 'Construction Support'. The construction on Site includes creation of a 'Station Box' by excavation from surface as a cut and cover structure, and tunnel sections entering and leaving the Station Box by tunnel boring machines. The Station Box Area is approximately 7,045 m^2 and the remaining Construction Support area is approximately 31,517 m^2.

This DSI was undertaken to enable collection of sufficient environmental data to supplement previous investigations and refine the understanding of potential contamination associated with current and historical land use, to determine whether remediation is required and to provide data to facilitate waste classification of material to be removed within the Station Box. The in-situ waste classification is to be prepared separately by others.

The works were completed in general accordance with *Sampling Analysis and Quality Plan* (ERM SAQP, 2022), reviewed and accepted by the Site Auditor, James Davies.

The desktop investigation undertaken comprised review of historical aerial photographs council and regulatory records available, and available previous investigation. The following is noted:

- Based on a review of the historical aerial photographs, the Site was observed to be mainly open space and rail infrastructure until circa 1986, when the railway was discontinued and the infrastructure demolished. The Site was cleared and it appears major earthworks have been undertaken on Site. The buildings currently present on Site, appeared to have been constructed circa 1991 and remain unchanged since. The surrounding areas predominantly comprised agricultural land and road/rail infrastructure with one large industrial compound to the north of the Site. The industrial compound and associated areas to the north were developed until circa 1970 and remained unchanged until circa 1994 when it was demolished. The surrounding areas were progressively developed into the commercial/industrial area currently present during the 1990s for the Sydney Olympic Games of 2000, and has not undergone significant changes since.
- One delicensed activity still regulated by the NSW EPA was identified on Site, Silanna Semiconductor Pty Ltd. The activity is listed as 'hazardous, industrial or Group A Waste Generation or Storage'. Three sites listed as NSW contaminated sites notified to the EPA were identified within 500 m of the Site, Bicentennial Park landfill located south east of the Site, 'Golf Driving Range' located south of the Site, and Aquatic Centre car park located south west of the Site. Based on the close proximity to the Site and the proposed dewatering anticipated to change the groundwater flow direction potentially making these sites hydraulically up gradient, it is considered a potential risk exists pertaining to leachate-contaminated groundwater being drawn towards the Station Box as a result of dewatering. Therefore, the land uses considered the most significant for the proposed Sydney Metro construction works are the three landfills located surrounding the Site.
- Golder-Douglas Partners (GDP) installed several on and off-site groundwater monitoring wells which were sampled between 2018 and 2022. The groundwater data contained concentrations of some constituents above ecological screening criteria but no human health screening criteria was exceeded with the exception of the nickel at SWM_ENV_712s located just to the north of the station box.

ERM completed intrusive investigations between 12 January 2022 and 09 February 2022 and comprised the progression of 45 boreholes in total, conversion of five boreholes to hazardous ground gas (HGG) monitoring wells, three rounds of hazardous ground gas (HGG) monitoring and the sampling of three offsite and two on-site groundwater wells. The following results are noted:

- Soil samples reported concentrations of contaminants of concern (CoPC) below the laboratory limit of reporting (LOR) and/or below adopted health and ecological screening criteria. It should be noted that per- and poly-fluoroalkyl substances (PFAS) was detected within three shallow soil samples analysed. Furthermore, detectable concentrations of semi- and volatile compounds were identified within several soil samples analysed at depth from shale inside the Station Box area.
- Three offsite groundwater wells were sampled and reported concentrations of metals and ammonia above adopted ecological screening criteria. Five groundwater wells (two located on-site and three off-site wells) were sampled and reported concentrations of ammonia, total phosphorous and nitrogen, arsenic, copper, iron, nickel, zinc and PFOS exceeded adopted ecological criteria. Detectable concentrations of some other PFAS compounds were also reported at two of monitoring wells (SWM_MW19, located off-site to the west, and Sub-W1, located on-site). Human health screening criteria were not exceeded, however the sodium, chloride and iron concentrations exceeded aesthetic guideline values.
- Three rounds of HGG monitoring was undertaken and identified elevated concentrations of carbon dioxide with a maximum reading of 12.8% v/v and a maximum flow rate of 0.1 L/hr. The subsequent calculation of gas screening value (GSV) and associated characteristic situation (CS) were calculated to be *"very low risk"* and CS 1.

Based on the combined dataset, the conceptual site model (CSM) was refined and source-pathway-receptor (SPR) linkages were assessed. The potentially viable SPR linkages are as follows:

- Potential risk to Sydney Metro current and future construction workers and users via direct contact with groundwater.
- Potential risk to recreational users of Parramatta River via direct contact/ingestion of groundwater to surface water in the Parramatta River. Potential risks to aquatic organisms in Parramatta River from discharge of impacted groundwater.
- Potential risks associated with hazardous ground gas in groundwater to future construction workers and users of the Site.

Overall based on the findings of the previous assessments, desktop investigation, the findings of this DSI and the refined CSM, and subject to the limitations of this report, the following is concluded:

- Soil sampling has been undertaken in accordance with the minimum sampling densities specified within NSW EPA (1995). Soil sample results have been compared to the relevant health-based and ecological criteria for in-situ soils. As such, it is considered sufficient characterisation of the soil has been undertaken and a risk posed to receptors from soil is not identified. It should be noted that boreholes are recognised as not being the most effective way to detect asbestos in soils. Therefore, an unexpected finds protocol is recommended to mitigate risks associated with potential unexpected finds. Additionally, required sampling density for in-situ waste classification in accordance with the Victoria EPA waste guidelines (IWRG702) is considered met.
- On-site and off-site groundwater data indicate COPCs are generally below human health screening criteria with the exception of nickel in groundwater just beyond the northern site boundary. Direct contact with groundwater should therefore be avoided.
- On-site and off-site groundwater data also indicate COPCs exceed ecological criteria, and so treatment of the water is necessary prior to discharge to a surface water body, as planned, and to be regulated under an EPL.

- Methane in groundwater is not present at concentrations that could produce hazardous conditions at the site. While dissolved methane is in groundwater off-site, and dewatering will result in groundwater from off-site migrating to the station box, it is considered unlikely that groundwater containing dissolved methane concentrations that could produce hazardous conditions will occur at the station box. Monitoring and management of groundwater and ground gas will be required to ensure risks to site users from dissolved gases in groundwater remains absent. Monitoring and management requirements are proposed to be included in the Groundwater Management Plan.
- Hazardous Ground Gas (HGG) monitoring identified elevated concentrations of carbon dioxide, however, the calculated GSV was calculated to be *"very low risk"* and a Situation 1.

Based on the information outlined within this DSI, ERM considers that the Site is suitable for the Sydney Metro station use, subject to the following:

- An Unexpected Finds Protocol (UFP) should be prepared as part of the Construction Environmental Management Plan (CEMP) to be implemented during the construction works, to outline the safe and appropriate actions to be undertaken in the event of encountering potential contamination that may arise from unexpected sources, including asbestos in soils during the construction works.
- Requirements for the monitoring and management of groundwater and ground gas in the vicinity of the Sydney Olympic Park site is to be documented in an updated version of the Groundwater Management Plan (GWMP) and implemented accordingly.
- Appropriate measures are specified within the Soil and Groundwater Management Plan, and any relevant occupational health and safety procedures to prevent direct contact with groundwater during construction and operation of the Station.

As remediation is not required a Remediation Action Plan (RAP) is not considered necessary for the purposes of rendering the site suitable for use, however ERM understands that a RAP is to be prepared for the purposes of detailing the spoil removal plan.

ERM considers that the applicable requirements of the Deed and the project CoA have been complied with.

1. INTRODUCTION

1.1 General

Environmental Resources Management Australia Pty Ltd (ERM) was engaged by Acciona Construction Pty Ltd & Ferrovial Construction Pty Ltd Joint Venture (AFJV) to conduct a Detailed Site Investigation (DSI) at the Sydney Olympic Park (SOP) Construction Site. The SOP Construction Site is located at the corner of Olympic Boulevard and Figtree Drive, Sydney Olympic Park, NSW 2127 (the Site).

This DSI was undertaken to enable collection of sufficient environmental data to supplement previous investigations and refine the understanding of potential contamination associated with current and historical land use, to determine whether remediation is required and to provide data to facilitate waste classification of material to be removed within the Station Box. The in-situ waste classification was prepared separately by others (and is included as Appendix H of this report). The Site location and current Site layout is presented on **Figure 1.**

1.2 Background

The Sydney Metro West line will extend from Hunter Street Station to Westmead and is being procured in three packages. This DSI relates to works at the Sydney Olympic Park Station Construction Site which is part of the Central Tunnelling Package (CTP), from The Bays to Sydney Olympic Park, for which AFJV has been awarded the contract for tunnelling and construction works.

The Sydney Olympic Park Construction Site is located on Olympic Boulevard, opposite the Aquatic Centre. The Site comprises land that will form the Sydney Olympic Park Metro Station, as well as land used for 'Construction Support'. The construction on Site includes creation of a 'Station Box' by excavation from surface as a cut and cover structure, and tunnel sections entering and leaving the Station Box by tunnel boring machines. At the time of writing, there is no potential excavation proposed outside the Station Box with the exception of limited excavation and off-site removal of spoil for installation of service infrastructure across the remainder of the Site. The future use of the Construction Support area is proposed to be commercial / retail development areas, high density residential buildings with retail and community space and station access to primarily comprise open space with surface hardstanding (Sydney Metro, 2022).

The proposed extent of the Station Box and the Construction Support areas are presented within **Figure 2**.

Several previous investigations, including an Environmental Impact Statement (EIS) have been undertaken for the Site (Jacobs EIS, 2020[1]). Based on the information available, ERM prepared a Sampling and Analysis Quality Plan (ERM SAQP, 2022[2]) for the DSI works. The objective of the SAQP was to describe the data quality objectives (DQOs) and required investigation methodology for undertaking the investigation works including sampling, analytical and reporting requirements to assess the potential risk to human health and the environment associated with the potential presence of contamination at the Site. This SAQP was reviewed and accepted by the Site Auditor, James Davis of Enviroview Pty Ltd. This DSI was undertaken in general accordance with the procedures set out within the SAQP (ERM, 2022).

1.3 Objectives

This DSI was undertaken to enable collection of sufficient environmental data to supplement previous investigations and refine the understanding of potential contamination associated with current and historical land use, and to evaluate whether remediation is required.

[1] Jacobs Engineering Group, *Sydney Metro West Environmental Impact Statement – Westmead to the The Bays and Sydney CBD,* ref: IA19980, dated 15 April 2020 (Jacobs EIS, 2020).

[2] ERM, *Sampling Analysis and Quality Plan, Sydney Olympic Park Station Construction Site, Sydney Metro West: Central Tunnelling Package,* Project no: 0628507, dated 24 January 2022 (ERM SAWQP, 2022).

The specific objectives of the DSI were to:

- Obtain sufficient environmental data to enable the proposed construction works to be conducted, to accurately characterise the Site and to assess the suitability of the Site for the proposed commercial / industrial land use in accordance with applicable NSW and Australian guidance;
- Obtain sufficient information to enable proposed excavation to be conducted in accordance with the sampling densities outlined within Table 3 of the *Victorian EPA Industrial Waste Resource Guidelines: Soil Sampling* (2009) referenced within the NEPM;
- Comply with the Conditions of Approval for Sydney Metro West – Concept and Stage 1 Construction (SSI 10038) ("the CoA"), specifically Condition D71 which reads:

  "Before commencement of any construction that would result in the disturbance of moderate to high risk contaminated sites as identified in the documents identified in ***Condition A1*** *of this schedule,* ***Detailed Site Investigations*** *(for contamination) must be conducted to determine the full nature and extent of the contamination. The* ***Detailed Site Investigation Report(s)*** *and the subsequent report(s), must be prepared, or reviewed and approved, by consultants certified under either the Environment Institute of Australia and New Zealand's Certified Environmental Practitioner (Site Contamination) scheme (CEnvP(SC)) or the Soil Science Australia Certified Professional Soil Scientist Contaminated Site Assessment and Management (CPSS CSAM) scheme. The* ***Detailed Site Investigations*** *must be undertaken in accordance with guidelines made or approved under Section 105 of Contaminated Land Management Act 1997 (NSW). The* ***Detailed Site Investigation*** *for Sydney Olympic Park metro construction site must be prepared in consultation with SOPA";* and
- Comply with the requirements of the Sydney Metro West Central Tunnelling Works Design and Construction Deed (the Deed) contract no. 00013/13033 between Sydney Metro and AFJV. The relevant requirements of the Deed are provided in **Section 1.4** below.

It should be noted that an in-situ waste classification report and/or preliminary waste classification will not be provided by ERM, as this is being prepared by others.

1.4 Requirements of the Deed

With respect to the provision of the DSIs, the Deed requires (clause 12.19):

(a) *Except for Preliminary Works, the Tunnelling Contractor must perform and submit to the Principal's Representative and the Independent Certifier a Detailed Site Investigation prior to commencing any excavation activities:*

  (i) *at any Area of Contamination Concern; and*

  (ii) *to the extent otherwise required under the Planning Approvals.*

(b) *Notwithstanding clause 12.19(a), the Tunnelling Contractor may also perform additional Detailed Site Investigations carried out in other areas of the Construction Site or outside the Construction Site if the Tunnelling Contractor deems it necessary to manage the risks associated with contaminated land and to appropriately plan for Remediation. Any additional Detailed Site Investigation performed in accordance with this clause 12.19(b) must also be submitted to the Principal's Representative and the Independent Certifier.*

(c) *Each Detailed Site Investigation:*

  (i) *must*

    (A) *investigate areas of proposed excavation or disturbance;*

    (B) *investigate land within the Construction Site or Extra Land surrounding the areas of proposed excavation or disturbance with*

respect to the potential migration of Contamination via groundwater, ground gas, vapour and odour into the areas of excavation or disturbance; and

(C) *characterise risks to the construction, operation and maintenance of Sydney Metro West and its infrastructure from Contamination,*

(ii) *be prepared in accordance with Law, Good Industry Practice, the Planning Approvals, all guidelines made or approved by the EPA and any other requirements of this deed;*

(iii) *be reviewed and approved by a Certified Contaminated Land Consultant; and*

(iv) *characterise the risk of Contamination migrating from the Construction Site as a result of the Tunneling Contractor's Activities;*

(d) *In addition to the requirements set out in clause 12.19(c), each Detailed Site Investigation performed within an Area of Contamination Concern must:*

(i) *To be reviewed and endorsed by an Accredited Site Auditor; and*

(ii) *Be accompanied by an Interim Site Audit Advice prepared by the Accredited Site Auditor when submitted to the Principal's Representative and the Independent Certifier in accordance with clause 12.19(a).*

(e) *In addition to the requirements set out in clauses 12.19(c) and 12.19(d), each Detailed Site Investigation performed within a Key Contaminated Area must in accordance with the relevant EPA guidelines:*

(i) *determine and delineate the lateral and vertical extent of Contamination within each Key Contaminated Area;*

(ii) *include in-situ classification of Solid Waste at sampling densities not less than that specified within the NEPM (2013) and the Industrial Waste Resources Guidelines (7), Sampling and Analysis: Soil Sampling (EPA Victoria 2010), except for Virgin Excavated Natural Material (VENM) and Excavated Natural Material (ENM) which are to be classified in accordance with the requirements of the Protection of the Environment Operations Act 1997 (NSW);*

(iii) *classify the Solid Waste in accordance with the Waste Classification Guidelines using a statistical approach where relevant;*

(iv) *be suitably detailed so as to inform the development of the Remediation Action Plan, any Remediation Cost Estimate and any Agreed Remediation Scope and to characterise contamination risk to the construction, operation and maintenance of Sydney Metro West (including but not limited to soil, groundwater, ground gas, vapour and odour risks arising from Contamination within the area of proposed excavation or disturbance or migrating into the area of proposed excavation or disturbance).*

1.5 Scope of Works

The scope of works undertaken in order to meet the objectives, as outlined within the SAQP (ERM, 2022) included the following tasks:

- Project preliminaries including preparation of a site specific Health and Safety Plan (HASP) and completion of subsurface utility clearance requirements;
- Review of background information relating to the Site, including:
  - Previous investigations relating to site contamination;

- The NSW Environment Protection Authority (EPA) Contaminated Land Register;
- The NSW EPA Record of notices;
- Historical aerial photographs;
- Groundwater bore information;
- Relevant government and other publically available databases;
- Published soil, geology and topographic maps;

- Soil investigation works included:
  - Progression of 16 boreholes within the proposed Station Box footprint, including:
    - 14 boreholes to a maximum depth of 5 metres below ground level (m BGL);
    - 2 boreholes to a maximum depth of 25 m BGL;
  - Progression of 29 boreholes within the Construction Support areas to a maximum of 3 m BGL;
- Groundwater investigation works included:
  - Gauging and sampling of one existing groundwater well onsite;
- Hazardous ground gas (HGG) investigation works included:
  - Five shallow soil bores were converted into HGG monitoring bores;
  - Two rounds of monitoring were undertaken at one week intervals following installation;
- Submission of collected soil and water samples to a National Association of Testing Authorities (NATA) accredited laboratory for the required analysis; and
- Preparation of this DSI report in general accordance with the applicable guidelines made or approved under S. 105 of the *Contaminated Land Management Act* (1997), including (but not limited to) relevant sections of the National Environment Protection *(Assessment of Site Contamination)* Measure 1999 (ASC NEPM) (NEPC, 2013) and the *Consultants reporting on contaminated land, Contaminated Land Guidelines* (NSW EPA, 2020).

1.6 Regulatory Requirements

The investigation was performed in accordance with the relevant elements of the following guidelines and standards.

- AS 4482.2 - Guide to the Sampling and Investigation of Potentially Contaminated Soil, Part 2: Volatile Substances, Australian Standard (1999);
- AS 4482.1 - Guide to the Investigation and Sampling of Sites with Potentially Contaminated Soil, Part 2: Non-volatile and Semi-volatile compounds, Australian Standard (2005);
- Australian and New Zealand Guidelines for Fresh and Marine Water Quality, Australian and New Zealand Environment Conservation Council (ANZECC) (2000);
- Australian Drinking Water Guidelines (ADWG), National Health and Medical Research Council (NHMRC) (2011);
- Australian and New Zealand Guidelines for Fresh and Marine Water Quality (ANZG) Australian and New Zealand Governments and Australian state and territory governments, Canberra ACT, Australia (2018);
- Department of Environment and Conservation NSW Guidelines for the Assessment and Management of Groundwater Contamination (2007);

- National Environment Protection (Assessment of Site Contamination) Measure 1999, National Environmental Protection Council (NEPC) (April 2013). This is hereafter referred to as 'ASC NEPM, 2013';
- NSW Environment Protection Authority (EPA) Guidelines for the NSW Site Auditor Scheme (3rd edition (2017);
- NSW EPA, Contaminated Sites, Sampling Design Guidelines (1995);
- NSW EPA, Consultants Reporting on Contaminated Land, Contaminated Sites Guidelines (2020);
- NSW EPA, Designing Sampling Programs for Sites Potentially Contaminated by PFAS (2017);
- NSW EPA, Assessment and management of hazardous ground gases, Contaminated Land Guidelines (2020). This is hereafter referred to as 'the NSW EPA HGG (2020)';
- Interim Guideline on the Assessment and Management of Perfluoroalkyl and Polyfluoroalkyl Substances (PFAS), WA Department of Environment Regulation (2017); and
- PFAS National Environmental Management Plan, Heads of Environment Protection Authority (HEPA) Version 2.0 (January 2020). This is hereafter referred to as 'the NEMP (2020)'.

2. SITE BACKGROUND

2.1 Site Description and Identification

The Site is located at the corner of Olympic Boulevard and Figtree Drive opposite the Aquatic Centre in Sydney Olympic Park, NSW 2127. The Site is currently occupied by large commercial buildings and car parks.

Site identification details are summarised in **Table 2-1** and the site location and layout are provided within **Figures 1.**

Table 2.1: Site Identification

ITEM	DESCRIPTION
Site Name	SOP Metro Construction Site
Site Address	Corner of Olympic Boulevard and Figtree Drive, Sydney Olympic Park, NSW
Legal Description	■ Lot 58 DP786296 ■ Lot 59 DP786296 ■ Lot 132 DP1189734
Site Area (approx.)	■ Station Box Area - 7,045 m^2 ■ Construction Support Area – 24,112 m^2 ■ Total Site Area – 31,517 m^2 (3.15 ha)
Local Government Area	City of Parramatta Council
Environmental Plan	State Environmental Planning Policy (State Significant Precincts) 2005
Current Zoning	B4: Mixed Use

2.2 Environmental Setting

The following subsections provide a brief overview of the environmental conditions surrounding and underlying the Site.

Detailed background information is provided within the Jacobs EIS (2020) and ERM SAQP (2022), therefore a brief description is presented in the subsections below.

2.2.1 Surrounding Land Use

The Site is located in an area primarily used for commercial / industrial land uses:

- **North** – Herb Elliot Ave followed by a gatehouse and associated gardens with heritage value, commercial/industrial properties, existing Olympic Park train station, stadiums and large paved areas beyond.
- **South** – Figtree Drive followed by commercial/industrial properties.
- **East** – Commercial/industrial properties and high density residential apartments beyond.
- **West** – Olympic Boulevard (Blvd) followed by recreational land uses (Sydney Olympic Park Aquatic Centre).

2.2.2 Topography and Hydrology

The Site is located in an area of relatively flat topography with an elevation of 24 m Australian Height Datum (AHD) generally across the Site. The Jacobs EIS (2020) describes the Site as having an overall south easterly decline towards Bicentennial Park. The nearest surface water receptor is Lake Belvedere, located approximately 500 m south east of the Site. Lake Belvedere discharges into Powells Creek located approximately 1 km to the east of the Site.

2.2.3 Geology and Soils

A review of Geological Survey of NSW 1:100 000 geological map indicates that geology underlying the Site consist of Wianamatta Group Ashfield Shales, which are described as consisting of black to dark-grey shale and laminite. The rock relationship diagram on the map indicates Hawkesbury sandstones underlying the Ashfield Shales at depth.

A review of Atlas of Australian Soils of NSW 1:100 000 geological map indicates that the Site is underlain by Sodosol soil order comprising undulating chief soils, hard acidic yellow mottled soils usually containing some ironstone gravels throughout the profile.

A review of the Soil Landscapes of central and eastern NSW geological map indicates that the Site is underlain by the Blacktown (bt) residual soil landscapes. The bt landscape is described as gently undulating rises on Wianamatta Group shales and Hawkesbury shale, with slopes <5%, broad rounded crests and ridges with gently inclined slopes. The bt soils are described as shallow to moderately deep red and brown Podzolic soils, yellow Podzolic soils and Soloths.

The following observations were made within the previous investigations:

- GHD (2010) reported between 3.5 m to 6.15 m depth of fill within three boreholes progressed at the Site and adjacent to the Site, as cited within the ERM SAQP (2022);
- The Jacobs EIS (2020) indicated that soils at the SOP Site comprise fill at depths of 0 – 2 m, underlain by residual Ashfield Shale to approximately 45 m BGL, with Hawkesbury Sandstone at depths greater than 45 m; and
- The intrusive investigation for this DSI observed fill depths between 0.2 – 1.7 m BGL.

2.2.4 Hydrogeology

A search of the WaterNSW database of registered groundwater bores undertaken by Lotsearch (**Appendix A**) and reported on 3 February 2022 did not identify any registered groundwater bores onsite. Three groundwater bores were identified 90 – 100 m north-east of the Site, registered as monitoring bores with a depth of 8.0 m BGL. Standing water levels (SWLs) were not available for these bores at the time of writing.

Several other groundwater bores were identified within a 1 km radius of the Site, with SWLs reported to be 1.8 – 1.83 m BGL within the closest cluster of groundwater wells. The SWLs within the other surrounding wells were not available.

Based on a groundwater monitoring report provided to ERM for review (GDP, 2018[3]), two sets of nested wells (one shallow ~4.5 m BGL and one deep ~26-30 m BGL) are located on Site. It is reported that the two shallow wells did not recharge following development, as such these wells remain dry. The deeper wells were reported to have SWLs between 12.29 and 14.44 m below top of casing (m BTOC).

The Jacobs EIS (2020) described the typical groundwater level observed to be approximately 12.0 m BGL.

The groundwater was reported to flow to the south and east. However, it is noted that groundwater flow direction is anticipated to change during the excavation of the Station Box area due to the Station Box acting as a ‘groundwater sink’ and likely dewatering activities being required to allow Station Box construction in dry conditions.

2.2.5 Acid Sulfate Soils

A review of the Acid Sulfate Soils (ASS) risk maps from the former Office of Environment and Heritage indicates the Site is located in an area described as *“No Risk”* in terms of potential ASS.

[3] Golder and Douglas Partners, *Groundwater Monitoring Report, 00013/11180 Sydney Metro West Geotechnical Investigation,* ref: 1791865-003-R-GWMR-RevA, dated 16 October 2018 (GDP, 2018).

Surrounding areas to the north-west of the Site, greater than 1 km from the Site, and outside of the zone of drawdown modelled by Jacobs Typsa (2022) are high ASS probability sediments identified as *"H0: high probability at/near ground surface"* and *"H1: high probability <1m below ground surface"*. Based on the surficial / shallow depth of potential occurrence of ASS, and these areas' proximity and hydraulic connection to surface water bodies including Powells Creek and the Parramatta River, impact to these potential ASS soils is not considered likely.

To the north and to the south of the site at a distance of at least 350 m from the station site are disturbed terrain areas identified as X2 and X4. These are disturbed estuarine environments with PASS elevations of 2-4 m and >4 m respectively. These are also mostly outside the zone of drawdown modelled by Jacobs Typsa (2022) with the exception of a portion of the X4 disturbed terrain approximately 350 m south east of the site at the 2 m drawdown contour. Oxidation of PASS soils at depth could occur in this area and groundwater quality may be impacted, however treatment of waters prior to discharge to surface water environments is planned, and monitoring of groundwater along he alignment in accordance with the groundwater management plan GWMP will enable detection of changes groundwater chemistry if they occur.

3. DESKTOP INVESTIGATION

3.1 Historical Aerial Photograph Review

Historic aerial photographs were sourced via LotSearch Pty Ltd and are presented in **Appendix A** of this report.

A summary of the historical aerial photograph review is provided in **Table 3-1** below.

Table 3.1: Historical Aerial Photograph Review

Historical Aerial Date	Description
1930	The Site is observed to be mainly an approximately triangular open space / field bordered by a line of vegetation/trees. The remaining area of the Site located to the east of the open space, is observed to be vacant land with ground disturbance across it. A large industrial site is observed to the north of the Site, with a road running between the two sites. The majority of the surrounding area is observed to comprise agricultural land, with few residential properties and some road/rail infrastructure.
1943	The triangular open space remains unchanged, with the exception of two dirt tracks across the area. Further soil disturbances, likely including earthworks, appear to have occurred in the remaining portion of the Site located to the east. Initial stages of rail infrastructure development are observed within this portion of the Site. The large industrial site appears to have been further developed, including the construction of associated smaller structures. The residential properties have been demolished and the surrounding area has been further developed into roads/rail and agricultural land.
1949	The Site appears to remain unchanged with the exception of minor ground disturbances observed across the open space area. Significant changes have not occurred within the surrounding areas.
1951	No significant changes have occurred within the open space field. A more defined railway structure has been developed within the remaining portion of the Site located to the east. Significant changes have not occurred within the surrounding areas.
1955 – 1956	No significant change is observed across the open space field. The railway infrastructure has been further developed. Soil disturbances are observable within the industrial property to the north. Minor developments associated with the rail infrastructure to the south west is observed. No significant changes are observed within the remaining surrounding land.
1961	The railway infrastructure appears to be developed and functional. No other significant changes are observed on Site. Two new warehouses or similar structure appears to have been constructed within the industrial property to the north, where the soil disturbances were observed within the previous aerial photograph. The land to the west of the industrial property is now observed to be used as a car park. Small sheds / structures have been constructed within the agricultural land surrounding the property to the south.
1965	No significant changes are observed on Site. Further road and rail infrastructure has been constructed to the south-west of the Site. It appears the construction of a building immediately east of the industrial property has occurred.
1970	Two buildings / structures have been constructed within the open space field in the southern extent of the Site. Ground disturbance appears to have occurred, and associated stockpiles and a dirt path can be observed. Further industrial development has occurred to the north of the site, including the construction of several car parks. Ground disturbance and the construction of a building is observed within the property to the south west of the Site.
1978	No significant changes have occurred within the Site. Major ground disturbance is observed to the south west of the Site. Further development of road infrastructure is also observed within the surrounding areas.
1982	No significant changes have occurred within the Site.

Historical Aerial Date	Description
	The agricultural land to the south of the Site has been cleared. No other significant changes have occurred within the surrounding areas.
1986	The railway portion across the Site appears to have been discontinued, and the infrastructure demolished. The open space field and the remaining portion of the Site has been cleared and is observed to comprise vacant land with bare soil, bar the tree line around the triangular area. It appears major earthworks have been undertaken at the Site and to the east of the Site. The cleared area to the south of the Site has been partially developed into a carpark area with associated buildings.
1991	Three buildings have been constructed on Site (the buildings currently present), and the road running immediately adjacent the northern boundary of the Site, currently Herb Elliott Ave, has been realigned. Four buildings have also been constructed immediately to the east of the Site, and two buildings have been constructed to the south of the Site. Herb Elliot Ave has been realigned and redeveloped in a loop structure around the Site and associated buildings to the east. Further agricultural land is observed to have been cleared in the surrounding areas. Some ground disturbance and dirt tracks/paths is observed within the property to the south west of the Site. Minor development is also observed to have occurred to the south of the Site.
1994	No significant changes have occurred within the Site. A large building is developed to the west/south-west of the Site, which is the currently present aquatic centre. Further road infrastructure and realignment has occurred. Further development has occurred in the land surrounding the Site to the west and south. The large industrial property to the north of the Site, has been demolished and a vacant land is observed with hardstand across it.
2000	No significant changes have occurred within the Site. Further development has occurred within the surrounding areas in relation to the development of Homebush Bay for the Sydney Olympic games of 2000, including the completion of the aquatic centre construction, the construction of Sydney Olympic Park station and associated rail infrastructure, and the Sydney Olympic Showground to the north of the Site. Realignment and redevelopment of roads has also occurred.
2005 – present	No significant changes have occurred within the Site. Minor progressive developments have occurred during this time period, however, the surroundings areas have for the most part remained unchanged.

3.2 Council and Regulatory Records

A summary of the information accessible through publicly available records and sourced via Lotsearch is summarised within **Table 3-2**.

Table 3.2: Council and Regulatory Records Search

Item	Description
Contaminated Land	The Site was not listed as contaminated under the Contaminated Land Management Act (CLM Act) 1997. Three sites listed as sites notified to the NSW EPA were identified within 500 m of the Site with ongoing maintenance required to manage residual contamination: ■ Aquatic Centre Carpark landfill located 139 m south west of the Site; ■ Former Golf Driving Range landfill located 149 m south east of the; and ■ Bicentennial Park landfill located 301 m east of the Site. The potential risk to onsite receptors from these three sources are discussed further within **Section 3.3** below.

Item	Description
	Two former 'Contaminated Land: Record of Notice' were identified for the Site and the general surrounding area of Homebush Bay. This is presumed to be in relation to the historical land uses as described within **Section 3.3.**
James Hardie Sites	The Site was not listed as a James Hardie Site. Two records of James Hardie Asbestos Waste Sites were identified to be located immediately adjacent the north western Site boundary. The address was listed as King Avenue, Showground road, Homebush with the site names King Avenue – abattoir and King Avenue – railway land. It is understood the abattoir was identified as AEI 33 within the EIS (2020).
Delicensed Activities still Regulated by NSW EPA	One delicensed activity still regulated by the NSW EPA was identified onsite: ■ Silanna Semiconductor Pty Ltd, Peregrine Semiconductor Australia Pty Ltd, 8 Herb Elliott Ave, Homebush. The activity is listed as 'hazardous, industrial or Group A Waste Generation or Storage'. ERM undertook intrusive sampling within the footprint of the regulated area and results will be discussed in **Section 7**.
Heritage	One (item was identified as an Environmental Planning Instrument (EPI) Heritage Item, located immediately adjacent the north western boundary of the Site: ■ State Abattoirs classified as Conservation Area – General. Two (State Heritage items and one EPI Heritage item were identified within a 500 m radius of the Site.
Dryland Salinity	The Site lies within an area of moderate salinity potential.
Bushfire Prone Land	The Site was not listed as a bushfire prone area.
Ecology	No Ramsar Wetland areas were identified on-site or within 1 km of the Site. Based on the data provided within the Lotsearch report, obtained from the Groundwater/Inflow Dependent Ecosystems (GDE / IDE) Atlas by the Bureau of Meteorology, a high potential GDE and an IDE with a 8 – 10 likelihood are located approximately 500 m north east of the Site.

3.3 Historical Land Use

A review of the Historical Business Directories provided by Lotsearch for the years 1950 – 1991 indicated the Site was used by the following entities for a variety of business activities:

- Alfa Laval Engineering Pty Ltd – tank, filter, heat exchanger, separator, valve, dairy machinery and pumping equipment manufacturing, dairy factory supplies and engineers' abattoirs.
- AWA Microelectronics Pty Ltd – electronic components manufacturers / imports and distributions.
- Sanyo Australia Pty Ltd Australia – video equipment manufacturers and distributors.

Based on publicly available information, previous land uses also included railway and road infrastructure, and the land was redeveloped for the 2000 Olympic Games.

As aforementioned, three contaminated sites notified to the EPA are present within a 500 m radius of the Site. Bicentennial Park landfill is currently considered to be located hydraulically down-gradient of the Site, and therefore is not considered likely to pose a risk for the current land use. However, the groundwater flow directions are presumed to change following commencement of dewatering. As such, the potential risk posed cannot be ruled out at this stage.

The 'Golf Driving Range' landfill is located approximately 150 m south and the landfill beneath the Aquatic Centre car park is located approximately 150 m south west. Both landfills are currently managed and therefore are likely low risk in terms of potential landfill gas migration onto the Site. The landfills are located hydraulically down gradient, based on data from previous investigations.

However, based on the close proximity to the Site and the proposed dewatering anticipated to change the groundwater flow direction, it is considered a potential risk exists pertaining to leachate-contaminated groundwater being drawn towards the Station Box as a result of dewatering. Therefore, the land uses considered the most significant for the proposed Sydney Metro construction works are the three landfills located surrounding the Site.

3.4 Site History Summary

Based on a review of the historical aerial photographs, the Site was observed to be mainly open space and rail infrastructure until circa 1986, when the railway was discontinued and the infrastructure demolished. The Site was cleared with the exception of the tree line around the Site, and it appears major earthworks have been undertaken on Site. The buildings currently present on Site, appears to have been constructed circa 1991 and remain unchanged since.

The surrounding areas predominantly comprised agricultural land and road/rail infrastructure with one large industrial compound to the north of the Site. The industrial compound and associated areas to the north were developed until circa 1970 and remained unchanged until circa 1994 when it was demolished. The surrounding areas were progressively developed into the commercial/industrial area currently present during the 1990s for the Sydney Olympic Games of 2000, and has not undergone significant changes since.

Three sites listed as NSW contaminated sites notified to the EPA were identified within 500 m of the Site, Bicentennial Park landfill located south east of the Site, ‘Golf Driving Range’ located south of the Site, and Aquatic Centre car park located south west of the Site. Based on the close proximity to the Site and the proposed dewatering anticipated to change the groundwater flow direction potentially making these sites hydraulically up gradient, it is considered a potential risk exists pertaining to leachate-contaminated groundwater being drawn towards the Station Box as a result of dewatering. Therefore, the land uses considered the most significant for the proposed Sydney Metro construction works are the three landfills located surrounding the Site.

Two records of James Hardie Asbestos Waste sites were identified to be located immediately adjacent the northern boundary of the Site. One delicensed activity still regulated by the NSW EPA was identified on Site, Silanna Semiconductor Pty Ltd. The activity is listed as ‘hazardous, industrial or Group A Waste Generation or Storage’.

4. PREVIOUS INVESTIGATIONS

The previous investigation undertaken at the Site or relevant to the Site are listed below. It should be noted that, at the time of writing, the GDP (2020) report were not available for review by ERM.

- Golder-Douglas Partners, *Groundwater Monitoring Report, 00013/11180 Sydney Metro West Geotechnical Investigation*, ref: 1791865-003-R-GWMR-RevA, dated 16 October 2018 (GDP, 2018).
- Golder-Douglas Partners, *Groundwater Monitoring Report – Stage 2 Locations, Sydney Metro West Geotechnical Investigation*, ref: 1791865-023-R-GWM Stage 2 Rev1, dated 20 May 2021 (GDP, May 2021).
- Golder-Douglas Partners, *00013/11180 Sydney Metro West Groundwater Monitoring Report – Stage 3 Locations*, ref: 1791865-026-R-GWM Stage 3-RevC, dated 12 June 2021 (GDP, June 2021).
- Jacobs (2020) Sydney Metro West Environmental Impact Statement – Westmead to The Bays and Sydney CBD, Ref. IA19980, dated 15 April 2020 (Jacobs EIS, 2020).
- Golder-Douglas Partners (2020) Factual Contamination Assessment Report, 00013/11180 Sydney Metro West Geotechnical Investigation, dated 6 May 2020 (GDP, 2020).
- ERM, Sampling Analysis and Quality Plan, Sydney Olympic Park Station Construction Site, Sydney Metro West: Central Tunnelling Package, Project no: 0628507, dated 24 January 2022 (ERM SAWQP, 2022).
- Jacobs Typsa (2022) Sydney Metro West – Central Tunelling Package Sydney Olympic Park Excavation – Station Shaft, dated 23 March 2022 (Jacobs Typsa, 2022).

A summary of relevant investigations where data or information relevant to the Site was collected or discussed is provided within the sections below.

4.1 GDP (2018)

A summary of the relevant findings is provided below:

GDP installed two sets of groundwater monitoring wells (BH015 and BH068) at the Site as part of a larger groundwater monitoring program across several sites. Each set of groundwater wells comprised a shallow well and a deep well installed approximately 1 m apart.

It is reported that following development of the shallow wells, groundwater recharge was not observed and the wells remained dry. The two deeper wells were installed to depths of 29.2 m BGL (BH015) and 26.1 m BGL (BH068).

BH015 reported concentrations of nitrate and nickel in groundwater above the adopted drinking water guidelines and ammonia and cobalt were reported above the adopted 95% marine ecological criteria.

BH068 was reported to be obstructed and therefore was unable to be sampled by GDP. However, SWLs were obtained via a data logger.

Two offsite groundwater wells immediately surrounding the Site, were also installed by GDP (BH019 and BH032). BH019 reported concentrations of metals and ammonia in groundwater above adopted ecological criteria, nitrate above the adopted drinking water guidelines, and dissolved methane above the adopted screening criteria of British Geological Survey (2018). BH032 reported a concentration of ammonia above the adopted ecological criteria and nitrate above the adopted drinking water guidelines.

4.2 Jacobs EIS (2020)

The Jacobs EIS (2020) Chapter 20.10 states the following pertaining to the Stage 1 construction works:

"Overall, the groundwater and landfill gas in the vicinity of the construction site and tunnel alignment have a high potential contamination risk associated with current and historical activities."

Jacobs suggested that further data review was required and an appropriate management approach implemented in accordance with the measures in Section 20.17, which are in summary, as follows:

- Stage 1 contamination impacts would be managed in accordance with the Construction Environmental Management Framework in place for the Site, which is stated to require the preparation of a Soil and Water management plan which would include management measures for contaminated material and a contingency plan in the event an unexpected finds (UF) is identified.
- Mitigation measures to address potential contamination risks associated with Stage 1 works are listed under five categories:
  - C1 – management of low risk contamination: For sites where potential contamination risk is moderate to very high, a further review of data is to be undertaken. In the event, the additional review determines the contamination if likely to have very low or low risk, the site will then be managed in accordance with the Soil and Water Management Plan.
  - C2 – detailed site investigation: In the event, the additional data review is insufficient to understand the risk of contamination a DSI will be required to be undertaken in accordance with ASC NEPM (2013).
  - C3 – remediation: Where data from the additional data review (C1) or the DSI confirms that contamination would be moderate to very high risk, a RAP would be required.
  - C4 – site audit statement (SAS): Where contamination is highly complex, an accredited Site Auditor would be required to review and approve the RAP and develop a SAS and Site Audit Report upon completion of remediation.
  - C5 – residual contamination following construction: Ongoing management and monitoring measures would be required to be documented in an appropriate form and implemented for any areas where minor residual contamination remains following construction.

4.3 Jacobs Typsa (2022)

This design report provides design information relating to the construction of the retention system for the Sydney Olympic Park Station Box. The report includes information relevant to this DSI, in particular, the Contamination Assessment Report and the Hydrogeological Assessment Report, which are provided as Appendix F and Appendix G of the document respectively.

The Contamination Assessment Report included the screening of soil and groundwater results from historical investigations against human health and ecological criteria. There were no exceedances of the human health criteria for soil samples at the site. There were, however, some exceedances of the ecological criteria within the on-site soil dataset. The groundwater data did not have concentrations of any constituents above the human health criteria. This includes data from both on and off-site monitoring wells. There were several exceedances of the ecological criteria in groundwater samples from both on-and off-site monitoring wells.

The Hydrogeological Assessment Report contained information on the groundwater levels and flow, which was reported to be towards the west, and contained the results of in-situ permeability (packer) tests and slug tests. Groundwater inflow and drawdown from the proposed dewatering were also re-modelled. The potential for groundwater impacted from nearby landfills to be drawn towards the station excavation was explored in the context of the hydrogeological conceptual site model, and found to be possible between 3 years and 20 years post excavation, however it was considered unlikely that contaminated groundwater would migrate to the station given the nearby landfills were designed with liners and include leachate management systems.

5. SAMPLING AND ANALYSIS QUALITY PLAN

5.1 Data Quality Objectives

The ERM SAQP (2022) was prepared for this investigation to define the type and quality of data required to achieve the objectives detailed within **Section 1.3**.

The approach adopted was consistent with the ASC NEPM 2013 Data Quality Objectives (DQO) process, as outlined in Schedule B2 *Guideline on Site Characterisation,* the Australian Standard AS4482.1 Guide to the Sampling and Investigation of Potentially Contaminated Soil, and the Quality Control requirements detailed within the HEPA (2020) NEMP.

The DQOs developed and presented in the SAQP (ERM, 2022) using the seven step DQO approach are summarised in the subsections below.

5.1.1 Step 1: State the Problem

Given the proposed development works for the Site, the Site is to be assessed during the DSI for suitability for a land use consistent with the definition of 'Commercial/Industrial' provided in the ASC NEPM 2013. To provide a complete characterisation of the Site in accordance with ASC NEPM and NSW EPA guidance, spatial coverage should be sufficient for confidence that the Site data is representative.

Furthermore, a waste classification is required for spoil to be excavated from the Station Box in accordance with the Waste Classification Guidelines (NSW EPA, 2014). As such, this investigation is required to satisfy the minimum sampling densities as outlined within Section 12.19 (e) (ii) of the Deed, which specifies a sampling density for in-situ classification of no less than Industrial Waste Resources Guidelines (IWRG) 7, Sampling and Analysis: Soil Sampling (EPA Victoria 2009). Virgin Excavated Natural Material (VENM) and Excavated Natural Material (ENM) are to be classified in accordance with the requirements of the NSW Protection of the Environment Operations Act 1997.

It should be noted that however, the in-situ waste classification was prepared separately by others.

5.1.2 Step 2: Identify the Decision

Based upon the objectives of the investigation detailed **Section 1.3**, the decisions required to meet the objectives are discussed below:

- Is there sufficient information on the distribution and characteristics of impacted soil, groundwater and ground gas across the site to evaluate risk of harm to human health or the environment and whether off-site migration of contamination may have occurred?
- Is there sufficient information collected for the accurate in-situ waste classification for material within the Station Box footprint?
- Are there any potential unacceptable risks to human health and / or ecological receptors from contamination impacts in soil, groundwater and/or ground gas?
- Is there any evidence of, or potential for, migration of contaminants from the site?
- Is management or remediation of contamination, if identified, required?
- Is there sufficient information on the distribution and characteristics of contaminated soil, groundwater and HGG across the site to develop a Remedial Action Plan (RAP) or Environmental Management Plan (EMP) to (where necessary) remediate and/or manage site contamination?

5.1.3 Step 3: Identify inputs to the Decision

The inputs to make the above decisions include:

- An understanding of the nature, type and distribution of potentially contaminating activities that are currently and have historically occurred at the Site.
- Review of available historical reports, including geological and hydrogeological data, lithological records and previously collected field and analytical data.
- Soil and groundwater data providing characterisation on the nature and extent of contamination.
- Screening-level assessment criteria from guidelines made or approved by the relevant regulatory authorities as detailed within **Section 6**.
- Confirmation of acceptable data quality by assessment of data quality assurance / quality control by comparison against Data Quality Indicators (DQIs).

5.1.4 Step 4: Define the Study Boundaries

The boundaries of the investigation are identified as follows:

- Spatial boundaries – the investigation is limited to the area illustrated within **Figure 1** and the maximum depth of investigation at each location.
- Constraints within the study boundaries: the following are limitations of the sampling strategy for the site:
  - Access restrictions associated with sites conditions e.g. sites boundary fencing, safety concerns related to sampling within indoor areas, potential operational restrictions, the presence of and / or uncertainties related to the potential for underground utilities and presence of building structures.

Potential contamination at the site was not expected to be significantly affected by short-term temporal conditions and, as such, the data is considered representative of conditions at the time and duration of the investigation.

5.1.5 Step 5: Develop a Decision Rule

The decision rules are outlined as follows.

Table 5.1: Decision Rules

Decision No.	Decision	Decision Rules
1	Is there sufficient information on the distribution and characteristics of contaminated soil, groundwater and ground gas across the site to evaluate risk of harm to human health or the environment and whether off-site migration of contamination may have occurred?	■ Based on the identified potential risks detailed within the CSM, does the sampling density provide sufficient coverage within and surrounding potential source areas to assess whether contamination is present, if so, the answer to the decision is 'Yes'. ■ Otherwise, the answer to the decision is 'No'. If the answer is 'No', additional investigation will be required.
2	Is there sufficient information collected for the accurate in-situ waste classification for material within the Station Box footprint?	■ Based on the volume of fill anticipated to be produced and in comparison with the adopted minimum sampling densities, sufficient samples have been collected and analysed, the answer to the decision is 'Yes'. ■ Otherwise, the answer to the decision is 'No'. If the answer is 'No', additional investigation will be required.

Decision No.	Decision	Decision Rules
2	Are there any potential unacceptable risks to human health and/or ecological receptors from fill/soil, groundwater and/ or ground gas?	Analytical data compared against adopted assessment criteria: ■ If one or more concentrations of contaminants at one or more sampling locations are reported above the adopted assessment criteria and relate to a potentially complete pathway, then the answer is 'Yes'. ■ If all concentrations of contaminants are reported to be equal to or below the adopted assessment criteria, the answer is 'No'. Statistical analysis of data sets of chemical CoPC analyte concentrations will be used as inputs should sufficient data be collected, consistent with guidance in the NEMP and ASC NEPM. The analysis shall include: ■ 95% upper confidence limit (UCL) of the arithmetic mean concentration of each analyte shall be less than or equal to the criterion. ■ The maximum concentration of each analyte shall be less than or equal to 250% of the criterion. ■ The standard deviation of each analyte shall be less than 50% of the criterion. If any of these are exceeded, then the answer to the decision is 'Yes'.
3	Is there any evidence of, or potential for, migration of contaminants from the site?	■ Where the assessment identifies the potential for unacceptable risks to off-Site receptors as a result of Site contamination conditions, the answer to the decision is 'Yes'. ■ Otherwise, the answer to the decision is 'No'.
4	Is management or remediation of contamination, if identified, potentially required?	■ If the answer to Decision 2 is 'Yes', then management or remediation of identified contamination may be required.
5	Is there sufficient information on the distribution and characteristics of contaminated soil and groundwater across the site to develop a Remedial Action Plan or Environmental Management Plan to (where necessary) remediate and/or manage site contamination?	■ Is further assessment required to delineate the nature and extent of identified contamination within the site or migrating off-site? ■ If no additional investigation is required, the answer to the decision is 'Yes'. ■ Otherwise, the answer to the decision is 'No'.

5.1.6 Step 6: Specify Limits of Decision Error

This step is to establish the decision maker's tolerable limits on decision errors, which are used to establish performance goals for limiting uncertainty in the data. Data generated during this project must be appropriate to allow decisions to be made with confidence.

Specific limits for this project have been adopted in accordance with the guidance provided by the ASC NEPM, the NEMP, and standard ERM procedures for field sampling and sample handling.

To assess the usability of the data prior to making decisions, the data will be assessed against pre-determined DQIs for precision, accuracy, representativeness, comparability and completeness.

The pre-determined DQIs established for the project are discussed below in relation to precision, accuracy, representativeness, comparability, completeness and sensitivity.

- **Precision** – measures the reproducibility of measurements under a given set of conditions. The precision of the laboratory data and sampling techniques is assessed by calculating the Relative Percent Difference (RPD) of duplicate samples.
- **Accuracy** – measures the bias in a measurement system. The accuracy of the laboratory data that are generated during this project is a measure of the closeness of the analytical results obtained by a method to the 'true' value. Accuracy is assessed by reference to the analytical results of laboratory control samples, laboratory spikes and analyses against reference standards.
- **Representativeness** – expresses the degree with which sample data accurately and precisely represent a characteristic of a population or an environmental condition. Representativeness is achieved by collecting samples on a representative basis across the site, and by using an adequate number of sample locations to characterise the site to the required accuracy.
- **Comparability** – expresses the confidence with which one data set can be compared with another. This is achieved through maintaining a level of consistency in sampling techniques, analytical techniques and reporting methods.
- **Completeness** – is defined as the percentage of measurements made which are judged to be valid measurements. The completeness goal is set at there being sufficient valid data generated during the study.
- **Sensitivity** – expresses the appropriateness of the chosen laboratory methods, including the limits of reporting, in producing reliable data in relation to the adopted assessment criteria.

If any of the DQIs are not met, further assessment will be necessary to assess whether the non-conformance will significantly affect the usefulness of the data. Corrective actions may include requesting further information from samplers and/or analytical laboratories, downgrading of the quality of the data or alternatively, re-collection of the data.

Table 5.2: Data Quality Indicators

Data Quality Objectives	Frequency	Data Quality Indicator
Precision		
Blind duplicates (intra laboratory)	■ 1 / 20 primary samples	■ <30% RPD or <50% if less than 10x LOR
Blind duplicates (inter laboratory)	■ 1 / 20 primary samples	■ <30% RPD or <50% if less than 10x LOR
Blind duplicates (intra laboratory) – PFAS	■ 1 / 10 primary samples	■ <30% RPD or <50% if less than 10x LOR
Blind duplicates (inter laboratory) - PFAS	■ 1 / 10 primary samples	■ <30% RPD or <50% if less than 10x LOR
NATA accredited laboratory method for required analysis	■ All samples	■ All samples
Accuracy		
Surrogate spikes	■ All samples	■ 70-130%
Laboratory control samples	■ 1 per lab batch	■ 70-130%
Matrix spikes	■ 1 per lab batch	■ 70-130%

Data Quality Objectives	Frequency	Data Quality Indicator
Representativeness		
Sampling appropriate for media and analytes	■ NA	■ NA
Samples extracted and analysed within holding times.	■ NA	■ Meet analyte specific laboratory holding time requirements
Rinsate blank	■ 1 per day per media sampled with re-useable sampling equipment	■ <LOR
Method blank	■ 1 per lab batch or 1 per day (whichever is greater)	■ <LOR
Comparability		
Standard operating procedures for sample collection & handling	■ All samples	■ All samples
Standard analytical methods used for all analyses	■ All samples	■ All samples
Consistent field conditions, sampling staff and laboratory analysis	■ All samples	■ All samples
Completeness		
Sample description and COCs completed and appropriate	■ All samples	■ All samples
Appropriate documentation	■ All samples	■ All samples
Satisfactory frequency and result for QC samples	■ All QA/QC samples	■ -
Data from critical samples is considered valid	■ All samples	■ All samples
Limits of reporting appropriate and consistent	■ All samples	■ All samples

5.1.7 Step 7: Optimise the Design for Obtaining Data

Historic uses of the Site indicate the potential for contamination to be present that may pose a potential risk to human health or the environment.

Various strategies for developing a statistically based sampling plan are identified in the ASC NEPM 2013 including judgemental, random, systemic and stratified sampling patterns. Based on the history of the Site and the proposed construction works, a stratified sampling program was considered appropriate to enable the accurate characterisation across the Site. Soil, groundwater and HGG sampling / monitoring locations are provided within **Figure 3** and **4**.

The rationale for the adopted sampling approach is described within **Section 5.2** and details on the investigation methodology is presented within **Section 5.3.**

5.2 Investigation Rationale

5.2.1 Soil

The soil sampling program was designed to assess the Site for suitability for a land use consistent with the definition of 'commercial / industrial' provided within ASC NEPM 2013 and to obtain sufficient data to enable waste classification of the material within the Station Box Area for off-site disposal.

The sampling density adopted for Site suitability was in accordance with the NSW EPA (1995) *Sampling Design Guidelines*, as recommended within ASC NEPM 2013. In general accordance with NSW EPA (1995) a minimum of 45 sample locations are required for an area of 3.15 ha. The boreholes were located to provide sufficient spatial coverage of the Site.

The sampling density recommended for waste classification purposes in accordance with Table 3 of the *Victorian EPA Industrial Waste Resource Guidelines: Soil Sampling* (2009) referenced within the NEPM, the sampling density requirement for in-situ material >2,500 m^3 in volume, is 1 sample per 250 m^3 to calculate the 95% UCL average. The Station Box excavation is proposed to generate a volume of 6,340 m^3 fill material (based on an average depth of 0.9 m BGL). As such, a minimum of 25 samples were required to characterise the waste sufficiently.

The below table outlines the approximate volumes of spoil proposed to be excavated from the Station Box and Station Access Excavation and the calculated sample density that is required to be achieved within this DSI.

Table 5.3: Fill & Natural Soil Sample Summary

Material Type	Approximate Volume (m^3)	IWRG (2009) Table 3 Minimum number of samples 95% UCL average
Fill	6,340 [1]	25
Natural Soils/Rock	581,100 [2]	2,324 [3]

[1] The approximate volume of anticipated Fill has been calculated on the basis of fill being encountered from 0 – 0.9 m BGL (on average).

[2] The approximate volume of anticipated natural material has been calculated on the assumption that the Station Box will be excavated to a depth of 25 m BGL.

[3] If the rock/natural soil is VENM or ENM, IWRG sample density requirements do not need to be met.

5.2.2 Groundwater

Several accessible groundwater monitoring wells were sampled as part of this DSI or as part of the baseline groundwater sampling program of works. Sampling of existing well (SMW_BH015) was not accessible, however the historical groundwater information was available for this well and other locations and used to inform the conceptual site model. The combined dataset was considered sufficient to gain an understanding of the groundwater conditions at the site for the purposes of this DSI.

An off-site groundwater investigation program comprising installation of three pairs of shallow and deep groundwater wells was proposed to be undertaken within the ERM SAQP (2022). However, due to constraints with permitting requirements with the landowner, Sydney Olympic Park Authority (SOPA), the groundwater investigation program was unable to be conducted as part of this DSI. These off-site locations (which are being installed at the time of writing) are sentinel wells designed to enable collection of data during the dewatering and are not required to assess current site suitability – but to monitor future groundwater conditions.

5.2.3 Hazardous Ground Gas

The HGG assessment across the Site was designed to obtain data on landfill gas migration from off-site sources. Landfill gas screening was undertaken to provide quantitative field screening for methane, carbon monoxide, hydrogen sulfide and carbon dioxide within the Site.

5.3 Investigation and Analysis Methodology

Fieldwork was undertaken by ERM Environmental Scientists between 12 January 2022 and 22 March 2022 in accordance with the scope of works outlined in Section **1.3** and ERM's Standard Operating Procedures (SOPs).

5.3.1 Soil Investigation

Prior to undertaking intrusive works, based on the potential for unknown services to be present within the Site, a review of available service plans including Dial Before You dig (DBYD) was undertaken and proposed drilling locations were cleared by an experienced underground utility locator with radio detection and Ground Penetrating Radar (GPR) equipment.

The soil investigation consisted the following:

- Progression of a total of 16 boreholes within the proposed Station Box footprint using a combination of non-destructive drilling (NDD) and a drill rig utilising solid flight augers, to the following depths:
  - 14 boreholes to a maximum depth of 5 mBGL;
  - 2 boreholes to a maximum depth of 25 mBGL (air hammering was utilised, where required).
- Soil samples from the soil bores within the Station Box was collected from near the surface (<0.1m), at each vertical metre within the fill, and every 5m thereafter. In the event a different lithological or fill layer was observed, a soil sample was collected.
- Progression of 29 boreholes within the Construction Support areas using a combination of NDD (high pressure water and vacuum, and hand auger for sampling) and a drill rig utilising solid flight augers, to a maximum depth of 3 m BGL. Progression via push tube sampling was not completed due to the presence of shallow bedrock. Test pits were considered within the SAQP and were only considered necessary if anthropogenic material was observed within fill during drilling.
- Two soil samples were collected from each soil bore within the Construction Support area, based on field observations.
- Soil logging was conducted by a suitably qualified and experienced ERM environmental scientist in general accordance with the Unified Soil Classification System and ERM SOPs. Samples were logged, and the following information was recorded in the field: soil/rock type, colour, grain size, sorting, angularity, inclusions, moisture condition, structure, visual signs of contamination (including staining and observations of anthropogenic material including fragments of fibre cement sheeting) in general accordance with AS1726. When samples were required to be collected in the upper 1.5m where NDD was utilised, the high pressure water/vacuum was stopped short of the sample depth, and the sample was collected using a hand auger. The method of sample collection was deemed appropriate. Using this method, soil could be inspected regularly, and water from NDD did not impact on the samples obtained. Bore hole logs are provided within **Appendix B**.
- Soil samples were placed in a zip lock bag and screened in the field for head space vapours (principally, volatile organic compounds (VOCs) but may also include some volatile inorganic compounds) using a calibrated photo-ionisation detector (PID). The sensor bulb used in the PID had an ionisation potential (IP) of 10.6 electronvolts (eV). Field records showing calibration details are provided in **Appendix C**.
- A minimum of 2 samples per location were selected for analysis based on field observations and screening, with a total of 99 soil samples submitted for analysis. Samples collected were placed within laboratory-supplied containers / sample bags and transported to a NATA accredited

laboratory under appropriate chain-of-custody (COC) documentation, for analysis for the contaminants of potential concern (CoPC) as described within **Table 5-4**.

- Field QA/QC samples were collected including field duplicates, inter-laboratory duplicates, rinsate blanks, trip blanks and trip spikes as outlined within **Table 5-4.**

5.3.2 Groundwater Investigation

The groundwater investigation consisted of gauging and sampling of five existing off-site wells, SMW_BH019, SMW_BH032, SMW_BH120, SOP_W1_w and an unknown well which has been named Sub_W1 in this report:

- Prior to sampling, the SWL and total well depth was gauged using an oil/water interface probe from the top of well casing.
- The well was purged and sampled using a peristaltic pump. During sampling measurements of field parameters including Dissolved Oxygen (DO), Electrical Conductivity (EC), reduction / oxidation potential (redox), pH, and temperature were collected. Field records and calibration details are provided within **Appendix C**.
- The collected samples were placed into laboratory provided sample containers and stored with a cooler box for transport to the laboratory under appropriate COC documentation. The samples were submitted to NATA accredited laboratory for analysis as described within **Table 5-4.**

As Sub_W1 contained very little water, the well was not purged prior to sampling and a bailer was used to collect a sample. Water collected was only sufficient to allow the analysis of a portion of the planned analytical suite.

It should be noted that the sampling of some of the off-site wells was undertaken as part of a wider sampling program.

5.3.3 Hazardous Ground Gas Investigation

The HGG assessment consisted the following:

- A total of five shallow soil bores advanced were converted to HGG monitoring wells. HGG monitoring wells were constructed within the bores in accordance with NSW EPA (2019) *Guidelines for the Assessment and Management of Sites Impacted by Hazardous Ground Gases*, using a slotted un-plasticised polyvinyl chloride (uPVC) screen positioned within the unsaturated zone, blank uPVC riser to the surface, 1 m bentonite grout seal at the surface, a flush gatic cover concreted in place to withstand light traffic and equipped with gas taps.
- The wells were left for seven days to stabilise prior to first round of monitoring, and the second round of monitoring was undertaken seven days following the first round. The third round of sampling was conducted six weeks after the second round of sampling.
- HGG monitoring was conducted using a GA5000 HGG monitor.
- Inert tubing was attached to the landfill gas monitor (GA5000) and in a location unlikely to be affected by landfill gas, to assess the background conditions of the Site and surrounds. GA5000 calibration certificate is provided within **Appendix C.**
- The gas monitor was connected to the HGG monitoring well cap and flow within the bore and atmospheric pressure recorded. The pump was turned on and the peak and stabilised concentrations of methane, carbon dioxide, carbon monoxide and hydrogen sulfide was recorded. The minimum and the stabilised concentration of oxygen and the %v/v balance (the non-analysed volume of gas taken from the bore into the analyser, representative of nitrogen and argon) was also recorded. The GA5000 was run for a minimum 10-minute period.

5.3.4 Decontamination

Decontamination of the down hole drilling equipment (casing, augers and sampler) was conducted prior to drilling the first hole and between locations by initially spraying with water using a high pressure hose, then applying Liquinox solution, and then rinsing using the high pressure hose. Dedicated disposable nitrile gloves were used for sample collection, and replaced between each sample and location. Equipment suitable for the purposes of this investigation were used (for example HDPE tubing suitable for sampling groundwater to be analysed for PFAS).

Quality control samples to assess potential cross contamination were collected during the sampling program as described within **Sections 5.3.6.**

5.3.5 Analytical Schedule

Soil and groundwater samples, including intra-laboratory duplicate samples, were analysed by ALS Limited laboratory. Inter-laboratory samples were analysed at Eurofins Scientific laboratory. Both laboratories held NATA accreditation for the analyses performed.

Table 5.4: Analytical Schedule

Location / Purpose	No. of Sample Locations	Primary Samples	Analytical Analysis[1]
Soil			
Construction Support Area	29	56	TRH, BTEXN, Metals (8), PAHs, PCBs, OC, OP
		29	VOCs (50% of samples collected)
		13	PFAS (LOR 5 µg/kg) (25% of samples collected)
		30	Asbestos ID (AS4964) (one sample from fill material per borehole)
Station Box Area	16	43	TRH, BTEXN, Metals (8), PAHs, PCBs, OC, OP
		21	VOCs (50% of samples collected)
		34	PFAS (LOR 5 µg/kg) (1xfill and 1xrock sample per borehole)
		16	Asbestos ID (AS4964) (one sample from fill material per borehole)
		13	Toxicity Characteristic Leaching Procedure (TCLP) - Nickel
Site coverage	5	5	Total organic carbon (TOC) (3 x fill and 2 x natural)
	3	3	pH and cation exchange capacity (CEC)
Groundwater			
On-site	2	2	TRH, BTEXN, Metals (8), PAHs, VOCs, PFAS Ammonia, nitrate, total nitrogen, total phosphorous, major anions and cations, total dissolved solids (TDS), dissolved methane. PFAS only at one location due to lack of water volume.

Location / Purpose	No. of Sample Locations	Primary Samples	Analytical Analysis[1]
Off-site	3	3	TRH, BTEXN, Metals (8), PAHs, VOCs, PFAS Ammonia, nitrate, total nitrogen, total phosphorous, major anions and cations, total dissolved solids (TDS), dissolved methane.

[1] Total recoverable hydrocarbons (TRH), benzene, toluene, ethylbenzene, xylene, naphthalene (BTEX), Arsenic, Barium, Cadmium, Chromium, Lead, Mercury, Nickel and Zinc (Metals), Polycyclic aromatic hydrocarbons (PAHs), Polychlorinated biphenyls (PCBs), Organochlorine (OC) pesticides, Oragnophosphates (OP) pesticides, volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs) and per- and polyfluoroalkyl substances (PFAS).

5.3.6 Quality Assurance / Quality Control

In the course of this investigation a number of QA/QC measures were implemented to check the accuracy, precision and overall validity of the results obtained. These include:

- Collection of nine duplicate and five blind duplicates (inter-laboratory) duplicate soil samples, and collection of two duplicate water samples for assessment of intra- and inter-laboratory precision;
- Collection of eight trip blanks and eight trip spikes during soil and groundwater investigations to assess the potential for loss or transfer of volatiles during sample storage and transport;
- Collection of eleven equipment rinsate blank samples for assessment of decontamination procedures;
- Internal laboratory QA/QC procedures:
  - method blanks;
  - laboratory duplicates;
  - laboratory control samples;
  - matrix spike samples;
  - surrogate recovery samples; and
  - analysis holding time reviews.

Calibration certificates for field instruments are presented in **Appendix C**, and laboratory QA/QC procedures and results are presented in **Appendix E**.

6. SITE ASSESSMENT CRITERIA

6.1 Overview

This detailed investigation was undertaken with reference to the following publications:

- National Environment Protection (Assessment of Site Contamination) Measure 1999 (ASC NEPM) (NEPC (2013);
- Health screening levels for petroleum hydrocarbons in soil and groundwater. Summary, CRC CARE Technical Report no. 10 (CRC Care, 2010);
- Technical Report no. 39, Risk-based management and remediation guidance for benzo(a)pyrene, Cooperative Research Centre for Contamination Assessment and Remediation of the Environment ('The Technical Report', CRC CARE, 2017);
- PFAS National Environmental Management Plan Version 2.0 (HEPA, 2020);
- Guidelines for Managing Risks in Recreational Water (NRHMC, 2008); and
- Australian and New Zealand guidelines for fresh and marine water quality (ANZG 2018).

6.2 Adopted Screening Levels

6.2.1 Soils

Based on the proposed future land use, ERM assessed the soil data against the 'Commercial/Industrial' land use criteria as defined in the ASC NEPM. Due to the observed underlying clays across the Site, the screening levels for clay (fine) soils were adopted. Additionally, since future green space planting above existing fill is potentially possible, the ecological investigation and screening levels for commercial/industrial land use (fine soils) were also adopted.

The adopted screening levels applicable to the assessment of soils included:

- ASC NEPM (2013):
  - Health Investigation Level (HIL) D – Commercial / Industrial
  - Soil Health Screening Level (HSL) D – Commercial / Industrial
  - Management Limits: Commercial Industrial
  - Ecological Investigation Levels (EIL) D – Commercial / Industrial (site specific values were adopted for relevant contaminants, with the exception of chromium where the most conservative value was adopted)
  - Ecological Screening Levels (ESL) D – Commercial / Industrial (fine) (except for benzo(a)pyrene criteria, for which a high reliability guidance value has been developed (CRC Care, 2017)
- CRC CARE (2011):
  - Soil HSLs for Direct Contact: HSL D – Commercial / Industrial
  - Soil Health Screening Level (HSL): Intrusive maintenance worker (shallow trench)
- HEPA NEMP (2020):
  - Human HILs for soil: Industrial/commercial (HIL-D)
  - Ecological direct exposure
  - Ecological indirect exposure

6.2.2 Aesthetic Criteria

Although no specific numeric aesthetic guideline values are provided, the ASC NEPM requires the consideration of aesthetic issues (as a result of contamination) arising from soils within the Site. The following assessment criteria have been used when considering soil aesthetics:

- No highly malodourous soils, taking into consideration the natural state of the soil at the Site; and
- No staining or discolouration in soils, taking into consideration the natural state of the soil.

6.2.3 Groundwater

The below listed criteria is used as a screening tool for the groundwater sampling results of the offsite well, BH032:

- ANZG (2018) 95% Species Protection Interim Marine Water for slightly to moderately disturbed ecosystems;
- NHMRC (2008) Recommended Recreational Guidelines for Aesthetic and Health guideline values;
- HEPA NEMP (2020) NEMP:
  - Human health guideline values for water; and
  - Recreational (NHMRC 2019).

Ecological guideline values for 99% Species Protection Interim Marine for slightly to moderately disturbed ecosystems.assessed against the following guidance:

- Assessment and Management of Hazardous Ground Gases Contaminated Land Guidelines, NSW Environmental Protection Agency (EPA), (2020).

To assess the risk posed to current or future buildings (and their occupants) by methane on the site, a gas risk assessment was performed according to the methodology set out in the NSW EPA (2020) Hazardous Ground Gases guidelines for a level 2 risk assessment (modified Wilson and Card classification). The method requires the calculation of the site Characteristic Situation score (CS) based on a Gas Screening Value (GSV) as assessed by data collected from the site. The table sourced from Table 7 of NSW EPA (2020) is provided below within **Table 6-1**. This CS score is then used to assess what protection measures are appropriate to mitigate potential risks posed by hazardous ground gases.

Table 6.1: Gas Risk Classification (modified Wilson and Card classification)

GSV threshold (L/hr)	CS	Risk Classification	Additional Factors	Typical Sources
<0.07	1	Very low risk	Typically, methane <1% v/v and/or carbon dioxide <5% v/v, otherwise consider increase to CS 2.	Natural soils with low organic content. Typical fill
<0.7	2	Low risk	Borehole flow rate not to exceed 70L/hr; otherwise consider increase to CS 3.	Natural soils with high organic content. Recent deep fill.
<3.5	3	Moderate risk		Old inert waste landfill. Flooded mine workings.

GSV threshold (L/hr)	CS	Risk Classification	Additional Factors	Typical Sources
<15	4	Moderate to high risk	Consider need for level 3 risk assessment	Mine workings susceptible to flooding. Closed putrescible waste landfill.
<70	5	High risk	Level 3 risk assessment required	Shallow, unflooded abandoned mine workings
>70	6	Very high risk		Recently used putrescible waste landfill

7. RESULTS

The following sections summaries the results of the investigation works undertaken by ERM. Sampling and monitoring locations are illustrated on **Figure 2** and **Figure 3.** Photographs of the investigation are provided within **Appendix D**. Laboratory certificates are presented within **Appendix F**.

Site work was undertaken between 12 January 2022 and 22 March 2022 in general accordance with the ERM SAQP (2022).

7.1 Subsurface Conditions and Field Screening

The fill material encountered was variable and generally comprised gravelly sand / 'road base' gravels / crushed shale and clay / coarse and fine silty and sandy clays and clayey sands. The depth of fill was observed to be varied between 0.1 and 1.7 m BGL across the Site.

Brown/red/orange and grey silty clays and clayey sands were encountered below fill material with underlying shales observed at depth. Detailed description of material encountered during intrusive investigation is described within the borehole logs provided in **Appendix B**. It should be noted that BH135 to BH138, BH141, BH143 and BH144 was terminated shallower (0.25 – 1.3) than target depth due to hand auger refusal on weathered shale, rocks or hard clay.

Results of field headspace screening of soils utilising the calibrated PID ranged from 0.1 ppm to 9.1 ppm. All PID measurements were reported equivalent to an isobutylene standard and are presented in full on the borehole logs provided in **Appendix B**.

7.2 Soil Laboratory Results

Soil analytical summary tables are provided as **Tables T1**, **T2** and **T3** within the 'Tables' section of this report.

Analytical results for soil samples are summarised below:

- Asbestos was not detected within the samples submitted for asbestos identification (AS 4964-2004[4]).
- TRH / BTEX concentrations were reported below the laboratory LOR and/or below the adopted screening criteria for all samples analysed. It should be noted that detectable concentrations of TRH (all fractions) were reported within some soil samples analysed at depth from shale within the Station Box area.
- Metals concentrations were reported below the laboratory LOR and/or below the adopted screening criteria for all samples analysed.
- PAH concentrations were reported below the laboratory limit of reporting (LOR) and/or below the adopted screening criteria for all samples analysed. However, it should be noted that detectable low level concentrations of Phenanthrene were reported within several samples analysed at depth from the rock within the Station Box Area.
- SVOCs concentrations were reported below the laboratory LOR and/or below the adopted screening criteria for all samples analysed. However, it should be noted that minor detectable concentrations of 2-Methylnaphthalene and 1,2,4-trimethylbenzene were reported within several soil samples analysed at depth from shale within the Station Box Area. Bis(2-ethylhexyl) phthalate (DEHP) was also detected within a shallow soil sample (BH141_0.4), located within the Construction Support area at a concentration of 8.7 mg/kg.
- PCB concentrations were reported below the laboratory LOR for all samples analysed.

[4] Australian Standard, *Method for the qualitative identification of asbestos in bulk samples* (AS 4964-2004).

- OC and OP concentrations were reported below the laboratory LOR and/or below the adopted screening criteria for all samples analysed.
- PFAS concentrations were reported below the laboratory LOR for all samples analysed with the exception of three shallow soil samples (BH106_0.2, BH110_0.2 and BH125_0.5).
- Total organic carbon (TOC) reported concentrations below the laboratory LOR for all samples analysed.

7.3 Groundwater Gauging and Field Parameters

Based on access restrictions the existing well onsite, BH015 and BH068 were not able to be gauged and sampled.

Groundwater gauging of the off-site wells was completed at the Site on 4 February 2022. SMW_BH032 was also sampled on this date (groundwater was sampled at SMW_BH120 and SMW_BH019 on 19 January 2022 as part of a wider groundwater monitoring program). The shallow groundwater well, SMW_BH032s, was observed to contain less than 0.2 m of standing water within the well. As such, neither field parameter measurements nor sampling was able to be conducted from this well. In later February and in mid-March, additional groundwater sampling was conducted, including the sampling of two newly identified wells (one of them was almost dry, so a very small sample volume could be obtained). The gauging results and summary of field parameters measured prior to groundwater sampling are presented below within **Table 7.1**.

Table 7.1: Summary of Groundwater Field Parameters

Date	Well ID	SWL[1] (mBTOC)[2]	SWL (m AHD)[3]	Depth to Bottom of well (m BTOC)	pH	Temp (^{0}C)	Conductivity (mS/cm)	DO (mg/L)	Redox (mV)
4/02/2022	SMW_BH019	14.45	2.88	26.16	6.66	20.4	12.57	0.77	-170.4
4/02/2022	SMW_BH032s	7.09	12.67	7.13	-	-	-	-	-
4/02/2022	SMW_BH032	9.29	10.45	22.36	7.47	20.2	15.8	5.45	152.2
19/01/2022	SMW_BH120	16.943	0.52	26.9	6.66	22.3	18.89	1.4	-139.7
21/02/2022	SMW_BH019	13.376	4.02	26.278	6.56	22.8	12.45	1.01	-21.9
15/03/2022	SMW_BH019	14.070	3.31	26.080	6.52	21.3	0.2	2.4	106.1
16/03/2022	SOP_W1_w	10.040	14.37	10.176	-	-	-	-	-
16/03/2022	Sub_W1	3.909	-	6.110	7.51	22.9	2.17	1.46	105.1

[1] Standing Water Level (SWL)

[2] meters below top of casing (mBTOC)

[3] Based on the surface elevation data provided within GDP (2018) and GDP (2020).

The groundwater parameters further indicate the groundwater in the Homebush Bay area immediately surrounding the Site was brackish. The DO concentrations indicate slightly aerobic conditions on average. A decrease in electrical conductivity during the March monitoring at SMW_BH019 was noted when compared with earlier sampling events and is potentially due to the large amount of rainfall that occurred around the time of sampling.

Based on groundwater elevation data from wells SMW_BH019 and SMW BH032 gauged during the same round of monitoring and SMW_BH120 gauged within a similar time period, groundwater was inferred to flow in a north-west / westerly direction.

It should be noted that rainfall conditions between the monitoring events were <30 mm, and therefore rainfall is not considered to have a material impact on the estimation of groundwater flow direction. The deeper wells (i.e. SMW_BH032, SMW_BH120 and SMW_BH015) were used for the groundwater elevation contouring to reflect the regional groundwater flow.

7.4 Groundwater Laboratory Results

Groundwater analytical results are provided in **Table T4** within the 'Tables' section of this report.

Analytical results for groundwater samples are summarised below:

- Total dissolved solids (TDS) was reported at concentrations above the adopted aesthetic criteria (6,000 mg/L) at three of the groundwater monitoring wells. TDS concentrations at SMW_BH019 were lower during the March 2022 sampling when compared to previous sampling rounds.
- Ammonia concentrations were above the adopted ecological criteria (ANZG (2018) 95% freshwater trigger value for an average pH of 7.4) at two monitoring wells. The ANZG (2018) trigger value for ammonia is dependent on the pH of the water and therefore the criteria has been selected for the average pH observed.
- PFAS concentrations were reported below or close to the laboratory LOR in most samples. 6:2 FTS was present in groundwater sampled from SWM_BH019 during the February monitoring round only, and several PFAS compounds were detected in the sample from Sub-W1. PFOS was also present at a concentration of 0.02ug/L in both these monitoring wells, which is above the ecological criteria adopted.
- Total phosphorous was reported at concentrations above the adopted ecological screening criteria (0.025 mg/L) within all samples analysed, with concentrations between 0.15 mg/L and 0.76 mg/L.
- Total nitrogen was reported at concentrations above the adopted ecological screening criteria (350 µg/L) within all samples analysed, with concentrations between 1,200 µg/L and 6,400 µg/L.
- Sodium and chloride concentrations exceeded the aesthetic criteria in all samples except Sub-W1, and at SWM_BH019 during the March 2022 sampling event only.
- Metals were reported at concentrations below the laboratory LOR and/or below adopted screening criteria with the exception of the following:
    - Copper within BH019 and Sub-W1 was reported a concentration above the adopted ecological screening criteria;
    - Arsenic within BH019 was reported a concentration above the adopted ecological screening criteria;
    - Iron within BH019 and BH120 was reported at concentrations above the adopted ecological screening criteria. The concentrations reported within BH019 also exceeded the adopted aesthetic criteria;
    - Nickel within Sub-W1 was reported a concentration above the adopted ecological screening criteria; and
    - Zinc within BH019 and BH032 were reported at concentrations exceeding the adopted ecological screening criteria.

7.5 Hazardous Ground Gas Field Screening

Three rounds of HGG monitoring were undertaken as part of this DSI. HGG monitoring was undertaken on 2 February 2022, 9 February 2022 and 22 March 2022. Round 1 and Round 3 were undertaken during low atmospheric pressure events. Due to the time constraints of this project, Round 2 was unable to be undertaken during a low pressure or falling atmospheric pressure events.

HGG monitoring data is tabulated and presented within **Tables T5** within the 'Tables' section of this report. The following peak readings were identified during field screening:

- Carbon dioxide readings were highest within monitoring well BH105, which recorded a maximum stabilised and peak concentration of 12.8% v/v;
- Methane readings were recorded at 0.1% v/v, same as the ambient air readings, within all monitoring wells;
- Carbon monoxide (CO) and hydrogen sulfide (H_2S) were not detected across the monitoring wells onsite; and
- The maximum flow rate observed during all monitoring events was 0.3 L/hr was observed at BH123.

7.6 Characteristic Gas Situation

Gas screening values (GSV) were calculated for CH_4 and CO_2 for all monitored wells in accordance with requirements outlined within the Ground Gas Guidelines. The GSV was also calculated assuming the worst case scenario by multiplying the maximum recorded flow rate with the maximum gas concentration in any other well as follows:

- GSV = Maximum borehole flow rate (L/hr) x Maximum gas concentration (%).

The results obtained were considered suitable for providing a quantitative indication of potential impacts from HGG on Site and calculation of preliminary GSV for the Site. The GSVs are provided within **Table 7-2** below.

Table 7.2: Gas Risk Classification

Bore	Maximum Flow (L/hr)	Maximum CH_4 (% v/v)	GSV CH_4 (L/hr)	Maximum CO_2 (% v/v)	GSV CO_2 (L/hr)	Highest Risk Classification (L/hr)	CS
BH105	0.1	0.1	0.0001	12.8	0.0128	<0.07 "very low risk"	1
BH106	0.1	0.1	0.0001	7.5	0.0075	<0.07 "very low risk"	1
BH123	0.3	0.1	0.0003	8.6	0.0258	<0.07 "very low risk"	1
BH130	0.1	0.1	0.0001	10.2	0.0102	<0.07 "very low risk"	1
BH131	0.1	0.1	0.0001	4.7	0.0047	<0.07 "very low risk"	1
Worst case	0.3	0.1	0.0003	12.8	0.0384	<0.07 "very low risk"	1

The GSV outcomes define a risk classification of "very low risk" and Situation 1. However, the NSW EPA HGG (2020) Table 7 also specifies that *"Typically methane <1% and/or carbon dioxide <5%; otherwise consider increase to CS 2".*

The quantitative assessment identified carbon dioxide at concentrations >5%, however the recorded values were consistent with the typical concentration range for oxidation of organic matter in soil [5], and methane concentrations were low (similar to the ambient air concentrations). It should also be noted that no flow rate was identified across the wells, and therefore it is considered unlikely that HGG at the Site will require management or mitigation under the CS 2 classification. In consideration of the above-mentioned factors, ERM considers that an increase to CS 2 is not warranted.

[5] Typical concentrations of oxidation of organic matter lie between 0 – 10% based on Table 2 of NSW EPA HGG (2020).

8. DATA QUALITY EVALUATION

8.1 ERM 2022 Investigation

A QA/QC assessment detailing field procedures, laboratory methods and an analysis of QA/QC sampling results from the investigation is provided in **Appendix E**. Overall, the sample data collected by ERM is considered to be of a suitable standard to be used in this report.

8.2 Previous Investigations

As the conceptual site model presented in this report will incorporate historical data from previous investigations, the quality assurance and quality assurance evaluations within the previous investigation reports were reviewed to ensure any unsuitable data is excluded from the conceptual site model evaluation. Items to note are provided in the table below.

Table 8.1: Summary of Previous Investigations

Investigation Report	Summary of Quality Assurance/ Quality Control
Golder-Douglas (2018) Groundwater Monitoring Report – Sydney Metro West Geotechnical Investigation	Golder Douglas note that although variances and non-conformances with acceptable criteria were noted, that these are considered unlikely to affect the validity of the data. The precision of most duplicates of organic compounds was acceptable and variability in PAH and TRH attributed to variance in laboratory handling, extraction and measurement procedures. SMW_BH015, SMW_BH019 and SMW_BH032 data is relevant to this DSI.
Golder-Douglas (May 2021) Groundwater Monitoring Report – Stage 2 Locations – Sydney Metro West Geotechnical Investigation	Golder Douglas note that although variances and non-conformances with acceptable criteria were noted, that these are considered unlikely to affect the validity of the data. The quality of the data was concluded to be acceptable for environmental interpretive purposes. ERM's review concurs with this assessment. SMW_BH120 and SMW_BH126 data is relevant to this DSI.
Golder-Douglas (June 2021) Sydney Metro West- Groundwater Monitoring Report – Stage 3 Locations –	Golder Douglas note that although variances and non-conformances with acceptable criteria were noted, that these are considered unlikely to affect the validity of the data. The quality of the data was concluded to be acceptable for environmental interpretive purposes. ERM's review concurs with this assessment. Just one relevant sample (SWM_ENV713) was included in the scope of works.
Jacobs Typsa (2022) Sydney Olympic Park Excavation –Station Shaft	While no data was collected by Jacobs Typsa, data from historical investigations was summarised. ERM has verified the consolidated data presented (and used in this DSI) against the original data sources for all results except SWM_ENV712, SWM_ENV712s, SWM_ENV714, AF_BH36/36s and AF_BH37/37s (as ERM does not have a copy of the original data source).

9. CONCEPTUAL SITE MODEL

9.1 Overview

A Conceptual Site Model (CSM) is the qualitative description of plausible mechanisms by which human and/or environmental receptors may be exposed to site contamination. For exposure to be considered possible, some mechanism ('pathway') must exist by which impact from a given source can reach a given receptor. This is classed as a source-pathway-receptor (SPR) linkage.

The following section presents a summary of the potential sources, pathways and receptors applicable to the Site, as well as identifying potential source-pathway-receptor (SPR) linkages, based on the groundwater data collected by Golder Douglas (2018), Golder Douglas (May 2021) and Golder-Douglas (June 2021), the soil, groundwater and ground gas data collected by ERM (2022), and information reviewed and summarised in the previous sections. The identification of SPR linkages forms a key part of developing the Conceptual Site Model (CSM) for the site.

The potential for SPR linkages to exist has been assessed assuming ongoing commercial / industrial site use. The assessment is based on ERM's review of previous investigations, the findings of the current investigations and knowledge of the prevailing conditions at the Site.

9.2 Potential Sources of Contamination

Based on the previous investigations supplied to ERM, the known and suspected Areas of Environmental Concern (AECs), along with the Contaminants of Potential Concern (COPC) are summarised in **Table 9-1**.

Table 9.1: AECs and COPCs

Areas of Environmental Concern	Contaminants of Potential Concern
Historically imported fill (for levelling) and burial of waste materials of unknown origin and quality	Heavy metals, hydrocarbons (TRH, BTEX, PAH), asbestos
Potential firefighting activities adjacent the Site	Solvents (VOC), surfactants, PFAS
Former and existing structures – Hazardous building materials within or from on-site buildings / structures, demolition wastes	PCBs, Heavy metals, hydrocarbons (TRH, PAH), pesticides, asbestos
Former landfills located up gradient of the Site	Heavy metals, hydrocarbons (TRH, BTEX, PAH), VOCs, ammonia, PFAS, sulfate and chloride Landfill gases – methane, carbon dioxide, carbon monoxide, hydrogen sulfide
Potential historical contamination during the use of a portion of Site by Silanna Semiconductor Pty Ltd	PCBs and chlorinated hydrocarbons (CHCs)
Potential historical contamination during the occupation and operation of various industrial business activities on Site.	Heavy metals, hydrocarbons (TRH, BTEX, PAH), VOCs, CHCs, asbestos

9.3 Nature and Extent of Contamination Present

The media on Site previously identified as potentially contaminated are:

- soils (fill material and underlying natural soils);
- groundwater; and
- ground gas.

Environmental investigations have been completed by Golder-Douglas (2018), Golder-Douglas (May 2021) and Golder-Douglas (June 2021) and ERM (2022) which have informed the following summary. Sample locations are shown on Figures 2, and Figure 3.

Data collected by ERM is presented in the analytical tables Table T1 to Table T3, and data collected from others is provided in Appendix G.

The data is discussed in the following subsections.

9.3.1 Soil /Rock

Fill materials on Site have been reported to comprise gravelly sand / 'road base' gravels / crushed shale and clay / coarse and fine silty and sandy clays and clayey sands. Natural soils underlying the fill comprise clayey sands and brown/red/orange/grey silty clays, with shales observed at depth.

Metals were detected within all samples analysed at varying concentrations below the adopted human health and ecological criteria.

Total recoverable hydrocarbons, BTEX and PAHs were detected at a few locations including low level concentrations within soil samples analysed at depth from shale inside the Station Box area. All concentrations reported were below the adopted human health and ecological criteria. Two semi-volatile organic compounds (SVOCs) and one volatile organic compound VOC were reported at detectable concentrations. 2-Methylnaphthalene and 1,2,4-trimethylbenzene was reported within several soil samples analysed at depth from shale inside the Station Box area. These compounds may be indicative of naturally occurring shales or site activities. Based on the limited presence of these constituents reported within the shallower fill samples and in groundwater from on-site wells, a soil or groundwater source large enough to result in the presence of hydrocarbons in deep rock is not evident and is therefore considered unlikely to be from a contaminant source. It is therefore considered more likely these detections are natural hydrocarbons in shale rather than a site activity source.

Bis(2-ethylhexyl) phthalate (DEHP) was also detected within a shallow soil sample (BH141_0.4), located within the Construction Support area at a concentration of 8.7 mg/kg. The US EPA Regional Screening Levels (RSLs) residential soil criteria was used as a screening tool in the absence of Australian guideline values, to identify the potential contamination risk. The US EPA screening criteria for DEHP is 388 mg/kg, therefore the detected concentration of DEHP identified within BH141 is not considered to pose a human health risk.

Bonded (non-friable) asbestos containing material (ACM) was not visually observed during fieldwork and was not identified by the laboratory within the 46 samples analysed from the fill material across the Site. However, it should be noted that boreholes are recognised as not being the most effective way to detect asbestos in soils, and test pits are the preferred method to provide a more reliable assessment due to the quantity of soil that can be inspected.

Polychlorinated Biphenyls (PCBs) were not detected within the soil samples analysed.

Trace concentrations of pesticides (OCPs and OPPs) were detected at some locations within shallow soils, however all were below the adopted human health criteria.

Minor PFAS detections were reported within three samples (BH106_0.2, BH110_0.2 and BH125_0.5) collected and analysed from shallow soils / fill across the Site. All reported concentrations were below the adopted human health and ecological criteria.

9.3.2 Groundwater

Based on the off-site groundwater well data collected in January/early February 2022, the SWL was measured to be approximately 14.45 – 16.86 m BGL in the west/north of the Site and 9.29 m BGL within the well located to the east of the Site. The groundwater flow is inferred to flow north-west / west, which is different/opposite to that initially presumed (see Figure 4). The flow direction was initially presumed to flow in a general south-east direction towards the Parramatta River.

Based on the new inferred groundwater flow, the aquatic centre carpark landfill would now be located hydraulically down-gradient of the Site, with the golf driving range landfill cross gradient from the site. The Jacobs Typsa (2022) hydrogeological report also inferred groundwater flow direction is to the west/northwest.

ERM's groundwater investigation results, which comprised the sampling of five wells (two located on-site and three off-site wells), reported exceedances of adopted ecological criteria for ammonia, total phosphorous and nitrogen, arsenic, copper, iron, nickel, zinc and PFOS. Detectable concentrations of some other PFAS compounds were also reported at two of monitoring wells (SWM_BH019, located off-site to the west, and SOP-W1, located on-site). Human health screening criteria were not exceeded, however the sodium, chloride and iron concentrations exceeded aesthetic guideline values.

The available historical groundwater data also had several COPCs above ecological screening criteria but no human health screening criteria was exceeded with the exception of nickel at SWM_ENV_712s located just to the north of the station box.

It is noted that two of the monitoring wells (SMW_BH126 and AF_BH37) sampled by others (Golder Douglas) are within the Golf Driving Range (GDR) landfill. Ammonia and PFAS concentrations are high in SMW_BH126 relative to the other locations, and methane is high in these locations relative to other locations. It is noted that SWM_BH019 also has dissolved methane detected despite being 300m north of the nearest landfill location (Aquatic Centre Carpark (ACC) Landfill). ERM's groundwater results from 2022 reported dissolved methane at the laboratory LOR (0.01 mg/L) for SWM_BH019 and below LOR for onsite well SOP_W1 (<0.01 mg/L).

The groundwater results and exceedances of the adopted screening criteria are summarised within Table T4 within the 'Tables' section of this report. Historical data is presented in **Appendix G**.

9.3.3 Ground Gases

The maximum readings identified during the field screening of the on-site ground gas wells are as follows:

- Carbon dioxide readings were highest within monitoring well BH105, which recorded a maximum stabilised and peak concentration of 12.8% v/v;
- Methane readings were recorded at 0.1% v/v (which is the same as the ambient air readings) within all monitoring wells;
- Carbon monoxide (CO) and hydrogen sulfide (H_2S) were not detected across the monitoring wells onsite; and
- Flow rates recorded were very low, recording a flow rate of 0.3 L/hr within all boreholes.

The GSV and CS calculated for the Site based on three rounds of HGG monitoring undertaken at the Site is a *"very low risk"* and Situation 1 (CS1).

9.4 Potential Receptors

The potential sensitive receptors for contaminants present at the Site include:

- Present (Central Tunnelling Package and future Sydney Metro construction workforce) and future construction workers (Construction Support Area following completion of the Metro station) on the Site who may potentially be exposed to CoPCs through direct contact with impacted soils and groundwater, and/or inhalation of dusts associated with impacted soils;
- Future workers and customers on the finished Sydney Metro West line;
- General public / passers-by during construction works (dust and odour, potential direct contact with soil via trucks transporting waste spoil if sheeting/wheel washing inadequate);
- Future intrusive maintenance workers working in or around the Sydney Metro West station;

- Future users of the areas of the Site that will be developed for use subsequent to Sydney Metro's use of the land as a construction compound;
- Terrestrial ecological receptors on site;
- Aquatic ecological receptors at receiving water bodies; and
- Workforce associated with treatment plant, groundwater movement, or long term via operational tunnel/station groundwater drainage and discharge).

9.4 Potential Exposure Pathways

The following potential pathways of exposure that may result from impact to soil, groundwater or air are likely relevant to the Site Area:

- Direct contact exposure to humans or ecological receptors (soil and groundwater);
- Discharge of groundwater to surface water (Parramatta River);
- Inhalation of contaminated dust or asbestos fibres;
- Inhalation of vapours from soil or groundwater;
- Leaching of liquid and soluble contaminants to groundwater;
- Asphyxiation from accumulation of landfill gases in enclosed areas;
- Explosive risk from accumulation of methane derived from landfill gas in enclosed areas;
- Transport of dissolved / suspended contaminants in surface run-off; and
- Migration of contaminants dissolved in groundwater (including flow induced by construction dewatering).

9.5 Contamination Migration Potential

The construction works have potential to affect the distribution of contamination, particularly due to dewatering of the Station Box which is likely to result in groundwater flow moving towards the Station Box. Water pumped from the Station Box during construction will be directed to a water treatment plant and discharged into a stormwater drain that flows towards Powells Creek which drains to the Parramatta River. The tunnel construction methodology is understood to result in relatively limited groundwater drainage, and the tunnel will be constructed as a tanked structure to minimise impacts on groundwater during operation. The Station Box dewatering is therefore considered to be the most significant mechanism for creating potential migration of contaminated groundwater.

Further, disturbance created by excavation works could create dust, and/or mobilise soil vapours. These potential migration pathways are discussed within the following subsections.

9.5.1 Migration via Dewatering

Dewatering will alter the hydrogeological condition at the site, and result in a groundwater 'sink' whereby groundwater will flow towards the site from the surrounding area.

An update of the groundwater modelling originally conducted during the preparation of the EIS was included in the Jacobs Typsa (2022) Hydrogeological Assessment Report. The potential for groundwater from nearby landfills to be drawn towards the station excavation was found to be possible between 3 years and 20 years post excavation, however it was considered unlikely that contaminated groundwater would migrate to the station given the nearby landfills were designed with liners and include leachate management systems. Despite this, groundwater from off-site locations were screened against the human health and ecological criteria in order to establish whether risks to future receptors were likely.

While considered unlikely, the potential for migration of impacted groundwater from the nearby landfills (leachate) cannot be ruled out. As such, appropriate monitoring of groundwater will be required, with management actions to be implemented should groundwater conditions indicate potential risk to human health.

9.5.2 Migration of Hazardous Ground Gases via Degasification and Advection/ Diffusion in Unsaturated Zone

The only HGG identified on-site at concentrations above ambient air readings was carbon dioxide at a maximum stabilised concentration of 12.8% v/v. The final calculated GSV and CS was *"very low risk"*. Further, it is noted that the recorded values were consistent with the typical concentration range for oxidation of organic matter in soil. Therefore, based on the above and the lack of methane detected, the carbon dioxide is not considered to be associated with landfill gas migration from nearby landfills.

Dissolved methane was reported within several off-site groundwater wells sampled historically, including elevated methane levels within two wells located within the GDR landfill (which is an expected result). While no screening level was available for dissolved methane, Environment Agency (2021) considers a minimum partial pressure in excess of 5kPa, an equivalent dissolved-phase concentration of 1.6 mg/L, to be the lowest dissolved methane concentration which could cause concentrations at the lower explosive limit in air (5%) within a confined space when in contact with groundwater. Based on historical groundwater data, this concentration was exceeded at SWM_BH126, which is the monitoring well within the GDR landfill site and also at SWM_BH019, located to the north of the ACC landfill (both wells are over 200 m from the Site). In the most recent of ERM's 2022 groundwater monitoring rounds, dissolved methane was reported at the laboratory LOR (0.01 mg/L) for SWM_BH019 and below LOR for onsite well SOP_W1 (<0.01 mg/L). Therefore, the likelihood of migration of dissolved methane as a viable pathway for HGG onsite is considered to be low.

HGG (specifically methane) is an identified CoPC pertaining to the Site based on the presence of landfills in the surrounding area. Despite the reported low concentrations of dissolved methane within the most recent groundwater monitoring round, the risk of dissolved methane undergoing degasification and creating a risk to receptors at the Site and at the sites surrounding the station site is discussed further for completeness.

The surrounding landfills are identified as one of the potential sources of the dissolved methane in groundwater, which only occurs under specific conditions based on the volume of methane present in the vadose zone, temperature and pressure conditions, and water chemistry as methane solubility changes based on these conditions (e.g., 23 mg/L solubility at 25°C and atmospheric pressure[6]). The surrounding landfills (Bicentennial Park, aquatic centre car park and golf driving range), as advised by SOPA, incorporate gas extraction and venting systems, wetlands treatment systems and leachate management systems and are managed as per the *SOP Remediated Lands Management Plan* (version 2.2, May 2022). Therefore, the dissolution of methane is not considered the preferential pathway for methane gas within the landfills. Thus, the risk / likelihood of offsite migration of HGG from these landfills are considered very low under normal conditions.

Dewatering is proposed at the Site as discussed previously and will result in the creation of a groundwater 'sink' at the Site. Based on the Jacobs Typsa (2022) hydrogeological report, a drawdown of groundwater in the vicinity of the Site is anticipated. Further to that discussed above pertaining to dissolved methane, the lowering of the groundwater table will likely lower pressure in the unsaturated zone at the landfill sites. This further reduces the likelihood that dissolution of methane will be the preferential pathway for methane gas. It should also be noted that in the long-term, the generation of HGG at the landfills is not anticipated to increase as these are old landfills (>20 years) and based on a typical landfill life cycle these landfills are past the peak gas production stage.

[6] NSW EPA HGG (2020).

Should migration of leachate impacted groundwater occur and reach the site/ other nearby sites, the conditions for degasification of methane from groundwater, (i.e., extreme changes in temperature or pressure) are considered unlikely to occur.

Therefore,given all the lines of evidence presented above, ERM considers the likelihood of HGG migrating from groundwater to the vadose zone (both on site and at other surrounding sites) or the station box excavation to be unlikely and consequently the risk posed to human health by HGG to be low.

9.5.3 Migration via Water Treatment and Discharge

Treatment and discharge of groundwater potentially leads to a more rapid pathway for groundwater to enter the Parramatta River than currently exists via groundwater flow.

Previous data available on the existing groundwater well onsite, indicates ecological and/or human health exceedances for some metals, and ammonia. The offsite groundwater sampled during the course of this DSI investigation, and by others has exceedances of ecological criteria for some metals, ammonia, PFAS and nutrients. If the previous onsite data and current offsite groundwater data is any indication of the onsite groundwater quality, the untreated discharge could increase risk to ecological receptors he waterways.

The water treatment plant discharges will be regulated by NSW EPA under an Environmental Protection Licence, and this will provide sufficient regulation and management of potential impacts from discharges. If onsite groundwater quality is similar to that reported offsite, the migration risk can potentially be adequately managed.

9.5.4 Migration of Vapours and Odours

There was no evidence from the combined investigations for significant sources of either soil vapour or odorous materials. Therefore, the risk of creating migration of vapours or odours is considered low.

9.5.5 Mobilisation of Soil Contaminants

Based on the analytical results of this DSI investigation, the risk from soil contaminants is considered to be low as elevated soil contaminants were not identified across the Site.

Additionally, the majority of the Site soils are covered with hardstand, thereby preventing the aqueous mobilisation of contaminants in soils, if present. The proposed Site will also largely be covered in hardstand, post completion, thereby further preventing future mobilisation of contaminants, if present.

The minor PFAS (PFOS, PFBS and PFHxS) in soil detections were below the adopted human health and ecological criteria, is not considered likely to have potential to affect groundwater conditions.

9.6 Potentially Complete Source Pathway Receptor Linkages

A Source-Pathway-Receptor (SPR) linkage is considered to be present when a pathway links a source with a receptor. These linkages explain when there may be risks to the receptor, either now or in future.

The assessment of the SPR linkages for the soil and groundwater conditions at the Site is summarised in **Table 9-2**.

Table 9.2: SPR Linkage Assessment

Source	Pathway / Transport Mechanism	Receptor(s)	SPR linkage status
Soil	Direct Contact	Current: Sydney Metro construction workforce	Incomplete: exceedances of human health criteria were not identified during the investigation.

Source	Pathway / Transport Mechanism	Receptor(s)	SPR linkage status
	Inhalation of vapours	Future construction workers (Construction Support area following completion of the Metro station) General public / passers-by (dust only) Future users of development land outside the Sydney Metro land. Future users of Sydney Metro Station	Incomplete for Sydney Metro station use: no volatile soil contaminant sources were identified during the investigation.
	Inhalation of dust		Incomplete: exceedances of human health criteria were not identified during the investigation. Additionally, bonded (non-friable) ACM was not visually observed, and asbestos was not identified at a laboratory level.
	Exposure to flammable material		Incomplete: All TRH Management Limits were found to be compliant with the screening criteria.
	Direct Contact /Ingestion	Terrestrial ecological organisms	Incomplete: exceedances of ecological criteria were not identified during the investigation.
Groundwater	Direct Contact /Ingestion	Current: Sydney Metro construction workforce Future construction workers (Construction Support area following completion of the Metro station) Future users of the Sydney metro station and development land. Recreational users of the Parramatta River	**Potentially complete** (current and future construction workers): Based on data collected by Golder Douglas (2018, 2021), groundwater was not present at concentrations exceeding human health criteria with the exception of nickel at concentrations above recreational criteria at SWM_ENV_712S. Incomplete (future site users): Future users of either the Sydney Metro station or the development land are not considered potentially exposed to impacted groundwater because there will be no pathway for direct contact. **Potentially complete** (recreational users of the Parramatta River): Groundwater concentrations were generally below recreational criteria. Nickel at one monitoring well (SWM_ENV712S), located just off-site exceeded the recreational guideline value, however treatment of waters is proposed prior to discharge to the receiving waters, and will be regulated under an Environmental Protection Licence (EPL).
	asphyxiation / explosion		See hazardous ground gas section below.
	Inhalation of vapours		Incomplete: historical and offsite contaminant data does not indicate vapour in groundwater will present a risk under current or potential future scenarios.
	Direct Contact /Ingestion	Aquatic ecological organisms in Parramatta River	**Potentially complete** (aquatic organisms): Historical and offsite groundwater samples exceeded the ecological screening criteria (for metals, nutrients and ammonia).

Source	Pathway / Transport Mechanism	Receptor(s)	SPR linkage status
		Terrestrial flora/fauna on Site	Incomplete (terrestrial ecology): not likely to be groundwater dependent
Hazardous Ground Gas	Inhalation / asphyxiation / explosion	Current: Sydney Metro construction workforce Future users of the Sydney metro station. Future construction workers and users of the Construction Support Area following completion of the Metro station Off-site human and ecological receptors	Incomplete (current users of the site) The calculated GSV for the site is *"very low risk"* and a Situation 1. **Potentially complete** (future construction workers and users of the Site/ surrounding sites): The dewatering during Sydney Metro station construction will result in the movement of groundwater from beneath nearby landfill sites toward the station. While considered unlikely given the landfills are lined and leachate is managed, there is the potential that if hazardous ground gasses are in groundwater and if these hazardous ground gasses de-gas from the groundwater, they could present a human health risk to future workers and users of the site/surrounding sites under this scenario. While this future SPR linkage is unlikely to be complete, the 'potentially complete' category has been assigned as future data will be necessary to categorically rule this out. It is noted that a change in the groundwater levels as modelled is not likely to affect the operation of containment system within the nearby landfill sites.

In summary the potentially viable SPR linkages that require remediation action (further assessment, remediation or management) comprise:

- Potential risk to Sydney Metro current and future construction workers and users via direct contact with groundwater.
- Potential risk to recreational users of Parramatta River via direct contact/ingestion of groundwater to surface water in the Parramatta River.
- Potential risks to aquatic organisms in Parramatta River and its tributaries from discharge of impacted groundwater.
- Potential risks associated with hazardous ground gas in groundwater to future construction workers and users of the Site.

10. DISCUSSION

A brief discussion of the decision rules set out within **Section 5.1.5** to achieve the DSI objective is provided within **Table 10-1** below.

Table 10.1: Assessment of Decision Objectives

Decision No.	Decision	Decision Rules
1	Is there sufficient information on the distribution and characteristics of contaminated soil, groundwater and ground gas across the site to evaluate risk of harm to human health or the environment and whether off-site migration of contamination may have occurred?	Soil sampling has been undertaken in accordance with the minimum sampling densities specified within NSW EPA (1995). Soil sample results have been compared to the relevant health-based and ecological criteria for in-situ soils. As such, it is considered sufficient characterisation of the soil has been undertaken. While some on-site wells were inaccessible during the DSI, the onsite and off-site groundwater data ERM was able to collect was supplemented with historical onsite and offsite groundwater data. The data available is considered sufficient to evaluate risk of harm to human health and ecological receptors. Additional offsite groundwater wells to act as sentinel wells to enable the monitoring of changing groundwater conditions were unable to be installed during this DSI due to previously discussed time/permitting constraints, however, installation of these wells to supplement the wider monitoring well network was underway at the time of writing. Based on the three rounds of data collected for HGG, the data available is considered sufficient to inform the risk characterisation of the HGG present onsite. Potential future HGG risks were unable to be directly assessed with the available data, although consideration of the likelihood for the presence of HGG in groundwater given landfill design and leachate management indicate this is unlikely, as is the likelihood of HGG de-gassing from groundwater and presenting a plausible risk to human health.
2	Is there sufficient information collected for the accurate in-situ waste classification for material within the Station Box footprint?	The number of samples required to satisfy the minimum sampling density for in-situ waste classification purposes for the fill is 25 samples. ERM has collected and analysed 22 samples and required TCLP for samples that have exceeded the waste criteria, have been undertaken. The number of samples required were calculated based on a linear average calculation undertaken to determine the average fill depth across the Station Box. ERM notes that the central portion of the Station Box was observed to comprise significantly less fill in comparison with the rest of the Station Box. As such, ERM was unable to collect additional fill samples within this central portion. Therefore, with consideration to the conservative volume calculation based on the linear average depth, ERM considers an adequate number of samples have been collected and analysed for accurate in-situ waste classification. Twenty samples were collected and analysed of the natural material across the Station Box Area, and is considered representative of the natural material. As such, it is considered that sufficient data was collected for the accurate in-situ waste classification of the material within the Station Box. Waste classification reports have been appended to the report as Appendix H. It should be noted that detectable concentrations of hydrocarbons (TRH, PAHs, SVOCs) were identified within the natural soils at depth, and may affect the classification of natural material as VENM. The compounds

Decision No.	Decision	Decision Rules
		identified may be indicative of naturally occurring shales, and the possibility of this should be further discussed as part of the in-situ waste classification.
3	Are there any potential unacceptable risks to human health and/or ecological receptors from fill/soil, groundwater and/ or ground gas?	Exceedances of human health or ecological criteria were not identified within the soil samples analysed during this DSI investigation. Exceedances of human health and ecological criteria were identified within the historical onsite groundwater sample analysed (GDP, 2018). Elevated concentrations of carbon dioxide were identified during the landfill gas field screening. However, the calculated GSV for the proposed works based on the end land use is *"very low risk"* and a Situation 1, which only includes the current construction workers and the end users of the Sydney metro station area.
4	Is there any evidence of, or potential for, migration of contaminants from the site?	Elevated concentrations of metals have been reported within onsite and offsite groundwater samples. However, it is difficult to discern if contaminants have migrated onto Site from potential offsite sources and/or if the Site may be contributing to these concentrations and/or if it is representative of background groundwater conditions of Homebush Bay.
5	Is management or remediation of contamination, if identified, potentially required?	For the Sydney Metro station site including the Station Box and surface access areas there are considered to be no risks to current or future site users or workforce from soil. Based on the outcomes of this assessment, the groundwater may pose a risk to Site users and the environment. Management preventing direct contact with groundwater will be required, treatment of water entering the station box will be required prior to discharge at a surface water body (as is planned) and ongoing monitoring under an updated version of the Groundwater Management Plan (GWMP) will be required to monitor potential changes in groundwater conditions during / following dewatering. While considered unlikely, there is the potential for hazardous ground gas to be transported via groundwater to the station. Monitoring and management of this potential scenario is recommended. Details of the monitoring and management are proposed to be included within an updated version of the GWMP.
6	Is there sufficient information on the distribution and characteristics of contaminated soil, groundwater and ground gas across the site to develop a Remedial Action Plan or Environmental Management Plan to (where necessary) remediate and/or manage site contamination?	A remedial action plan or environmental management plan is considered not required for the Site in terms of soil, groundwater and ground gas risks (however a RAP may be required for spoil management purposes). Groundwater monitoring and management should be undertaken to ensure hazardous ground gas in groundwater does not pose a risk to future users of the station. A wider monitoring program is already proposed and outlined in a Groundwater Management Plan (GWMP). It is proposed that additional monitoring and management requirements can be incorporated into this plan instead of a RAP.

Based on the above discussion and information outlined within this DSI, ERM considers that the Site is suitable for general industrial and the Sydney Metro station use, subject to the following:

- An Unexpected Finds Protocol (UFP) should be prepared as part of the Construction Environmental Management Plan (CEMP) to be implemented during the construction works, to outline the safe

and appropriate actions to be undertaken in the event of encountering potential contamination that may arise from unexpected sources, including asbestos in soils during the construction works.

- Requirements for the monitoring and management of groundwater and ground gas in the vicinity of the Sydney Olympic Park site is to be documented in an updated version of the GWMP and implemented accordingly.
- Appropriate measures are specified within the Soil and Groundwater Management Plan, and any relevant occupational health and safety procedures to prevent direct contact with groundwater during construction and operation of the Station.

11. COMPLIANCE WITH THE DEED AND COA

Table 11.1: Assessment of Compliance

Clause [a]	Requirement [b]	Compliance [c]
Deed Requirements		
12.19 (a)	Except for Preliminary Works, the Tunnelling Contractor must perform and submit to the Principal's Representative and the Independent Certifier a Detailed Site Investigation prior to commencing any excavation activities	This DSI has been submitted to and reviewed by Principal's Representative and the Independent Certifier.
(i)	at any Area of Contamination Concern; and	The Areas of Contamination Concern are described and addressed by the scope of the DSI.
(ii)	to the extent otherwise required under the Planning Approvals	No additional requirement: see comment under CoA D71
12.19 (b)	Notwithstanding clause 12.19(a), the Tunnelling Contractor may also perform additional Detailed Site Investigations carried out in other areas of the Construction Site or outside the Construction Site if the Tunnelling Contractor deems it necessary to manage the risks associated with contaminated land and to appropriately plan for Remediation. Any additional Detailed Site Investigation performed in accordance with this clause 12.19(b) must also be submitted to the Principal's Representative and the Independent Certifier.	There is currently no additional DSI planned
12.19 (c)	Each Detailed Site Investigation	
(i)	must	
A	investigate areas of proposed excavation or disturbance	The whole footprint of SOP Construction Site is covered by the DSI, and therefore all areas of potential excavation or disturbance have been adequately investigated. The planned disturbance/excavation areas are shown in Figure 1
B	investigate land within the Construction Site or Extra Land surrounding the areas of proposed excavation or disturbance with respect to the potential migration of Contamination via groundwater, ground gas, vapour and odour into the areas of excavation or disturbance; and	The land within SOP Construction Site has been adequately investigated with respect to potential migration via groundwater, ground gas, vapour (no significant volatile substances detected, and not considered likely) and odours (no significantly odorous material encountered).
C	characterise risks to the construction, operation and maintenance of Sydney Metro West and its infrastructure from Contamination	Risks are characterised in Section 9, Conceptual Site Model.
(ii)	be prepared in accordance with Law, Good Industry Practice, the Planning Approvals, all guidelines made or approved by the EPA and any other requirements of this deed;	This DSI has been prepared in accordance with this requirement.

Clause [a]	Requirement [b]	Compliance [c]
(iii)	be reviewed and approved by a Certified Contaminated Land Consultant; and	This DSI has been reviewed and approved by a Certified Contaminated Land Consultant (Peter Lavelle, CEnvP SC).
(iv)	characterise the risk of Contamination migrating from the Construction Site as a result of the Tunnelling Contractor's Activities;	See Section 9 Conceptual Site Model.
12.19(d)	In addition to the requirements set out in clause 12.19(c), each Detailed Site Investigation performed within an Area of Contamination Concern must:	
(i)	To be reviewed and endorsed by an Accredited Site Auditor; and	This report is scheduled to be reviewed and endorsed by NSW accredited Site Auditor James Davis of Enviroview.
(ii)	Be accompanied by an Interim Site Audit Advice prepared by the Accredited Site Auditor when submitted to the Principal's Representative and the Independent Certifier in accordance with clause 12.19(a).	The Interim Site Audit Advice will be provided separately.
12.19 (e)	In addition to the requirements set out in clauses 12.19(c) and 12.19(d), each Detailed Site Investigation performed within a Key Contaminated Area must in accordance with the relevant EPA guidelines:	The whole Site was identified as a KCA, this report has been prepared in accordance with the relevant EPA guidelines
(i)	determine and delineate the lateral and vertical extent of Contamination within each Key Contaminated Area;	Soil criteria exceedances were not identified within this DSI. . Concentrations of constituents of potential concern in groundwater exceeding human health and /or ecological screening criteria were present within onsite and offsite wells (current and historical data). Concentrations were not attributed to a particular on-site or off-site source, but considered representative of the groundwater conditions in the Homebush Bay area. Ground gas at the site has been assessed and a "very low risk" has been assigned to the Site in terms of HGG.
(ii)	include in-situ classification of Solid Waste at sampling densities not less than that specified within the NEPM (2013) and the Industrial Waste Resources Guidelines (7), Sampling and Analysis: Soil Sampling (EPA Victoria 2010), except for Virgin Excavated Natural Material (VENM) and Excavated Natural Material (ENM) which are to be classified in accordance with the requirements of the Protection of the Environment Operations Act 1997 (NSW);	ERM considers sufficient samples have been collected and analysed for in-situ waste classification purposes. Waste classification of soils generated from the excavation of materials will not be conducted by ERM, as such this information has not been reported on within the DSI.
(iii)	classify the Solid Waste in accordance with the Waste Classification Guidelines using a statistical approach where relevant;	
(iv)	be suitably detailed so as to inform the development of the Remediation Action Plan, any Remediation Cost Estimate and any Agreed Remediation Scope and to characterise contamination risk to the construction, operation and maintenance of Sydney Metro West (including but not limited to soil, groundwater, ground gas, vapour and odour risks arising from	The RAP is proposed to be focused on spoil management and sufficient data has been obtained to enable RAP development. The DSI report has identified the presence of groundwater which require avoidance of direct contact, and

Clause [a]	Requirement [b]	Compliance [c]
	Contamination within the area of proposed excavation or disturbance or migrating into the area of proposed excavation or disturbance); and	also treatment prior to disposal to surface water environments. The DSI has also identified gas in groundwater off-site, and monitoring the groundwater surrounding the site is recommended. The DSI has sufficient information to inform the monitoring plan and measures to be incorporated to the Groundwater Monitoring Plan document.
(v)	without limiting the Tunnelling Contractor's obligations under clause 12.20A(h), characterise the risk of any PFAS contained in Solid Wastes in respect of The Bays PFAS Key Contaminated Area.	Not applicable
CoA requirements		
Condition D71	Before commencement of any construction that would result in the disturbance of moderate to high risk contaminated sites as identified in the documents identified in Condition A1 of this schedule, Detailed Site Investigations (for contamination) must be conducted to determine the full nature and extent of the contamination. The Detailed Site Investigation Report(s) and the subsequent report(s), must be prepared, or reviewed and approved, by consultants certified under either the Environment Institute of Australia and New Zealand's Certified Environmental Practitioner (Site Contamination) scheme (CEnvP(SC)) or the Soil Science Australia Certified Professional Soil Scientist Contaminated Site Assessment and Management (CPSS CSAM) scheme. The Detailed Site Investigations must be undertaken in accordance with guidelines made or approved under section 105 of Contaminated Land Management Act 1997 (NSW). The Detailed Site Investigation for Sydney Olympic Park metro construction site must be prepared in consultation with SOPA. *Note: Nothing in this condition prevents the Proponent from preparing individual Remedial Action Plans for separate sites*	The high risk areas referred to are defined by the Environmental Impact Statement for the project. There are three related to the SOP Construction Site, comprising AEI 30 (former Gold Driving Range landfill), AEI 31 (Aquatic centre landfill), AEI 32 (Bicentennial park landfill). All of which are located surrounding the Construction Site. ERM confirms that the DSI has been prepared in accordance with the specified guidance, and has been reviewed and approved by a CEnvP (SC). SOPA was provided the Draft DSI for review and the current version of this DSI includes updates to address SOPA comments.
Condition D72	Should remediation be required to make land suitable for the final intended land use, a Remedial Action Plan must be prepared, or reviewed and approved, by consultants certified under either the Environment Institute of Australia and New Zealand's Certified Environmental Practitioner (Site Contamination) scheme (CEnvP(SC)) or the Soil Science Australia Certified Professional Soil Scientist Contaminated Site Assessment and Management (CPSS CSAM) scheme. The Remedial Action Plan must be prepared in accordance with relevant guidelines made or approved by the EPA under section 105 of the Contaminated Land Management Act 1997 (NSW) and must include measures to remediate the contamination at the site to ensure the site will be suitable for the proposed use when the Remedial Action Plan is implemented. The	The RAP is proposed to be focused on spoil management. This DSI does not require remediation measures to be completed to make the land suitable for the intended site use, provided the measures in the Groundwater Management Plan are implemented.

Clause [a]	Requirement [b]	Compliance [c]
	Remedial Action Plan for Sydney Olympic Park metro construction site must be prepared in consultation with SOPA. *Note: Nothing in this condition prevents the Proponent from preparing individual Remedial Action Plans for separate sites*	
Condition D76	A copy of Detailed Site Investigation Report(s), Remedial Action Plan(s), Validation Report(s), Site Audit Report(s) and Site Audit Statement(s) must be submitted to the Planning Secretary, SOPA (in respect of Sydney Olympic Park) and the Relevant Council(s) for information.	Following the review and endorsement of this report by a NSW EPA accredited Site Auditor, it is understood that AFJV is to provide this report to SOPA and Parramatta Council for review and comment.

12. DATA GAPS

Following a review of the deed conditions and data presented within this report, ERM has identified the below data gaps and a discussion is provided pertaining to the requirement of further investigation and/or if it can be closed out and managed via management plans.

Table 12.1: Data Gap Discussion

Data Gap Identified	Discussion	Decision / Conclusion
Asbestos - sampling methods utilised for were not ideal for asbestos identification.	The SAQP initially proposed some test pits to enable greater ability to inspect soils, however challenges arose with this method and boreholes were completed instead. Agreement on the change in methodology was obtained from the site Auditor following the presentation of the initial investigation observations suggesting asbestos materials were not likely to be identified at the site. These lines of evidence included the presence of very little fill in most locations, and the fill being comprised of crushed mudstone with no anthropogenic material. Agreement on the changed approach was based on similar conditions being encountered across the remainder of the site, and test pits were to be a requirement if any evidence of fill containing anthropogenic materials was encountered, which it was not. The investigation is therefore considered to be adequate in characterising the soil, and due to the lack of evidence of asbestos material, quantification of asbestos at the site is not considered to be a data gap. Asbestos was not detected in the samples analysed within the investigation. Unexpected finds of asbestos can be managed under an UFP as discussed within **Section 10.**	Closed out with an Unexpected Finds Protocol (UFP)
Leachate and dissolved hazardous ground gas migration via groundwater from former landfills in the surrounding area.	As discussed within this DSI, leachate migration and HGG dissolution / migration is considered unlikely due to the management systems in place at the landfills. However unlikely, groundwater changes during and following dewatering is recommended to be monitored until it can conclusively be stated that adverse impacts from dewatering at the Site are not taking place.	Groundwater monitoring to be undertaken under an updated version of the existing GWMP. Monitoring to include, but not be limited to, analysis for dissolved methane, metals, ammonia, nitrate, major cations and anions.

13. CONCLUSIONS

ERM was engaged by AFJV to conduct a DSI at the SOP Construction Site. The DSI was undertaken to enable collection of sufficient environmental data to supplement previous investigation and refine the understanding of potential contamination associated with current and historical land use, to determine whether remediation is required and to provide data to facilitate waste classification of material to be removed within the Station Box.

Investigations were completed between 12 January 2022 and 22 March 2022 in general accordance with that outlined within the ERM SAQP (2022). Works completed included the progression of 45 boreholes in total, conversion of five boreholes to HGG monitoring wells and the sampling of five offsite groundwater wells.

Overall based on the findings of the previous assessments, desktop investigation undertaken, the findings of this DSI and the refined CSM, and subject to the objectives and limitations of this report, the following is concluded:

- Soil sampling has been undertaken in accordance with the minimum sampling densities specified within NSW EPA (1995) and the required sampling density for in-situ waste classification is considered met. Soil sample results have been compared to the relevant health-based and ecological criteria for in-situ soils. As such, it is considered sufficient characterisation of the soil has been undertaken and a risk posed to receptors from soil has not been identified. It should however be noted that boreholes are recognised as not being the most effective way to detect asbestos in soils. Therefore, an unexpected finds protocol is recommended to mitigate risks associated with potential unexpected finds.
- On-site and off-site groundwater data indicate COPCs are generally below human health screening criteria with the exception of nickel in groundwater just beyond the northern site boundary. Direct contact with groundwater should therefore be avoided.
- On-site and off-site groundwater data also indicate COPCs exceed ecological criteria, and so treatment of the water is necessary prior to discharge to a surface water body, as planned, and to be regulated under an EPL.
- Methane in groundwater is not present at concentrations that could produce hazardous conditions at the site. While dissolved methane is in groundwater off-site, and dewatering will result in groundwater from off-site migrating to the station box, it is considered unlikely that groundwater containing dissolved methane concentrations that could produce hazardous conditions will occur at the station box. Monitoring and management of groundwater will be required to ensure risks to site users from dissolved gases in groundwater remains absent. Monitoring and management requirements are proposed to be included in the Groundwater Management Plan.
- Hazardous Ground Gas (HGG) monitoring identified elevated concentrations of carbon dioxide, however, the calculated GSV was calculated to be *"very low risk"* and a Situation 1.

Based on the information outlined within this DSI, ERM considers that the Site is suitable for the Sydney Metro station use, subject to the following:

- An Unexpected Finds Protocol (UFP) should be prepared as part of the Construction Environmental Management Plan (CEMP) to be implemented during the construction works, to outline the safe and appropriate actions to be undertaken in the event of encountering potential contamination that may arise from unexpected sources, including asbestos in soils during the construction works.
- Requirements for the monitoring and management of groundwater and ground gas in the vicinity of the Sydney Olympic Park site is to be documented in an updated version of the Groundwater Management Plan (GWMP) and implemented accordingly.
- Appropriate measures are specified within the Soil and Groundwater Management Plan, and any relevant occupational health and safety procedures to prevent direct contact with groundwater during construction and operation of the Station.

As remediation is not required, a Remediation Action Plan (RAP) is not considered necessary for the purposes of rendering the site suitable for use, but is required to meet the Sydney Metro West – Central Tunnelling Works Design and Construction Deed requirements of the AFJV Contract with Sydney Metro.

The document will be prepared in a manner consistent with a standard RAP and as such will document all necessary actions to be undertaken at the Site in order to appropriately manage excavated soils and in a manner posing no unacceptable risk to human health or the environment.

ERM considers that the applicable requirements of the Deed and the project CoA have been complied with.

14. REFERENCES

AS 4482.1-2005. Guide to the investigation and sampling of sites with potentially contaminated soil. Part 1: Volatile and Semi-volatile compounds. Standards Australia.

AS 4482.2-1999. Guide to the investigation and sampling of sites with potentially contaminated soil. Part 2: Volatile substances. Standards Australia.

CRC Care (2010) Health screening levels for petroleum hydrocarbons in soil and groundwater. Summary, CRC CARE Technical Report no. 10

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Friebel, E & Nadebaum, P. (2011). Health screening levels for petroleum hydrocarbons in soil and groundwater. Summary, CRC CARE Technical Report no. 10. CRC for Contamination Assessment and Remediation of the Environment

Golder Douglas (2018) 00013/11180 Sydney Metro West Geotechnical Investigation. Ref: 1791865-003-R-GWMR-RevA. Dated 16 October 2018

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Golder Douglas (June 2021) 00013/11180 Sydney Metro West Groundwater Monitoring Report- Stage 3 Locations, ref:1791865-026-R-GWM Stage 3 Rev C, Dated 23 June 2021

HEPA & DoEE (2020) PFAS National Environmental Management Plan Version 2.0, Heads of EPAs Australia and New Zealand (HEPA) and the Australian Government Department of the Environment and Energy (DoEE).

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Jacobs Typsa (2022) Sydney Olympic Park Excavation – Station Shaft. Revision C, Dated March 23 2022

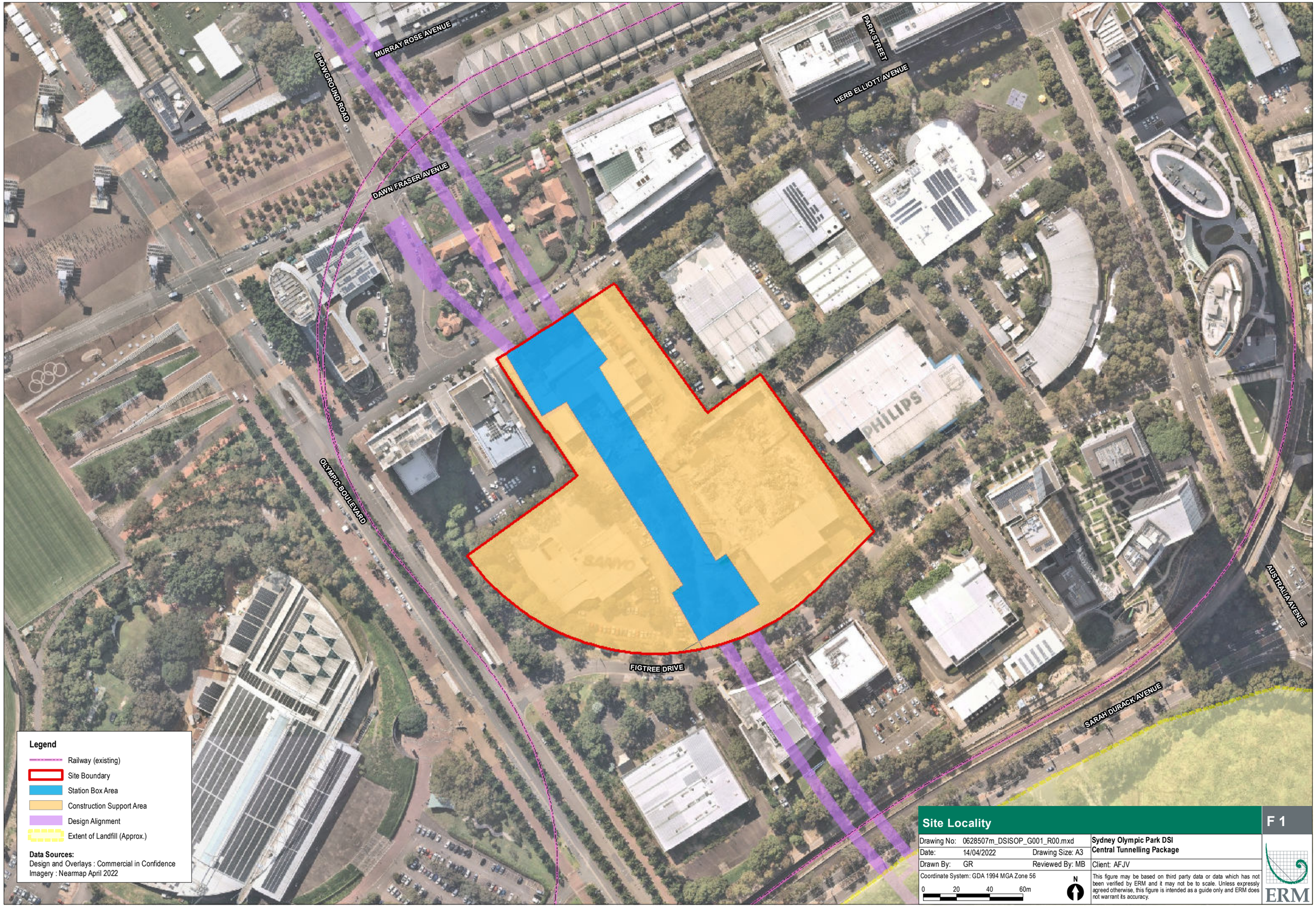
NEPC (2013). National Environment Protection (Assessment of Site Contamination) Measure 1999 (ASC NEPM). National Environment Protection Council.

NSW EPA (2019) Assessment and Management of Hazardous Ground Gases Contaminated Land Guidelines. Dated December 2019, amended May 2020.

NSW EPA (2020). Contaminated Land Guidelines: Consultants reporting on contaminated land. New South Wales Environment Protection Authority.

Sydney Metro (2022) Scoping Report Sydney Olympic Park Over and Adjacent Station Development Concept State Significant Development Application. Dated January 2022.

FIGURES



Site Locality

F 1

Drawing No:	0628507m_DSISOP_G001_R00.mxd		Sydney Olympic Park DSI Central Tunnelling Package
Date:	14/04/2022	Drawing Size: A3	
Drawn By:	GR	Reviewed By: MB	Client: AFJV

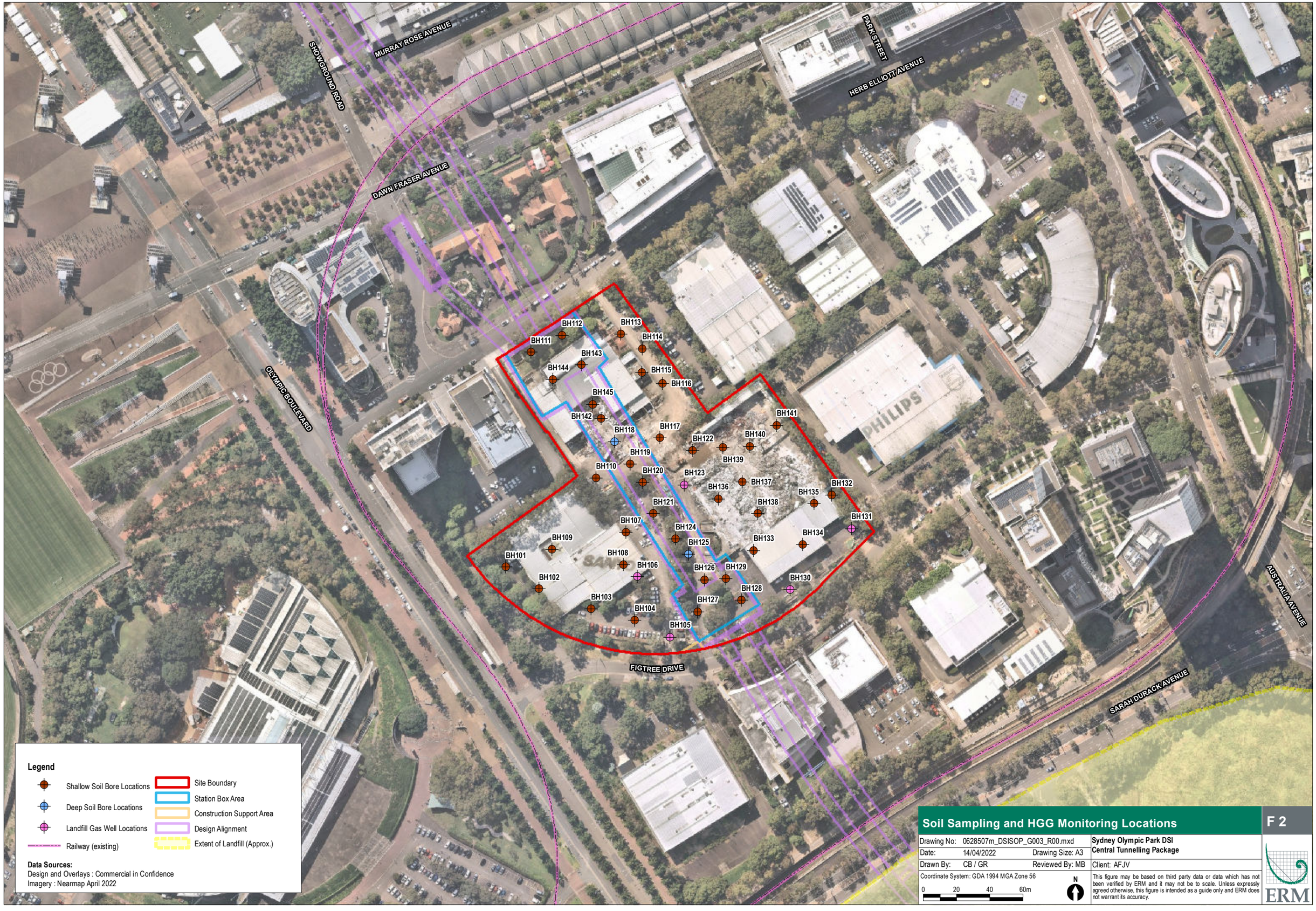
Coordinate System: GDA 1994 MGA Zone 56

0 20 40 60m

N

This figure may be based on third party data or data which has not been verified by ERM and it may not be to scale. Unless expressly agreed otherwise, this figure is intended as a guide only and ERM does not warrant its accuracy.

ERM



Legend

- Shallow Soil Bore Locations
- Deep Soil Bore Locations
- Landfill Gas Well Locations
- Railway (existing)
- Site Boundary
- Station Box Area
- Construction Support Area
- Design Alignment
- Extent of Landfill (Approx.)

Data Sources:
Design and Overlays : Commercial in Confidence
Imagery : Nearmap April 2022

Soil Sampling and HGG Monitoring Locations

F 2

Drawing No:	0628507m_DSISOP_G003_R00.mxd		Sydney Olympic Park DSI Central Tunnelling Package
Date:	14/04/2022	Drawing Size: A3	
Drawn By:	CB / GR	Reviewed By: MB	Client: AFJV

Coordinate System: GDA 1994 MGA Zone 56

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N

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ERM

SMW_BH120	Date	Arsenic (Filtered)	Copper (Filtered)	Iron (Filtered)	Nickel (Filtered)	Zinc (Filtered)	Chloride	Nitrogen (Total)	Ammonia as N	Total Phosphorus as P	PFOS
	19/01/2022	<1	<1	1990	<1	<5	6750	2300	1.66	0.15	<0.01

SMW_BH032	Date	Arsenic (Filtered)	Copper (Filtered)	Iron (Filtered)	Nickel (Filtered)	Zinc (Filtered)	Chloride	Nitrogen (Total)	Ammonia as N	Total Phosphorus as P	PFOS
	4/02/2022	3	<1	<50	5	13	5850	2700	1.96	0.24	<0.01

SOP_W1	Date	Arsenic (Filtered)	Copper (Filtered)	Iron (Filtered)	Nickel (Filtered)	Zinc (Filtered)	Chloride	Nitrogen (Total)	Ammonia as N	Total Phosphorus as P	PFOS
	16/03/2022	<1	2	<50	9	<5	538	2500	0.25	0.51	0.02

SOP_W1_w	Date	Arsenic (Filtered)	Copper (Filtered)	Iron (Filtered)	Nickel (Filtered)	Zinc (Filtered)	Chloride	Nitrogen (Total)	Ammonia as N	Total Phosphorus as P	PFOS
	16/03/2022	-	-	-	-	-	-	-	-	-	<0.01

SMW_BH019	Date	Arsenic (Filtered)	Copper (Filtered)	Iron (Filtered)	Nickel (Filtered)	Zinc (Filtered)	Chloride	Nitrogen (Total)	Ammonia as N	Total Phosphorus as P	PFOS
	19/01/2022	<1	2	5780	2	14	6580	6400	4.76	0.27	0.02
	21/02/2022	<1	<1	5060	2	38	5140	4900	4.5	0.22	<0.01
	15/03/2022	27	4	-	4	16	12	1200	0.08	0.76	0.02

SMW_BH120
SMW_BH032
SMW_ENV712
SMW_BH015
SMW_BH019
SOP_W1
SOP_W1_w
SMW_ENV714
SMW_ENV713
SMW_BH126
SHOWGROUND ROAD
HERB ELLIOTT AVENUE
FIGTREE DRIVE
PHILIPS
SANYO

Legend

- Groundwater Monitoring Location -Sampled
- Groundwater Monitoring (Existing Bore)
- Railway (existing)
- Site Boundary
- Station Box Area
- Construction Support Area
- Design Alignment
- Extent of Landfill (Approx.)

Data Sources:
Design and Overlays : Commercial in Confidence
Imagery : Nearmap April 2022

Analytes	Arsenic (Filtered)	Copper (Filtered)	Iron (Filtered)	Nickel (Filtered)	Zinc (Filtered)	Chloride	Nitrogen (Total)	Ammonia as N	Total Phosphorus as P	Perfluorooctane sulfonic acid (PFOS)
Units	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L	µg/L	mg/L	mg/L	µg/L
S1			**3000**		**30000**	**2500**				
S2	100	20,000		200		2500				0.7
S3										2
S4	13	1.3	300	7	8		350	1.75	0.025	0.0002

S1	NHMRC (2008) Recommended Recreational Guidelines - Aesthetic
S2	NHMRC (2008) Recommended Recreational Guidelines - Health
S3	NHMRC (2019) HBGV - Recreational Water
S4	Slightly to Moderately Disturbed Discharge Criteria for Estuarine Water
NS	No Standard Available
10	Exceeds Screening Criteria

Groundwater Monitoring Locations and Screening Criteria Exceedances

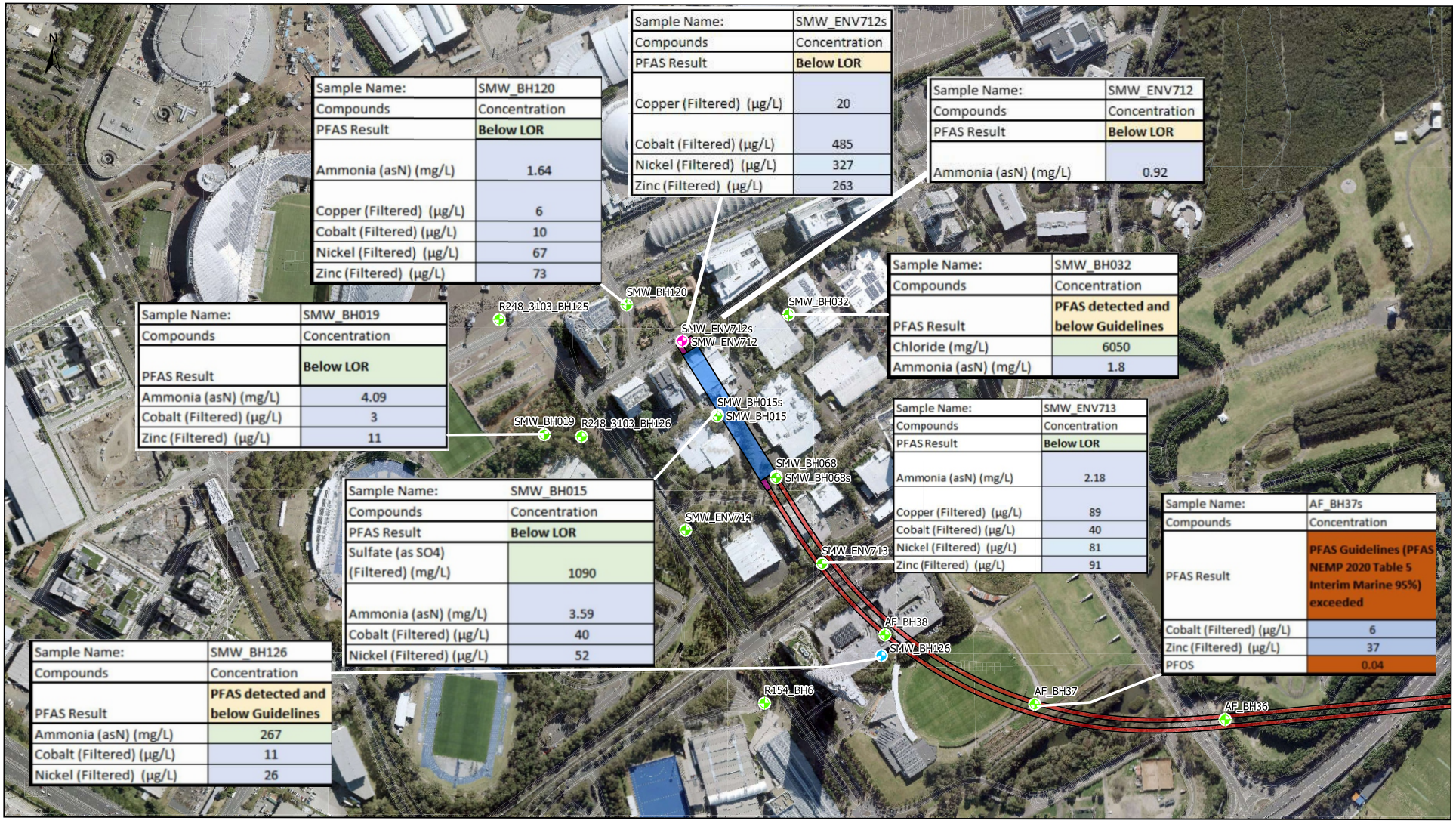
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Date: 21/04/2022 Drawing Size: A3
Drawn By: CB / GR Reviewed By: MB
Coordinate System: GDA 1994 MGA Zone 56
0 20 40 60m
N

Sydney Olympic Park DSI
Central Tunnelling Package
Client: AFJV

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ERM



Sample Name:	SMW_BH120
Compounds	Concentration
PFAS Result	**Below LOR**
Ammonia (asN) (mg/L)	1.64
Copper (Filtered) (µg/L)	6
Cobalt (Filtered) (µg/L)	10
Nickel (Filtered) (µg/L)	67
Zinc (Filtered) (µg/L)	73

Sample Name:	SMW_ENV712s
Compounds	Concentration
PFAS Result	**Below LOR**
Copper (Filtered) (µg/L)	20
Cobalt (Filtered) (µg/L)	485
Nickel (Filtered) (µg/L)	327
Zinc (Filtered) (µg/L)	263

Sample Name:	SMW_ENV712
Compounds	Concentration
PFAS Result	**Below LOR**
Ammonia (asN) (mg/L)	0.92

Sample Name:	SMW_BH019
Compounds	Concentration
PFAS Result	**Below LOR**
Ammonia (asN) (mg/L)	4.09
Cobalt (Filtered) (µg/L)	3
Zinc (Filtered) (µg/L)	11

Sample Name:	SMW_BH032
Compounds	Concentration
PFAS Result	**PFAS detected and below Guidelines**
Chloride (mg/L)	6050
Ammonia (asN) (mg/L)	1.8

Sample Name:	SMW_ENV713
Compounds	Concentration
PFAS Result	**Below LOR**
Ammonia (asN) (mg/L)	2.18
Copper (Filtered) (µg/L)	89
Cobalt (Filtered) (µg/L)	40
Nickel (Filtered) (µg/L)	81
Zinc (Filtered) (µg/L)	91

Sample Name:	SMW_BH015
Compounds	Concentration
PFAS Result	**Below LOR**
Sulfate (as SO4) (Filtered) (mg/L)	1090
Ammonia (asN) (mg/L)	3.59
Cobalt (Filtered) (µg/L)	40
Nickel (Filtered) (µg/L)	52

Sample Name:	AF_BH37s
Compounds	Concentration
PFAS Result	**PFAS Guidelines (PFAS NEMP 2020 Table 5 Interim Marine 95%) exceeded**
Cobalt (Filtered) (µg/L)	6
Zinc (Filtered) (µg/L)	37
PFOS	0.04

Sample Name:	SMW_BH126
Compounds	Concentration
PFAS Result	**PFAS detected and below Guidelines**
Ammonia (asN) (mg/L)	267
Cobalt (Filtered) (µg/L)	11
Nickel (Filtered) (µg/L)	26

sydney METRO | west

0 50 100
Meters

LEGEND

Screen geology
- FILL and SILTSTONE
- Interlaminated SILTSTONE and SANDSTONE
- SILTSTONE

- Running Tunnels
- Station Box
- Nozzle

Not analysed for PFAS
PFAS analysed and below LOR
PFAS detected and below Guidelines
PFAS Guidelines (PFAS NEMP 2020 Table 5 Interim Marine 95%) exceeded
NEPM 2013 Table 1A(4) Comm/Ind HSL D GW for Vapour Intrusion, Sand (µg/L)
Structural Impacts (Mild Upper Limits) (mg/L)
ANZG (2018) Freshwater 95% LOSP Toxicant DGVs
ANZG (2018) Marine Water 95% LOSP Toxicant DGVs
NEMP 2020 PFAS Ecological Freshwater Water 99% Protection (µg/L)

Historical Groundwater Monitoring and Screening Criteria Exceedances (Jacobs Typsa, 2022)

3b

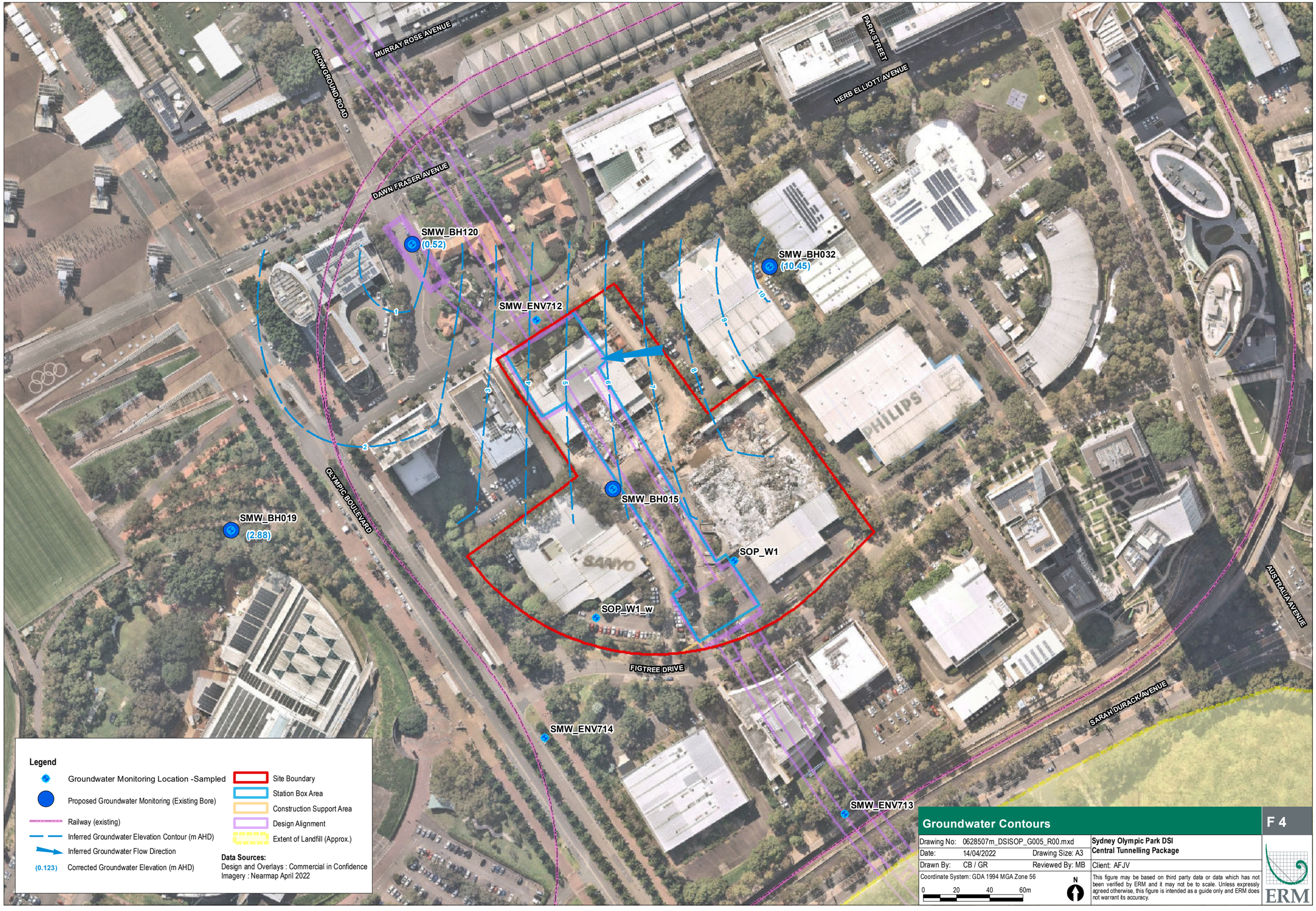
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Source:
Jacobs Typsa (2022) Sydney Olympic Park Excavation – Station Shaft. Revision C, Dated March 23 2022

N

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ERM



Legend

- Groundwater Monitoring Location -Sampled
- Proposed Groundwater Monitoring (Existing Bore)
- Railway (existing)
- Inferred Groundwater Elevation Contour (m AHD)
- Inferred Groundwater Flow Direction
- (0.123) Corrected Groundwater Elevation (m AHD)
- Site Boundary
- Station Box Area
- Construction Support Area
- Design Alignment
- Extent of Landfill (Approx.)

Data Sources:
Design and Overlays : Commercial in Confidence
Imagery : Nearmap April 2022

Groundwater Contours

F 4

Drawing No:	0628507m_DSISOP_G005_R00.mxd		Sydney Olympic Park DSI Central Tunnelling Package
Date:	14/04/2022	Drawing Size: A3	
Drawn By:	CB / GR	Reviewed By: MB	Client: AFJV

Coordinate System: GDA 1994 MGA Zone 56

0 20 40 60m

N

This figure may be based on third party data or data which has not been verified by ERM and it may not be to scale. Unless expressly agreed otherwise, this figure is intended as a guide only and ERM does not warrant its accuracy.

ERM

TABLES

	Asbestos	Chlorinated HCs						Exchangeable Cations					Moisture Content	Naphthalene	OCP		OCs	OPs				PAH/Phenols (SIM)																							
	Asbestos Identification (AS4964)*	1,2,3-trichlorobenzene	1,2,4-trichlorobenzene	1,2-dichlorobenzene	1,3-dichlorobenzene	1,4-dichlorobenzene	Chlorobenzene	Exchangeable Calcium	Exchangeable Magnesium	Exchangeable Potassium	Exchangeable Sodium	Exchangeable Sodium Percent	Moisture Content	Naphthalene	Vic EPA IWRG 621 OCP (Total)*	Vic EPA IWRG 621 Other OCP (Total)*	Toxaphene	Mevinphos (Phosdrin)	Naled (Dibrom)	Tokuthion	Trichloronate	Acenaphthene	Acenaphthylene	Anthracene	Fluoranthene	Fluorene	Benz(a)anthracene	Benzo(a)pyrene	Benzo(a)pyrene TEQ (half LOR)	Benzo(a)pyrene TEQ (LOR)	Benzo(a)pyrene TEQ (zero)	Benzo(b+j)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Chrysene	Dibenz(a.h)anthracene	Indeno(1.2.3.cd)pyrene	Phenanthrene	Pyrene	Sum of polycyclic aromatic hydrocarbons
Comment		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	meq/100	meq/100	meq/100	meq/100	%	%	mg/kg	MG/KG	MG/KG	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL		0.5	0.5	0.5	0.5	0.5	0.5	0.1	0.1	0.1	0.1	0.1	0.1	0.5								0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
CRC Care (2011) Direct Contact HSL D - Comm/Ind														11000																														
CRC Care (2011) Direct Contact Intrusive Maint. Worker														29000																														
CRC Care (2017) Ecological guideline - Commercial and industrial																											172[#1]																	
NEPM (1999) EIL - Commercial/Industrial (site specific)																																											
NEPM (1999) EIL - Commercial/Industrial														370																														
NEPM (1999) ESL - Commercial/Industrial (coarse)																											1.4																	
NEPM (1999) ESL - Commercial/Industrial (fine)																											1.4																	
NEPM (1999) HIL D - Commercial/Industrial																	160											40																4000
NEPM (1999) HSL D Comm/Indust - VI Clay 0 to <1 m														NL																														
NEPM (1999) HSL D Comm/Indust - VI Clay 1 to <2 m														NL																														
NEPM (1999) HSL D Comm/Indust - VI Clay 2 to <4 m														NL																														
NEPM (1999) HSL D Comm/Indust - VI Clay 4 m+														NL																														
NEPM (1999) Management Limits - Commercial/Industrial (coarse)																																											
NEPM (1999) Management Limits - Commercial/Industrial (fine)																																											
US EPA Regional Screening Levels (RSLs) Resident soil HQ=1.0, carcinogenic TR 1E-05																																											

Field_ID	Sampled_Date	Lab_Report	Sample_Depth_Avg																																											
Construction Support Area																																													
SOP_BH101_0.5_220120	20-Jan-22	ES2202264	0.5	ND	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	20.6	<0.5	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
SOP_BH101_1.3_220120	20-Jan-22	ES2202264	1.3	-	-	-	-	-	-	-	-	-	-	-	-	8.1	<0.5	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
SOP_BH101_2.0_220120	20-Jan-22	ES2202264	2	-	-	-	-	-	-	-	-	-	-	-	-	20.6	<0.5	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
SOP_BH102_0.7_220120	20-Jan-22	ES2202264	0.7	ND	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	10.9	<0.5	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
SOP_BH102_3.0_220120	20-Jan-22	ES2202264	3	-	-	-	-	-	-	-	-	-	-	-	-	9.9	<0.5	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
SOP_BH103_0.2_220117	17-Jan-22	ES2201683	0.2	ND	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	8	<0.5	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
SOP_BH103_1.0_220117	17-Jan-22	ES2201683	1	-	-	-	-	-	-	-	-	-	-	-	-	8.7	<0.5	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
SOP_BH104_1.0_220117	17-Jan-22	ES2201683	1	ND	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	9	<0.5	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
SOP_BH104_2.0_220117	17-Jan-22	ES2201683	2	-	-	-	-	-	-	-	-	-	-	-	-	11	<0.5	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
SOP_BH105_0.2_220117	17-Jan-22	ES2201683	0.2	ND	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	9.9	<0.5	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
SOP_BH105_2.0_220117	17-Jan-22	ES2201683	2	-	-	-	-	-	-	-	-	-	-	-	-	10.8	<0.5	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
SOP_BH106_0.2_220117	17-Jan-22	ES2201683	0.2	ND	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	12.2	<0.5	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
SOP_BH106_1.0_220117	17-Jan-22	ES2201683	1	-	-	-	-	-	-	-	-	-	-	-	-	9.4	<0.5	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
SOP_BH107_1.0_220120	20-Jan-22	ES2202264	1	ND	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	11.2	<0.5	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
SOP_BH107_2.0_220120	20-Jan-22	ES2202264	2	-	-	-	-	-	-	-	-	-	-	-	-	11.2	<0.5	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
SOP_BH108_0.4_220120	19-Jan-22	ES2202264	0.4	ND	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	19.9	<0.5	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
SOP_BH108_3.0_220120	19-Jan-22	ES2202264	3	-	-	-	-	-	-	-	-	-	-	-	-	9	<0.5	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
SOP_BH109_0.3_220120	19-Jan-22	ES2202264	0.3	ND	-	-	-	-	-	-	-	-	-	-	-	18.3	<0.5	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
SOP_BH109_1.0_220120	20-Jan-22	ES2202264	1	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	22.3	<0.5	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
SOP_BH110_0.2_220117	17-Jan-22	ES2201683	0.2	ND	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	3.2	<0.5	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
SOP_BH110_1.3_220118	18-Jan-22	ES2201683	1.3	-	-	-	-	-	-	-	-	-	-	-	-	7.4	<0.5	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
SOP_BH113_0.1_220118	18-Jan-22	ES2201683	0.1	ND	-	-	-	-	-	-	-	-	-	-	-	3.9	<0.5	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
SOP_BH113_0.3_220118	18-Jan-22	ES2201683	0.3	ND	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	19.1	<0.5	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
SOP_BH114_0.3_220118	18-Jan-22	ES2201683	0.3	ND	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	17.9	<0.5	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
SOP_BH114_2._220118	18-Jan-22	ES2201683	2	-	-	-	-	-	-	-	-	-	-	-	-	7.6	<0.5	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
SOP_BH115_0.1_220118	18-Jan-22	ES2201683	0.1	ND	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	3.4	<0.5	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
SOP_BH115_2._220118	18-Jan-22	ES2201683	2	-	-	-	-	-	-	-	-	-	-	-	-	7.5	<0.5	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
SOP_BH116_0.2_220117	17-Jan-22	ES2201683	0.2	ND	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	3.8	<0.5	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
SOP_BH116_2.0_220117	17-Jan-22	ES2201683	2	-	-	-	-	-	-	-	-	-	-	-	-	12.8	<0.5	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
SOP_BH117_0.2_220117	17-Jan-22	ES2201683	0.2	ND	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	6.7	<0.5	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
SOP_BH117_3.0_220118	18-Jan-22	ES2201683	3	-	-	-	-	-	-	-	-	-	-	-	-	9.6	<0.5	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
SOP_BH122_1.0_220124	24-Jan-22	ES2202692	1	ND	-	-	-	-	-	-	-	-	-	-	-	8.2	<0.5	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
SOP_BH122_2.0_220124	24-Jan-22	ES2202692	2	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	10	<0.5	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
SOP_BH123_1.0_220124	24-Jan-22	ES2202692	1	ND	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	9.1	<0.5	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
SOP_BH123_3.0_220124	24-Jan-22	ES2202692	3	-	-	-	-	-	-	-	-	-	-	-	-	8.9	<0.5	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
SOP_BH130_0.4_220124	24-Jan-22	ES2202692	0.4	ND	-	-	-	-	-	-	-	-	-	-	-	18	<0.5	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
SOP_BH130_2.0_220124	24-Jan-22	ES2202692	2	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	7.8	<0.5	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
SOP_BH131_1.0_220124	24-Jan-22	ES2202692	1	ND	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	11.8	<0.5	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
SOP_BH131_2.0_220124	24-Jan-22	ES2202692	2	-	-	-	-	-	-	-	-	-	-	-	-	8.6	<0.5	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
SOP_BH132_1.0_220125	25-Jan-22	ES2202692	1	ND	-	-	-	-	-	-	0.3	2.3	0.1	0.9	24	20	<0.5	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
SOP_BH132_3.0_220125	25-Jan-22	ES2202692	3	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	8.9	<0.5	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
SOP_BH133_0.3_220125	25-Jan-22	ES2202692	0.3	ND	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	9.1	<0.5	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
SOP_BH133_0.8_220125	25-Jan-22	ES2202692	0.8	-	-	-	-	-	-	-	-	-	-	-	-	14.2	<0.5	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
SOP_BH134_0.5_220125	25-Jan-22	ES2202692	0.5	ND	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	19.8	<0.5	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
SOP_BH134_2.0_220125	25-Jan-22	ES2202692	2	-	-	-	-	-	-	-	-	-	-	-	-	13.1	<0.5	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
SOP_BH135_0.5_220125	25-Jan-22	ES2202692	0.5	ND	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	4.9	<0.5	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
SOP_BH135_0.8_220125	25-Jan-22	ES2202692	0.8	-	-	-	-	-	-	0.3	2.4	0.2	0.9	23.9	8.8	<0.5	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
SOP_BH136_0.2_220125	25-Jan-22	ES2202692	0.2	ND	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	18.1	<0.5	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
SOP_BH137_0.2_220125	25-Jan-22	ES2202692	0.2	ND	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	18.1	<0.5	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
SOP_BH138_0.2_220125	25-Jan-22	ES2202692	0.2	ND	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	19.2	<0.5	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
SOP_BH139_1.2_220125	24-Jan-22	ES2202692	1.2	ND	-	-	-	-	-	-	3.9	4.1	0.3	1.3	13.6	23.6	<0.5	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
SOP_BH139_2.0_220125	25-Jan-22	ES2202692	2	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	8.4	<0.5	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
SOP_BH140_1.0_220124	24-Jan-22	ES2202692	1	ND	-	-	-	-	-	-	-	-	-	-	-	14.2	<0.5	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
SOP_BH140_2.0_220124	24-Jan-22	ES2202692	2	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	16.1	<0.5	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

	Asbestos	Chlorinated HCs						Exchangeable Cations					Moisture Content	Naphthalene	OCP		OCs	OPs				PAH/Phenols (SIM)																						
	Asbestos Identification (AS4964)*	1,2,3-trichlorobenzene	1,2,4-trichlorobenzene	1,2-dichlorobenzene	1,3-dichlorobenzene	1,4-dichlorobenzene	Chlorobenzene	Exchangeable Calcium	Exchangeable Magnesium	Exchangeable Potassium	Exchangeable Sodium	Exchangeable Sodium Percent	Moisture Content	Naphthalene	Vic EPA IWRG 621 OCP (Total)*	Vic EPA IWRG 621 Other OCP (Total)*	Toxaphene	Mevinphos (Phosdrin)	Naled (Dibrom)	Tokuthion	Trichloronate	Acenaphthene	Acenaphthylene	Anthracene	Fluoranthene	Fluorene	Benz(a)anthracene	Benzo(a)pyrene	Benzo(a)pyrene TEQ (half LOR)	Benzo(a)pyrene TEQ (LOR)	Benzo(a)pyrene TEQ (zero)	Benzo(b+j)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Chrysene	Dibenz(a.h)anthracene	Indeno(1.2.3.cd)pyrene	Phenanthrene	Pyrene	Sum of polycyclic aromatic hydrocarbons
	Comment	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	meq/100	meq/100	meq/100	meq/100	%	%	mg/kg	MG/KG	MG/KG	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL		0.5	0.5	0.5	0.5	0.5	0.5	0.1	0.1	0.1	0.1	0.1	0.1	0.5								0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
CRC Care (2011) Direct Contact HSL D - Comm/Ind														11000																														
CRC Care (2011) Direct Contact Intrusive Maint. Worker														29000																														
CRC Care (2017) Ecological guideline - Commercial and industrial																											172[#1]																	
NEPM (1999) EIL - Commercial/Industrial (site specific)																																												
NEPM (1999) EIL - Commercial/Industrial														370																														
NEPM (1999) ESL - Commercial/Industrial (coarse)																											1.4																	
NEPM (1999) ESL - Commercial/Industrial (fine)																											1.4																	
NEPM (1999) HIL D - Commercial/Industrial																	160											40																4000
NEPM (1999) HSL D Comm/Indust - VI Clay 0 to <1 m														NL																														
NEPM (1999) HSL D Comm/Indust - VI Clay 1 to <2 m														NL																														
NEPM (1999) HSL D Comm/Indust - VI Clay 2 to <4 m														NL																														
NEPM (1999) HSL D Comm/Indust - VI Clay 4 m+														NL																														
NEPM (1999) Management Limits - Commercial/Industrial (coarse)																																												
NEPM (1999) Management Limits - Commercial/Industrial (fine)																																												
US EPA Regional Screening Levels (RSLs) Resident soil HQ=1.0, carcinogenic TR 1E-05																																												

Field_ID	Sampled_Date	Lab_Report	Sample_Depth_Avg																																											
SOP_BH141_0.3_220124	24-Jan-22	ES2202692	0.3	-	-	-	-	-	-	-	-	-	-	-	5.1	<0.5	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
SOP_BH141_0.4_220124	24-Jan-22	ES2202692	0.4	ND	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	8.3	<0.5	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

	Asbestos	Chlorinated HCs						Exchangeable Cations					Moisture Content	Naphthalene	OCP		OCs	OPs				PAH/Phenols (SIM)																						
	Asbestos Identification (AS4964)*	1,2,3-trichlorobenzene	1,2,4-trichlorobenzene	1,2-dichlorobenzene	1,3-dichlorobenzene	1,4-dichlorobenzene	Chlorobenzene	Exchangeable Calcium	Exchangeable Magnesium	Exchangeable Potassium	Exchangeable Sodium	Exchangeable Sodium Percent	Moisture Content	Naphthalene	Vic EPA IWRG 621 OCP (Total)*	Vic EPA IWRG 621 Other OCP (Total)*	Toxaphene	Mevinphos (Phosdrin)	Naled (Dibrom)	Tokuthion	Trichloronate	Acenaphthene	Acenaphthylene	Anthracene	Fluoranthene	Fluorene	Benz[a]anthracene	Benzo(a)pyrene	Benzo(a)pyrene TEQ (half LOR)	Benzo(a)pyrene TEQ (LOR)	Benzo(a)pyrene TEQ (zero)	Benzo(b+j)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Chrysene	Dibenz(a.h)anthracene	Indeno(1.2.3.cd)pyrene	Phenanthrene	Pyrene	Sum of polycyclic aromatic hydrocarbons
	Comment	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	meq/100	meq/100	meq/100	meq/100	%	%	mg/kg	MG/KG	MG/KG	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL		0.5	0.5	0.5	0.5	0.5	0.5	0.1	0.1	0.1	0.1	0.1	0.1	0.5								0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
CRC Care (2011) Direct Contact HSL D - Comm/Ind														11000																														
CRC Care (2011) Direct Contact Intrusive Maint. Worker														29000																														
CRC Care (2017) Ecological guideline - Commercial and industrial																											172[#1]																	
NEPM (1999) EIL - Commercial/Industrial (site specific)																																											
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NEPM (1999) ESL - Commercial/Industrial (fine)																											1.4																	
NEPM (1999) HIL D - Commercial/Industrial																	160											40																4000
NEPM (1999) HSL D Comm/Indust - VI Clay 0 to <1 m														NL																														
NEPM (1999) HSL D Comm/Indust - VI Clay 1 to <2 m														NL																														
NEPM (1999) HSL D Comm/Indust - VI Clay 2 to <4 m														NL																														
NEPM (1999) HSL D Comm/Indust - VI Clay 4 m+														NL																														
NEPM (1999) Management Limits - Commercial/Industrial (coarse)																																											
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US EPA Regional Screening Levels (RSLs) Resident soil HQ=1.0, carcinogenic TR 1E-05																																											

Field_ID	Sampled_Date	Lab_Report	Sample_Depth_Avg																																										
Station Box Area																																												
SOP_BH111_1.0_220118	18-Jan-22	ES2201683	1	ND	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	27	<0.5	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
SOP_BH111_3.0_220118	18-Jan-22	ES2201683	3	-	-	-	-	-	-	-	-	-	-	-	-	11.6	<0.5	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
SOP_BH112_1.0_220118	18-Jan-22	ES2201683	1	ND	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	23.5	<0.5	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
SOP_BH112_5.0_220118	18-Jan-22	ES2201683	5	-	-	-	-	-	-	-	-	-	-	-	-	8.8	<0.5	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
SOP_BH118_0.1_220119	19-Jan-22	ES2202264	0.1	ND	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	7.9	<0.5	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
SOP_BH118_1.0_220119	19-Jan-22	ES2202264	1	-	-	-	-	-	-	-	-	-	-	-	-	13.4	<0.5	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
SOP_BH118_5.0_220119	19-Jan-22	ES2202264	5	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	6.4	<0.5	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
SOP_BH118_10.0_220119	19-Jan-22	ES2202264	10	-	-	-	-	-	-	-	-	-	-	-	-	7.3	<0.5	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.8	<0.5	0.8
SOP_BH118_15.0_220119	19-Jan-22	ES2202264	15	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	13.6	<0.5	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
SOP_BH118_20.0_220119	19-Jan-22	ES2202264	20	-	-	-	-	-	-	-	-	-	-	-	-	31.2	<0.5	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
SOP_BH118_25.0_220119	19-Jan-22	ES2202264	25	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	12.9	<0.5	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
SOP_BH119_0.2_220117	17-Jan-22	ES2201683	0.2	ND	-	-	-	-	-	-	-	-	-	-	-	1.8	<0.5	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
SOP_BH119_1.0_220117	17-Jan-22	ES2201683	1	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	14.2	<0.5	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
SOP_BH119_3.0_220117	17-Jan-22	ES2201683	3	-	-	-	-	-	-	-	-	-	-	-	-	9.2	<0.5	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
SOP_BH120_0.5_220120	20-Jan-22	ES2202264	0.5	ND	-	-	-	-	-	-	-	-	-	-	-	11.8	<0.5	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
SOP_BH120_3.0_220120	20-Jan-22	ES2202264	3	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	7	<0.5	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
SOP_BH121_1.0_220120	20-Jan-22	ES2202264	1	ND	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	9.8	<0.5	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
SOP_BH121_5.0_220120	20-Jan-22	ES2202264	5	-	-	-	-	-	-	-	-	-	-	-	-	5.3	<0.5	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
SOP_BH124_0.5_220120	21-Jan-22	ES2202264	0.5	ND	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	20.5	<0.5	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
SOP_BH124_3.0_220120	21-Jan-22	ES2202264	3	-	-	-	-	-	-	-	-	-	-	-	-	7.9	<0.5	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
SOP_BH125_0.5_220121	21-Jan-22	ES2202264	0.5	ND	-	-	-	-	-	-	-	-	-	-	-	11.9	<0.5	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
SOP_BH125_10.0_220121	21-Jan-22	ES2202264	10	-	-	-	-	-	-	-	-	-	-	-	-	3.8	<0.5	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	1	<0.5	1
SOP_BH125_15.0_220121	21-Jan-22	ES2202264	15	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	2.8	<0.5	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.8	<0.5	0.8
SOP_BH125_20.0_220121	21-Jan-22	ES2202264	20	-	-	-	-	-	-	-	-	-	-	-	-	3.2	<0.5	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.8	<0.5	0.8
SOP_BH125_25.0_220121	21-Jan-22	ES2202264	25	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	2.4	<0.5	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	<0.5	0.6
SOP_BH125_5.0_220121	21-Jan-22	ES2202264	5	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	6.1	<0.5	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.8	<0.5	0.8
SOP_BH126_0.5_220121	21-Jan-22	ES2202264	0.5	ND	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	16.5	<0.5	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
SOP_BH126_2.0_220121	21-Jan-22	ES2202264	2	-	-	-	-	-	-	-	-	-	-	-	-	7.6	<0.5	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.7	<0.5	0.7
SOP_BH127_1.2_220121	21-Jan-22	ES2202264	1.2	ND	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	16	<0.5	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
SOP_BH127_4.0_220121	21-Jan-22	ES2202264	4	-	-	-	-	-	-	-	-	-	-	-	-	5.8	<0.5	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	<0.5	0.6
SOP_BH128_0.9_220124	24-Jan-22	ES2202692	0.9	ND	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	16.5	<0.5	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
SOP_BH128_5.0_220124	24-Jan-22	ES2202692	5	-	-	-	-	-	-	-	-	-	-	-	-	4.9	<0.5	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
SOP_BH129_0.5_220124	24-Jan-22	ES2202692	0.5	ND	-	-	-	-	-	-	-	-	-	-	-	11.6	<0.5	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
SOP_BH129_1.0_220124	24-Jan-22	ES2202692	1	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	10.2	<0.5	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
SOP_BH142_0.4_220119	19-Jan-22	ES2202264	0.4	ND	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	12.4	<0.5	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
SOP_BH142_4.0_220119	19-Jan-22	ES2202264	4	-	-	-	-	-	-	-	-	-	-	-	-	12.5	<0.5	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
SOP_BH143_0.3_220119	19-Jan-22	ES2202264	0.3	ND	-	-	-	-	-	-	-	-	-	-	-	14.8	<0.5	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
SOP_BH143_1.0_220119	19-Jan-22	ES2202264	1	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	19.5	<0.5	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
SOP_BH144_0.3_220119	19-Jan-22	ES2202264	0.3	ND	-	-	-	-	-	-	-	-	-	-	-	8.5	<0.5	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
SOP_BH144_0.6_220119	19-Jan-22	ES2202264	0.6	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	21.7	<0.5	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
SOP_BH145_0.3_220119	19-Jan-22	ES2202264	0.3	ND	-	-	-	-	-	-	-	-	-	-	-	21.9	<0.5	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
SOP_BH145_1.0_220119	19-Jan-22	ES2202264	1	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	22.8	<0.5	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
SOP_BH145_5.0_220119	19-Jan-22	ES2202264	5	-	-	-	-	-	-	-	-	-	-	-	-	8.3	<0.5	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

	Asbestos	Chlorinated HCs						Exchangeable Cations					Moisture Content	Naphthalene	OCP		OCs	OPs				PAH/Phenols (SIM)																							
	Asbestos Identification (AS4964)*	1,2,3-trichlorobenzene	1,2,4-trichlorobenzene	1,2-dichlorobenzene	1,3-dichlorobenzene	1,4-dichlorobenzene	Chlorobenzene	Exchangeable Calcium	Exchangeable Magnesium	Exchangeable Potassium	Exchangeable Sodium	Exchangeable Sodium Percent	Moisture Content	Naphthalene	Vic EPA IWRG 621 OCP (Total)*	Vic EPA IWRG 621 Other OCP (Total)*	Toxaphene	Mevinphos (Phosdrin)	Naled (Dibrom)	Tokuthion	Trichloronate	Acenaphthene	Acenaphthylene	Anthracene	Fluoranthene	Fluorene	Benz(a)anthracene	Benzo(a)pyrene	Benzo(a)pyrene TEQ (half LOR)	Benzo(a)pyrene TEQ (LOR)	Benzo(a)pyrene TEQ (zero)	Benzo(b+j)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Chrysene	Dibenz(a.h)anthracene	Indeno(1.2.3.cd)pyrene	Phenanthrene	Pyrene	Sum of polycyclic aromatic hydrocarbons
	Comment	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	meq/100	meq/100	meq/100	meq/100	%	%	mg/kg	MG/KG	MG/KG	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL		0.5	0.5	0.5	0.5	0.5	0.5	0.1	0.1	0.1	0.1	0.1	0.1	0.5								0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
CRC Care (2011) Direct Contact HSL D - Comm/Ind														11000																														
CRC Care (2011) Direct Contact Intrusive Maint. Worker														29000																														
CRC Care (2017) Ecological guideline - Commercial and industrial																											172[#1]																	
NEPM (1999) EIL - Commercial/Industrial (site specific)																																											
NEPM (1999) EIL - Commercial/Industrial														370																														
NEPM (1999) ESL - Commercial/Industrial (coarse)																											1.4																	
NEPM (1999) ESL - Commercial/Industrial (fine)																											1.4																	
NEPM (1999) HIL D - Commercial/Industrial																	160											40																4000
NEPM (1999) HSL D Comm/Indust - VI Clay 0 to <1 m														NL																														
NEPM (1999) HSL D Comm/Indust - VI Clay 1 to <2 m														NL																														
NEPM (1999) HSL D Comm/Indust - VI Clay 2 to <4 m														NL																														
NEPM (1999) HSL D Comm/Indust - VI Clay 4 m+														NL																														
NEPM (1999) Management Limits - Commercial/Industrial (coarse)																																											
NEPM (1999) Management Limits - Commercial/Industrial (fine)																																											
US EPA Regional Screening Levels (RSLs) Resident soil HQ=1.0, carcinogenic TR 1E-05																																											

Field_ID	Sampled_Date	Lab_Report	Sample_Depth_Avg																																												
DUP01_220117	17-Jan-22	ES2201683		-	-	-	-	-	-	-	-	-	-	-	-	7.4	<0.5	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
DUP02_220119	19-Jan-22	ES2202264		-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	9.2	<0.5	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.5	<0.5	0.5
DUP03_220119	19-Jan-22	ES2202264		-	-	-	-	-	-	-	-	-	-	-	-	10.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DUP04_220119	19-Jan-22	ES2202264		-	-	-	-	-	-	-	-	-	-	-	-	8.4	<0.5	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
DUP05_220120	20-Jan-22	ES2202264		-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	9	<0.5	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
DUP06_220121	21-Jan-22	ES2202264		-	-	-	-	-	-	-	-	-	-	-	-	8	<0.5	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
DUP07_220124	24-Jan-22	ES2202692		-	-	-	-	-	-	-	-	-	-	-	-	7.7	<0.5	-	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TRIP01_220117	17-Jan-22	858847		-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.1	<0.1	<0.5	<0.2	<0.2	<0.2	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TRIP02_220119	19-Jan-22	858994		-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	<0.5	<0.1	<0.1	<0.5	<0.2	<0.2	<0.2	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TRIP03_220119	19-Jan-22	ES2202264		-	-	-	-	-	-	-	-	-	-	-	-	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TRIP04_220119	19-Jan-22	858994		-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.1	<0.1	<0.5	<0.2	<0.2	<0.2	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TRIP05_220120	20-Jan-22	858994		-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	<0.5	<0.1	<0.1	<0.5	<0.2	<0.2	<0.2	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TRIP06_220121	21-Jan-22	858994		-	-	-	-	-	-	-	-	-	-	-	-	-	<0.5	<0.1	<0.1	<0.5	<0.2	<0.2	<0.2	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

* ND - non-detect

Statistical Summary

Number of Results	46	54	54	54	54	54	54	3	3	3	3	3	107	110	5	5	5	5	5	5	5	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110
Number of Detects	0	0	0	0	0	0	0	3	3	3	3	3	107	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	110	110	0	0	0	0	0	0	9	0	9		
Minimum Concentration	0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.3	2.3	0.1	0.9	13.6	1.8	<0.5	<0.1	<0.1	<0.5	<0.2	<0.2	<0.2	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Minimum Detect	ND	ND	ND	ND	ND	ND	ND	0.3	2.3	0.1	0.9	13.6	1.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6	1.2	ND	ND	ND	ND	ND	ND	0.5	ND	0.5		
Maximum Concentration	0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	3.9	4.1	0.3	1.3	24	31.2	<0.5	<0.1	<0.1	<0.5	<0.2	<0.2	<0.2	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	1	<0.5	1	
Maximum Detect	ND	ND	ND	ND	ND	ND	ND	3.9	4.1	0.3	1.3	24	31.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.6	1.2	ND	ND	ND	ND	ND	ND	1	ND	1		
Average Concentration	0	0.25	0.25	0.25	0.25	0.25	0.25	1.5	2.9	0.2	1	21	12	0.25	0.05	0.05	0.25	0.1	0.1	0.1	0.1	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.6	1.2	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.29	0.25	0.29		
Median Concentration	0	0.25	0.25	0.25	0.25	0.25	0.25	0.3	2.4	0.2	0.9	23.9	9.9	0.25	0.05	0.05	0.25	0.1	0.1	0.1	0.1	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.6	1.2	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25		
Standard Deviation	0	0	0	0	0	0	0	2.1	1	0.1	0.23	6	5.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.14	0	0.14		
Number of Guideline Exceedances	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Number of Guideline Exceedances(Detects Only)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		

Env Stds Comments

#1:High reliability ecological guideline
for fresh B(a)P
#2:Most conservative Chromium (III)
ACL adopted - NEPM Table 1B

| | | pH | Semivolatile Organic Compounds | | | | | | | | | | SVOC | | | | | | | | | |

| | pH | Semivolatile Organic Compounds | | | | | | | | | | SVOC | | | | | | | | | |

| | | pH | Semivolatile Organic Compounds | | | | | | | | | | SVOC | | | | | | | | | |

| | pH | Semivolatile Organic Compounds | | | | | | | | | | SVOC | | | | | | | | | |

				SVOC																																					
				Benzyl chloride	Bis(2-chloroethoxy) methane	Bis(2-chloroethyl)ether	Bis(2-chloroisopropyl) ether	Carbazole	Chlorobenzilate	Demeton-O	Demeton-S	Dibenz[a.j]acridine	Dibenzofuran	Diphenylamine	EPN	Fensulfothion	Hexachlorobutadiene	Hexachlorocyclopentadiene	Hexachloroethane	Hexachloropropene	Isophorone	Methapyrilene	Nitrobenzene	N-nitrosodiethylamine	N-nitrosodi-n-butylamine	N-nitrosodi-n-propylamine	N-Nitrosomethylethylamine	N-nitrosomorpholine	N-nitrosopiperidine	N-nitrosopyrrolidine	Pentachlorobenzene	Pentachloronitrobenzene	Phenacetin	Pronamide
				mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL					0.5	0.5		0.5	0.5				0.5				0.5	1	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1	0.5	0.5	0.5	0.5						
CRC Care (2011) Direct Contact HSL D - Comm/Ind																																									
CRC Care (2011) Direct Contact Intrusive Maint. Worker																																									
CRC Care (2017) Ecological guideline - Commercial and industrial																																									
NEPM (1999) EIL - Commercial/Industrial (site specific)																																									
NEPM (1999) EIL - Commercial/Industrial																																									
NEPM (1999) ESL - Commercial/Industrial (coarse)																																									
NEPM (1999) ESL - Commercial/Industrial (fine)																																									
NEPM (1999) HIL D - Commercial/Industrial																																									
NEPM (1999) HSL D Comm/Indust - VI Clay 0 to <1 m																																									
NEPM (1999) HSL D Comm/Indust - VI Clay 1 to <2 m																																									
NEPM (1999) HSL D Comm/Indust - VI Clay 2 to <4 m																																									
NEPM (1999) HSL D Comm/Indust - VI Clay 4 m+																																									
NEPM (1999) Management Limits - Commercial/Industrial (coarse)																																									
NEPM (1999) Management Limits - Commercial/Industrial (fine)																																									
US EPA Regional Screening Levels (RSLs) Resident soil HQ=1.0, carcinogenic TR 1E-05																																									
Field_ID	**Sampled_Date**	**Lab_Report**	**Sample_Depth_Avg**																																						
Construction Support Area																																								
SOP_BH101_0.5_220120	20-Jan-22	ES2202264	0.5	-	<0.5	<0.5	-	<0.5	<0.5	-	-	-	<0.5	-	-	-	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5						
SOP_BH101_1.3_220120	20-Jan-22	ES2202264	1.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
SOP_BH101_2.0_220120	20-Jan-22	ES2202264	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
SOP_BH102_0.7_220120	20-Jan-22	ES2202264	0.7	-	<0.5	<0.5	-	<0.5	<0.5	-	-	-	<0.5	-	-	-	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5						
SOP_BH102_3.0_220120	20-Jan-22	ES2202264	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
SOP_BH103_0.2_220117	17-Jan-22	ES2201683	0.2	-	<0.5	<0.5	-	<0.5	<0.5	-	-	-	<0.5	-	-	-	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5						
SOP_BH103_1.0_220117	17-Jan-22	ES2201683	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
SOP_BH104_1.0_220117	17-Jan-22	ES2201683	1	-	<0.5	<0.5	-	<0.5	<0.5	-	-	-	<0.5	-	-	-	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5						
SOP_BH104_2.0_220117	17-Jan-22	ES2201683	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
SOP_BH105_0.2_220117	17-Jan-22	ES2201683	0.2	-	<0.5	<0.5	-	<0.5	<0.5	-	-	-	<0.5	-	-	-	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5						
SOP_BH105_2.0_220117	17-Jan-22	ES2201683	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
SOP_BH106_0.2_220117	17-Jan-22	ES2201683	0.2	-	<0.5	<0.5	-	<0.5	<0.5	-	-	-	<0.5	-	-	-	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5						
SOP_BH106_1.0_220117	17-Jan-22	ES2201683	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
SOP_BH107_1.0_220120	20-Jan-22	ES2202264	1	-	<0.5	<0.5	-	<0.5	<0.5	-	-	-	<0.5	-	-	-	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5						
SOP_BH107_2.0_220120	20-Jan-22	ES2202264	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
SOP_BH108_0.4_220120	19-Jan-22	ES2202264	0.4	-	<0.5	<0.5	-	<0.5	<0.5	-	-	-	<0.5	-	-	-	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5						
SOP_BH108_3.0_220120	19-Jan-22	ES2202264	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
SOP_BH109_0.3_220120	19-Jan-22	ES2202264	0.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
SOP_BH109_1.0_220120	20-Jan-22	ES2202264	1	-	<0.5	<0.5	-	<0.5	<0.5	-	-	-	<0.5	-	-	-	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5						
SOP_BH110_0.2_220117	17-Jan-22	ES2201683	0.2	-	<0.5	<0.5	-	<0.5	<0.5	-	-	-	<0.5	-	-	-	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5						
SOP_BH110_1.3_220118	18-Jan-22	ES2201683	1.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
SOP_BH113_0.1_220118	18-Jan-22	ES2201683	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
SOP_BH113_0.3_220118	18-Jan-22	ES2201683	0.3	-	<0.5	<0.5	-	<0.5	<0.5	-	-	-	<0.5	-	-	-	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5						
SOP_BH114_0.3_220118	18-Jan-22	ES2201683	0.3	-	<0.5	<0.5	-	<0.5	<0.5	-	-	-	<0.5	-	-	-	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5						
SOP_BH114_2._220118	18-Jan-22	ES2201683	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
SOP_BH115_0.1_220118	18-Jan-22	ES2201683	0.1	-	<0.5	<0.5	-	<0.5	<0.5	-	-	-	<0.5	-	-	-	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5						
SOP_BH115_2._220118	18-Jan-22	ES2201683	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
SOP_BH116_0.2_220117	17-Jan-22	ES2201683	0.2	-	<0.5	<0.5	-	<0.5	<0.5	-	-	-	<0.5	-	-	-	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5						
SOP_BH116_2.0_220117	17-Jan-22	ES2201683	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
SOP_BH117_0.2_220117	17-Jan-22	ES2201683	0.2	-	<0.5	<0.5	-	<0.5	<0.5	-	-	-	<0.5	-	-	-	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5						
SOP_BH117_3.0_220118	18-Jan-22	ES2201683	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
SOP_BH122_1.0_220124	24-Jan-22	ES2202692	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
SOP_BH122_2.0_220124	24-Jan-22	ES2202692	2	-	<0.5	<0.5	-	<0.5	<0.5	-	-	-	<0.5	-	-	-	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5						
SOP_BH123_1.0_220124	24-Jan-22	ES2202692	1	-	<0.5	<0.5	-	<0.5	<0.5	-	-	-	<0.5	-	-	-	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5						
SOP_BH123_3.0_220124	24-Jan-22	ES2202692	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
SOP_BH130_0.4_220124	24-Jan-22	ES2202692	0.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
SOP_BH130_2.0_220124	24-Jan-22	ES2202692	2	-	<0.5	<0.5	-	<0.5	<0.5	-	-	-	<0.5	-	-	-	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5						
SOP_BH131_1.0_220124	24-Jan-22	ES2202692	1	-	<0.5	<0.5	-	<0.5	<0.5	-	-	-	<0.5	-	-	-	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5						
SOP_BH131_2.0_220124	24-Jan-22	ES2202692	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
SOP_BH132_1.0_220125	25-Jan-22	ES2202692	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
SOP_BH132_3.0_220125	25-Jan-22	ES2202692	3	-	<0.5	<0.5	-	<0.5	<0.5	-	-	-	<0.5	-	-	-	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5						
SOP_BH133_0.3_220125	25-Jan-22	ES2202692	0.3	-	<0.5	<0.5	-	<0.5	<0.5	-	-	-	<0.5	-	-	-	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5						
SOP_BH133_0.8_220125	25-Jan-22	ES2202692	0.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
SOP_BH134_0.5_220125	25-Jan-22	ES2202692	0.5	-	<0.5	<0.5	-	<0.5	<0.5	-	-	-	<0.5	-	-	-	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5						
SOP_BH134_2.0_220125	25-Jan-22	ES2202692	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
SOP_BH135_0.5_220125	25-Jan-22	ES2202692	0.5	-	<0.5	<0.5	-	<0.5	<0.5	-	-	-	<0.5	-	-	-	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5						
SOP_BH135_0.8_220125	25-Jan-22	ES2202692	0.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
SOP_BH136_0.2_220125	25-Jan-22	ES2202692	0.2	-	<0.5	<0.5	-	<0.5	<0.5	-	-	-	<0.5	-	-	-	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5						
SOP_BH137_0.2_220125	25-Jan-22	ES2202692	0.2	-	<0.5	<0.5	-	<0.5	<0.5	-	-	-	<0.5	-	-	-	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5						
SOP_BH138_0.2_220125	25-Jan-22	ES2202692	0.2	-	<0.5	<0.5	-	<0.5	<0.5	-	-	-	<0.5	-	-	-	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5						
SOP_BH139_1.2_220125	24-Jan-22	ES2202692	1.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
SOP_BH139_2.0_220125	25-Jan-22	ES2202692	2	-	<0.5	<0.5	-	<0.5	<0.5	-	-	-	<0.5	-	-	-	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5						
SOP_BH140_1.0_220124	24-Jan-22	ES2202692	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
SOP_BH140_2.0_220124	24-Jan-22	ES2202692	2	-	<0.5	<0.5	-	<0.5	<0.5	-	-	-	<0.5	-	-	-	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5						

	SVOC																																		
	Benzyl chloride	Bis(2-chloroethoxy) methane	Bis(2-chloroethyl)ether	Bis(2-chloroisopropyl) ether	Carbazole	Chlorobenzilate	Demeton-O	Demeton-S	Dibenz[a.j]acridine	Dibenzofuran	Diphenylamine	EPN	Fensulfothion	Hexachlorobutadiene	Hexachlorocyclopentadiene	Hexachloroethane	Hexachloropropene	Isophorone	Methapyrilene	Nitrobenzene	N-nitrosodiethylamine	N-nitrosodi-n-butylamine	N-nitrosodi-n-propylamine	N-Nitrosomethylethylamine	N-nitrosomorpholine	N-nitrosopiperidine	N-nitrosopyrrolidine	Pentachlorobenzene	Pentachloronitrobenzene	Phenacetin	Pronamide
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL		0.5	0.5		0.5	0.5				0.5				0.5	1	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1	0.5	0.5	0.5	0.5	0.5	0.5
CRC Care (2011) Direct Contact HSL D - Comm/Ind																																			
CRC Care (2011) Direct Contact Intrusive Maint. Worker																																			
CRC Care (2017) Ecological guideline - Commercial and industrial																																			
NEPM (1999) EIL - Commercial/Industrial (site specific)																																			
NEPM (1999) EIL - Commercial/Industrial																																			
NEPM (1999) ESL - Commercial/Industrial (coarse)																																			
NEPM (1999) ESL - Commercial/Industrial (fine)																																			
NEPM (1999) HIL D - Commercial/Industrial																																			
NEPM (1999) HSL D Comm/Indust - VI Clay 0 to <1 m																																			
NEPM (1999) HSL D Comm/Indust - VI Clay 1 to <2 m																																			
NEPM (1999) HSL D Comm/Indust - VI Clay 2 to <4 m																																			
NEPM (1999) HSL D Comm/Indust - VI Clay 4 m+																																			
NEPM (1999) Management Limits - Commercial/Industrial (coarse)																																			
NEPM (1999) Management Limits - Commercial/Industrial (fine)																																			
US EPA Regional Screening Levels (RSLs) Resident soil HQ=1.0, carcinogenic TR 1E-05																																			
Field_ID	**Sampled_Date**	**Lab_Report**	**Sample_Depth_Avg**																																
SOP_BH141_0.3_220124	24-Jan-22	ES2202692	0.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SOP_BH141_0.4_220124	24-Jan-22	ES2202692	0.4	-	<0.5	<0.5	-	<0.5	<0.5	-	-	-	<0.5	-	-	-	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5

				SVOC																																			
				Benzyl chloride	Bis(2-chloroethoxy) methane	Bis(2-chloroethyl)ether	Bis(2-chloroisopropyl) ether	Carbazole	Chlorobenzilate	Demeton-O	Demeton-S	Dibenz[a.j]acridine	Dibenzofuran	Diphenylamine	EPN	Fensulfothion	Hexachlorobutadiene	Hexachlorocyclopentadiene	Hexachloroethane	Hexachloropropene	Isophorone	Methapyrilene	Nitrobenzene	N-nitrosodiethylamine	N-nitrosodi-n-butylamine	N-nitrosodi-n-propylamine	N-Nitrosomethylethylamine	N-nitrosomorpholine	N-nitrosopiperidine	N-nitrosopyrrolidine	Pentachlorobenzene	Pentachloronitrobenzene	Phenacetin	Pronamide
				mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL					0.5	0.5		0.5	0.5				0.5				0.5	1	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1	0.5	0.5	0.5	0.5				
CRC Care (2011) Direct Contact HSL D - Comm/Ind																																							
CRC Care (2011) Direct Contact Intrusive Maint. Worker																																							
CRC Care (2017) Ecological guideline - Commercial and industrial																																							
NEPM (1999) EIL - Commercial/Industrial (site specific)																																							
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NEPM (1999) ESL - Commercial/Industrial (fine)																																							
NEPM (1999) HIL D - Commercial/Industrial																																							
NEPM (1999) HSL D Comm/Indust - VI Clay 0 to <1 m																																							
NEPM (1999) HSL D Comm/Indust - VI Clay 1 to <2 m																																							
NEPM (1999) HSL D Comm/Indust - VI Clay 2 to <4 m																																							
NEPM (1999) HSL D Comm/Indust - VI Clay 4 m+																																							
NEPM (1999) Management Limits - Commercial/Industrial (coarse)																																							
NEPM (1999) Management Limits - Commercial/Industrial (fine)																																							
US EPA Regional Screening Levels (RSLs) Resident soil HQ=1.0, carcinogenic TR 1E-05																																							
Field_ID	**Sampled_Date**	**Lab_Report**	**Sample_Depth_Avg**																																				
Station Box Area																																							
SOP_BH111_1.0_220118	18-Jan-22	ES2201683	1	-	<0.5	<0.5	-	<0.5	<0.5	-	-	-	<0.5	-	-	-	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5				
SOP_BH111_3.0_220118	18-Jan-22	ES2201683	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
SOP_BH112_1.0_220118	18-Jan-22	ES2201683	1	-	<0.5	<0.5	-	<0.5	<0.5	-	-	-	<0.5	-	-	-	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5				
SOP_BH112_5.0_220118	18-Jan-22	ES2201683	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
SOP_BH118_0.1_220119	19-Jan-22	ES2202264	0.1	-	<0.5	<0.5	-	<0.5	<0.5	-	-	-	<0.5	-	-	-	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5				
SOP_BH118_1.0_220119	19-Jan-22	ES2202264	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
SOP_BH118_5.0_220119	19-Jan-22	ES2202264	5	-	<0.5	<0.5	-	<0.5	<0.5	-	-	-	<0.5	-	-	-	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5				
SOP_BH118_10.0_220119	19-Jan-22	ES2202264	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
SOP_BH118_15.0_220119	19-Jan-22	ES2202264	15	-	<0.5	<0.5	-	<0.5	<0.5	-	-	-	<0.5	-	-	-	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5				
SOP_BH118_20.0_220119	19-Jan-22	ES2202264	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
SOP_BH118_25.0_220119	19-Jan-22	ES2202264	25	-	<0.5	<0.5	-	<0.5	<0.5	-	-	-	<0.5	-	-	-	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5				
SOP_BH119_0.2_220117	17-Jan-22	ES2201683	0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
SOP_BH119_1.0_220117	17-Jan-22	ES2201683	1	-	<0.5	<0.5	-	<0.5	<0.5	-	-	-	<0.5	-	-	-	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5				
SOP_BH119_3.0_220117	17-Jan-22	ES2201683	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
SOP_BH120_0.5_220120	20-Jan-22	ES2202264	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
SOP_BH120_3.0_220120	20-Jan-22	ES2202264	3	-	<0.5	<0.5	-	<0.5	<0.5	-	-	-	<0.5	-	-	-	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5				
SOP_BH121_1.0_220120	20-Jan-22	ES2202264	1	-	<0.5	<0.5	-	<0.5	<0.5	-	-	-	<0.5	-	-	-	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5				
SOP_BH121_5.0_220120	20-Jan-22	ES2202264	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
SOP_BH124_0.5_220120	21-Jan-22	ES2202264	0.5	-	<0.5	<0.5	-	<0.5	<0.5	-	-	-	<0.5	-	-	-	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5				
SOP_BH124_3.0_220120	21-Jan-22	ES2202264	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
SOP_BH125_0.5_220121	21-Jan-22	ES2202264	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
SOP_BH125_10.0_220121	21-Jan-22	ES2202264	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
SOP_BH125_15.0_220121	21-Jan-22	ES2202264	15	-	<0.5	<0.5	-	<0.5	<0.5	-	-	-	<0.5	-	-	-	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5				
SOP_BH125_20.0_220121	21-Jan-22	ES2202264	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
SOP_BH125_25.0_220121	21-Jan-22	ES2202264	25	-	<0.5	<0.5	-	<0.5	<0.5	-	-	-	<0.5	-	-	-	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5				
SOP_BH125_5.0_220121	21-Jan-22	ES2202264	5	-	<0.5	<0.5	-	<0.5	<0.5	-	-	-	<0.5	-	-	-	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5				
SOP_BH126_0.5_220121	21-Jan-22	ES2202264	0.5	-	<0.5	<0.5	-	<0.5	<0.5	-	-	-	<0.5	-	-	-	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5				
SOP_BH126_2.0_220121	21-Jan-22	ES2202264	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
SOP_BH127_1.2_220121	21-Jan-22	ES2202264	1.2	-	<0.5	<0.5	-	<0.5	<0.5	-	-	-	<0.5	-	-	-	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5				
SOP_BH127_4.0_220121	21-Jan-22	ES2202264	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
SOP_BH128_0.9_220124	24-Jan-22	ES2202692	0.9	-	<0.5	<0.5	-	<0.5	<0.5	-	-	-	<0.5	-	-	-	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5				
SOP_BH128_5.0_220124	24-Jan-22	ES2202692	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
SOP_BH129_0.5_220124	24-Jan-22	ES2202692	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
SOP_BH129_1.0_220124	24-Jan-22	ES2202692	1	-	<0.5	<0.5	-	<0.5	<0.5	-	-	-	<0.5	-	-	-	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5				
SOP_BH142_0.4_220119	19-Jan-22	ES2202264	0.4	-	<0.5	<0.5	-	<0.5	<0.5	-	-	-	<0.5	-	-	-	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5				
SOP_BH142_4.0_220119	19-Jan-22	ES2202264	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
SOP_BH143_0.3_220119	19-Jan-22	ES2202264	0.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
SOP_BH143_1.0_220119	19-Jan-22	ES2202264	1	-	<0.5	<0.5	-	<0.5	<0.5	-	-	-	<0.5	-	-	-	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5				
SOP_BH144_0.3_220119	19-Jan-22	ES2202264	0.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
SOP_BH144_0.6_220119	19-Jan-22	ES2202264	0.6	-	<0.5	<0.5	-	<0.5	<0.5	-	-	-	<0.5	-	-	-	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5				
SOP_BH145_0.3_220119	19-Jan-22	ES2202264	0.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
SOP_BH145_1.0_220119	19-Jan-22	ES2202264	1	-	<0.5	<0.5	-	<0.5	<0.5	-	-	-	<0.5	-	-	-	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5				
SOP_BH145_5.0_220119	19-Jan-22	ES2202264	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				

	SVOC																																
	Benzyl chloride	Bis(2-chloroethoxy) methane	Bis(2-chloroethyl)ether	Bis(2-chloroisopropyl) ether	Carbazole	Chlorobenzilate	Demeton-O	Demeton-S	Dibenz[a,j]acridine	Dibenzofuran	Diphenylamine	EPN	Fensulfothion	Hexachlorobutadiene	Hexachlorocyclopentadiene	Hexachloroethane	Hexachloropropene	Isophorone	Methapyrilene	Nitrobenzene	N-nitrosodiethylamine	N-nitrosodi-n-butylamine	N-nitrosodi-n-propylamine	N-Nitrosomethylethylamine	N-nitrosomorpholine	N-nitrosopiperidine	N-nitrosopyrrolidine	Pentachlorobenzene	Pentachloronitrobenzene	Phenacetin	Pronamide
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL		0.5	0.5		0.5	0.5				0.5				0.5	1	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1	0.5	0.5	0.5	0.5
CRC Care (2011) Direct Contact HSL D - Comm/Ind																																	
CRC Care (2011) Direct Contact Intrusive Maint. Worker																																	
CRC Care (2017) Ecological guideline - Commercial and industrial																																	
NEPM (1999) EIL - Commercial/Industrial (site specific)																																	
NEPM (1999) EIL - Commercial/Industrial																																	
NEPM (1999) ESL - Commercial/Industrial (coarse)																																	
NEPM (1999) ESL - Commercial/Industrial (fine)																																	
NEPM (1999) HIL D - Commercial/Industrial																																	
NEPM (1999) HSL D Comm/Indust - VI Clay 0 to <1 m																																	
NEPM (1999) HSL D Comm/Indust - VI Clay 1 to <2 m																																	
NEPM (1999) HSL D Comm/Indust - VI Clay 2 to <4 m																																	
NEPM (1999) HSL D Comm/Indust - VI Clay 4 m+																																	
NEPM (1999) Management Limits - Commercial/Industrial (coarse)																																	
NEPM (1999) Management Limits - Commercial/Industrial (fine)																																	
US EPA Regional Screening Levels (RSLs) Resident soil HQ=1.0, carcinogenic TR 1E-05																																	
Field_ID	**Sampled_Date**	**Lab_Report**	**Sample_Depth_Avg**																															
DUP01_220117	17-Jan-22	ES2201683		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DUP02_220119	19-Jan-22	ES2202264		-	<0.5	<0.5	-	<0.5	<0.5	-	-	-	<0.5	-	-	-	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5
DUP03_220119	19-Jan-22	ES2202264		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DUP04_220119	19-Jan-22	ES2202264		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DUP05_220120	20-Jan-22	ES2202264		-	<0.5	<0.5	-	<0.5	<0.5	-	-	-	<0.5	-	-	-	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5
DUP06_220121	21-Jan-22	ES2202264		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DUP07_220124	24-Jan-22	ES2202692		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TRIP01_220117	17-Jan-22	858847		-	-	-	-	-	-	<0.2	<0.2	-	-	-	<0.2	<0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TRIP02_220119	19-Jan-22	858994		<0.5	<0.5	-	<0.5	-	-	<0.2	<0.2	<0.5	<0.5	<0.5	<0.2	<0.2	<0.5	<1	<0.5	-	-	-	<0.5	-	<0.5	<0.5	-	-	<0.5	-	<0.5	<0.5	-	<0.5
TRIP03_220119	19-Jan-22	ES2202264		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TRIP04_220119	19-Jan-22	858994		-	-	-	-	-	-	<0.2	<0.2	-	-	-	<0.2	<0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TRIP05_220120	20-Jan-22	858994		<0.5	<0.5	-	<0.5	<1	<0.5	<0.2	<0.2	<0.5	<0.5	<0.5	<0.2	<0.2	<0.5	<1	<0.5	-	-	-	<0.5	-	<0.5	<0.5	-	-	<0.5	-	<0.5	<0.5	-	<0.5
TRIP06_220121	21-Jan-22	858994		-	-	-	-	-	-	<0.2	<0.2	-	-	-	<0.2	<0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

* ND - non-detect

Statistical Summary

Number of Results	2	54	52	2	52	52	5	5	2	54	2	5	5	54	54	54	52	52	52	54	52	54	54	52	52	54	52	54	54	52	54		
Number of Detects	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Minimum Concentration	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<0.2	<0.5	<0.5	<0.5	<0.2	<0.2	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5		
Minimum Detect	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
Maximum Concentration	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<0.2	<0.5	<0.5	<0.5	<0.2	<0.2	<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5		
Maximum Detect	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
Average Concentration		0.25	0.25		0.25	0.25	0.1	0.1		0.25		0.1	0.1	0.25	1.2	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.5	0.25	0.25	0.25	0.25		
Median Concentration	0.25	0.25	0.25	0.25	0.25	0.25	0.1	0.1	0.25	0.25	0.25	0.1	0.1	0.25	1.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.5	0.25	0.25	0.25	0.25	
Standard Deviation		0	0		0	0	0	0		0		0	0	0	0.14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Number of Guideline Exceedances	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Number of Guideline Exceedances(Detects Only)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

Env Stds Comments

#1:High reliability ecological guideline
for fresh B(a)P
#2:Most conservative Chromium (III)
ACL adopted - NEPM Table 1B

	TRH - Semivolatile Fraction									TRH Volatiles/BTEX										BTEX	Explosives	Inorganics	Metals								PCBs								Pesticides								
	>C10 - C16 Fraction	>C10 - C16 Fraction minus Naphthalene (F2)	>C10 - C40 Fraction (sum)	>C16 - C34 Fraction	>C34 - C40 Fraction	C10 - C14 Fraction	C10 - C36 Fraction (sum)	C15 - C28 Fraction	C29 - C36 Fraction	Toluene	Total Xylenes	Benzene	C6 - C10 Fraction	C6 - C10 Fraction minus BTEX (F1)	C6 - C9 Fraction	Ethylbenzene	meta- & para-Xylene	ortho-Xylene	Sum of BTEX	Total MAH	1,3,5-Trinitrobenzene	Moisture Content (dried @ 103°C)	Arsenic	Cadmium	Chromium	Copper	Lead	Mercury	Nickel	Zinc	Arochlor 1016	Arochlor 1221	Arochlor 1232	Arochlor 1242	Arochlor 1248	Arochlor 1254	Arochlor 1260	PCBs (Sum of total)	4,4-DDE	a-BHC	Aldrin	Aldrin + Dieldrin	Azinophos methyl	b-BHC	Bromophos-ethyl	Carbophenothion
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	%	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL	50	50	50	100	100	20	50	50	50	0.1	0.3	0.1	10	10	10	0.1	0.2	0.1	0.2		0.5		2	0.4	2	5	5	0.1	2	5								0.1	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
CRC Care (2011) Direct Contact HSL D - Comm/Ind		20000		27000	38000					99000	81000	430		26000		27000																												
CRC Care (2011) Direct Contact Intrusive Maint. Worker		62000		85000	120000					120000	130000	1100		82000		85000																												
CRC Care (2017) Ecological guideline - Commercial and industrial																																													
NEPM (1999) EIL - Commercial/Industrial (site specific)																										150			180	380															
NEPM (1999) EIL - Commercial/Industrial																							160		310[#2]		1800																	
NEPM (1999) ESL - Commercial/Industrial (coarse)	170			1700	3300					135	180	75		215		165																												
NEPM (1999) ESL - Commercial/Industrial (fine)				2500	6600					135	95	95				185																												
NEPM (1999) HIL D - Commercial/Industrial																							3000	900	3600	240000	1500	730	6000	400000								7				45				
NEPM (1999) HSL D Comm/Indust - VI Clay 0 to <1 m		NL								NL	NL	4		310		NL																												
NEPM (1999) HSL D Comm/Indust - VI Clay 1 to <2 m		NL								NL	NL	6		480		NL																												
NEPM (1999) HSL D Comm/Indust - VI Clay 2 to <4 m		NL								NL	NL	9		NL		NL																												
NEPM (1999) HSL D Comm/Indust - VI Clay 4 m+		NL								NL	NL	NL		NL		NL																												
NEPM (1999) Management Limits - Commercial/Industrial (coarse)	1000			3500	10000								700																															
NEPM (1999) Management Limits - Commercial/Industrial (fine)	1000			5000	10000								800																															
US EPA Regional Screening Levels (RSLs) Resident soil HQ=1.0, carcinogenic TR 1E-05																																												

| Field_ID | Sampled_Date | Lab_Report | Sample_Depth_Avg | | | | | | | | | | | | | | | | | | |

	TRH - Semivolatile Fraction									TRH Volatiles/BTEX										BTEX	Explosives	Inorganics	Metals								PCBs								Pesticides								
	>C10 - C16 Fraction	>C10 - C16 Fraction minus Naphthalene (F2)	>C10 - C40 Fraction (sum)	>C16 - C34 Fraction	>C34 - C40 Fraction	C10 - C14 Fraction	C10 - C36 Fraction (sum)	C15 - C28 Fraction	C29 - C36 Fraction	Toluene	Total Xylenes	Benzene	C6 - C10 Fraction	C6 - C10 Fraction minus BTEX (F1)	C6 - C9 Fraction	Ethylbenzene	meta- & para-Xylene	ortho-Xylene	Sum of BTEX	Total MAH	1,3,5-Trinitrobenzene	Moisture Content (dried @ 103°C)	Arsenic	Cadmium	Chromium	Copper	Lead	Mercury	Nickel	Zinc	Arochlor 1016	Arochlor 1221	Arochlor 1232	Arochlor 1242	Arochlor 1248	Arochlor 1254	Arochlor 1260	PCBs (Sum of total)	4,4-DDE	a-BHC	Aldrin	Aldrin + Dieldrin	Azinophos methyl	b-BHC	Bromophos-ethyl	Carbophenothion
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	%	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL	50	50	50	100	100	20	50	50	50	0.1	0.3	0.1	10	10	10	0.1	0.2	0.1	0.2		0.5		2	0.4	2	5	5	0.1	2	5								0.1	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
CRC Care (2011) Direct Contact HSL D - Comm/Ind		20000		27000	38000					99000	81000	430		26000		27000																												
CRC Care (2011) Direct Contact Intrusive Maint. Worker		62000		85000	120000					120000	130000	1100		82000		85000																												
CRC Care (2017) Ecological guideline - Commercial and industrial																																													
NEPM (1999) EIL - Commercial/Industrial (site specific)																										150			180	380															
NEPM (1999) EIL - Commercial/Industrial																							160		310[#2]		1800																	
NEPM (1999) ESL - Commercial/Industrial (coarse)	170			1700	3300					135	180	75		215		165																												
NEPM (1999) ESL - Commercial/Industrial (fine)				2500	6600					135	95	95				185																												
NEPM (1999) HIL D - Commercial/Industrial																							3000	900	3600	240000	1500	730	6000	400000								7				45				
NEPM (1999) HSL D Comm/Indust - VI Clay 0 to <1 m		NL								NL	NL	4		310		NL																												
NEPM (1999) HSL D Comm/Indust - VI Clay 1 to <2 m		NL								NL	NL	6		480		NL																												
NEPM (1999) HSL D Comm/Indust - VI Clay 2 to <4 m		NL								NL	NL	9		NL		NL																												
NEPM (1999) HSL D Comm/Indust - VI Clay 4 m+		NL								NL	NL	NL		NL		NL																												
NEPM (1999) Management Limits - Commercial/Industrial (coarse)	1000			3500	10000								700																															
NEPM (1999) Management Limits - Commercial/Industrial (fine)	1000			5000	10000								800																															
US EPA Regional Screening Levels (RSLs) Resident soil HQ=1.0, carcinogenic TR 1E-05																																												

| Field_ID | Sampled_Date | Lab_Report | Sample_Depth_Avg | | | | | | | | | | | | | | | | | | |

	TRH - Semivolatile Fraction									TRH Volatiles/BTEX										BTEX	Explosives	Inorganics	Metals								PCBs								Pesticides								
	>C10 - C16 Fraction	>C10 - C16 Fraction minus Naphthalene (F2)	>C10 - C40 Fraction (sum)	>C16 - C34 Fraction	>C34 - C40 Fraction	C10 - C14 Fraction	C10 - C36 Fraction (sum)	C15 - C28 Fraction	C29 - C36 Fraction	Toluene	Total Xylenes	Benzene	C6 - C10 Fraction	C6 - C10 Fraction minus BTEX (F1)	C6 - C9 Fraction	Ethylbenzene	meta- & para-Xylene	ortho-Xylene	Sum of BTEX	Total MAH	1,3,5-Trinitrobenzene	Moisture Content (dried @ 103°C)	Arsenic	Cadmium	Chromium	Copper	Lead	Mercury	Nickel	Zinc	Arochlor 1016	Arochlor 1221	Arochlor 1232	Arochlor 1242	Arochlor 1248	Arochlor 1254	Arochlor 1260	PCBs (Sum of total)	4,4-DDE	a-BHC	Aldrin	Aldrin + Dieldrin	Azinophos methyl	b-BHC	Bromophos-ethyl	Carbophenothion
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	%	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL	50	50	50	100	100	20	50	50	50	0.1	0.3	0.1	10	10	10	0.1	0.2	0.1	0.2		0.5		2	0.4	2	5	5	0.1	2	5								0.1	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
CRC Care (2011) Direct Contact HSL D - Comm/Ind		20000		27000	38000					99000	81000	430		26000		27000																												
CRC Care (2011) Direct Contact Intrusive Maint. Worker		62000		85000	120000					120000	130000	1100		82000		85000																												
CRC Care (2017) Ecological guideline - Commercial and industrial																																													
NEPM (1999) EIL - Commercial/Industrial (site specific)																										150			180	380															
NEPM (1999) EIL - Commercial/Industrial																							160		310[#2]		1800																	
NEPM (1999) ESL - Commercial/Industrial (coarse)	170			1700	3300					135	180	75		215		165																												
NEPM (1999) ESL - Commercial/Industrial (fine)				2500	6600					135	95	95				185																												
NEPM (1999) HIL D - Commercial/Industrial																							3000	900	3600	240000	1500	730	6000	400000								7				45				
NEPM (1999) HSL D Comm/Indust - VI Clay 0 to <1 m		NL								NL	NL	4		310		NL																												
NEPM (1999) HSL D Comm/Indust - VI Clay 1 to <2 m		NL								NL	NL	6		480		NL																												
NEPM (1999) HSL D Comm/Indust - VI Clay 2 to <4 m		NL								NL	NL	9		NL		NL																												
NEPM (1999) HSL D Comm/Indust - VI Clay 4 m+		NL								NL	NL	NL		NL		NL																												
NEPM (1999) Management Limits - Commercial/Industrial (coarse)	1000			3500	10000								700																															
NEPM (1999) Management Limits - Commercial/Industrial (fine)	1000			5000	10000								800																															
US EPA Regional Screening Levels (RSLs) Resident soil HQ=1.0, carcinogenic TR 1E-05																																												

| Field_ID | Sampled_Date | Lab_Report | Sample_Depth_Avg | | | | | | | | | | | | | | | | | | |

	TRH - Semivolatile Fraction									TRH Volatiles/BTEX										BTEX	Explosives	Inorganics	Metals								PCBs								Pesticides								
	>C10 - C16 Fraction	>C10 - C16 Fraction minus Naphthalene (F2)	>C10 - C40 Fraction (sum)	>C16 - C34 Fraction	>C34 - C40 Fraction	C10 - C14 Fraction	C10 - C36 Fraction (sum)	C15 - C28 Fraction	C29 - C36 Fraction	Toluene	Total Xylenes	Benzene	C6 - C10 Fraction	C6 - C10 Fraction minus BTEX (F1)	C6 - C9 Fraction	Ethylbenzene	meta- & para-Xylene	ortho-Xylene	Sum of BTEX	Total MAH	1,3,5-Trinitrobenzene	Moisture Content (dried @ 103°C)	Arsenic	Cadmium	Chromium	Copper	Lead	Mercury	Nickel	Zinc	Arochlor 1016	Arochlor 1221	Arochlor 1232	Arochlor 1242	Arochlor 1248	Arochlor 1254	Arochlor 1260	PCBs (Sum of total)	4,4-DDE	a-BHC	Aldrin	Aldrin + Dieldrin	Azinophos methyl	b-BHC	Bromophos-ethyl	Carbophenothion
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg		mg/kg	%	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL	50	50	50	100	100	20	50	50	50	0.1	0.3	0.1	10	10	10	0.1	0.2	0.1	0.2		0.5		2	0.4	2	5	5	0.1	2	5								0.1	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
CRC Care (2011) Direct Contact HSL D - Comm/Ind		20000		27000	38000					99000	81000	430		26000		27000																												
CRC Care (2011) Direct Contact Intrusive Maint. Worker		62000		85000	120000					120000	130000	1100		82000		85000																												
CRC Care (2017) Ecological guideline - Commercial and industrial																																													
NEPM (1999) EIL - Commercial/Industrial (site specific)																										150			180	380															
NEPM (1999) EIL - Commercial/Industrial																							160		310[#2]		1800																	
NEPM (1999) ESL - Commercial/Industrial (coarse)	170			1700	3300					135	180	75		215		165																												
NEPM (1999) ESL - Commercial/Industrial (fine)				2500	6600					135	95	95				185																												
NEPM (1999) HIL D - Commercial/Industrial																							3000	900	3600	240000	1500	730	6000	400000								7				45				
NEPM (1999) HSL D Comm/Indust - VI Clay 0 to <1 m		NL								NL	NL	4		310		NL																												
NEPM (1999) HSL D Comm/Indust - VI Clay 1 to <2 m		NL								NL	NL	6		480		NL																												
NEPM (1999) HSL D Comm/Indust - VI Clay 2 to <4 m		NL								NL	NL	9		NL		NL																												
NEPM (1999) HSL D Comm/Indust - VI Clay 4 m+		NL								NL	NL	NL		NL		NL																												
NEPM (1999) Management Limits - Commercial/Industrial (coarse)	1000			3500	10000								700																															
NEPM (1999) Management Limits - Commercial/Industrial (fine)	1000			5000	10000								800																															
US EPA Regional Screening Levels (RSLs) Resident soil HQ=1.0, carcinogenic TR 1E-05																																												

| Field_ID | Sampled_Date | Lab_Report | Sample_Depth_Avg | | | | | | | | | | | | | | | | | | |

| | Pesticides | | |

	Pesticides																																													
	Chlordane	Chlordane (cis)	Chlordane (trans)	Chlorfenvinphos	Chlorpyrifos	Chlorpyrifos-methyl	Coumaphos	d-BHC	DDD	DDT	DDT+DDE+DDD	Demeton-S-methyl	Diazinon	Dichlorvos	Dieldrin	Dimethoate	Disulfoton	Endosulfan	Endosulfan I	Endosulfan II	Endosulfan sulphate	Endrin	Endrin aldehyde	Endrin ketone	Ethion	Ethoprop	Fenamiphos	Fenitrothion	Fenthion	g-BHC (Lindane)	Heptachlor	Heptachlor epoxide	Hexachlorobenzene	Malathion	Methoxychlor	Methyl parathion	Monocrotophos	Parathion	Phorate	Pirimphos-ethyl	Prothiofos	Ronnel	Trifluralin	Bolstar (Sulprofos)	Merphos
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL	0.05	0.05	0.05	0.05	0.05	0.05		0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05		0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05		0.05		0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.2	0.2	0.2		0.05	0.05				
CRC Care (2011) Direct Contact HSL D - Comm/Ind																																													
CRC Care (2011) Direct Contact Intrusive Maint. Worker																																													
CRC Care (2017) Ecological guideline - Commercial and industrial																																													
NEPM (1999) EIL - Commercial/Industrial (site specific)																																													
NEPM (1999) EIL - Commercial/Industrial										640																																			
NEPM (1999) ESL - Commercial/Industrial (coarse)																																													
NEPM (1999) ESL - Commercial/Industrial (fine)																																													
NEPM (1999) HIL D - Commercial/Industrial	530				2000						3600							2000				100									50		80		2500											
NEPM (1999) HSL D Comm/Indust - VI Clay 0 to <1 m																																													
NEPM (1999) HSL D Comm/Indust - VI Clay 1 to <2 m																																													
NEPM (1999) HSL D Comm/Indust - VI Clay 2 to <4 m																																													
NEPM (1999) HSL D Comm/Indust - VI Clay 4 m+																																													
NEPM (1999) Management Limits - Commercial/Industrial (coarse)																																													
NEPM (1999) Management Limits - Commercial/Industrial (fine)																																													
US EPA Regional Screening Levels (RSLs) Resident soil HQ=1.0, carcinogenic TR 1E-05																																													
Field_ID	**Sampled_Date**	**Lab_Report**	**Sample_Depth_Avg**																																												
SOP_BH141_0.3_220124	24-Jan-22	ES2202692	0.3	3.09	0.35	2.74	<0.05	<0.05	<0.05	-	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	-	<0.05	-	<0.05	<0.05	0.62	0.55	<0.05	<0.05	<0.2	<0.2	<0.2	<0.2	-	<0.05	<0.05	-	-	-	-
SOP_BH141_0.4_220124	24-Jan-22	ES2202692	0.4	0.7	0.1	0.6	<0.05	<0.05	<0.05	-	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	-	<0.05	-	<0.05	<0.05	0.5 - 0.1	0.5 - 0.1	<0.05	<0.05	<0.2	<0.2	<0.2	<0.2	-	<0.05	<0.05	-	-	-	-

| | Pesticides | | |

| | Pesticides | | |

	Per- and Polyfluoroalkyl Subst																					PFAS		PFOS and PFOA									
	10:2 Fluorotelomer sulfonic acid (10:2 FTS)	4:2 Fluorotelomer sulfonic acid (4:2 FTS)	6:2 Fluorotelomer sulfonic acid (6:2 FTS)	8:2 Fluorotelomer sulfonic acid (8:2 FTS)	N-Ethyl perfluorooctane sulfonamide (EtFOSA)	N-Ethyl perfluorooctane sulfonamidoacetic acid (Et	N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE	N-Methyl perfluorooctane sulfonamide (MeFOSA)	N-Methyl perfluorooctane sulfonamidoacetic acid (M	N-Methyl perfluorooctane sulfonamidoethanol (MeFOS	Perfluorobutanoic acid (PFBA)	Perfluoroheptane sulfonic acid (PFHpS)	Perfluorooctane sulfonic acid (PFOS)	Perfluoropentane sulfonic acid (PFPeS)	Perfluoropentanoic acid (PFPeA)	Perfluorooctanoic acid (PFOA)	Perfluorotetradecanoic acid (PFTeDA)	Perfluorotridecanoic acid (PFTrDA)	Sum of PFAS	Sum of PFAS (WA DER List)	Sum of PFHxS and PFOS	Sum of enHealth PFAS (PFHxS + PFOS + PFOA)*	Sum of US EPA PFAS (PFOS + PFOA)*	Perfluorobutanesulfonic acid (PFBS)	Perfluorodecanesulfonic acid (PFDS)	Perfluorodecanoic acid (PFDA)	Perfluorohexanesulfonic acid (PFHxS)	Perfluorododecanoic acid (PFDoA)	Perfluoroheptanoic acid (PFHpA)	Perfluorohexanoic acid (PFHxA)	Perfluorononanoic acid (PFNA)	Perfluorooctanesulfonamide (PFOSA)	Perfluoroundecanoic acid (PFUnA)
	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	UG/KG	UG/KG	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg
EQL	0.5	0.5	0.5	0.5	0.5	0.2	0.5	0.5	0.2	0.5	1	0.2	0.2	0.2	0.2	0.2	0.2	0.5	0.2	0.2	0.2	0.2			0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
NEMP (2020) Ecological (direct exposure)													1000			10000																	
NEMP (2020) Ecological (indirect exposure)													10																				
NEMP (2020) HIL D - Industrial/ commercial													20000			50000					20000					20000						

Field_ID	Sampled_Date-Time	Lab_Report_Number	Sample_Depth_Avg																															
Construction Support Area																																		
SOP_BH101_0.5_220120	20/01/2022	ES2202264	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<0.5	<0.5	<0.2	<0.5	<1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.5	<0.2	<0.2	<0.2	-	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
SOP_BH103_0.2_220117	17/01/2022	ES2201683	0.2	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	<1	-	<0.2	-	<0.2	<0.2	-	-	-	<0.2	<0.2	-	-	<0.2	-	-	<0.2	-	<0.2	<0.2	-	-	-
SOP_BH104_1.0_220117	17/01/2022	ES2201683	1	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	<1	-	<0.2	-	<0.2	<0.2	-	-	-	<0.2	<0.2	-	-	<0.2	-	-	<0.2	-	<0.2	<0.2	-	-	-
SOP_BH106_0.2_220117	17/01/2022	ES2201683	0.2	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	<1	-	0.3	-	<0.2	<0.2	-	-	-	0.5	0.3	-	-	0.2	-	-	<0.2	-	<0.2	<0.2	-	-	-
SOP_BH110_0.2_220117	17/01/2022	ES2201683	0.2	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	<1	-	<0.2	-	<0.2	<0.2	-	-	-	0.5	<0.2	-	-	0.5	-	-	<0.2	-	<0.2	<0.2	-	-	-
SOP_BH113_0.3_220118	18/01/2022	ES2201683	0.3	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	<1	-	<0.2	-	<0.2	<0.2	-	-	-	<0.2	<0.2	-	-	<0.2	-	-	<0.2	-	<0.2	<0.2	-	-	-
SOP_BH114_0.3_220118	18/01/2022	ES2201683	0.3	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	<1	-	<0.2	-	<0.2	<0.2	-	-	-	<0.2	<0.2	-	-	<0.2	-	-	<0.2	-	<0.2	<0.2	-	-	-
SOP_BH123_1.0_220124	24/01/2022	ES2202692	1	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	<1	-	<0.2	-	<0.2	<0.2	-	-	-	<0.2	<0.2	-	-	<0.2	-	-	<0.2	-	<0.2	<0.2	-	-	-
SOP_BH131_2.0_220124	24/01/2022	ES2202692	2	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	<1	-	<0.2	-	<0.2	<0.2	-	-	-	<0.2	<0.2	-	-	<0.2	-	-	<0.2	-	<0.2	<0.2	-	-	-
SOP_BH132_1.0_220125	25/01/2022	ES2202692	1	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	<1	-	<0.2	-	<0.2	<0.2	-	-	-	<0.2	<0.2	-	-	<0.2	-	-	<0.2	-	<0.2	<0.2	-	-	-
SOP_BH134_0.5_220125	25/01/2022	ES2202692	0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	<1	-	<0.2	-	<0.2	<0.2	-	-	-	<0.2	<0.2	-	-	<0.2	-	-	<0.2	-	<0.2	<0.2	-	-	-
SOP_BH139_1.2_220125	24/01/2022	ES2202692	1.2	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	<1	-	<0.2	-	<0.2	<0.2	-	-	-	<0.2	<0.2	-	-	<0.2	-	-	<0.2	-	<0.2	<0.2	-	-	-
SOP_BH140_2.0_220124	24/01/2022	ES2202692	2	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	<1	-	<0.2	-	<0.2	<0.2	-	-	-	<0.2	<0.2	-	-	<0.2	-	-	<0.2	-	<0.2	<0.2	-	-	-

				Per- and Polyfluoroalkyl Subst																					PFAS		PFOS and PFOA								
				10:2 Fluorotelomer sulfonic acid (10:2 FTS)	4:2 Fluorotelomer sulfonic acid (4:2 FTS)	6:2 Fluorotelomer sulfonic acid (6:2 FTS)	8:2 Fluorotelomer sulfonic acid (8:2 FTS)	N-Ethyl perfluorooctane sulfonamide (EtFOSA)	N-Ethyl perfluorooctane sulfonamidoacetic acid (Et	N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE	N-Methyl perfluorooctane sulfonamide (MeFOSA)	N-Methyl perfluorooctane sulfonamidoacetic acid (M	N-Methyl perfluorooctane sulfonamidoethanol (MeFOS	Perfluorobutanoic acid (PFBA)	Perfluoroheptane sulfonic acid (PFHpS)	Perfluorooctane sulfonic acid (PFOS)	Perfluoropentane sulfonic acid (PFPeS)	Perfluoropentanoic acid (PFPeA)	Perfluorooctanoic acid (PFOA)	Perfluorotetradecanoic acid (PFTeDA)	Perfluorotridecanoic acid (PFTrDA)	Sum of PFAS	Sum of PFAS (WA DER List)	Sum of PFHxS and PFOS	Sum of enHealth PFAS (PFHxS + PFOS + PFOA)*	Sum of US EPA PFAS (PFOS + PFOA)*	Perfluorobutanesulfonic acid (PFBS)	Perfluorodecanesulfonic acid (PFDS)	Perfluorodecanoic acid (PFDA)	Perfluorohexanesulfonic acid (PFHxS)	Perfluorododecanoic acid (PFDoA)	Perfluoroheptanoic acid (PFHpA)	Perfluorohexanoic acid (PFHxA)	Perfluorononanoic acid (PFNA)	Perfluorooctanesulfonamide (PFOSA)	Perfluoroundecanoic acid (PFUnA)
				µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	UG/KG	UG/KG	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg
EQL				0.5	0.5	0.5	0.5	0.5	0.2	0.5	0.5	0.2	0.5	1	0.2	0.2	0.2	0.2	0.2	0.2	0.5	0.2	0.2	0.2	0.2			0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
NEMP (2020) Ecological (direct exposure)																1000			10000																
NEMP (2020) Ecological (indirect exposure)																10																			
NEMP (2020) HIL D - Industrial/ commercial																20000			50000					20000						20000					
Field_ID	**Sampled_Date-Time**	**Lab_Report_Number**	**Sample_Depth_Avg**																																	
Station Box Area																																				
SOP_BH111_1.0_220118	18/01/2022	ES2201683	1	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	<1	-	<0.2	-	<0.2	<0.2	-	-	-	<0.2	<0.2	-	-	<0.2	-	-	<0.2	-	<0.2	<0.2	-	-	-
SOP_BH111_3.0_220118	18/01/2022	ES2201683	3	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	<1	-	<0.2	-	<0.2	<0.2	-	-	-	<0.2	<0.2	-	-	<0.2	-	-	<0.2	-	<0.2	<0.2	-	-	-
SOP_BH112_1.0_220118	18/01/2022	ES2201683	1	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	<1	-	<0.2	-	<0.2	<0.2	-	-	-	<0.2	<0.2	-	-	<0.2	-	-	<0.2	-	<0.2	<0.2	-	-	-
SOP_BH112_5.0_220118	18/01/2022	ES2201683	5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	<1	-	<0.2	-	<0.2	<0.2	-	-	-	<0.2	<0.2	-	-	<0.2	-	-	<0.2	-	<0.2	<0.2	-	-	-
SOP_BH118_1.0_220119	19/01/2022	ES2202264	1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<0.5	<0.5	<0.2	<0.5	<1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.5	<0.2	<0.2	<0.2	<0.2	<0.2	-	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
SOP_BH118_10.0_220119	19/01/2022	ES2202264	10	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<0.5	<0.5	<0.2	<0.5	<1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.5	<0.2	<0.2	<0.2	<0.2	<0.2	-	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
SOP_BH118_25.0_220119	19/01/2022	ES2202264	25	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<0.5	<0.5	<0.2	<0.5	<1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.5	<0.2	<0.2	<0.2	<0.2	<0.2	-	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
SOP_BH119_0.2_220117	17/01/2022	ES2201683	0.2	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	<1	-	<0.2	-	<0.2	<0.2	-	-	-	<0.2	<0.2	-	-	<0.2	-	-	<0.2	-	<0.2	<0.2	-	-	-
SOP_BH119_1.0_220117	17/01/2022	ES2201683	1	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	<1	-	<0.2	-	<0.2	<0.2	-	-	-	<0.2	<0.2	-	-	<0.2	-	-	<0.2	-	<0.2	<0.2	-	-	-
SOP_BH119_3.0_220117	17/01/2022	ES2201683	3	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	<1	-	<0.2	-	<0.2	<0.2	-	-	-	<0.2	<0.2	-	-	<0.2	-	-	<0.2	-	<0.2	<0.2	-	-	-
SOP_BH120_0.5_220120	20/01/2022	ES2202264	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<0.5	<0.5	<0.2	<0.5	<1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.5	<0.2	<0.2	<0.2	<0.2	<0.2	-	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
SOP_BH120_3.0_220120	20/01/2022	ES2202264	3	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<0.5	<0.5	<0.2	<0.5	<1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.5	<0.2	<0.2	<0.2	<0.2	<0.2	-	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
SOP_BH121_1.0_220120	20/01/2022	ES2202264	1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<0.5	<0.5	<0.2	<0.5	<1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.5	<0.2	<0.2	<0.2	<0.2	<0.2	-	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
SOP_BH121_5.0_220120	20/01/2022	ES2202264	5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<0.5	<0.5	<0.2	<0.5	<1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.5	<0.2	<0.2	<0.2	<0.2	<0.2	-	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
SOP_BH124_0.5_220120	21/01/2022	ES2202264	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<0.5	<0.5	<0.2	<0.5	<1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.5	<0.2	<0.2	<0.2	<0.2	<0.2	-	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
SOP_BH124_3.0_220120	21/01/2022	ES2202264	3	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<0.5	<0.5	<0.2	<0.5	<1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.5	<0.2	<0.2	<0.2	<0.2	<0.2	-	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
SOP_BH125_0.5_220121	21/01/2022	ES2202264	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<0.5	<0.5	<0.2	<0.5	<1	<0.2	0.2	<0.2	<0.2	<0.2	<0.2	<0.5	<0.2	1.4	1.4	1.4	-	-	<0.2	<0.2	<0.2	1.2	<0.2	<0.2	<0.2	<0.2	<0.2
SOP_BH125_15.0_220121	21/01/2022	ES2202264	15	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<0.5	<0.5	<0.2	<0.5	<1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.5	<0.2	<0.2	<0.2	<0.2	<0.2	-	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
SOP_BH126_0.5_220121	21/01/2022	ES2202264	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<0.5	<0.5	<0.2	<0.5	<1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.5	<0.2	<0.2	<0.2	<0.2	<0.2	-	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
SOP_BH126_2.0_220121	21/01/2022	ES2202264	2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<0.5	<0.5	<0.2	<0.5	<1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.5	<0.2	<0.2	<0.2	<0.2	<0.2	-	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
SOP_BH127_1.2_220121	21/01/2022	ES2202264	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<0.5	<0.5	<0.2	<0.5	<1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.5	<0.2	<0.2	<0.2	<0.2	<0.2	-	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
SOP_BH127_4.0_220121	21/01/2022	ES2202264	4	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<0.5	<0.5	<0.2	<0.5	<1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.5	<0.2	<0.2	<0.2	<0.2	<0.2	-	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
SOP_BH128_0.9_220124	24/01/2022	ES2202692	0.9	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	<1	-	<0.2	-	<0.2	<0.2	-	-	-	<0.2	<0.2	-	-	<0.2	-	-	<0.2	-	<0.2	<0.2	-	-	-
SOP_BH128_5.0_220124	24/01/2022	ES2202692	5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	<1	-	<0.2	-	<0.2	<0.2	-	-	-	<0.2	<0.2	-	-	<0.2	-	-	<0.2	-	<0.2	<0.2	-	-	-
SOP_BH129_0.5_220124	24/01/2022	ES2202692	0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	<1	-	<0.2	-	<0.2	<0.2	-	-	-	<0.2	<0.2	-	-	<0.2	-	-	<0.2	-	<0.2	<0.2	-	-	-
SOP_BH129_1.0_220124	24/01/2022	ES2202692	1	<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	<1	-	<0.2	-	<0.2	<0.2	-	-	-	<0.2	<0.2	-	-	<0.2	-	-	<0.2	-	<0.2	<0.2	-	-	-
SOP_BH142_0.4_220119	19/01/2022	ES2202264	0.4	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<0.5	<0.5	<0.2	<0.5	<1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.5	<0.2	<0.2	<0.2	<0.2	<0.2	-	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
SOP_BH142_4.0_220119	19/01/2022	ES2202264	4	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<0.5	<0.5	<0.2	<0.5	<1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.5	<0.2	<0.2	<0.2	<0.2	<0.2	-	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
SOP_BH143_0.3_220119	19/01/2022	ES2202264	0.3	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<0.5	<0.5	<0.2	<0.5	<1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.5	<0.2	<0.2	<0.2	<0.2	<0.2	-	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
SOP_BH143_1.0_220119	19/01/2022	ES2202264	1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<0.5	<0.5	<0.2	<0.5	<1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.5	<0.2	<0.2	<0.2	<0.2	<0.2	-	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
SOP_BH144_0.3_220119	19/01/2022	ES2202264	0.3	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<0.5	<0.5	<0.2	<0.5	<1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.5	<0.2	<0.2	<0.2	<0.2	<0.2	-	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
SOP_BH144_0.6_220119	19/01/2022	ES2202264	0.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<0.5	<0.5	<0.2	<0.5	<1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.5	<0.2	<0.2	<0.2	<0.2	<0.2	-	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
SOP_BH145_0.3_220119	19/01/2022	ES2202264	0.3	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<0.5	<0.5	<0.2	<0.5	<1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.5	<0.2	<0.2	<0.2	<0.2	<0.2	-	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
SOP_BH145_5.0_220119	19/01/2022	ES2202264	5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<0.5	<0.5	<0.2	<0.5	<1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.5	<0.2	<0.2	<0.2	<0.2	<0.2	-	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
DUP03_220119	19/01/2022	ES2202264		<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<0.5	<0.5	<0.2	<0.5	<1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.5	<0.2	<0.2	<0.2	<0.2	<0.2	-	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
DUP04_220119	19/01/2022	ES2202264		<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<0.5	<0.5	<0.2	<0.5	<1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.5	<0.2	<0.2	<0.2	<0.2	<0.2	-	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
DUP05_220120	20/01/2022	ES2202264		<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<0.5	<0.5	<0.2	<0.5	<1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.5	<0.2	<0.2	<0.2	<0.2	<0.2	-	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
DUP06_220121	21/01/2022	ES2202264		<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<0.5	<0.5	<0.2	<0.5	<1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.5	<0.2	<0.2	<0.2	<0.2	<0.2	-	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
DUP07_220124	24/01/2022	ES2202692		<0.5	<0.5	<0.5	<0.5	-	-	-	-	-	-	<1	-	<0.2	-	<0.2	<0.2	-	-	-	<0.2	<0.2	-	-	<0.2	-	-	<0.2	-	<0.2	<0.2	-	-	-
TRIP03_220119	19/01/2022	ES2202264		<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<0.5	<0.5	<0.2	<0.5	<1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.5	<0.2	<0.2	<0.2	<0.2	<0.2	-	-	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
TRIP04_220119	19/01/2022	858994		-	-	<10	-	-	-	-	-	-	-	-	-	<5	-	-	<5	-	-	-	-	<5	<5	<5	-	-	-	<5	-	-	-	-	-	-
TRIP05_220120	20/01/2022	858994		-	-	<10	-	-	-	-	-	-	-	-	-	<5	-	-	<5	-	-	-	-	<5	<5	<5	-	-	-	<5	-	-	-	-	-	-
TRIP06_220121	21/01/2022	858994		-	-	<10	-	-	-	-	-	-	-	-	-	<5	-	-	<5	-	-	-	-	<5	<5	<5	-	-	-	<5	-	-	-	-	-	-
Statistical Summary																																				
Number of Results				53	53	56	53	29	29	29	29	29	29	53	29	56	29	53	56	29	29	29	53	56	3	3	53	29	29	56	29	53	53	29	29	29
Number of Detects				0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	1	3	2	0	0	2	0	0	1	0	0	0	0	0	0
Minimum Concentration				<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<0.5	<0.5	<0.2	<0.5	<1	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.5	<0.2	<0.2	<0.2	<5	<5	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Minimum Detect				ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.2	ND	ND	ND	ND	ND	1.4	0.5	0.3	ND	ND	0.2	ND	ND	1.2	ND	ND	ND	ND	ND	ND
Maximum Concentration				<0.5	<0.5	<10	<0.5	<0.5	<0.2	<0.5	<0.5	<0.2	<0.5	<1	<0.2	<5	<0.2	<0.2	<5	<0.5	<0.2	1.4	1.4	<5	<5	<5	0.5	<0.2	<0.2	<5	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Maximum Detect				ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.3	ND	ND	ND	ND	ND	1.4	1.4	1.4	ND	ND	0.5	ND	ND	1.2	ND	ND	ND	ND	ND	ND
Average Concentration				0.25	0.25	0.5	0.25	0.25	0.1	0.25	0.25	0.1	0.25	0.5	0.1	0.23	0.1	0.1	0.23	0.25	0.1	0.14	0.14	0.26	2.5	2.5	0.11	0.1	0.1	0.25	0.1	0.1	0.1	0.1	0.1	0.1
Median Concentration				0.25	0.25	0.25	0.25	0.25	0.1	0.25	0.25	0.1	0.25	0.5	0.1	0.1	0.1	0.1	0.1	0.25	0.1	0.1	0.1	0.1	2.5	2.5	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Standard Deviation				0	0	1.1	0	0	0	0	0	0	0	0	0	0.54	0	0	0.55	0	0	0.24	0.19	0.57	0	0	0.056	0	0	0.56	0	0	0	0	0	0

	Per- and Polyfluoroalkyl Subst																					PFAS		PFOS and PFOA									
	10:2 Fluorotelomer sulfonic acid (10:2 FTS)	4:2 Fluorotelomer sulfonic acid (4:2 FTS)	6:2 Fluorotelomer sulfonic acid (6:2 FTS)	8:2 Fluorotelomer sulfonic acid (8:2 FTS)	N-Ethyl perfluorooctane sulfonamide (EtFOSA)	N-Ethyl perfluorooctane sulfonamidoacetic acid (Et	N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE	N-Methyl perfluorooctane sulfonamide (MeFOSA)	N-Methyl perfluorooctane sulfonamidoacetic acid (M	N-Methyl perfluorooctane sulfonamidoethanol (MeFOS	Perfluorobutanoic acid (PFBA)	Perfluoroheptane sulfonic acid (PFHpS)	Perfluorooctane sulfonic acid (PFOS)	Perfluoropentane sulfonic acid (PFPeS)	Perfluoropentanoic acid (PFPeA)	Perfluorooctanoic acid (PFOA)	Perfluorotetradecanoic acid (PFTeDA)	Perfluorotridecanoic acid (PFTrDA)	Sum of PFAS	Sum of PFAS (WA DER List)	Sum of PFHxS and PFOS	Sum of enHealth PFAS (PFHxS + PFOS + PFOA)*	Sum of US EPA PFAS (PFOS + PFOA)*	Perfluorobutanesulfonic acid (PFBS)	Perfluorodecanesulfonic acid (PFDS)	Perfluorodecanoic acid (PFDA)	Perfluorohexanesulfonic acid (PFHxS)	Perfluorododecanoic acid (PFDoA)	Perfluoroheptanoic acid (PFHpA)	Perfluorohexanoic acid (PFHxA)	Perfluorononanoic acid (PFNA)	Perfluorooctanesulfonamide (PFOSA)	Perfluoroundecanoic acid (PFUnA)
	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	UG/KG	UG/KG	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg
EQL	0.5	0.5	0.5	0.5	0.5	0.2	0.5	0.5	0.2	0.5	1	0.2	0.2	0.2	0.2	0.2	0.2	0.5	0.2	0.2	0.2	0.2			0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
NEMP (2020) Ecological (direct exposure)													1000			10000																	
NEMP (2020) Ecological (indirect exposure)													10																				
NEMP (2020) HIL D - Industrial/ commercial													20000			50000					20000					20000						
Field_ID **Sampled_Date-Time** **Lab_Report_Number** **Sample_Depth_Avg**																																	
Number of Guideline Exceedances	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Number of Guideline Exceedances(Detects Only)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

				VOC																																						
				1,2,4-trimethylbenzene	1,3,5-trimethylbenzene	2-chlorotoluene	4-chlorotoluene	Bromobenzene	Isopropylbenzene	n-butylbenzene	n-propylbenzene	p-isopropyltoluene	sec-butylbenzene	Styrene	tert-butylbenzene	1,1,1,2-tetrachloroethane	1,1,1-trichloroethane	1,1,2,2-tetrachloroethane	1,1,2-trichloroethane	1,1-dichloroethane	1,1-dichloroethene	1,1-dichloropropene	1,2,3-trichloropropane	1,2-dibromo-3-chloropropane	1,2-dibromoethane	1,2-dichloroethane	1,2-dichloropropane	1,3-dichloropropane	2,2-dichloropropane	2-butanone (MEK)	2-hexanone (MBK)	4-methyl-2-pentanone (MIBK)	Acetone	Allyl chloride	Bromochloromethane
				mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL				0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	5	0.5								
CRC Care (2011) Direct Contact HSL D - Comm/Ind																																											
CRC Care (2011) Direct Contact Intrusive Maint. Worker																																											
CRC Care (2017) Ecological guideline - Commercial and industrial																																											
NEPM (1999) EIL - Commercial/Industrial																																											
NEPM (1999) ESL - Commercial/Industrial (coarse)																																											
NEPM (1999) ESL - Commercial/Industrial (fine)																																											
NEPM (1999) HIL D - Commercial/Industrial																																											
NEPM (1999) HSL D Comm/Indust - VI Clay 0 to <1 m																																											
NEPM (1999) HSL D Comm/Indust - VI Clay 1 to <2 m																																											
NEPM (1999) HSL D Comm/Indust - VI Clay 2 to <4 m																																											
NEPM (1999) HSL D Comm/Indust - VI Clay 4 m+																																											
NEPM (1999) Management Limits - Commercial/Industrial (coarse)																																											
NEPM (1999) Management Limits - Commercial/Industrial (fine)																																											
Field_ID	**Sampled_Date-Time**	**Lab_Report_Number**	**Sample_Depth_Avg**																																								
Construction Support Area																																										
SOP_BH101_0.5_220120	20/01/2022	ES2202264	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	-	-	-
SOP_BH102_0.7_220120	20/01/2022	ES2202264	0.7	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	-	-	-
SOP_BH103_0.2_220117	17/01/2022	ES2201683	0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	-	-	-
SOP_BH104_1.0_220117	17/01/2022	ES2201683	1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	-	-	-
SOP_BH105_0.2_220117	17/01/2022	ES2201683	0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	-	-	-
SOP_BH106_0.2_220117	17/01/2022	ES2201683	0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	-	-	-
SOP_BH107_1.0_220120	20/01/2022	ES2202264	1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	-	-	-
SOP_BH108_0.4_220120	19/01/2022	ES2202264	0.4	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	-	-	-
SOP_BH109_1.0_220120	20/01/2022	ES2202264	1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	-	-	-
SOP_BH110_0.2_220117	17/01/2022	ES2201683	0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	-	-	-
SOP_BH113_0.3_220118	18/01/2022	ES2201683	0.3	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	-	-	-
SOP_BH114_0.3_220118	18/01/2022	ES2201683	0.3	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	-	-	-
SOP_BH115_0.1_220118	18/01/2022	ES2201683	0.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	-	-	-
SOP_BH116_0.2_220117	17/01/2022	ES2201683	0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	-	-	-
SOP_BH117_0.2_220117	17/01/2022	ES2201683	0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	-	-	-
SOP_BH122_2.0_220124	24/01/2022	ES2202692	2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	-	-	-
SOP_BH123_1.0_220124	24/01/2022	ES2202692	1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	-	-	-
SOP_BH130_2.0_220124	24/01/2022	ES2202692	2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	-	-	-
SOP_BH131_1.0_220124	24/01/2022	ES2202692	1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	-	-	-
SOP_BH132_3.0_220125	25/01/2022	ES2202692	3	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	-	-	-
SOP_BH133_0.3_220125	25/01/2022	ES2202692	0.3	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	-	-	-
SOP_BH134_0.5_220125	25/01/2022	ES2202692	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	-	-	-
SOP_BH135_0.5_220125	25/01/2022	ES2202692	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	-	-	-
SOP_BH136_0.2_220125	25/01/2022	ES2202692	0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	-	-	-
SOP_BH137_0.2_220125	25/01/2022	ES2202692	0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	-	-	-
SOP_BH138_0.2_220125	25/01/2022	ES2202692	0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	-	-	-
SOP_BH139_2.0_220125	25/01/2022	ES2202692	2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	-	-	-
SOP_BH140_2.0_220124	24/01/2022	ES2202692	2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	-	-	-
SOP_BH141_0.4_220124	24/01/2022	ES2202692	0.4	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	-	-	-

				VOC																																						
				1,2,4-trimethylbenzene	1,3,5-trimethylbenzene	2-chlorotoluene	4-chlorotoluene	Bromobenzene	Isopropylbenzene	n-butylbenzene	n-propylbenzene	p-isopropyltoluene	sec-butylbenzene	Styrene	tert-butylbenzene	1,1,1,2-tetrachloroethane	1,1,1-trichloroethane	1,1,2,2-tetrachloroethane	1,1,2-trichloroethane	1,1-dichloroethane	1,1-dichloroethene	1,1-dichloropropene	1,2,3-trichloropropane	1,2-dibromo-3-chloropropane	1,2-dibromoethane	1,2-dichloroethane	1,2-dichloropropane	1,3-dichloropropane	2,2-dichloropropane	2-butanone (MEK)	2-hexanone (MBK)	4-methyl-2-pentanone (MIBK)	Acetone	Allyl chloride	Bromochloromethane
				mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL				0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	5	0.5			
CRC Care (2011) Direct Contact HSL D - Comm/Ind																																										
CRC Care (2011) Direct Contact Intrusive Maint. Worker																																										
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NEPM (1999) HSL D Comm/Indust - VI Clay 0 to <1 m																																										
NEPM (1999) HSL D Comm/Indust - VI Clay 1 to <2 m																																										
NEPM (1999) HSL D Comm/Indust - VI Clay 2 to <4 m																																										
NEPM (1999) HSL D Comm/Indust - VI Clay 4 m+																																										
NEPM (1999) Management Limits - Commercial/Industrial (coarse)																																										
NEPM (1999) Management Limits - Commercial/Industrial (fine)																																										
Field_ID	**Sampled_Date-Time**	**Lab_Report_Number**	**Sample_Depth_Avg**																																								
Station Box Area																																										
SOP_BH111_1.0_220118	18/01/2022	ES2201683	1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	-	-	-
SOP_BH112_1.0_220118	18/01/2022	ES2201683	1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	-	-	-
SOP_BH118_0.1_220119	19/01/2022	ES2202264	0.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	-	-	-
SOP_BH118_15.0_220119	19/01/2022	ES2202264	15	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	-	-	-
SOP_BH118_25.0_220119	19/01/2022	ES2202264	25	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	-	-	-
SOP_BH118_5.0_220119	19/01/2022	ES2202264	5	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	-	-	-
SOP_BH119_1.0_220117	17/01/2022	ES2201683	1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	-	-	-
SOP_BH120_3.0_220120	20/01/2022	ES2202264	3	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	-	-	-
SOP_BH121_1.0_220120	20/01/2022	ES2202264	1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	-	-	-
SOP_BH124_0.5_220120	21/01/2022	ES2202264	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	-	-	-
SOP_BH125_15.0_220121	21/01/2022	ES2202264	15	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	-	-	-
SOP_BH125_25.0_220121	21/01/2022	ES2202264	25	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	-	-	-
SOP_BH125_5.0_220121	21/01/2022	ES2202264	5	0.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	-	-	-
SOP_BH126_0.5_220121	21/01/2022	ES2202264	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	-	-	-
SOP_BH127_1.2_220121	21/01/2022	ES2202264	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	-	-	-
SOP_BH128_0.9_220124	24/01/2022	ES2202692	0.9	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	-	-	-
SOP_BH129_1.0_220124	24/01/2022	ES2202692	1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	-	-	-
SOP_BH142_0.4_220119	19/01/2022	ES2202264	0.4	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	-	-	-
SOP_BH143_1.0_220119	19/01/2022	ES2202264	1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	-	-	-
SOP_BH144_0.6_220119	19/01/2022	ES2202264	0.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	-	-	-
SOP_BH145_1.0_220119	19/01/2022	ES2202264	1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	-	-	-
DUP02_220119	19/01/2022	ES2202264		0.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	-	-	-
DUP05_220120	20/01/2022	ES2202264		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<5	-	-	-
TRIP02_220119	19/01/2022	858994		<0.5	<0.5	-	<0.5	<0.5	<0.5	-	-	-	-	<0.5	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	<0.5	-	<0.5	<0.5	<0.5	<0.5	-	<0.5	-	<0.5	<0.5	<0.5	<0.5
TRIP05_220120	20/01/2022	858994		<0.5	<0.5	-	<0.5	<0.5	<0.5	-	-	-	-	<0.5	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	<0.5	-	<0.5	<0.5	<0.5	<0.5	-	<0.5	-	<0.5	<0.5	<0.5	<0.5
Statistical Summary																																										
Number of Results				54	54	52	54	54	54	52	52	52	52	54	52	54	54	54	54	54	54	52	54	52	54	54	54	54	52	54	52	54	2	2	2
Number of Detects				3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Minimum Concentration				<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<0.5	<0.5	<0.5
Minimum Detect				0.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Maximum Concentration				0.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<0.5	<0.5	<0.5
Maximum Detect				0.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Average Concentration				0.27	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	2.4	2.5	2.4			
Median Concentration				0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	2.5	2.5	2.5	0.25	0.25	0.25
Standard Deviation				0.074	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.43	0	0.43			
Number of Guideline Exceedances				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Number of Guideline Exceedances(Detects Only)				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

				VOC																													
				Bromodichloromethane	Bromoform	Bromomethane	Carbon disulfide	Carbon tetrachloride	Chlorodibromomethane	Chloroethane	Chloroform	Chloromethane	cis-1,2-dichloroethene	cis-1,3-dichloropropene	cis-1,4-Dichloro-2-butene	Dibromomethane	Dichlorodifluoromethane	Dichloromethane	Iodomethane	Pentachloroethane	TCE	Tetrachloroethene	trans-1,2-dichloroethene	trans-1,3-dichloropropene	trans-1,4-Dichloro-2-butene	Trichlorofluoromethane	Vic EPA IWRG 621 CHC (Total)*	Vic EPA IWRG 621 Other CHC (Total)*	Vinyl acetate	Vinyl chloride
				mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	MG/KG	MG/KG	mg/kg	mg/kg
EQL				0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5		0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5			5	0.5
CRC Care (2011) Direct Contact HSL D - Comm/Ind																																	
CRC Care (2011) Direct Contact Intrusive Maint. Worker																																	
CRC Care (2017) Ecological guideline - Commercial and industrial																																	
NEPM (1999) EIL - Commercial/Industrial																																	
NEPM (1999) ESL - Commercial/Industrial (coarse)																																	
NEPM (1999) ESL - Commercial/Industrial (fine)																																	
NEPM (1999) HIL D - Commercial/Industrial																																	
NEPM (1999) HSL D Comm/Indust - VI Clay 0 to <1 m																																	
NEPM (1999) HSL D Comm/Indust - VI Clay 1 to <2 m																																	
NEPM (1999) HSL D Comm/Indust - VI Clay 2 to <4 m																																	
NEPM (1999) HSL D Comm/Indust - VI Clay 4 m+																																	
NEPM (1999) Management Limits - Commercial/Industrial (coarse)																																	
NEPM (1999) Management Limits - Commercial/Industrial (fine)																																	
Field_ID	**Sampled_Date-Time**	**Lab_Report_Number**	**Sample_Depth_Avg**																														
Construction Support Area																																	
SOP_BH101_0.5_220120	20/01/2022	ES2202264	0.5	<0.5	<0.5	<5	<0.5	<0.5	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<5	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	-	-	<5	<5
SOP_BH102_0.7_220120	20/01/2022	ES2202264	0.7	<0.5	<0.5	<5	<0.5	<0.5	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<5	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	-	-	<5	<5
SOP_BH103_0.2_220117	17/01/2022	ES2201683	0.2	<0.5	<0.5	<5	<0.5	<0.5	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<5	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	-	-	<5	<5
SOP_BH104_1.0_220117	17/01/2022	ES2201683	1	<0.5	<0.5	<5	<0.5	<0.5	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<5	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	-	-	<5	<5
SOP_BH105_0.2_220117	17/01/2022	ES2201683	0.2	<0.5	<0.5	<5	<0.5	<0.5	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<5	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	-	-	<5	<5
SOP_BH106_0.2_220117	17/01/2022	ES2201683	0.2	<0.5	<0.5	<5	<0.5	<0.5	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<5	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	-	-	<5	<5
SOP_BH107_1.0_220120	20/01/2022	ES2202264	1	<0.5	<0.5	<5	<0.5	<0.5	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<5	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	-	-	<5	<5
SOP_BH108_0.4_220120	19/01/2022	ES2202264	0.4	<0.5	<0.5	<5	<0.5	<0.5	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<5	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	-	-	<5	<5
SOP_BH109_1.0_220120	20/01/2022	ES2202264	1	<0.5	<0.5	<5	<0.5	<0.5	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<5	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	-	-	<5	<5
SOP_BH110_0.2_220117	17/01/2022	ES2201683	0.2	<0.5	<0.5	<5	<0.5	<0.5	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<5	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	-	-	<5	<5
SOP_BH113_0.3_220118	18/01/2022	ES2201683	0.3	<0.5	<0.5	<5	<0.5	<0.5	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<5	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	-	-	<5	<5
SOP_BH114_0.3_220118	18/01/2022	ES2201683	0.3	<0.5	<0.5	<5	<0.5	<0.5	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<5	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	-	-	<5	<5
SOP_BH115_0.1_220118	18/01/2022	ES2201683	0.1	<0.5	<0.5	<5	<0.5	<0.5	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<5	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	-	-	<5	<5
SOP_BH116_0.2_220117	17/01/2022	ES2201683	0.2	<0.5	<0.5	<5	<0.5	<0.5	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<5	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	-	-	<5	<5
SOP_BH117_0.2_220117	17/01/2022	ES2201683	0.2	<0.5	<0.5	<5	<0.5	<0.5	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<5	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	-	-	<5	<5
SOP_BH122_2.0_220124	24/01/2022	ES2202692	2	<0.5	<0.5	<5	<0.5	<0.5	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<5	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	-	-	<5	<5
SOP_BH123_1.0_220124	24/01/2022	ES2202692	1	<0.5	<0.5	<5	<0.5	<0.5	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<5	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	-	-	<5	<5
SOP_BH130_2.0_220124	24/01/2022	ES2202692	2	<0.5	<0.5	<5	<0.5	<0.5	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<5	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	-	-	<5	<5
SOP_BH131_1.0_220124	24/01/2022	ES2202692	1	<0.5	<0.5	<5	<0.5	<0.5	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<5	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	-	-	<5	<5
SOP_BH132_3.0_220125	25/01/2022	ES2202692	3	<0.5	<0.5	<5	<0.5	<0.5	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<5	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	-	-	<5	<5
SOP_BH133_0.3_220125	25/01/2022	ES2202692	0.3	<0.5	<0.5	<5	<0.5	<0.5	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<5	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	-	-	<5	<5
SOP_BH134_0.5_220125	25/01/2022	ES2202692	0.5	<0.5	<0.5	<5	<0.5	<0.5	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<5	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	-	-	<5	<5
SOP_BH135_0.5_220125	25/01/2022	ES2202692	0.5	<0.5	<0.5	<5	<0.5	<0.5	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<5	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	-	-	<5	<5
SOP_BH136_0.2_220125	25/01/2022	ES2202692	0.2	<0.5	<0.5	<5	<0.5	<0.5	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<5	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	-	-	<5	<5
SOP_BH137_0.2_220125	25/01/2022	ES2202692	0.2	<0.5	<0.5	<5	<0.5	<0.5	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<5	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	-	-	<5	<5
SOP_BH138_0.2_220125	25/01/2022	ES2202692	0.2	<0.5	<0.5	<5	<0.5	<0.5	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<5	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	-	-	<5	<5
SOP_BH139_2.0_220125	25/01/2022	ES2202692	2	<0.5	<0.5	<5	<0.5	<0.5	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<5	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	-	-	<5	<5
SOP_BH140_2.0_220124	24/01/2022	ES2202692	2	<0.5	<0.5	<5	<0.5	<0.5	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<5	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	-	-	<5	<5
SOP_BH141_0.4_220124	24/01/2022	ES2202692	0.4	<0.5	<0.5	<5	<0.5	<0.5	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<5	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	-	-	<5	<5

				VOC																											
				Bromodichloromethane	Bromoform	Bromomethane	Carbon disulfide	Carbon tetrachloride	Chlorodibromomethane	Chloroethane	Chloroform	Chloromethane	cis-1,2-dichloroethene	cis-1,3-dichloropropene	cis-1,4-Dichloro-2-butene	Dibromomethane	Dichlorodifluoromethane	Dichloromethane	Iodomethane	Pentachloroethane	TCE	Tetrachloroethene	trans-1,2-dichloroethene	trans-1,3-dichloropropene	trans-1,4-Dichloro-2-butene	Trichlorofluoromethane	Vic EPA IWRG 621 CHC (Total)*	Vic EPA IWRG 621 Other CHC (Total)*	Vinyl acetate	Vinyl chloride
				mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	MG/KG	MG/KG	mg/kg	mg/kg
EQL				0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5		0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5			5	0.5
CRC Care (2011) Direct Contact HSL D - Comm/Ind																															
CRC Care (2011) Direct Contact Intrusive Maint. Worker																															
CRC Care (2017) Ecological guideline - Commercial and industrial																															
NEPM (1999) EIL - Commercial/Industrial																															
NEPM (1999) ESL - Commercial/Industrial (coarse)																															
NEPM (1999) ESL - Commercial/Industrial (fine)																															
NEPM (1999) HIL D - Commercial/Industrial																															
NEPM (1999) HSL D Comm/Indust - VI Clay 0 to <1 m																															
NEPM (1999) HSL D Comm/Indust - VI Clay 1 to <2 m																															
NEPM (1999) HSL D Comm/Indust - VI Clay 2 to <4 m																															
NEPM (1999) HSL D Comm/Indust - VI Clay 4 m+																															
NEPM (1999) Management Limits - Commercial/Industrial (coarse)																															
NEPM (1999) Management Limits - Commercial/Industrial (fine)																															
Field_ID	**Sampled_Date-Time**	**Lab_Report_Number**	**Sample_Depth_Avg**																												
Station Box Area																															
SOP_BH111_1.0_220118	18/01/2022	ES2201683	1	<0.5	<0.5	<5	<0.5	<0.5	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<5	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	-	-	<5	<5
SOP_BH112_1.0_220118	18/01/2022	ES2201683	1	<0.5	<0.5	<5	<0.5	<0.5	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<5	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	-	-	<5	<5
SOP_BH118_0.1_220119	19/01/2022	ES2202264	0.1	<0.5	<0.5	<5	<0.5	<0.5	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<5	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	-	-	<5	<5
SOP_BH118_15.0_220119	19/01/2022	ES2202264	15	<0.5	<0.5	<5	<0.5	<0.5	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<5	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	-	-	<5	<5
SOP_BH118_25.0_220119	19/01/2022	ES2202264	25	<0.5	<0.5	<5	<0.5	<0.5	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<5	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	-	-	<5	<5
SOP_BH118_5.0_220119	19/01/2022	ES2202264	5	<0.5	<0.5	<5	<0.5	<0.5	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<5	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	-	-	<5	<5
SOP_BH119_1.0_220117	17/01/2022	ES2201683	1	<0.5	<0.5	<5	<0.5	<0.5	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<5	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	-	-	<5	<5
SOP_BH120_3.0_220120	20/01/2022	ES2202264	3	<0.5	<0.5	<5	<0.5	<0.5	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<5	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	-	-	<5	<5
SOP_BH121_1.0_220120	20/01/2022	ES2202264	1	<0.5	<0.5	<5	<0.5	<0.5	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<5	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	-	-	<5	<5
SOP_BH124_0.5_220120	21/01/2022	ES2202264	0.5	<0.5	<0.5	<5	<0.5	<0.5	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<5	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	-	-	<5	<5
SOP_BH125_15.0_220121	21/01/2022	ES2202264	15	<0.5	<0.5	<5	<0.5	<0.5	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<5	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	-	-	<5	<5
SOP_BH125_25.0_220121	21/01/2022	ES2202264	25	<0.5	<0.5	<5	<0.5	<0.5	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<5	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	-	-	<5	<5
SOP_BH125_5.0_220121	21/01/2022	ES2202264	5	<0.5	<0.5	<5	<0.5	<0.5	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<5	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	-	-	<5	<5
SOP_BH126_0.5_220121	21/01/2022	ES2202264	0.5	<0.5	<0.5	<5	<0.5	<0.5	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<5	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	-	-	<5	<5
SOP_BH127_1.2_220121	21/01/2022	ES2202264	1.2	<0.5	<0.5	<5	<0.5	<0.5	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<5	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	-	-	<5	<5
SOP_BH128_0.9_220124	24/01/2022	ES2202692	0.9	<0.5	<0.5	<5	<0.5	<0.5	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<5	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	-	-	<5	<5
SOP_BH129_1.0_220124	24/01/2022	ES2202692	1	<0.5	<0.5	<5	<0.5	<0.5	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<5	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	-	-	<5	<5
SOP_BH142_0.4_220119	19/01/2022	ES2202264	0.4	<0.5	<0.5	<5	<0.5	<0.5	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<5	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	-	-	<5	<5
SOP_BH143_1.0_220119	19/01/2022	ES2202264	1	<0.5	<0.5	<5	<0.5	<0.5	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<5	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	-	-	<5	<5
SOP_BH144_0.6_220119	19/01/2022	ES2202264	0.6	<0.5	<0.5	<5	<0.5	<0.5	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<5	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	-	-	<5	<5
SOP_BH145_1.0_220119	19/01/2022	ES2202264	1	<0.5	<0.5	<5	<0.5	<0.5	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<5	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	-	-	<5	<5
DUP02_220119	19/01/2022	ES2202264		<0.5	<0.5	<5	<0.5	<0.5	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<5	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	-	-	<5	<5
DUP05_220120	20/01/2022	ES2202264		<0.5	<0.5	<5	<0.5	<0.5	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<5	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	-	-	<5	<5
TRIP02_220119	19/01/2022	858994		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	-	<0.5
TRIP05_220120	20/01/2022	858994		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	-	<0.5
Statistical Summary																															
Number of Results				54	54	54	54	54	54	54	54	54	54	54	52	54	54	2	54	52	54	54	54	54	52	54	2	2	52	54
Number of Detects				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Minimum Concentration				<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5
Minimum Detect				ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Maximum Concentration				<0.5	<0.5	<5	<0.5	<0.5	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<0.5	<0.5	<5	<5
Maximum Detect				ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Average Concentration				0.25	0.25	2.4	0.25	0.25	0.25	2.4	0.25	2.4	0.25	0.25	0.25	0.25	2.4		0.25	0.25	0.25	0.25	0.25	0.25	0.25	2.4			2.5	2.4
Median Concentration				0.25	0.25	2.5	0.25	0.25	0.25	2.5	0.25	2.5	0.25	0.25	0.25	0.25	2.5	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	2.5	0.25	0.25	2.5	2.5
Standard Deviation				0	0	0.43	0	0	0	0.43	0	0.43	0	0	0	0	0.43		0	0	0	0	0	0	0	0.43			0	0.43
Number of Guideline Exceedances				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Number of Guideline Exceedances(Detects Only)				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

	Metals														Inorganics													Alkalinity by PC Titrator		MNA				Nitrite + Nitrate as N
	Arsenic (Filtered)	Cadmium (Filtered)	Calcium (Filtered)	Chromium (Filtered)	Copper (Filtered)	Iron (Filtered)	Lead (Filtered)	Magnesium (Filtered)	Mercury (Filtered)	Nickel (Filtered)	Potassium (Filtered)	Zinc (Filtered)	Aluminium (Filtered)	Selenium (Filtered)	Alkalinity (Hydroxide) as CaCO3	Alkalinity (total) as CaCO3	Anions Total	Cations Total	Chloride	Fluoride	Ionic Balance	Sodium (Filtered)	Sulfate as SO4 - Turbidimetric (Filtered)	Kjeldahl Nitrogen Total	Nitrite (as N)	Nitrogen (Total)	Carbonate Alkalinity as CaCO3	Bicarbonate Alkalinity as CaCO3	Ferrous Iron - Fe2+	Methane	TDS	Ammonia as N	Nitrate (as N)	Nitrite + Nitrate as N
	µg/L	µg/L	mg/L	µg/L	µg/L	µg/L	µg/L	mg/L	µg/L	µg/L	mg/L	µg/L	µg/L	µg/L	mg/L	mg/L	meq/L	meq/L	mg/L	mg/L	%	mg/L	mg/L	mg/L	mg/L	µg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
EQL	1	0.1	1	1	1	50	1	1	0.1	1	1	5	10	10	1	1	0.01	0.01	1	0.1	0.01	1	1	0.1	0.01	100	1	1	0.05	0.01	10	0.01	0.01	0.01
NEPM (1999) HSL D Comm/Indust - Clay 2 to <4 m																																		
NEPM (1999) HSL D Comm/Indust - Clay 4 to <8 m																																		
NEPM (1999) HSL D Comm/Indust - Clay 8 m+																																		
NHMRC (2008) Recommended Recreational Guidelines - Aesthetic						3000[#1]						30000[#1]							2500[#1]			1800[#1]									6000[#1]			
NHMRC (2008) Recommended Recreational Guidelines - Health	100[#3]	20[#3]		500[#7]	20000[#3]		100[#3]		10[#3]	200[#3]			2000[#4]	100[#3]						15[#3]														
NHMRC (2019) HBGV - Recreational Water																																		
Slightly to Moderately Disturbed Discharge Criteria for Estuarine Water	13	0.2			1.3	300[#12]	3.4		0.06[#11]	7[#10]		8														350[#9]						1.75		
LocCode	**Field_ID**	**Sampled_Date**																																
SMW_BH019	D01_220119	19/01/2022	<1	<0.1	416	<1	2	5780	<1	365	<0.1	2	43	13	-	-	<1	855	201	169	6510	-	8.48	2700	1	6.3	<0.01	6300	<1	855	-	-	11,700	4.61	0.02	0.02
SMW_BH019	SMW_BH019	19/01/2022	<1	<0.1	411	<1	2	5770	<1	358	<0.1	1	43	14	-	-	<1	856	203	166	6580	-	9.87	2650	2	6.4	<0.01	6400	<1	856	-	-	11,800	4.76	0.02	0.02
SMW_BH019	T01_220119	19/01/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SMW_BH019	SMW_BH019	21/02/2022	<1	<0.1	338	<1	<1	5060	<1	298	<0.1	2	38	38	-	-	<1	711	159	144	5140	-	4.97	2340	2	4.9	<0.01	4900	<1	711	-	-	12,000	4.5	0.01	0.01
SMW_BH019	SMW_BH019	15/03/2022	27	<0.1	18	<1	4	-	<1	5	<0.1	4	6	16	-	-	<1	75	3.17	2.16	12	-	19	16	64	1	0.03	1200	<1	75	0.1	0.01	168	0.08	0.13	0.16
SMW_BH032	SWM_BH032_220204	4/02/2022	3	<0.1	393	<1	<1	<50	<1	320	<0.1	5	40	13	-	-	<1	420	189	175	5850	0.2	3.82	2950	758	2.6	<0.01	2700	<1	420	-	-	11,400	1.96	0.12	0.12
SMW_BH120	SMW_BH120	19/01/2022	<1	<0.1	247	<1	<1	1990	<1	474	<0.1	<1	51	<5	-	-	<1	673	214	199	6750	-	3.75	3360	501	2.3	<0.01	2300	<1	673	-	-	12,300	1.66	0.02	0.02
SOP_W1_w	Sub_W2	16/03/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sub-W1	Sub-W1	16/03/2022	<1	<0.1	77	<1	2	<50	<1	52	<0.1	9	14	<5	<10	<10	<1	775	42.7	40.1	538	-	3.16	727	579	2.4	<0.01	2500	<1	775	-	<0.01	2750	0.25	0.14	0.14
Statistical Summary																																		
Number of Results	7	7	7	7	7	6	7	7	7	7	7	7	1	1	7	7	7	7	7	1	7	7	7	7	7	7	7	7	1	2	7	7	7	7
Number of Detects	2	0	7	0	4	4	0	7	0	6	7	5	0	0	0	7	7	7	7	1	7	7	7	7	1	7	0	7	1	1	7	7	7	7
Minimum Concentration	<1	<0.1	18	<1	<1	<50	<1	5	<0.1	<1	6	<5	<10	<10	<1	75	3.17	2.16	12	0.2	3.16	16	1	1	<0.01	1200	<1	75	0.1	<0.01	168	0.08	0.01	0.01
Minimum Detect	3	ND	18	ND	2	1990	ND	5	ND	1	6	13	ND	ND	ND	75	3.17	2.16	12	0.2	3.16	16	1	1	0.03	1200	ND	75	0.1	0.01	168	0.08	0.01	0.01
Maximum Concentration	27	<0.1	416	<1	4	5780	<1	474	<0.1	9	51	38	<10	<10	<1	856	214	199	6750	0.2	19	3360	758	6.4	0.03	6400	<1	856	0.1	0.01	12300	4.76	0.14	0.16
Maximum Detect	27	ND	416	ND	4	5780	ND	474	ND	9	51	38	ND	ND	ND	856	214	199	6750	0.2	19	3360	758	6.4	0.03	6400	ND	856	0.1	0.01	12300	4.76	0.14	0.16
Average Concentration	4.6	0.05	271	0.5	1.6	3108	0.5	267	0.05	3.4	34	14			0.5	624	145	128	4483		7.6	2106	272	3.7	0.0086	3757	0.5	624			8874	2.5	0.066	0.07
Median Concentration	0.5	0.05	338	0.5	2	3525	0.5	320	0.05	2	40	13	5	5	0.5	711	189	166	5850	0.2	4.97	2650	64	2.6	0.005	2700	0.5	711	0.1	0.0075	11700	1.96	0.02	0.02
Standard Deviation	9.9	0	164	0	1.3	2768	0	173	0	3	17	12			0	284	86	75	2930		5.7	1242	328	2.1	0.0094	2086	0	284			5127	2.1	0.061	0.067
Number of Guideline Exceedances	1	0	0	0	4	4	0	0	7	1	0	5	0	0	0	0	0	0	5	0	0	5	0	0	0	7	0	0	0	0	5	4	0	0
Number of Guideline Exceedances(Detects Only)	1	0	0	0	4	4	0	0	0	1	0	5	0	0	0	0	0	0	5	0	0	5	0	0	0	7	0	0	0	0	5	4	0	0

Env Stds Comments

#1:NHMRC (2011) Drinking Water Guidelines [2016] Aesthetic
#2:US EPA (2012) Health Advisories for Drinking Water Contaminants
#3:NHMRC (2011) Drinking Water Guidelines [2016] Health
#4:EPHC (2008) Australian Guidelines for Water Recycling - Drinking
#5:NHMRC (2011) Drinking Water Guidelines Health (Ver. 3.5)
#6:California EPA (2014) Public Health Goals for Drinking Water
#7:WHO (2011) Drinking Water Quality
#8:WHO (2020) Trichloroethene in drinking-water
#9:Estuaries
#10:Slightly to moderately disturbed ecosystems (95% protection).
#11:99% species protection to account for bioaccumulation
#12:ANZECC (2000). Applied Canadian Value
#13:Lowland Rivers
#14:Set as the standard Laboratory Limit of Reporting (LOR)
#15:Marine 99% species protection to account for data uncertainty

	Phosphorus	TRH - Semivolatile Fraction									TRH Volatiles/BTEX										Naphthalene	PAH/Phenols (SIM)																			
	Total Phosphorus as P	>C10 - C16 Fraction	>C10 - C16 Fraction minus Naphthalene (F2)	>C10 - C40 Fraction (sum)	>C16 - C34 Fraction	>C34 - C40 Fraction	C10 - C14 Fraction	C10 - C36 Fraction (sum)	C15 - C28 Fraction	C29 - C36 Fraction	Toluene	Total Xylenes	Benzene	C6 - C10 Fraction	C6 - C10 Fraction minus BTEX (F1)	C6 - C9 Fraction	Ethylbenzene	meta- & para-Xylene	ortho-Xylene	Sum of BTEX	Naphthalene	Acenaphthene	Acenaphthylene	Anthracene	Fluoranthene	Fluorene	Benz(a)anthracene	Benzo(a)pyrene	Benzo(a)pyrene TEQ (zero)	Benzo(b+j)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Chrysene	Dibenz(a.h)anthracene	Indeno(1.2.3.cd)pyrene	Phenanthrene	Pyrene	Sum of polycyclic aromatic hydrocarbons
	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
EQL	0.01	100	100	100	100	100	50	50	100	50	2	2	1	20	20	20	2	2	2	1	1	1	1	1	1	1	1	0.5	0.5	1	1	1	1	1	1	1	1	0.5
NEPM (1999) HSL D Comm/Indust - Clay 2 to <4 m											NL	NL	30000				NL				NL																	
NEPM (1999) HSL D Comm/Indust - Clay 4 to <8 m											NL	NL	30000				NL				NL																	
NEPM (1999) HSL D Comm/Indust - Clay 8 m+											NL	NL	35000				NL				NL																	
NHMRC (2008) Recommended Recreational Guidelines - Aesthetic																																							
NHMRC (2008) Recommended Recreational Guidelines - Health											8000[#3]	6000[#3]	10[#3]				3000[#3]				700[#4]	20000[#2]		1500[#4]		100000[#2]		0.1[#3]								1500[#4]	1500[#4]	
NHMRC (2019) HBGV - Recreational Water																																							
Slightly to Moderately Disturbed Discharge Criteria for Estuarine Water	0.025[#13]			100[#14]							180		500[#15]				80	75|200	350		16[#10]			0.01[#11]	1[#11]			0.01[#11]							0.6[#11]		
LocCode	**Field_ID**	**Sampled_Date**																																					
SMW_BH019	D01_220119	19/01/2022	0.27	<100	<100	<100	<100	<100	<50	<50	<100	<50	<2	<2	1	<20	<20	<20	<2	<2	<2	1	<1	<1	<1	<1	<1	<1	<1	<0.5	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<0.5
SMW_BH019	SMW_BH019	19/01/2022	0.27	<100	<100	<100	<100	<100	<50	<50	<100	<50	<2	<2	1	<20	<20	<20	<2	<2	<2	1	<1	<1	<1	<1	<1	<1	<1	<0.5	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<0.5
SMW_BH019	T01_220119	19/01/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SMW_BH019	SMW_BH019	21/02/2022	0.22	<100	<100	<100	<100	<100	<50	<50	<100	<50	<2	<2	<1	<20	<20	<20	<2	<2	<2	<1	<1	<1	<1	<1	<1	<1	<1	<0.5	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<0.5
SMW_BH019	SMW_BH019	15/03/2022	0.76	<100	<100	<100	<100	<100	<50	<50	<100	<50	<2	<2	<1	<20	<20	<20	<2	<2	<2	<1	<1	<1	<1	<1	<1	<1	<1	<0.5	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<0.5
SMW_BH032	SWM_BH032_220204	4/02/2022	0.24	<100	<100	<100	<100	<100	<50	<50	<100	<50	<2	<2	<1	<20	<20	<20	<2	<2	<2	<1	<1	<1	<1	<1	<1	<1	<1	<0.5	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<0.5
SMW_BH120	SMW_BH120	19/01/2022	0.15	<100	<100	<100	<100	<100	<50	<50	<100	<50	<2	<2	<1	<20	<20	<20	<2	<2	<2	<1	<1	<1	<1	<1	<1	<1	<1	<0.5	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<0.5
SOP_W1_w	Sub_W2	16/03/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sub-W1	Sub-W1	16/03/2022	0.51	<100	<100	<100	<100	<100	<50	<50	<100	<50	<2	<2	<1	40	40	<20	<2	<2	<2	<1	<1	<1	<1	<1	<1	<1	<1	<0.5	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<0.5
Statistical Summary																																							
Number of Results	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Number of Detects	7	0	0	0	0	0	0	0	0	0	0	0	2	1	1	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Minimum Concentration	0.15	<100	<100	<100	<100	<100	<50	<50	<100	<50	<2	<2	<1	<20	<20	<20	<2	<2	<2	<1	<1	<1	<1	<1	<1	<1	<1	<0.5	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<0.5
Minimum Detect	0.15	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	40	40	ND	ND	ND	ND	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Maximum Concentration	0.76	<100	<100	<100	<100	<100	<50	<50	<100	<50	<2	<2	1	40	40	<20	<2	<2	<2	1	<1	<1	<1	<1	<1	<1	<1	<0.5	<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<0.5
Maximum Detect	0.76	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	40	40	ND	ND	ND	ND	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Average Concentration	0.35	50	50	50	50	50	25	25	50	25	1	1	0.64	14	14	10	1	1	1	0.64	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.25	0.25	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.25
Median Concentration	0.27	50	50	50	50	50	25	25	50	25	1	1	0.5	10	10	10	1	1	1	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.25	0.25	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.25
Standard Deviation	0.21	0	0	0	0	0	0	0	0	0	0	0	0.24	11	11	0	0	0	0	0.24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Number of Guideline Exceedances	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	7	0	0	0	0	0	0	0	7	0	0
Number of Guideline Exceedances(Detects Only)	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Env Stds Comments

#1:NHMRC (2011) Drinking Water Guidelines [2016] Aesthetic
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#12:ANZECC (2000). Applied Canadian Value
#13:Lowland Rivers
#14:Set as the standard Laboratory Limit of Reporting (LOR)
#15:Marine 99% species protection to account for data uncertainty

			Per- and Polyfluoroalkyl Subst																				PFOS and PFOA										SVOC	Chlorinated HCs						
			10:2 Fluorotelomer sulfonic acid (10:2 FTS)	4:2 Fluorotelomer sulfonic acid (4:2 FTS)	6:2 Fluorotelomer sulfonic acid (6:2 FTS)	8:2 Fluorotelomer sulfonic acid (8:2 FTS)	N-Ethyl perfluorooctane sulfonamide (EtFOSA)	N-Ethyl perfluorooctane sulfonamidoacetic acid (Et	N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE	N-Methyl perfluorooctane sulfonamide (MeFOSA)	N-Methyl perfluorooctane sulfonamidoacetic acid (M	N-Methyl perfluorooctane sulfonamidoethanol (MeFOS	Perfluorobutanoic acid (PFBA)	Perfluoroheptane sulfonic acid (PFHpS)	Perfluorooctane sulfonic acid (PFOS)	Perfluoropentane sulfonic acid (PFPeS)	Perfluoropentanoic acid (PFPeA)	Perfluorooctanoic acid (PFOA)	Perfluorotetradecanoic acid (PFTeDA)	Perfluorotridecanoic acid (PFTrDA)	Sum of PFAS	Sum of PFAS (WA DER List)	Sum of PFHxS and PFOS	Perfluorobutanesulfonic acid (PFBS)	Perfluorodecanesulfonic acid (PFDS)	Perfluorodecanoic acid (PFDA)	Perfluorohexanesulfonic acid (PFHxS)	Perfluorododecanoic acid (PFDoA)	Perfluoroheptanoic acid (PFHpA)	Perfluorohexanoic acid (PFHxA)	Perfluorononanoic acid (PFNA)	Perfluorooctanesulfonamide (PFOSA)	Perfluoroundecanoic acid (PFUnA)	Hexachlorobutadiene	1,2,3-trichlorobenzene	1,2,4-trichlorobenzene	1,2-dichlorobenzene	1,3-dichlorobenzene	1,4-dichlorobenzene	Chlorobenzene
			µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
EQL			0.05	0.05	0.05	0.05	0.05	0.02	0.05	0.05	0.02	0.05	0.1	0.02	0.01	0.02	0.02	0.01	0.05	0.02	0.01	0.01	0.01	0.02	0.02	0.02	0.01	0.02	0.02	0.02	0.02	0.02	5	5	5	5	5	5	5
NEPM (1999) HSL D Comm/Indust - Clay 2 to <4 m																																								
NEPM (1999) HSL D Comm/Indust - Clay 4 to <8 m																																								
NEPM (1999) HSL D Comm/Indust - Clay 8 m+																																								
NHMRC (2008) Recommended Recreational Guidelines - Aesthetic																																						200[#1]		
NHMRC (2008) Recommended Recreational Guidelines - Health															0.7[#5]			5.6[#5]					0.7[#5]				0.7[#5]							7[#3]		7000[#2]	15000[#3]		400[#3]	3000[#3]
NHMRC (2019) HBGV - Recreational Water															2			10					2				2													
Slightly to Moderately Disturbed Discharge Criteria for Estuarine Water															0.0002[#11]			19[#11]																						
LocCode	**Field_ID**	**Sampled_Date**																																						
SMW_BH019	D01_220119	19/01/2022	<0.05	<0.05	<0.05	<0.05	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.1	<0.02	0.02	<0.02	<0.02	<0.01	<0.05	<0.02	0.02	0.02	0.02	<0.02	<0.02	<0.02	<0.01	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<5	<5	<5	<5	<5	<5	<5
SMW_BH019	SMW_BH019	19/01/2022	<0.05	<0.05	<0.05	<0.05	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.1	<0.02	0.02	<0.02	<0.02	<0.01	<0.05	<0.02	0.02	0.02	0.02	<0.02	<0.02	<0.02	<0.01	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<5	<5	<5	<5	<5	<5	<5
SMW_BH019	T01_220119	19/01/2022	<0.05	<0.05	<0.05	<0.05	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.1	<0.02	0.02	<0.02	<0.02	<0.01	<0.05	<0.02	0.02	0.02	0.02	<0.02	<0.02	<0.02	<0.01	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	-	-	-	-	-	-	-
SMW_BH019	SMW_BH019	21/02/2022	<0.05	<0.05	0.16	<0.05	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.1	<0.02	<0.01	<0.02	<0.02	<0.01	<0.05	<0.02	0.16	0.16	<0.01	<0.02	<0.02	<0.02	<0.01	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<5	<5	<5	<5	<5	<5	<5
SMW_BH019	SMW_BH019	15/03/2022	<0.05	<0.05	<0.05	<0.05	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.1	<0.02	0.02	<0.02	<0.02	<0.01	<0.05	<0.02	0.02	0.02	0.02	<0.02	<0.02	<0.02	<0.01	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<5	<5	<5	<5	<5	<5	<5
SMW_BH032	SWM_BH032_220204	4/02/2022	<0.05	<0.05	<0.05	<0.05	-	-	-	-	-	-	<0.1	-	<0.01	-	<0.02	<0.01	-	-	-	<0.01	<0.01	<0.02	-	-	<0.01	-	<0.02	<0.02	-	-	-	<5	<5	<5	<5	<5	<5	<5
SMW_BH120	SMW_BH120	19/01/2022	<0.05	<0.05	<0.05	<0.05	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.1	<0.02	<0.01	<0.02	<0.02	<0.01	<0.05	<0.02	<0.01	<0.01	<0.01	<0.02	<0.02	<0.02	<0.01	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<5	<5	<5	<5	<5	<5	<5
SOP_W1_w	Sub_W2	16/03/2022	<0.05	<0.05	<0.05	<0.05	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.1	<0.02	<0.01	<0.02	<0.02	<0.01	<0.05	<0.02	<0.01	<0.01	<0.01	<0.02	<0.02	<0.02	<0.01	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	-	-	-	-	-	-	-
Sub-W1	Sub-W1	16/03/2022	<0.05	<0.05	<0.05	<0.05	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.1	<0.02	0.02	<0.02	0.14	0.05	<0.05	<0.02	0.46	0.46	0.06	0.03	<0.02	<0.02	0.04	<0.02	0.03	0.15	<0.02	<0.02	<0.02	<5	<5	<5	<5	<5	<5	<5
Statistical Summary																																								
Number of Results			9	9	9	9	8	8	8	8	8	8	9	8	9	8	9	9	8	8	8	9	9	9	8	8	9	8	9	9	8	8	8	7	7	7	7	7	7	7
Number of Detects			0	0	1	0	0	0	0	0	0	0	0	0	5	0	1	1	0	0	6	6	5	1	0	0	1	0	1	1	0	0	0	0	0	0	0	0	0	0
Minimum Concentration			<0.05	<0.05	<0.05	<0.05	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.1	<0.02	<0.01	<0.02	<0.02	<0.01	<0.05	<0.02	<0.01	<0.01	<0.01	<0.02	<0.02	<0.02	<0.01	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<5	<5	<5	<5	<5	<5	<5
Minimum Detect			ND	ND	0.16	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.02	ND	0.14	0.05	ND	ND	0.02	0.02	0.02	0.03	ND	ND	0.04	ND	0.03	0.15	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Maximum Concentration			<0.05	<0.05	0.16	<0.05	<0.05	<0.02	<0.05	<0.05	<0.02	<0.05	<0.1	<0.02	0.02	<0.02	0.14	0.05	<0.05	<0.02	0.46	0.46	0.06	0.03	<0.02	<0.02	0.04	<0.02	0.03	0.15	<0.02	<0.02	<0.02	<5	<5	<5	<5	<5	<5	<5
Maximum Detect			ND	ND	0.16	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.02	ND	0.14	0.05	ND	ND	0.46	0.46	0.06	0.03	ND	ND	0.04	ND	0.03	0.15	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Average Concentration			0.025	0.025	0.04	0.025	0.025	0.01	0.025	0.025	0.01	0.025	0.05	0.01	0.013	0.01	0.024	0.01	0.025	0.01	0.089	0.079	0.018	0.012	0.01	0.01	0.0089	0.01	0.012	0.026	0.01	0.01	0.01	2.5	2.5	2.5	2.5	2.5	2.5	2.5
Median Concentration			0.025	0.025	0.025	0.025	0.025	0.01	0.025	0.025	0.01	0.025	0.05	0.01	0.02	0.01	0.01	0.005	0.025	0.01	0.02	0.02	0.02	0.01	0.01	0.01	0.005	0.01	0.01	0.01	0.01	0.01	0.01	2.5	2.5	2.5	2.5	2.5	2.5	2.5
Standard Deviation			0	0	0.045	0	0	0	0	0	0	0	0	0	0.0079	0	0.043	0.015	0	0	0.16	0.15	0.018	0.0067	0	0	0.012	0	0.0067	0.047	0	0	0	0	0	0	0	0	0	0
Number of Guideline Exceedances			0	0	0	0	0	0	0	0	0	0	0	0	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Number of Guideline Exceedances(Detects Only)			0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Env Stds Comments

#1:NHMRC (2011) Drinking Water Guidelines [2016] Aesthetic
#2:US EPA (2012) Health Advisories for Drinking Water Contaminants
#3:NHMRC (2011) Drinking Water Guidelines [2016] Health
#4:EPHC (2008) Australian Guidelines for Water Recycling - Drinking
#5:NHMRC (2011) Drinking Water Guidelines Health (Ver. 3.5)
#6:California EPA (2014) Public Health Goals for Drinking Water
#7:WHO (2011) Drinking Water Quality
#8:WHO (2020) Trichloroethene in drinking-water
#9:Estuaries
#10:Slightly to moderately disturbed ecosystems (95% protection).
#11:99% species protection to account for bioaccumulation
#12:ANZECC (2000). Applied Canadian Value
#13:Lowland Rivers
#14:Set as the standard Laboratory Limit of Reporting (LOR)
#15:Marine 99% species protection to account for data uncertainty

			VOC																							
			1,2,4-trimethylbenzene	1,3,5-trimethylbenzene	2-chlorotoluene	4-chlorotoluene	Bromobenzene	Isopropylbenzene	n-butylbenzene	n-propylbenzene	p-isopropyltoluene	sec-butylbenzene	Styrene	tert-butylbenzene	1,1,1,2-tetrachloroethane	1,1,1-trichloroethane	1,1,2,2-tetrachloroethane	1,1,2-trichloroethane	1,1-dichloroethane	1,1-dichloroethene	1,1-dichloropropene	1,2,3-trichloropropane	1,2-dibromo-3-chloropropane	1,2-dibromoethane	1,2-dichloroethane	1,2-dichloropropane	1,3-dichloropropane
			µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
EQL			5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
NEPM (1999) HSL D Comm/Indust - Clay 2 to <4 m																											
NEPM (1999) HSL D Comm/Indust - Clay 4 to <8 m																											
NEPM (1999) HSL D Comm/Indust - Clay 8 m+																											
NHMRC (2008) Recommended Recreational Guidelines - Aesthetic																											
NHMRC (2008) Recommended Recreational Guidelines - Health				1000000[#2]	10000[#2]	10000[#2]	6000[#2]	400000[#2]					300[#3]		100[#2]	4000000[#2]	40[#2]	60[#2]	30[#6]	300[#3]		10000[#2]	10[#7]	10[#3]	30[#3]	400[#7]	
NHMRC (2019) HBGV - Recreational Water																											
Slightly to Moderately Disturbed Discharge Criteria for Estuarine Water								30																			
LocCode	**Field_ID**	**Sampled_Date**																									
SMW_BH019	D01_220119	19/01/2022	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
SMW_BH019	SMW_BH019	19/01/2022	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
SMW_BH019	T01_220119	19/01/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SMW_BH019	SMW_BH019	21/02/2022	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
SMW_BH019	SMW_BH019	15/03/2022	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
SMW_BH032	SWM_BH032_220204	4/02/2022	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
SMW_BH120	SMW_BH120	19/01/2022	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
SOP_W1_w	Sub_W2	16/03/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sub-W1	Sub-W1	16/03/2022	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Statistical Summary																											
Number of Results			7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Number of Detects			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Minimum Concentration			<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Minimum Detect			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Maximum Concentration			<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Maximum Detect			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Average Concentration			2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
Median Concentration			2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
Standard Deviation			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Number of Guideline Exceedances			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Number of Guideline Exceedances(Detects Only)			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Env Stds Comments

#1:NHMRC (2011) Drinking Water Guidelines [2016] Aesthetic
#2:US EPA (2012) Health Advisories for Drinking Water Contaminants
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#5:NHMRC (2011) Drinking Water Guidelines Health (Ver. 3.5)
#6:California EPA (2014) Public Health Goals for Drinking Water
#7:WHO (2011) Drinking Water Quality
#8:WHO (2020) Trichloroethene in drinking-water
#9:Estuaries
#10:Slightly to moderately disturbed ecosystems (95% protection).
#11:99% species protection to account for bioaccumulation
#12:ANZECC (2000). Applied Canadian Value
#13:Lowland Rivers
#14:Set as the standard Laboratory Limit of Reporting (LOR)
#15:Marine 99% species protection to account for data uncertainty

	VOC																											
	2,2-dichloropropane	2-butanone (MEK)	2-hexanone (MBK)	4-methyl-2-pentanone (MIBK)	Bromodichloromethane	Bromoform	Bromomethane	Carbon disulfide	Carbon tetrachloride	Chlorodibromomethane	Chloroethane	Chloroform	Chloromethane	cis-1,2-dichloroethene	cis-1,3-dichloropropene	cis-1,4-Dichloro-2-butene	Dibromomethane	Dichlorodifluoromethane	Iodomethane	Pentachloroethane	TCE	Tetrachloroethene	trans-1,2-dichloroethene	trans-1,3-dichloropropene	trans-1,4-Dichloro-2-butene	Trichlorofluoromethane	Vinyl acetate	Vinyl chloride
	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
EQL	5	50	50	50	5	5	50	5	5	5	50	5	50	5	5	5	5	50	5	5	5	5	5	5	5	50	50	50
NEPM (1999) HSL D Comm/Indust - Clay 2 to <4 m																												
NEPM (1999) HSL D Comm/Indust - Clay 4 to <8 m																												
NEPM (1999) HSL D Comm/Indust - Clay 8 m+																												
NHMRC (2008) Recommended Recreational Guidelines - Aesthetic																												
NHMRC (2008) Recommended Recreational Guidelines - Health		400000[#2]			60[#4]	1000[#4]	10[#3]		30[#3]	1000[#4]		2000[#4]	40000[#2]	1000[#2]				100000[#2]			80[#8]	500[#3]	10000[#2]			200000[#2]		3[#3]
NHMRC (2019) HBGV - Recreational Water																												
Slightly to Moderately Disturbed Discharge Criteria for Estuarine Water																												
LocCode **Field_ID** **Sampled_Date**																												
SMW_BH019 D01_220119 19/01/2022	<5	<50	<50	<50	<5	<5	<50	<5	<5	<5	<50	<5	<50	<5	<5	<5	<5	<50	<5	<5	<5	<5	<5	<5	<5	<50	<50	<50
SMW_BH019 SMW_BH019 19/01/2022	<5	<50	<50	<50	<5	<5	<50	<5	<5	<5	<50	<5	<50	<5	<5	<5	<5	<50	<5	<5	<5	<5	<5	<5	<5	<50	<50	<50
SMW_BH019 T01_220119 19/01/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SMW_BH019 SMW_BH019 21/02/2022	<5	<50	<50	<50	<5	<5	<50	<5	<5	<5	<50	<5	<50	<5	<5	<5	<5	<50	<5	<5	<5	<5	<5	<5	<5	<50	<50	<50
SMW_BH019 SMW_BH019 15/03/2022	<5	<50	<50	<50	<5	<5	<50	<5	<5	<5	<50	<5	<50	<5	<5	<5	<5	<50	<5	<5	<5	<5	<5	<5	<5	<50	<50	<50
SMW_BH032 SWM_BH032_220204 4/02/2022	<5	<50	<50	<50	<5	<5	<50	<5	<5	<5	<50	<5	<50	<5	<5	<5	<5	<50	<5	<5	<5	<5	<5	<5	<5	<50	<50	<50
SMW_BH120 SMW_BH120 19/01/2022	<5	<50	<50	<50	<5	<5	<50	<5	<5	<5	<50	<5	<50	<5	<5	<5	<5	<50	<5	<5	<5	<5	<5	<5	<5	<50	<50	<50
SOP_W1_w Sub_W2 16/03/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sub-W1 Sub-W1 16/03/2022	<5	<50	<50	<50	<5	<5	<50	<5	<5	<5	<50	<5	<50	<5	<5	<5	<5	<50	<5	<5	<5	<5	<5	<5	<5	<50	<50	<50
Statistical Summary																												
Number of Results	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
Number of Detects	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Minimum Concentration	<5	<50	<50	<50	<5	<5	<50	<5	<5	<5	<50	<5	<50	<5	<5	<5	<5	<50	<5	<5	<5	<5	<5	<5	<5	<50	<50	<50
Minimum Detect	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Maximum Concentration	<5	<50	<50	<50	<5	<5	<50	<5	<5	<5	<50	<5	<50	<5	<5	<5	<5	<50	<5	<5	<5	<5	<5	<5	<5	<50	<50	<50
Maximum Detect	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Average Concentration	2.5	25	25	25	2.5	2.5	25	2.5	2.5	2.5	25	2.5	25	2.5	2.5	2.5	2.5	25	2.5	2.5	2.5	2.5	2.5	2.5	2.5	25	25	25
Median Concentration	2.5	25	25	25	2.5	2.5	25	2.5	2.5	2.5	25	2.5	25	2.5	2.5	2.5	2.5	25	2.5	2.5	2.5	2.5	2.5	2.5	2.5	25	25	25
Standard Deviation	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Number of Guideline Exceedances	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7
Number of Guideline Exceedances(Detects Only)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Env Stds Comments

#1:NHMRC (2011) Drinking Water Guidelines [2016] Aesthetic
#2:US EPA (2012) Health Advisories for Drinking Water Contaminants
#3:NHMRC (2011) Drinking Water Guidelines [2016] Health
#4:EPHC (2008) Australian Guidelines for Water Recycling - Drinking
#5:NHMRC (2011) Drinking Water Guidelines Health (Ver. 3.5)
#6:California EPA (2014) Public Health Goals for Drinking Water
#7:WHO (2011) Drinking Water Quality
#8:WHO (2020) Trichloroethene in drinking-water
#9:Estuaries
#10:Slightly to moderately disturbed ecosystems (95% protection).
#11:99% species protection to account for bioaccumulation
#12:ANZECC (2000). Applied Canadian Value
#13:Lowland Rivers
#14:Set as the standard Laboratory Limit of Reporting (LOR)
#15:Marine 99% species protection to account for data uncertainty

ERM The business of sustainability

Project:	628507	**Instrument:**	GA 5000		
Date:	2/02/2022	**Date:**	9/02/2022	**Date:**	22/03/2022
Time:	7:29 AM	**Time:**	12:00 PM	**Time:**	7:20 AM
Barometric pressure (start):	1001 mb	**Barometric pressure (start):**	1015.4 mb	**Barometric pressure (start):**	1008
Barometric pressure (finish):	1003 mb	**Barometric pressure (finish):**	1015.4 mb	**Barometric pressure (finish):**	1009
Weather:	Rainy / cloudy	**Weather:**	Overcast	**Weather:**	Overcast
Ground conditions:		**Ground conditions:**		**Ground conditions:**	

Location	Date	Flow	Barometric Pressure	Criteria		Peak		Min	Stabilised						Relative Pressure	Ambient Methane % v/v	Ambient CO2 % v/v	Comments
				CH_4 Criteria	CO_2 Criteria*	CH_4	CO_2	O_2	CH_4	CO_2	O_2	Balance	H_2S	CO				
ID number		l/hr	mb		% v/v	% v/v	% v/v	% v/v	% v/v	% v/v	% v/v	% v/v	ppm	ppm	mb			
BH105	2/02/2022	0.1	1001	**1.0**	--	0.1	12.8	10.3	0.1	12.8	10.3	76.6	0	0	0.01	0.1	0.1	
	9/02/2022	0.1	1015	**1.0**	--	0.0	10.9	11.4	0.0	6.9	19.3	79.9	0	0	-	-	-	Water observed within well.
	22/03/2022	0.0	1009	**1.0**	--	0.0	0.4	18.3	0.0	0.3	20.6	79.1	0	0	0.1	-	0.2	
BH106	2/02/2022	0.1	1001	**1.0**	--	0.1	7.5	15.0	0.1	7.5	15.0	77.4	0	0	0.07	0.1	0.1	
	9/02/2022	Could not be accessed due to drilling works no site.																
	22/03/2022	0.0	1009	**1.0**	--	0.0	9.0	8.5	0.0	9.0	8.5	82.4	0	0	-0.26	-	0.2	
BH123	2/02/2022	0.1	1002	**1.0**	--	0.1	8.1	10.6	0.1	8.0	10.6	81.3	0	0	0.02	0.1	0.1	
	9/02/2022	0.1	1015	**1.0**	--	0.0	7.5	16.4	0.0	1.2	18.1	80.9	0	0	-	-	-	
	22/03/2022	0.3	1008	**1.0**	--	0.0	8.6	8.3	0.0	8.6	8.3	83.1	0	0	-0.02	0.2	-	
BH130	2/02/2022	0.1	1002	**1.0**	--	0.1	10.2	11.4	0.1	10.1	11.4	78.3	0	0	0.02	0.1	0.1	
	9/02/2022	0.1	1015	**1.0**	--	0.0	9.0	13.7	0.0	9.0	18.8	80.2	0	0	-	-	-	
	22/03/2022	0.1	1009	**1.0**	--	0.0	6.5	13.5	0.0	6.5	13.5	80.0	0	0	0.10	-	0.2	
BH131	2/02/2022	0.1	1003	**1.0**	--	0.1	4.7	17.4	0.1	4.6	17.4	77.9	0	0	0.01	0.1	0.1	
	9/02/2022	0.1	1015	**1.0**	--	0.0	4.4	16.3	0.0	2.1	17.8	80.2	0	0	-	-	-	
	22/03/2022	0.2	1009	**1.0**	--	0.0	0.5	20.2	0.0	0.5	20.2	79.3	0	0	0.09	-	0.2	

APPENDIX A LOTSEARCH REPORT

LOTSEARCH

LOTSEARCH ENVIRO PROFESSIONAL

Date: 03 Feb 2022 15:56:54

Reference: LS028900 EP

Address: 7 Figtree Drive, Sydney Olympic Park, NSW 2127

Disclaimer:
The purpose of this report is to provide an overview of some of the site history, environmental risk and planning information available, affecting an individual address or geographical area in which the property is located. It is not a substitute for an on-site inspection or review of other available reports and records. It is not intended to be, and should not be taken to be, a rating or assessment of the desirability or market value of the property or its features.
You should obtain independent advice before you make any decision based on the information within the report.
The detailed terms applicable to use of this report are set out at the end of this report.

Dataset Listing

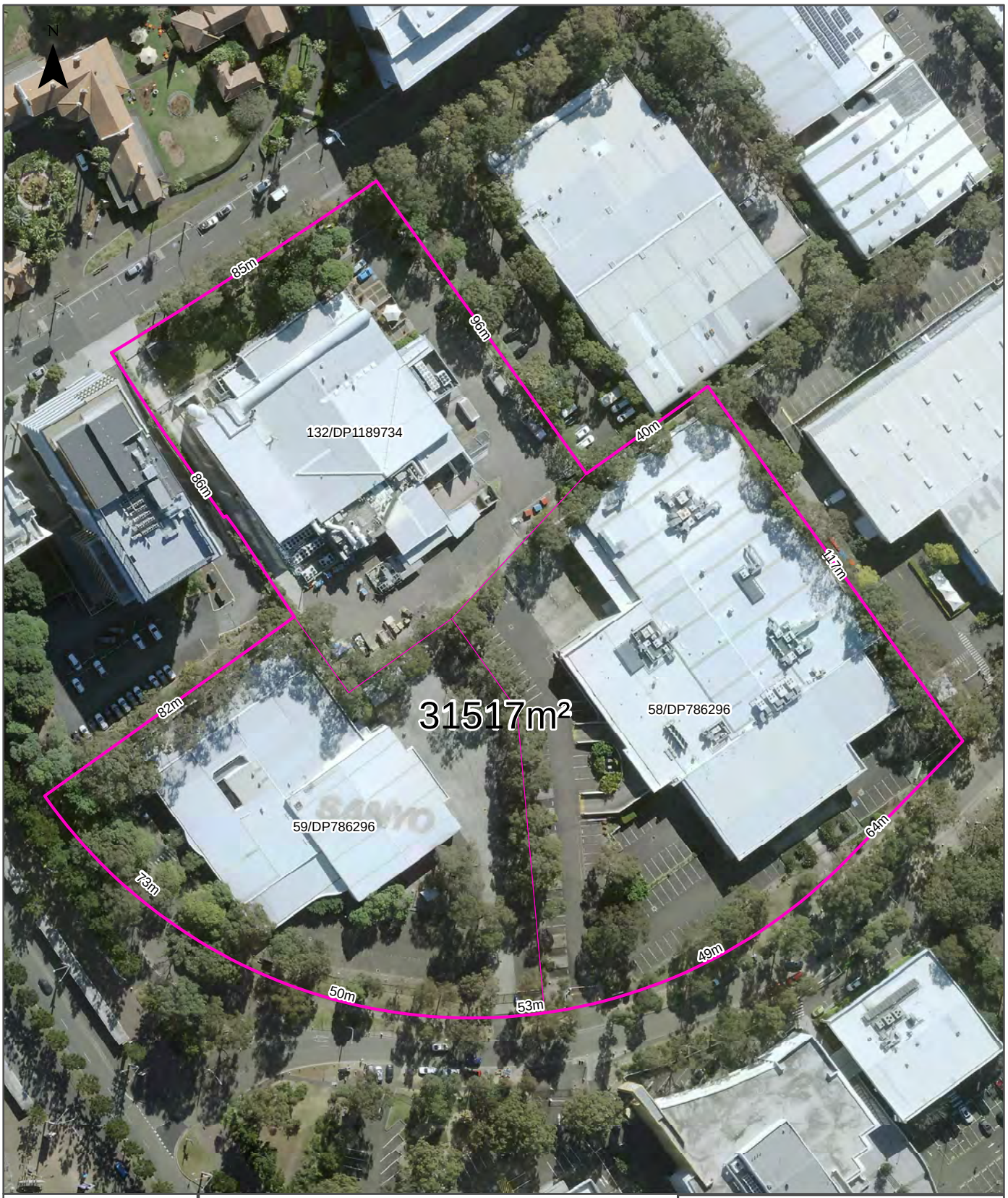
Datasets contained within this report, detailing their source and data currency:

Dataset Name	Custodian	Supply Date	Currency Date	Update Frequency	Dataset Buffer (m)	No. Features On-site	No. Features within 100m	No. Features within Buffer
Cadastre Boundaries	NSW Department of Finance, Services & Innovation	04/01/2022	04/01/2022	Quarterly	-	-	-	-
Topographic Data	NSW Department of Finance, Services & Innovation	25/06/2019	25/06/2019	Annually	-	-	-	-
List of NSW contaminated sites notified to EPA	Environment Protection Authority	10/12/2021	09/12/2021	Monthly	1000m	0	0	8
Contaminated Land Records of Notice	Environment Protection Authority	11/01/2022	11/01/2022	Monthly	1000m	1	2	6
Former Gasworks	Environment Protection Authority	07/01/2022	11/10/2017	Quarterly	1000m	0	0	0
National Waste Management Facilities Database	Geoscience Australia	12/05/2021	07/03/2017	Annually	1000m	0	0	2
National Liquid Fuel Facilities	Geoscience Australia	15/02/2021	13/07/2012	Annually	1000m	0	0	2
EPA PFAS Investigation Program	Environment Protection Authority	24/01/2022	14/07/2021	Monthly	2000m	0	0	0
Defence PFAS Investigation & Management Program - Investigation Sites	Department of Defence	28/01/2022	28/01/2022	Monthly	2000m	0	0	0
Defence PFAS Investigation & Management Program - Management Sites	Department of Defence	28/01/2022	28/01/2022	Monthly	2000m	0	0	0
Airservices Australia National PFAS Management Program	Airservices Australia	06/01/2022	06/01/2022	Monthly	2000m	0	0	0
Defence 3 Year Regional Contamination Investigation Program	Department of Defence	06/01/2022	06/01/2022	Quarterly	2000m	0	0	0
EPA Other Sites with Contamination Issues	Environment Protection Authority	02/02/2021	13/12/2018	Annually	1000m	0	2	2
Licensed Activities under the POEO Act 1997	Environment Protection Authority	19/01/2022	19/01/2022	Monthly	1000m	1	2	13
Delicensed POEO Activities still regulated by the EPA	Environment Protection Authority	19/01/2022	19/01/2022	Monthly	1000m	1	1	2
Former POEO Licensed Activities now revoked or surrendered	Environment Protection Authority	19/01/2022	19/01/2022	Monthly	1000m	0	0	8
UBD Business Directories (Premise & Intersection Matches)	Hardie Grant			Not required	150m	13	19	21
UBD Business Directories (Road & Area Matches)	Hardie Grant			Not required	150m	-	211	211
UBD Business Directory Dry Cleaners & Motor Garages/Service Stations (Premise & Intersection Matches)	Hardie Grant			Not required	500m	0	0	0
UBD Business Directory Dry Cleaners & Motor Garages/Service Stations (Road & Area Matches)	Hardie Grant			Not required	500m	-	0	0
Points of Interest	NSW Department of Finance, Services & Innovation	19/08/2021	19/08/2021	Quarterly	1000m	0	2	68
Tanks (Areas)	NSW Department of Customer Service - Spatial Services	19/08/2021	19/08/2021	Quarterly	1000m	0	0	0
Tanks (Points)	NSW Department of Customer Service - Spatial Services	19/08/2021	19/08/2021	Quarterly	1000m	0	0	8
Major Easements	NSW Department of Finance, Services & Innovation	19/08/2021	19/08/2021	Quarterly	1000m	0	0	12
State Forest	Forestry Corporation of NSW	25/02/2021	14/02/2021	Annually	1000m	0	0	0
NSW National Parks and Wildlife Service Reserves	NSW Office of Environment & Heritage	22/01/2021	11/12/2020	Annually	1000m	0	0	0
Hydrogeology Map of Australia	Commonwealth of Australia (Geoscience Australia)	08/10/2014	17/03/2000	As required	1000m	1	1	1
Temporary Water Restriction (Botany Sands Groundwater Source) Order 2018	NSW Department of Planning, Industry and Environment	26/10/2020	21/02/2018	Annually	1000m	0	0	0
Groundwater Boreholes	NSW Dept. of Primary Industries - Water NSW; Commonwealth of Australia (Bureau of Meteorology)	24/07/2018	23/07/2018	Annually	2000m	0	1	48

Dataset Name	Custodian	Supply Date	Currency Date	Update Frequency	Dataset Buffer (m)	No. Features On-site	No. Features within 100m	No. Features within Buffer
Geological Units 1:100,000	NSW Department of Planning, Industry and Environment	20/08/2014		Annually	1000m	1	1	5
Geological Structures 1:100,000	NSW Department of Planning, Industry and Environment	20/08/2014		Annually	1000m	0	0	0
Naturally Occurring Asbestos Potential	NSW Dept. of Industry, Resources & Energy	04/12/2015	24/09/2015	Unknown	1000m	0	0	0
Atlas of Australian Soils	Australian Bureau of Agriculture and Resource Economics and Sciences (ABARES)	19/05/2017	17/02/2011	As required	1000m	1	1	2
Soil Landscapes of Central and Eastern NSW	NSW Department of Planning, Industry and Environment	14/10/2020	27/07/2020	Annually	1000m	1	1	3
Environmental Planning Instrument Acid Sulfate Soils	NSW Department of Planning, Industry and Environment	07/01/2022	17/12/2021	Monthly	500m	0	-	-
Environmental Planning Instrument Acid Sulfate Soils Sydney Olympic Park	NSW Department of Planning, Industry and Environment	07/01/2022	17/12/2021	Monthly	500m	0	0	1
Atlas of Australian Acid Sulfate Soils	CSIRO	19/01/2017	21/02/2013	As required	1000m	1	1	3
Dryland Salinity - National Assessment	National Land and Water Resources Audit	18/07/2014	12/05/2013	None planned	1000m	0	0	0
Dryland Salinity Potential of Western Sydney	NSW Department of Planning, Industry and Environment	12/05/2017	01/01/2002	None planned	1000m	1	1	1
Mining Subsidence Districts	NSW Department of Customer Service - Subsidence Advisory NSW	19/08/2021	05/08/2021	Quarterly	1000m	0	0	0
Current Mining Titles	NSW Department of Industry	07/01/2022	07/01/2022	Monthly	1000m	0	0	0
Mining Title Applications	NSW Department of Industry	07/01/2022	07/01/2022	Monthly	1000m	0	0	0
Historic Mining Titles	NSW Department of Industry	07/01/2022	07/01/2022	Monthly	1000m	10	10	10
Environmental Planning Instrument SEPP State Significant Precincts	NSW Department of Planning, Industry and Environment	15/11/2021	07/12/2018	Monthly	1000m	1	1	2
Environmental Planning Instrument Land Zoning	NSW Department of Planning, Industry and Environment	15/11/2021	05/11/2021	Monthly	1000m	1	1	54
Commonwealth Heritage List	Australian Government Department of the Agriculture, Water and the Environment	18/05/2021	20/11/2019	Annually	1000m	0	0	0
National Heritage List	Australian Government Department of the Agriculture, Water and the Environment	18/05/2021	20/11/2019	Annually	1000m	0	0	0
State Heritage Register - Curtilages	NSW Department of Planning, Industry and Environment	19/08/2021	25/06/2021	Quarterly	1000m	0	0	2
Environmental Planning Instrument Local Heritage	NSW Department of Planning, Industry and Environment	07/01/2022	17/12/2021	Monthly	1000m	0	1	5
Bush Fire Prone Land	NSW Rural Fire Service	31/01/2022	08/12/2021	Weekly	1000m	0	0	0
Native Vegetation of the Sydney Metropolitan Area	NSW Office of Environment & Heritage	01/03/2017	16/12/2016	As required	1000m	1	1	11
Ramsar Wetlands of Australia	Australian Government Department of Agriculture, Water and the Environment	24/02/2021	19/03/2020	Annually	1000m	0	0	0
Groundwater Dependent Ecosystems	Bureau of Meteorology	14/08/2017	15/05/2017	Annually	1000m	0	0	3
Inflow Dependent Ecosystems Likelihood	Bureau of Meteorology	14/08/2017	15/05/2017	Unknown	1000m	0	0	6
NSW BioNet Species Sightings	NSW Office of Environment & Heritage	31/01/2022	31/01/2022	Weekly	10000m	-	-	-

Site Diagram

7 Figtree Drive, Sydney Olympic Park, NSW 2127



Legend

- Site Boundary
- Internal Parcel Boundaries

Total Area: 31517m²

Total Perimeter: 798m

Scale: 0 25 50 Meters

Data Source Aerial Imagery: © Aerometrex Pty Ltd

Disclaimers:

Measurements are approximate only and may have been simplified or smaller lengths removed for readability.

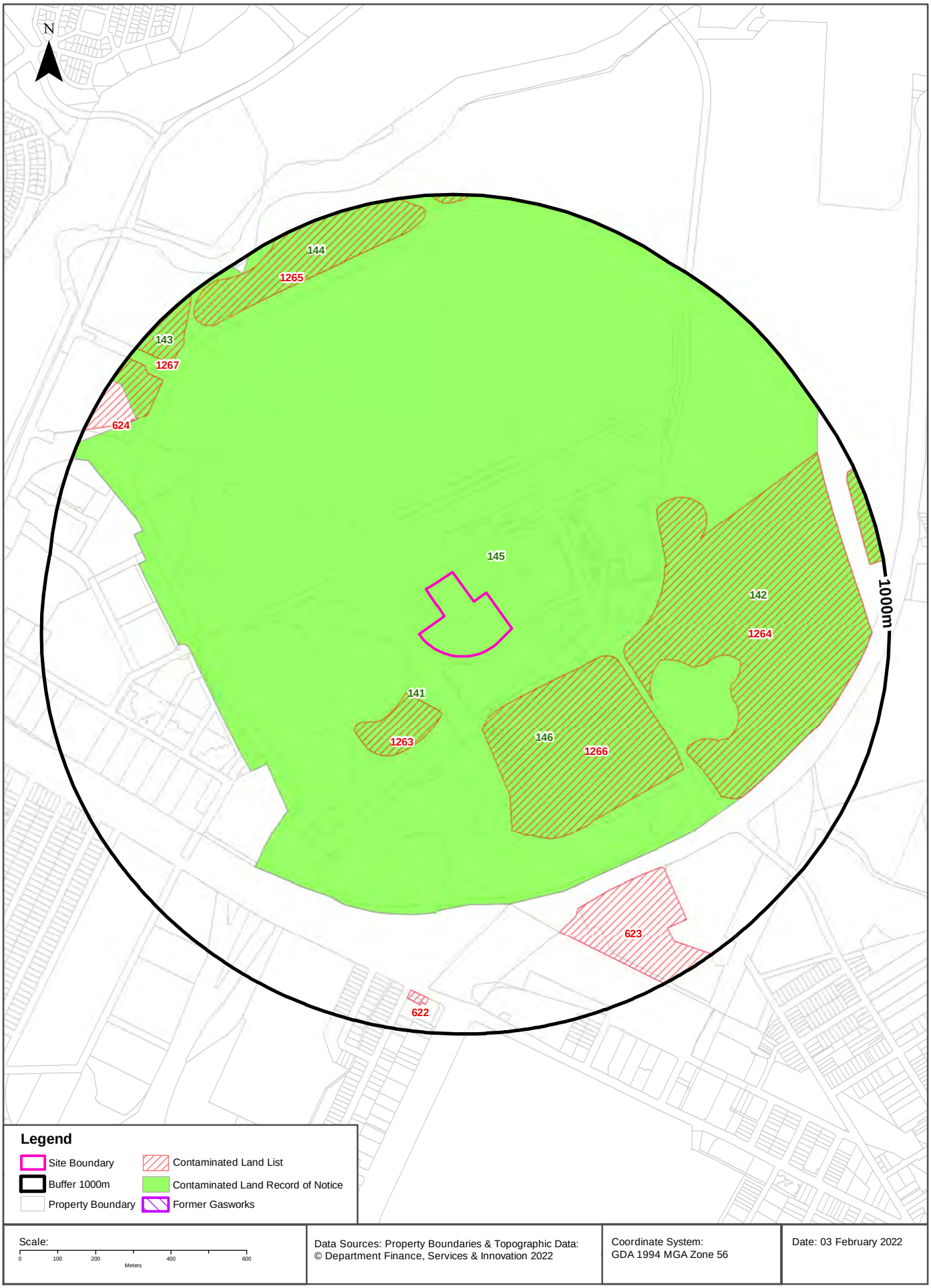
Parcels that make up a small percentage of the total site area have not been labelled for increased legibility.

Coordinate System: GDA 1994 MGA Zone 56

Date: 03 February 2022

Contaminated Land

7 Figtree Drive, Sydney Olympic Park, NSW 2127



Contaminated Land

7 Figtree Drive, Sydney Olympic Park, NSW 2127

List of NSW contaminated sites notified to EPA

Records from the NSW EPA Contaminated Land list within the dataset buffer:

Map Id	Site	Address	Suburb	Activity	Management Class	Status	Location Confidence	Dist	Direction
1263	Aquatic Centre Carpark Landfill	Shane Gould Avenue	SYDNEY OLYMPIC PARK	Landfill	Ongoing maintenance required to manage residual contamination (CLM Act)	Current EPA List	Premise Match	139m	South West
1266	Former Golf Driving Range Landfill	Sarah Durack Avenue	SYDNEY OLYMPIC PARK	Landfill	Ongoing maintenance required to manage residual contamination (CLM Act)	Current EPA List	Premise Match	149m	South East
1264	Bicentennial Park	Bicentennial Drive	SYDNEY OLYMPIC PARK	Landfill	Ongoing maintenance required to manage residual contamination (CLM Act)	Current EPA List	Premise Match	301m	East
623	Ausgrid Mason Park Substation	1 Underwood Road	Homebush	Other Industry	Regulation under CLM Act not required	Current EPA List	Premise Match	711m	South East
1265	Kronos Hill Landfill	Kevin Coombes AVENUE	SYDNEY OLYMPIC PARK	Landfill	Ongoing maintenance required to manage residual contamination (CLM Act)	Current EPA List	Premise Match	867m	North West
624	SUEZ Waste Recycling Centre (WRC) and Cleanaway Liquid Waste Treatment Plant (LWTP)	Corner Pondage Link and Hill Road	Homebush Bay	Landfill	Regulation under CLM Act not required	Current EPA List	Premise Match	871m	North West
622	Caltex Service Station Homebush West	334-336 Parramatta Road	Homebush West	Service Station	Regulation under CLM Act not required	Current EPA List	Premise Match	893m	South
1267	Haslams Creek South Area 3	At Kronos Hill, Kevin Coombes Avenue	SYDNEY OLYMPIC PARK	Landfill	Contamination formerly regulated under the CLM Act	Current EPA List	Premise Match	901m	North West

The values within the EPA site management class in the table above, are given more detailed explanations in the table below:

EPA site management class	Explanation
Contamination being managed via the planning process (EP&A Act)	The EPA has completed an assessment of the contamination and decided that the contamination is significant enough to warrant regulation. The contamination of this site is managed by the consent authority under the Environmental Planning and Assessment Act 1979 (EP&A Act) planning approval process, with EPA involvement as necessary to ensure significant contamination is adequately addressed. The consent authority is typically a local council or the Department of Planning and Environment.

EPA site management class	Explanation
Contamination currently regulated under CLM Act	The EPA has completed an assessment of the contamination and decided that the contamination is significant enough to warrant regulation under the Contaminated Land Management Act 1997 (CLM Act). Management of the contamination is regulated by the EPA under the CLM Act. Regulatory notices are available on the EPA's Contaminated Land Public Record of Notices.
Contamination currently regulated under POEO Act	The EPA has completed an assessment of the contamination and decided that the contamination is significant enough to warrant regulation. Management of the contamination is regulated under the Protection of the Environment Operations Act 1997 (POEO Act). The EPA's regulatory actions under the POEO Act are available on the POEO public register.
Contamination formerly regulated under the CLM Act	The EPA has determined that the contamination is no longer significant enough to warrant regulation under the Contaminated Land Management Act 1997 (CLM Act). The contamination was addressed under the CLM Act.
Contamination formerly regulated under the POEO Act	The EPA has determined that the contamination is no longer significant enough to warrant regulation. The contamination was addressed under the Protection of the Environment Operations Act 1997 (POEO Act).
Contamination was addressed via the planning process (EP&A Act)	The EPA has determined that the contamination is no longer significant enough to warrant regulation. The contamination was addressed by the appropriate consent authority via the planning process under the Environmental Planning and Assessment Act 1979 (EP&A Act).
Ongoing maintenance required to manage residual contamination (CLM Act)	The EPA has determined that ongoing maintenance, under the Contaminated Land Management Act 1997 (CLM Act), is required to manage the residual contamination. Regulatory notices under the CLM Act are available on the EPA's Contaminated Land Public Record of Notices.
Regulation being finalised	The EPA has completed an assessment of the contamination and decided that the contamination is significant enough to warrant regulation under the Contaminated Land Management Act 1997. A regulatory approach is being finalised.
Regulation under the CLM Act not required	The EPA has completed an assessment of the contamination and decided that regulation under the Contaminated Land Management Act 1997 is not required.
Under assessment	The contamination is being assessed by the EPA to determine whether regulation is required. The EPA may require further information to complete the assessment. For example, the completion of management actions regulated under the planning process or Protection of the Environment Operations Act 1997. Alternatively, the EPA may require information via a notice issued under s77 of the Contaminated Land Management Act 1997 or issue a Preliminary Investigation Order.

NSW EPA Contaminated Land List Data Source: Environment Protection Authority

© State of New South Wales through the Environment Protection Authority

Contaminated Land

7 Figtree Drive, Sydney Olympic Park, NSW 2127

Contaminated Land: Records of Notice

Record of Notices within the dataset buffer:

Map Id	Name	Address	Suburb	Notices	Area No	Location Confidence	Distance	Direction
145	Homebush Bay General Area	No specific Street OTHER	Homebush Bay	2 former	3033	Premise Match	0m	On-site
141	Aquatic Centre Carpark Landfill	Shane Gould Avenue	Sydney Olympic Park	1 current and 8 former	3035	Premise Match	85m	South West
146	Former Golf Driving Range Landfill	Sarah Durack Avenue	Sydney Olympic Park	2 current and 6 former	3036	Premise Match	149m	South East
142	Bicentennial Park	Bicentennial Drive	Sydney Olympic Park	1 current and 2 former	3032	Premise Match	301m	East
144	Kronos Hill Landfill	Kevin Coombes Avenue	Sydney Olympic Park	1 current and 13 former	3034	Premise Match	867m	North West
143	Haslams Creek South Area 3	At Kronos Hill, Kevin Coombes Avenue	Sydney Olympic Park	1 current and 3 former	3030	Premise Match	901m	North West

Contaminated Land Records of Notice Data Source: Environment Protection Authority
© State of New South Wales through the Environment Protection Authority
Terms of use and disclaimer for Contaminated Land: Record of Notices, please visit
http://www.epa.nsw.gov.au/clm/clmdisclaimer.htm

Former Gasworks

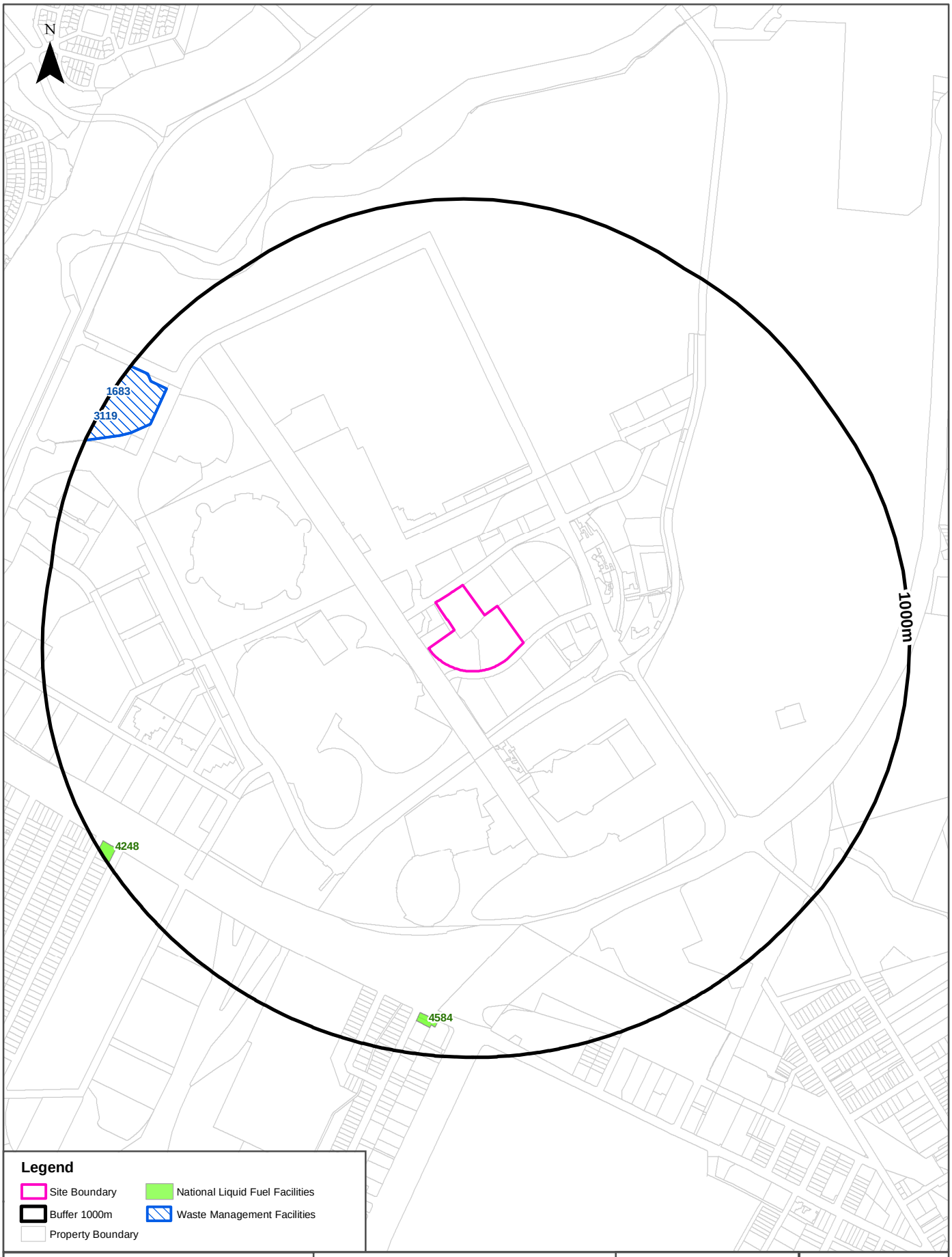
Former Gasworks within the dataset buffer:

Map Id	Location	Council	Further Info	Location Confidence	Distance	Direction
N/A	No records in buffer					

Former Gasworks Data Source: Environment Protection Authority
© State of New South Wales through the Environment Protection Authority

Waste Management & Liquid Fuel Facilities

7 Figtree Drive, Sydney Olympic Park, NSW 2127



Waste Management & Liquid Fuel Facilities

7 Figtree Drive, Sydney Olympic Park, NSW 2127

National Waste Management Site Database

Sites on the National Waste Management Site Database within the dataset buffer:

Site Id	Owner	Name	Address	Suburb	Class	Landfill	Reprocess	Transfer	Comments	Loc Conf	Dist	Direction
1683	Auburn City Council	Auburn Waste and Recycling Centre	Old Hill Link Road	Homebush Bay	Multi-Purpose		Operational	Operational		Premise Match	871 m	North West
3119	Transpacific Industries Group Ltd	Transpacific Homebush Bay	Cnr Hill Road & Pondage Link	Homebush Bay	Multi-Purpose		Operational	Operational	CPT plant	Premise Match	871 m	North West

Waste Management Facilities Data Source: Geoscience Australia
Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

National Liquid Fuel Facilities

National Liquid Fuel Facilties within the dataset buffer:

Map Id	Owner	Name	Address	Suburb	Class	Operational Status	Operator	Revision Date	Loc Conf	Dist	Direction
4584	Caltex	Caltex Homebush	334-336 Parramatta Road	Homebush	Petrol Station	Operational		25/07/2011	Premise Match	893m	South
4248	Shell	Coles Express Lidcombe	18 Parramatta Road	Lidcombe	Petrol Station	Operational		25/07/2011	Premise Match	960m	South West

National Liquid Fuel Facilities Data Source: Geoscience Australia
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PFAS Investigation & Management Programs

7 Figtree Drive, Sydney Olympic Park, NSW 2127

EPA PFAS Investigation Program

Sites that are part of the EPA PFAS investigation program, within the dataset buffer:

Map ID	Site	Address	Loc Conf	Dist	Dir
N/A	No records in buffer				

EPA PFAS Investigation Program: Environment Protection Authority
© State of New South Wales through the Environment Protection Authority

Defence PFAS Investigation Program

Sites being investigated by the Department of Defence for PFAS contamination within the dataset buffer:

Map ID	Base Name	Address	Loc Conf	Dist	Dir
N/A	No records in buffer				

Defence PFAS Investigation Program Data Custodian: Department of Defence, Australian Government

Defence PFAS Management Program

Sites being managed by the Department of Defence for PFAS contamination within the dataset buffer:

Map ID	Base Name	Address	Loc Conf	Dist	Dir
N/A	No records in buffer				

Defence PFAS Management Program Data Custodian: Department of Defence, Australian Government

Airservices Australia National PFAS Management Program

Sites being investigated or managed by Airservices Australia for PFAS contamination within the dataset buffer:

Map ID	Site Name	Impacts	Loc Conf	Dist	Dir
N/A	No records in buffer				

Airservices Australia National PFAS Management Program Data Custodian: Airservices Australia

Defence Sites

7 Figtree Drive, Sydney Olympic Park, NSW 2127

Defence 3 Year Regional Contamination Investigation Program

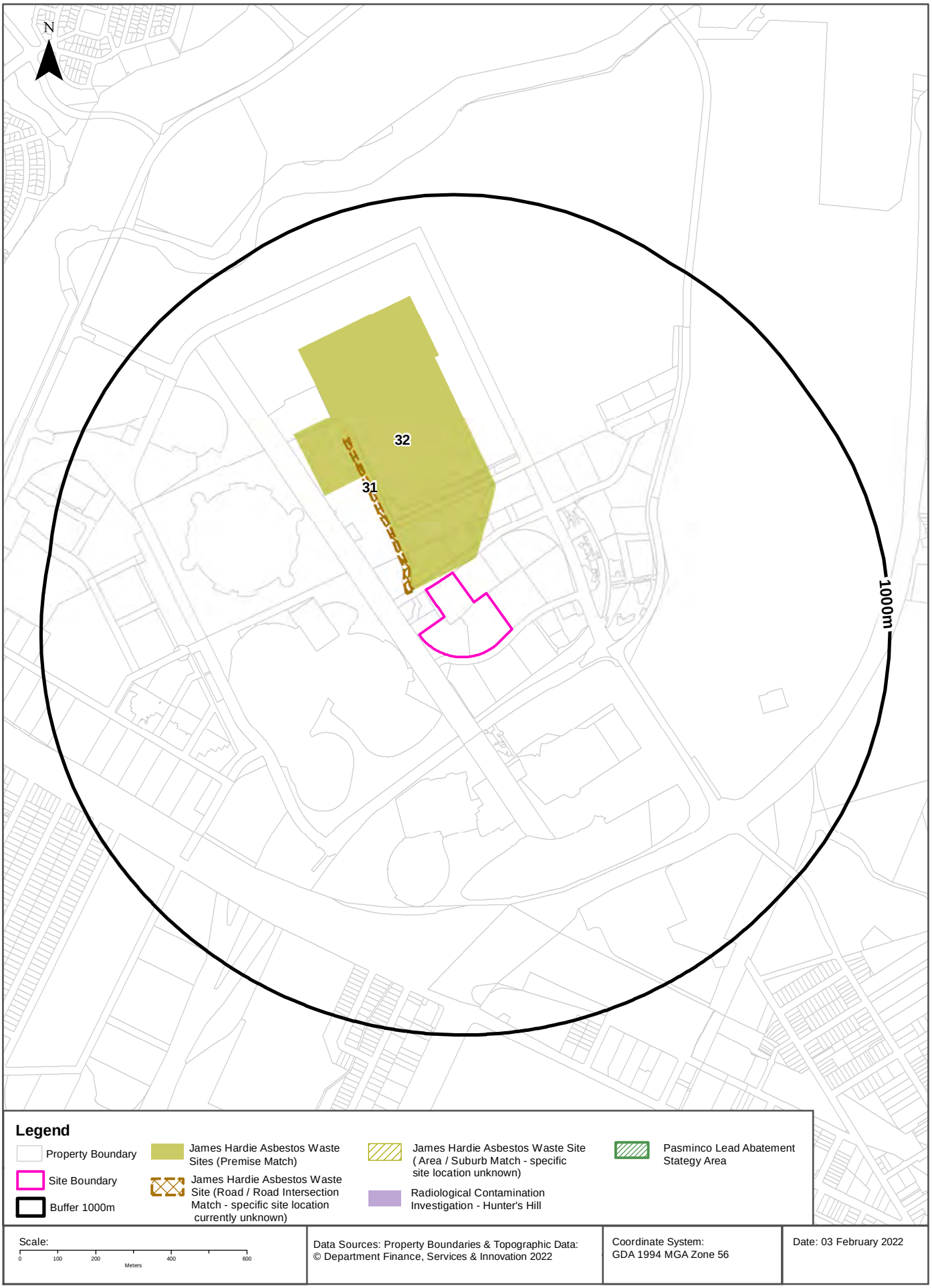
Sites which have been assessed as part of the Defence 3 Year Regional Contamination Investigation Program within the dataset buffer:

Property ID	Base Name	Address	Known Contamination	Loc Conf	Dist	Dir
N/A	No records in buffer					

Defence 3 Year Regional Contamination Investigation Program, Data Custodian: Department of Defence, Australian Government

EPA Other Sites with Contamination Issues

7 Figtree Drive, Sydney Olympic Park, NSW 2127



EPA Other Sites with Contamination Issues

7 Figtree Drive, Sydney Olympic Park, NSW 2127

EPA Other Sites with Contamination Issues

This dataset contains other sites identified on the EPA website as having contamination issues. This dataset currently includes:

- James Hardie asbestos manufacturing and waste disposal sites
- Radiological investigation sites in Hunter's Hill
- Pasminco Lead Abatement Strategy Area

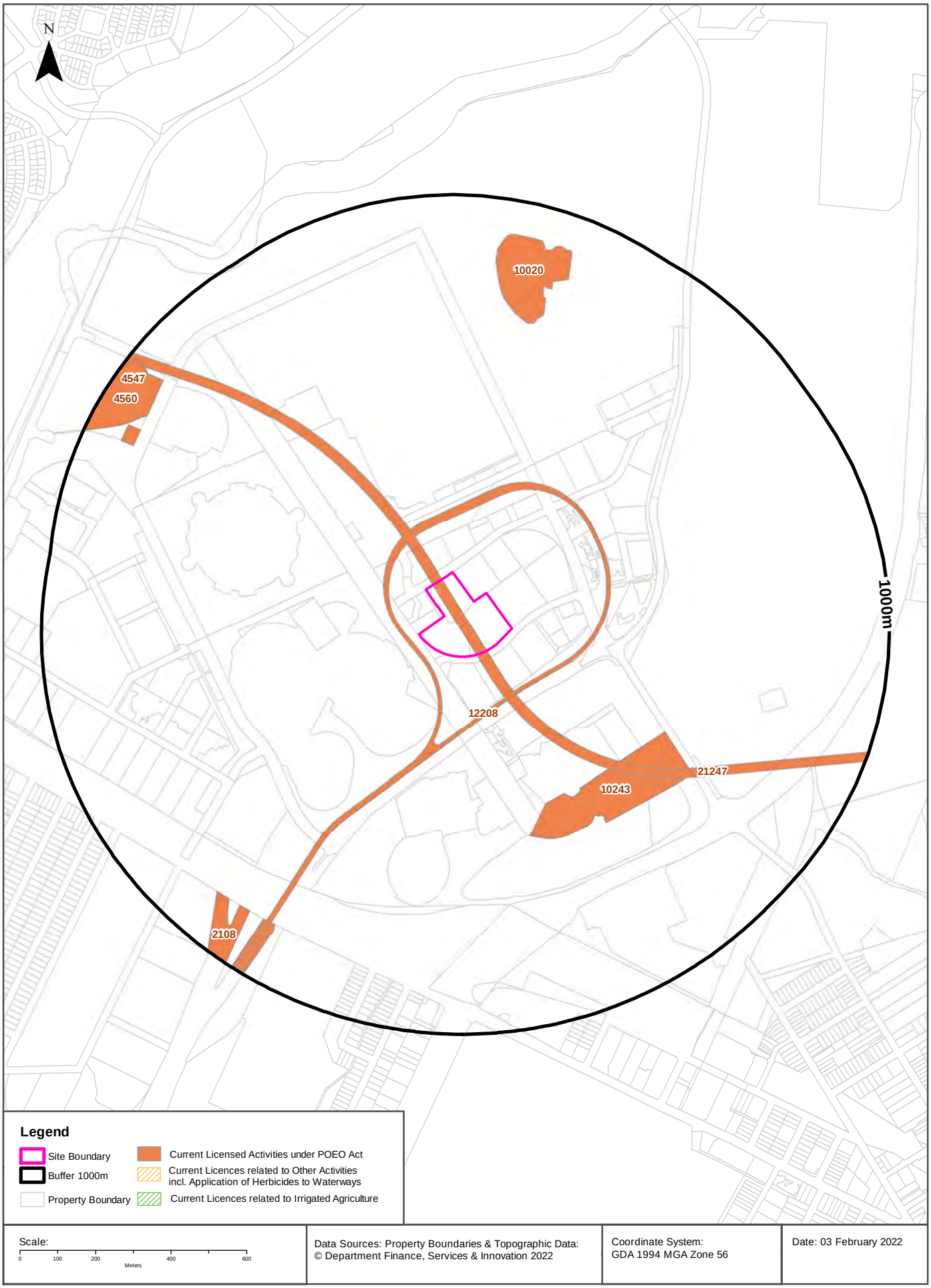
Sites within the dataset buffer:

Site Id	Site Name	Site Address	Dataset	Comments	Location Confidence	Distance	Direction
32	King Ave. Abattoir	Showground Rd, Homebush	James Hardie Asbestos Waste Sites	Current Land Use: Heritage listed buildings within Olympic Park complex	Premise Match	6m	North
31	King Ave. railway land	Showground Rd, Homebush	James Hardie Asbestos Waste Sites		Road Match	30m	North West

EPA Other Sites with Contamination Issues: Environment Protection Authority
© State of New South Wales through the Environment Protection Authority

Current EPA Licensed Activities

7 Figtree Drive, Sydney Olympic Park, NSW 2127



EPA Activities

7 Figtree Drive, Sydney Olympic Park, NSW 2127

Licensed Activities under the POEO Act 1997

Licensed activities under the Protection of the Environment Operations Act 1997, within the dataset buffer:

EPL	Organisation	Name	Address	Suburb	Activity	Loc Conf	Distance	Direction
21247	Metro Trains Sydney Pty Ltd		SYDNEY METRO, ROUSE HILL, NSW 2155		Railway systems activities	Network of Features	0m	On-site
12208	SYDNEY TRAINS		SYDNEY TRAINS, HAYMARKET, NSW 1238		Railway systems activities	Network of Features	28m	South West
10243	SYDNEY OLYMPIC PARK AUTHORITY	Sydney Olympic Park (wetlands treatment systems)	OFF NEWINGTON ROAD	SILVERWATER	Miscellaneous licensed discharge to waters (at any time)	Premise Match	429m	South East
10020	SYDNEY OLYMPIC PARK AUTHORITY	SYDNEY OLYMPIC PARK	Marjorie Jackson Parkway, Edwin Flack Avenue, HOMEBUSH BAY, NSW 2127	HOMEBUSH BAY	Sewage treatment processing by small plants	Premise Match	688m	North
10020	SYDNEY OLYMPIC PARK AUTHORITY	SYDNEY OLYMPIC PARK	Marjorie Jackson Parkway, Edwin Flack Avenue, HOMEBUSH BAY, NSW 2127	HOMEBUSH BAY	Miscellaneous licensed discharge to waters (at any time)	Premise Match	688m	North
2108	LACTALIS AUSTRALIA PTY LTD	PARMALAT FOOD PRODUCTS PTY LTD	LOT 1 BIRNIE AVE	LIDCOMBE	Dairy processing	Premise Match	844m	South West
4547	CLEANAWAY PTY LTD	AUBURN RESOURCE RECOVERY CENTRE	HILL ROAD	HOMEBUSH BAY	Waste storage - hazardous, restricted solid, liquid, clinical and related waste and asbestos waste	Premise Match	871m	North West
4547	CLEANAWAY PTY LTD	AUBURN RESOURCE RECOVERY CENTRE	HILL ROAD	HOMEBUSH BAY	Non-thermal treatment of general waste	Premise Match	871m	North West
4547	CLEANAWAY PTY LTD	AUBURN RESOURCE RECOVERY CENTRE	HILL ROAD	HOMEBUSH BAY	Waste storage - other types of waste	Premise Match	871m	North West
4547	CLEANAWAY PTY LTD	AUBURN RESOURCE RECOVERY CENTRE	HILL ROAD	HOMEBUSH BAY	Waste storage - waste tyres	Premise Match	871m	North West
4547	CLEANAWAY PTY LTD	AUBURN RESOURCE RECOVERY CENTRE	HILL ROAD	HOMEBUSH BAY	Recovery of general waste	Premise Match	871m	North West
4560	CLEANAWAY OPERATIONS PTY LTD	HOMEBUSH BAY LIQUID TREATMENT PLANT	CORNER OF PONDAGE LINK & HILL RD	HOMEBUSH BAY	Waste storage - hazardous, restricted solid, liquid, clinical and related waste and asbestos waste	Premise Match	871m	North West
4560	CLEANAWAY OPERATIONS PTY LTD	HOMEBUSH BAY LIQUID TREATMENT PLANT	CORNER OF PONDAGE LINK & HILL RD	HOMEBUSH BAY	Non-thermal treatment of hazardous and other waste	Premise Match	871m	North West

POEO Licence Data Source: Environment Protection Authority
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Delicensed & Former Licensed EPA Activities

7 Figtree Drive, Sydney Olympic Park, NSW 2127



EPA Activities

7 Figtree Drive, Sydney Olympic Park, NSW 2127

Delicensed Activities still regulated by the EPA

Delicensed activities still regulated by the EPA, within the dataset buffer:

Licence No	Organisation	Name	Address	Suburb	Activity	Loc Conf	Distance	Direction
7509	SILANNA SEMICONDUCTOR PTY LTD	PEREGRINE SEMICONDUCTOR AUSTRALIA PTY LIMITED	8 HERB ELLIOTT AVE	HOMEBUSH	Hazardous, Industrial or Group A Waste Generation or Storage	Premise Match	0m	On-site
12390	RAIL CORPORATION NEW SOUTH WALES	Flemington Passenger Fleet Maintenance Centre	Bachell Avenue	LIDCOMBE	Hazardous, Industrial or Group A Waste Generation or Storage	Premise Match	843m	South West

Delicensed Activities Data Source: Environment Protection Authority
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Former Licensed Activities under the POEO Act 1997, now revoked or surrendered

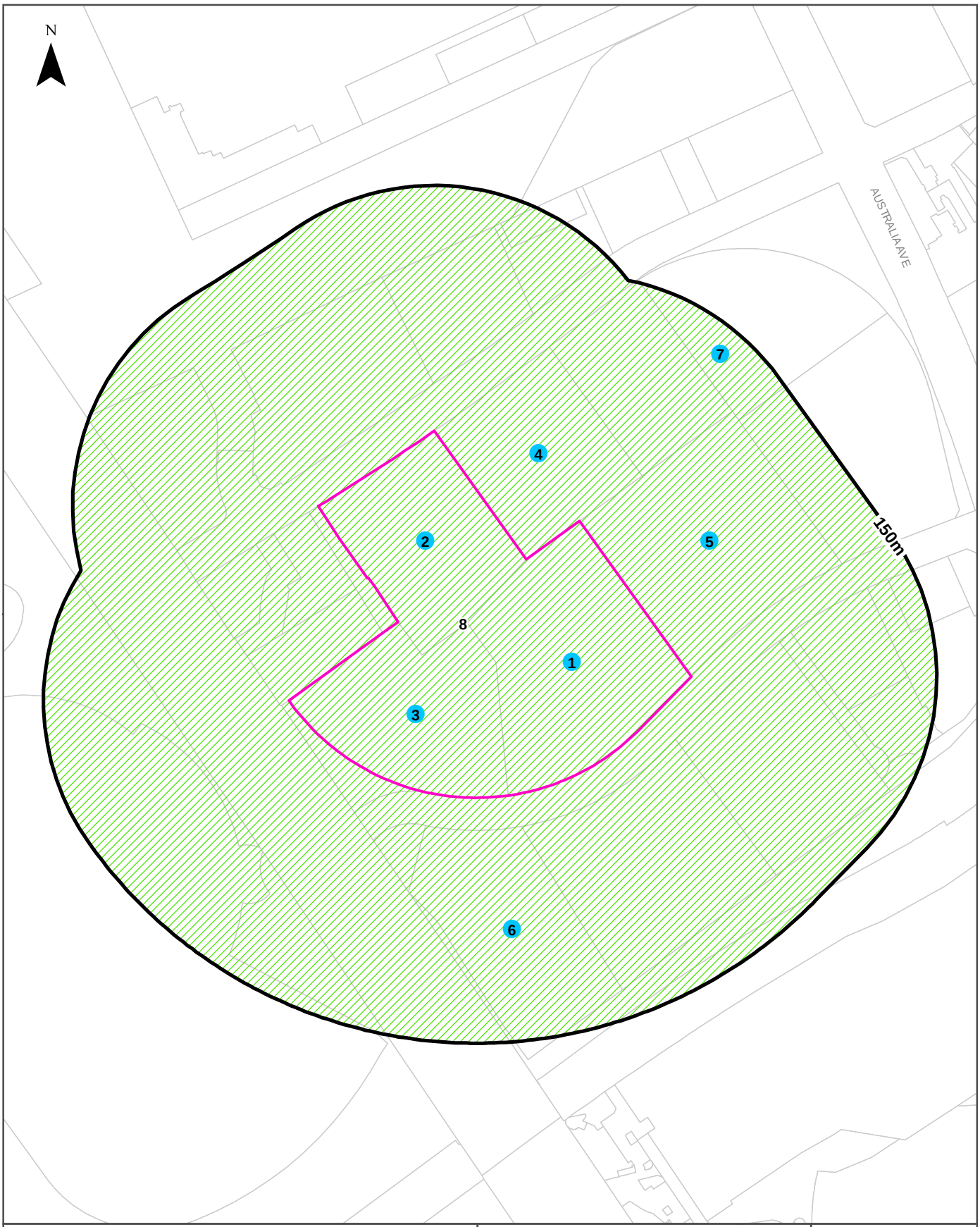
Former Licensed activities under the Protection of the Environment Operations Act 1997, now revoked or surrendered, within the dataset buffer:

Licence No	Organisation	Location	Status	Issued Date	Activity	Loc Conf	Distance	Direction
10142	SYDNEY OLYMPIC PARK AUTHORITY	Golf Driving Range, Australia Avenue, HOMEBUSH BAY, NSW 2127	Surrendered	08/10/1999	Miscellaneous licensed discharge to waters (at any time)	Premise Match	268m	South East
6708	BRONSON & JACOBS PTY LTD	5 PARKVIEW DRIVE, HOMEBUSH BAY, NSW 2127	Surrendered	11/08/2000	General chemicals storage, Hazardous, Industrial or Group A Waste Generation or Storage	Premise Match	421m	North East
4653	LUHRMANN ENVIRONMENT MANAGEMENT PTY LTD	WATERWAYS THROUGHOUT NSW	Surrendered	06/09/2000	Other Activities / Non Scheduled Activity - Application of Herbicides	Network of Features	487m	North East
4838	Robert Orchard	Various Waterways throughout New South Wales - SYDNEY NSW 2000	Surrendered	07/09/2000	Other Activities / Non Scheduled Activity - Application of Herbicides	Network of Features	487m	North East
6630	SYDNEY WEED & PEST MANAGEMENT PTY LTD	WATERWAYS THROUGHOUT NSW - PROSPECT, NSW, 2148	Surrendered	09/11/2000	Other Activities / Non Scheduled Activity - Application of Herbicides	Network of Features	487m	North East
7414	AUBURN COUNCIL	AUBURN MUNICIPAL COUNCIL, AUBURN, NSW 2144	Surrendered	06/09/2000	Other Activities - Application of Herbicide(s)	Network of Features	487m	North East
20567	CPB CONTRACTORS PTY LIMITED	, Between Pitt Street, Parramatta and Homebush Bay Drive, Homebush , PARRAMATTA, NSW 2150,	Surrendered	20/04/2015	Road Construction	Road Match	677m	South West
20734	CPB CONTRACTORS PTY LIMITED	WestConnex M4 East, WestConnex M4 East, Homebush bay Drive to Parramatta Road, BURWOOD, NSW 2134, BURWOOD	Surrendered	26/02/2016	Road construction	Network of Features	677m	South

Former Licensed Activities Data Source: Environment Protection Authority
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Historical Business Directories

7 Figtree Drive, Sydney Olympic Park, NSW 2127



Legend

- Site Boundary
- Buffer 150m
- Property Boundary
- Business directory records mapped to a specific premise
- Business directory records mapped to a road intersection
- Business directory records mapped to a road corridor
- Business directory records mapped to a general area

Scale: 0 40 80 120 160 Meters

Coordinate System: GDA 1994 MGA Zone 56

Date: 03 February 2022

Data Sources: Reproduced with permission of UBD and Hardie Grant Media Pty Ltd DD 01/08/2018

Historical Business Directories

7 Figtree Drive, Sydney Olympic Park, NSW 2127

Business Directory Records 1950-1991
Premise or Road Intersection Matches

Universal Business Directory records from years 1991, 1986, 1982, 1978, 1975, 1970, 1965, 1961 & 1950, mapped to a premise or road intersection within the dataset buffer:

Map Id	Business Activity	Premise	Ref No.	Year	Location Confidence	Distance to Property Boundary or Road Intersection	Direction
1	Tank &/or Tankstand Mfrs &/or Dists	Alfa Laval Engineering Pty Ltd, 5 Figtree Dr Homebush 2140	63835	1991	Premise Match	0m	On-site
	Filter Mfrs &/or Dists	Alfa Laval Engineering Pty Ltd, 5 Figtree Dr., Homebush 2140	45597	1991	Premise Match	0m	On-site
	Heat Exchanger Mfrs &/or Dists	Alfa Laval Engineering Pty. Ltd., 5 Figtree Dr., Homebush. 2140	48301	1991	Premise Match	0m	On-site
	Separator Mfrs &/or Imps or Dists	Alfa-Laval Engineering Pty Ltd, 5 Figtree Dr., Homebush 2140	61968	1991	Premise Match	0m	On-site
	Valve &/or Cock Mfrs &/or Dists	Alfa-Laval Engineering Pty. Ltd., 5 Figtree Dr Homebush 2140	65530	1991	Premise Match	0m	On-site
	Centrifugal Machines	Alfa-Laval Engineering Pty. Ltd., 5 Figtree Dr., Homebush 2140	38720	1991	Premise Match	0m	On-site
	Dairy Factory Supplies	Alfa-Laval Engineering Pty. Ltd., 5 Figtree Dr., Homebush 2140	41224	1991	Premise Match	0m	On-site
	Dairy Machinery &/or Equipment Mfrs &/or Imps &/or Dists	Alfa-Laval Engineering Pty. Ltd., 5 Figtree Dr., Homebush 2140	41227	1991	Premise Match	0m	On-site
	Pump & Pumping Equipment Mfrs &/or Dists	Alfa-Laval Engineering Pty. Ltd., 5 Figtree Dr., Homebush 2140	59938	1991	Premise Match	0m	On-site
	Engineers Abattoirs	Alta Laval Engineering Pty. Ltd., 5 Figtree Dr., Homebush 2140	43293	1991	Premise Match	0m	On-site
2	Electronic Components Mfrs &/or Imps &/or Dists	AWA Microelectronics Pty. Ltd., 8 Australia Ave. Homebush 2140	42823	1991	Premise Match	0m	On-site
3	Video Equipment Mfrs &/or Dists	Sanyo Australia Pty Ltd Australia Centre 7 Figtree Dr Homebush 2140	96982	1991	Premise Match	0m	On-site
	Air Conditioning Equipment & Parts Mfrs &/or Imps &/or Dists	Sanyo Australia Pty. Ltd., Australia Center, 7 Figtree Dr., Homebush 2140	33887	1991	Premise Match	0m	On-site
4	Agricultural Chemicals Mfrs &/or Imps &/or Dists	BASF Australia Ltd., 6 Australia Ave., Homebush 2140	33614	1991	Premise Match	0m	North
	Chemical Mfrs &/or Imps &/or Dists	BASF Australia Ltd., 6 Australia Ave., Homebush 2140	38836	1991	Premise Match	0m	North
5	Hi-Fedelity Equipment Mfrs &/or Dists	Philips Consumer Products Australia Centre., 3 Figtree Dr., Homebush. 2140	48353	1991	Premise Match	0m	North East
	Electrical Appliance Repair &/or Service Agents	Philips Consumer Products. Australia Centre., 3 Figtree Dr., Homebush 2140	42414	1991	Premise Match	0m	North East
6	Communication Systems Mfrs &/or Imps &/or Dists	Kenwood Electronics Australia Pty. Ltd., 8 Figtree Dr., Homebush 2140	39761	1991	Premise Match	20m	South
	Electronic Equipment Mfrs &/or Dists	Kenwood Electronics Australia Pty. Ltd., 8 Figtree Dr., Homebush 2140	42976	1991	Premise Match	20m	South
7	Video Equipment Mfrs &/or Dists	Akai Australia, 2 Australia Ave Homebush 2140	65753	1991	Premise Match	115m	North East
	Hi-Fedelity Equipment Mfrs &/or Dists	Akai Australia., 2 Australia Ave., Homebush. 2140	48341	1991	Premise Match	115m	North East

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Business Directory Records 1950-1991
Road or Area Matches

Universal Business Directory records from years 1991, 1986, 1982, 1978, 1975, 1970, 1965, 1961 & 1950, mapped to a road or an area, within the dataset buffer. Records are mapped to the road when a building number is not supplied, cannot be found, or the road has been renumbered since the directory was published:

Map Id	Business Activity	Premise	Ref No.	Year	Location Confidence	Distance to Road Corridor or Area
8	Butchers Wholesale	Benjamen Prime Beef, Abattoirs, Homebush 2140	37754	1991	Area Match	0m
	Canners &/or Preservers Processed Foods	Bronte Meats Pty Ltd, Abattoirs, Homebush 2140	38017	1991	Area Match	0m
	Butchers Wholesale	Brown & Hatten Pty. Ltd., Abattoirs, Homebush 2140	37757	1991	Area Match	0m
	Butchers Wholesale	Burland Wholesale Meats., Abattoirs, Homebush 2140	37758	1991	Area Match	0m
	Butchers Wholesale	Edwards, J. J. Pty. Ltd., Abattoirs, Homebush 2140	37767	1991	Area Match	0m
	Butchers Wholesale	Edwards, J. J. Pty. Ltd., Abattoirs, Homebush 2140	37766	1991	Area Match	0m
	Butchers Wholesale	Fletcher & Pickett Pty. Ltd., Abattoirs, Homebush 2140	37770	1991	Area Match	0m
	Butchers Wholesale	Hitchings, P., Abattoirs, Homebush 2140	37775	1991	Area Match	0m
	Butchers Wholesale	Hitchings. C. C. Pty. Ltd., Abattoirs, Homebush 2140	37776	1991	Area Match	0m
	Abattoirs	Homebush Abattoir Corporation, Abattoirs, Homebush 2140	33269	1991	Area Match	0m
	Cold Stores	Homebush Cold Stores, Abattoirs, Homebush 2140	39714	1991	Area Match	0m
	Butchers Wholesale	Homebush Wholesale Meat Co. Pty. Ltd., Abattoirs, Homebush 2140	37777	1991	Area Match	0m
	Butchers Wholesale	Howard & Lincoln Pty. Ltd., Abattoirs, Homebush 2140	37778	1991	Area Match	0m
	Butchers Wholesale	Lyme, H.J. Co. Pty. Ltd., Abattoirs, Homebush 2140	37783	1991	Area Match	0m
	Butchers Wholesale	Moss Meats Pty. Ltd, Abattoirs, Homebush 2140	37786	1991	Area Match	0m
	Butchers Wholesale	Peare Meat Industries Pty. Ltd., Abattoirs, Homebush 2140	37789	1991	Area Match	0m
	Butchers Wholesale	Riverstone Meat., Abattoirs. Homebush 2140	37791	1991	Area Match	0m
	Butchers Wholesale	West Country Meats, Abattoirs, Homebush 2140	37799	1991	Area Match	0m
	Butchers Wholesale	Wilmeat, Abattoirs, Homebush 2140	37800	1991	Area Match	0m
	BUTCHERS-WHOLESALE.	Benjamen Prime Beef, Abattoirs, Homebush.2140	10892	1986	Area Match	0m
	BUTCHERS-WHOLESALE.	Black, Jack Sales, Abattoirs, Homebush.2140	10895	1986	Area Match	0m
	CANNERS &/OR PRESERVERS-PROCESSED FOODS.	Bronte Meats Pty. Ltd., Abattoirs, Homebush. 2140	12126	1986	Area Match	0m
	BUTCHERS-WHOLESALE.	Brown & Hatten Pty. Ltd., Abattoirs, Homebush.2140	10898	1986	Area Match	0m
	BUTCHERS-WHOLESALE.	Burland Wholesale Meats, Abattoirs, Homebush.2140	10900	1986	Area Match	0m
	BUTCHERS-WHOLESALE.	Dorrigo Abattoirs, State Abattoirs, Hill Rd., Lidcombe.2141	10905	1986	Area Match	0m
	BUTCHERS-WHOLESALE.	Edwards, J. J. Pty. Ltd., Abattoirs, Homebush.2140	10907	1986	Area Match	0m
	MEAT EXPORTERS.	Fletcher & Pickett Pty. Ltd., Abattoirs, Homebush. 2140	53251	1986	Area Match	0m
	BUTCHERS-WHOLESALE.	Fletcher & Pickett Pty. Ltd., Abattoirs, Homebush.2140	10909	1986	Area Match	0m

Map Id	Business Activity	Premise	Ref No.	Year	Location Confidence	Distance to Road Corridor or Area
8	BUTCHERS-WHOLESALE.	Hitchings, C. C. Pty. Ltd., Abattoirs, Homebush.2140	10915	1986	Area Match	0m
	ABATTOIRS.	Homebush Abattoir Corporation, Abattoirs, Homebush 2140	1	1986	Area Match	0m
	BUTCHERS-WHOLESALE.	Homebush Wholesale Meat Co. Pty. Ltd., Abattoirs, Homebush.2140	10916	1986	Area Match	0m
	BUTCHERS-WHOLESALE.	Howard & Lincoln Pty. Ltd., Abattoirs, Homebush.2140	10917	1986	Area Match	0m
	BUTCHERS-WHOLESALE.	Lyme, H. J. Co. Pty. Ltd., Abattoirs, Homebush.2140	10923	1986	Area Match	0m
	BACON &/OR HAM CURERS &/OR DISTS.	Mayfair Foods Pty. Ltd., State Abattoirs Underwood Rd., Homebush. 2140	4925	1986	Area Match	0m
	MEAT CANNERS.	Mayfair Foods Pty. Ltd., State Abattoirs Underwood Rd., Homebush. 2140	53233	1986	Area Match	0m
	SMALL GOODS MFRS. &/OR W/SALERS.	Mayfair Foods Pty. Ltd., State Abattoirs Underwood Rd., Homebush. 2140	87067	1986	Area Match	0m
	BUTCHERS-WHOLESALE.	Moss Meats Pty. Ltd., Abattoirs, Homebush.2140	10927	1986	Area Match	0m
	BUTCHERS-WHOLESALE.	Peare Meat Industries Pty. Ltd., Abattoirs, Homebush.2140	10929	1986	Area Match	0m
	BUTCHERS-WHOLESALE.	Riverstone Meat, Abattoirs, Homebush.2140	10933	1986	Area Match	0m
	ROAD TRANSPORT SERVICES-INTERSTATE.	Roadmaster Haulage Pty. Ltd, State Abattoirs, Hill Rd., Lidcombe. 2141	83363	1986	Area Match	0m
	BUTCHERS-WHOLESALE.	Wilmeat, Abattoirs, Homebush.2140	10946	1986	Area Match	0m
	BUTCHERS - WHOLESALE. (B8120)	Benjamin Prime Beef Pty. Ltd., Abattoirs, Homebush. 2140.	11869	1982	Area Match	0m
	CANNERS &/OR PRESERVERS - PROCESSED FOODS, (C0915)	Bronte Meats Pty. Ltd., Abattoirs, Homebush. 2140.	12999	1982	Area Match	0m
	BACON &/OR HAM CURERS &/OR DISTS. (B0180)	Canadian Bacon Pty. Ltd., Abattoirs, Homebush. 2140.	4479	1982	Area Match	0m
	BUTCHERS - WHOLESALE. (B8120)	Canadian Bacon Pty. Ltd., Abattoirs, Homebush. 2140.	11878	1982	Area Match	0m
	BUTCHERS - WHOLESALE. (B8120)	Fletcher & Pickett Pty. Ltd, Abattoirs, Homebush. 2140.	11889	1982	Area Match	0m
	MEAT EXPORTERS. (M1800)	Fletcher & Pickett Pty. Ltd., Abattoirs, Homebush. 2140.	46856	1982	Area Match	0m
	ABATTOIRS. (A0030)	Homebush Abattoir Corporation, Abattoirs, Homebush. 2140.	2	1982	Area Match	0m
	BUTCHERS - WHOLESALE. (B8120)	Howard & Lincoln Pty. Ltd., State Abattoir. Homebush. 2140.	11897	1982	Area Match	0m
	BACON &/OR HAM CURERS &/OR DISTS. (B0180)	Mayfair Hams & Bacon Co., Abattoirs, Homebush. 2140.	4482	1982	Area Match	0m
	MEATCANNERS. (M1760)	Mayfair Hams & Bacon Co., Abattoirs, Homebush. 2140.	46839	1982	Area Match	0m
	SMALL GOODS MFRS. &/OR W/SALERS. (S3960)	Mayfair Hams & Bacon Co., Abattoirs, Homebush. 2140.	75097	1982	Area Match	0m
	BUTCHERS - WHOLESALE. (B8120)	Scott, G, M, Pty. Ltd., State Abattoir, Homebush. 2140.	11915	1982	Area Match	0m
	BACON &/OR HAM CURERS &/OR DISTS.	Barnes Bacon Pty. Ltd., Abattoirs, Homebush. 2140	4130	1978	Area Match	0m
	SMALL GOODS MFRS. &/OR W/SALERS.	Barnes Bacon Pty. Ltd., Abattoirs, Homebush. 2140	66505	1978	Area Match	0m
	BUTCHERS - WHOLESALE.	Brindell A., Abattoirs. Homebush. 2140.	10170	1978	Area Match	0m
	CANNERS &/OR CANNED FOOD SPECIALISTS.	Bronte Industries Pty. Ltd., Abattoirs, Homebush. 2140.	11099	1978	Area Match	0m
	BACON &/OR HAM CURERS &/OR DISTS.	Canadian Bacon Pty. Ltd., Abattoirs, Homebush. 2140	4131	1978	Area Match	0m
	BUTCHERS - WHOLESALE.	Canadian Bacon Pty. Ltd., Abattoirs. Homebush. 2140.	10173	1978	Area Match	0m
	MEAT EXPORTERS	Edge, W. L. & Son Pty. Ltd., Abattoirs, Homebush. 2140	41939	1978	Area Match	0m
	BUTCHERS - WHOLESALE.	Edge. W. L. & Son Pty. Ltd., Abattoirs, Homebush. 2140.	10179	1978	Area Match	0m

Map Id	Business Activity	Premise	Ref No.	Year	Location Confidence	Distance to Road Corridor or Area
8	MEAT EXPORTERS	Fletcher & Pickett Pty. Ltd., Abattoirs, Homebush. 2140	41941	1978	Area Match	0m
	BUTCHERS - WHOLESALE.	Fletcher & Pickett Pty. Ltd., Abattoirs. Homebush. 2140.	10183	1978	Area Match	0m
	BUTCHERS - WHOLESALE.	Mackay, Johnson Meat Packers Pty. Ltd., Abattoirs, Homebush. 2140.	10195	1978	Area Match	0m
	BACON &/OR HAM CURERS &/OR DISTS.	Mayfair Hams & Bacon Co. Pty. Ltd., Abattoirs, Homebush. 2140	4133	1978	Area Match	0m
	MEAT CANNERS.	Mayfair Hams & Bacon Co. Pty. Ltd., Abattoirs, Homebush. 2140	41924	1978	Area Match	0m
	MEAT EXPORTERS	Mayfair Hams & Bacon Co. Pty. Ltd., Abattoirs, Homebush. 2140	41950	1978	Area Match	0m
	SMALL GOODS MFRS. &/OR W/SALERS.	Mayfair Hams & Bacon Co. Pty. Ltd., Abattoirs, Homebush. 2140	66517	1978	Area Match	0m
	BUTCHERS - WHOLESALE.	McLean. W. Tasman Meat, Abattoirs. Homebush. 2140.	10197	1978	Area Match	0m
	BOARDS &/OR COMMITTEES-OFFICIAL.	Metropolitan Meat Industry Board. The, Abattoirs. Homebush. 2140.	6069	1978	Area Match	0m
	ABATTOIRS.	N.S.W. State Abattoirs, Homebush. 2140	3	1978	Area Match	0m
	BUTCHERS - WHOLESALE.	Peare Meat Industries Pty. Ltd., Abattoirs, Homebush. 2140.	10202	1978	Area Match	0m
	BUTCHERS - WHOLESALE.	Taylor. R. Pty. Ltd., Abattoirs, Homebush. 2140.	10215	1978	Area Match	0m
	BUTCHERS - WHOLESALE	Angliss Meat Co., Abattoirs. Homebush. 2140	11498	1975	Area Match	0m
	BUTCHERS - WHOLESALE	Angliss. W. & Co. (Aust.) Pty. Ltd., Abattoirs, Homebush 2140	11499	1975	Area Match	0m
	BACON &/OR HAM CURERS &/OR DISTS.	Barnes Bacon Pty. Ltd., Abattoirs, Homebush. 2140	3976	1975	Area Match	0m
	SMALL GOODS MFRS. &/OR W/SALERS.	Barnes Bacon Pty. Ltd., Abattoirs., Homebush. 2140	77838	1975	Area Match	0m
	BUTCHERS - WHOLESALE	Beach. S. D. Pty. Ltd., Abattoirs, Homebush 2140	11503	1975	Area Match	0m
	BUTCHERS - WHOLESALE	Brindell, W. J., Abattoirs, Homebush. 2140	11507	1975	Area Match	0m
	CANNERS &/OR CANNED FOOD SPECIALISTS.	Bronte Industries Pty. Ltd., Abattoirs, Homebush. 2140	12946	1975	Area Match	0m
	MATTRESS MFRS. SUPPLIES.	Bronte Industries Pty. Ltd., Abattoirs., Homebush. 2140.	49461	1975	Area Match	0m
	BUTCHERS - WHOLESALE	Canadian Bacon Pty. Ltd., Abattoirs. Homebush 2140	11511	1975	Area Match	0m
	ABATTOIRS.	City Wholesale Meat Co. Pty. Ltd., Abattoirs, Homebush. 2140	5	1975	Area Match	0m
	MEAT CANNERS.	Colonial Wholesale Meat Co. Pty. Ltd., Abattoirs., Homebush. 2140.	49468	1975	Area Match	0m
	BUTCHERS - WHOLESALE	Crompton, H. D. & Sons Pty. Ltd., Abattoirs, Homebush 2140	11515	1975	Area Match	0m
	BUTCHERS - WHOLESALE	Davis & Smith Pty. Ltd., Abattoirs, Homebush 2140	11516	1975	Area Match	0m
	BUTCHERS - WHOLESALE	Doherty, R. Pty. Ltd., Abattoirs, Homebush. 2140	11517	1975	Area Match	0m
	BUTCHERS - WHOLESALE	Edge, W. L. & Son Pty. Ltd., Abattoirs, Homebush. 2140	11518	1975	Area Match	0m
	BUTCHERS - WHOLESALE	Finch. W. Pty. Ltd., Abattoirs, Homebush. 2140	11522	1975	Area Match	0m
	BUTCHERS - WHOLESALE	Fletcher & Pickett Pty. Ltd., Abattoirs, Homebush 2140	11523	1975	Area Match	0m
	ASBESTOS CEMENT MFRS. &/OR DISTS.	Fletcher & Pickett Pty. Ltd., Abattoirs, Homebush. 2140	3095	1975	Area Match	0m
	MEAT EXPORTERS.	Fletcher & Pickett Pty. Ltd., Abattoirs, Homebush. 2140.	49496	1975	Area Match	0m
	BUTCHERS - WHOLESALE	Humphreys & Pearce Pty. Ltd., Abattoirs, Homebush. 2140	11532	1975	Area Match	0m
	BACON &/OR HAM CURERS &/OR DISTS.	Mayfair Hams & Bacon Co. Pty. Ltd., Abattoirs, Homebush. 2140	3982	1975	Area Match	0m
	CANNERS &/OR CANNED FOOD SPECIALISTS.	Mayfair Hams & Bacon Co. Pty. Ltd., Abattoirs, Homebush. 2140	12965	1975	Area Match	0m

Map Id	Business Activity	Premise	Ref No.	Year	Location Confidence	Distance to Road Corridor or Area
8	EXPORTERS.	Mayfair Hams & Bacon Co. Pty. Ltd., Abattoirs, Homebush. 2140.	31105	1975	Area Match	0m
	SMALL GOODS MFRS. &/OR W/SALERS.	Mayfair Hams & Bacon Co. Pty. Ltd., Abattoirs., Homebush. 2140	77859	1975	Area Match	0m
	MEAT CANNERS.	Mayfair Hams & Bacon Co. Pty. Ltd., Abattoirs., Homebush. 2140.	49470	1975	Area Match	0m
	BUTCHERS - WHOLESALE	McDonald Bros., Abattoirs, Homebush. 2140	11539	1975	Area Match	0m
	ASSOCIATIONS-EMPLOYERS INDUSTRIAL &/OR PROFESSIONAL	Meat Traders Protective Association Wholesale, Abattoirs, Homebush. 2140	3228	1975	Area Match	0m
	COLD STORES	Metropolitan Meat Industry Board, The Abattoirs, Homebush. 2140	18251	1975	Area Match	0m
	FERTILIZER MFRS. &/OR SUPPLIERS.	Metropolitan Meat Industry Board, The, Abattoirs, Homebush. 2140.	31522	1975	Area Match	0m
	TALLOW MERCHANTS &/OR REFINERS.	Metropolitan Meat Industry Board. The, Abattoirs., Homebush. 2140	82079	1975	Area Match	0m
	POULTRY FOOD MFRS. &/OR DISTS.	Metropolitan Meat Industry Board., The, Abattoirs., Homebush. 2140	69023	1975	Area Match	0m
	ABATTOIRS.	N.S.W. State Abattoirs, Homebush. 2140	7	1975	Area Match	0m
	BUTCHERS - WHOLESALE	Raffaele, J., Abattoirs, Homebush 2140	11550	1975	Area Match	0m
	BUTCHERS - WHOLESALE	Reid, F. Pty. Ltd., Abattoirs, Homebush. 2140	11551	1975	Area Match	0m
	BUTCHERS - WHOLESALE	Robins, B. A., Abattoirs, Homebush 2140	11554	1975	Area Match	0m
	BUTCHERS - WHOLESALE	Taylor, R. Pty. Ltd., Abattoirs, Homebush. 2140	11561	1975	Area Match	0m
	BUTCHERS - WHOLESALE	Williams, J. P. & Co. Pty. Ltd., Abattoirs, Homebush. 2140	11566	1975	Area Match	0m
	BUTCHERS-WHOLESALE (B868)	Angliss, W. & Co. (Aust.) Pty. Ltd., Country Meat Hall., Abattoirs, Homebush	274881	1970	Area Match	0m
	SMALLGOODS MANUFACTURERS &/OR WHOLESALERS (S371)	Barnes Bacon Pty. Ltd., Abattoirs Area, Homebush	361949	1970	Area Match	0m
	MEAT CANNERS (M180)	Bronte Industries Pty. Ltd., State Abattoirs., Homebush	325907	1970	Area Match	0m
	BUTCHERS-WHOLESALE (B868)	Humphreys & Pearce Pty. Ltd., Abattoirs Meat Hall, Homebush	274924	1970	Area Match	0m
	MEAT EXTRACT MFRS. (M192)	Mayfair Distributors Pty. Ltd., State Abattoirs, Homebush	325972	1970	Area Match	0m
	SMALLGOODS MANUFACTURERS &/OR WHOLESALERS (S371)	Mayfair Hams & Bacon Co., Abattoirs, Homebush	361971	1970	Area Match	0m
	MEAT CANNERS (M180)	Mayfair Hams & Bacon Co., Abattoirs., Homebush	325912	1970	Area Match	0m
	GOVT. DEPTS. -STATE (G500)	Meat Industry Board, State Abattoir & Meat Works., Homebush Bay	311758	1970	Area Match	0m
	ASSOCIATIONS - EMPLOYERS', INDUSTRIAL & PROFESSIONAL	Meat Traders Protective Association, Wholesale., New Meat Hall, Abattoirs, Homebush	263470	1970	Area Match	0m
	FERTILIZER MANUFACTURERS &/OR SUPPLIERS (F112)	Metropolitan Meat Industry Board (The) State Abattoirs & Meat Works., Homebush Abattoirs	302377	1970	Area Match	0m
	TALLOW MERCHANTS &/OR REFINERS (T040)	Metropolitan Meat Industry Board (The), State Abattoirs & Meat Works, Homebush	367057	1970	Area Match	0m
	POULTRY FOOD MFRS./DIST. (P708)	Metropolitan Meat Industry Board (The)., State Abattoirs & Meat Works., Homebush	351382	1970	Area Match	0m
	COLD STORES (C528)	Metropolitan Meat Industry Board (The)., State Abattoirs & Meat Works., Homebush Abattoir	284903	1970	Area Match	0m
	SAUSAGE CASING MFRS. &/OR DISTS.(S092)	Sayer & Co. (N.S.W.) Pty. Ltd., State Abattoirs, Homebush	359150	1970	Area Match	0m
	Bacon & Ham Curers	Barnes Bacon Co. Pty. Ltd., Abattoirs, Homebush	49052	1965	Area Match	0m
	SMALLGOODS MANUFACTURERS &/OR WHOLESALERS	Barnes Bacon Co. Pty. Ltd., Abattoirs, Homebush	145179	1965	Area Match	0m
	Butchers' - Wholesale	Casino Wholesalers Co. Pty. Ltd., Homebush Abattoirs	59658	1965	Area Match	0m

Map Id	Business Activity	Premise	Ref No.	Year	Location Confidence	Distance to Road Corridor or Area
8	Butchers' - Wholesale	Cleary, T., State Abattoirs, Homebush	59660	1965	Area Match	0m
	Meat Canners	Colonial Wholesale Meat Co. Pty. Ltd., Abattoirs, Homebush	110489	1965	Area Match	0m
	Butchers' - Wholesale	Gunning, W. & Co. Pty. Ltd., State Abattoirs, Homebush	59673	1965	Area Match	0m
	Butchers' - Wholesale	Humphrey's, H., Abattoirs Meat Hall, Homebush	59677	1965	Area Match	0m
	Canners & Canned Food Specialists	Intercontinental Packers Pty. Ltd., Abattoirs, Homebush	61821	1965	Area Match	0m
	Food Exporters	Intercontinental Packers Pty. Ltd., Abattoirs, Homebush	88168	1965	Area Match	0m
	Meat Canners	Intercontinental Packers Pty. Ltd., Abattoirs, Homebush	110490	1965	Area Match	0m
	Butchers' - Wholesale	Knapp, R. A. Pty. Ltd., State Abattoirs, Homebush Bay	59679	1965	Area Match	0m
	Canners & Canned Food Specialists	Mayfair Distributors Pty. Ltd., Abattoirs, Homebush	61830	1965	Area Match	0m
	Exporters	Mayfair Distributors Pty. Ltd., Abattoirs, Homebush	85119	1965	Area Match	0m
	Freezing Companies	Mayfair Distributors Pty. Ltd., Abattoirs, Homebush	89598	1965	Area Match	0m
	Food Processors/Packers	Mayfair Distributors Pty. Ltd., State Abattoirs, Homebush	88367	1965	Area Match	0m
	Meat Canners	Mayfair Distributors Pty. Ltd., State Abattoirs, Homebush	110492	1965	Area Match	0m
	Meat Extract Mfrs.	Mayfair Distributors Pty. Ltd., State Abattoirs, Homebush	110583	1965	Area Match	0m
	Poultry Dealers - W'Sale	Mayfair Distributors Pty. Ltd., State Abattoirs, Homebush	135540	1965	Area Match	0m
	SMALLGOODS MANUFACTURERS &/OR WHOLESALERS	Mayfair Distributors Pty. Ltd., State Abattoirs, Homebush	145196	1965	Area Match	0m
	Associations - Employers - Indust. & Professional	Meat Traders' Protective Association, Wholesale, New Meat Hall., Abattoirs, Homebush	47374	1965	Area Match	0m
	TALLOW MERCHANTS &/OR REFINERS	Metropolitan Meat Industry Board (The), State Abattoirs & Meat Works, Homebush	149932	1965	Area Match	0m
	POULTRY FOOD MFRS./DIST.	Metropolitan Meat Industry Board (The), State Abattoirs & Meat Works, Homebush	135593	1965	Area Match	0m
	Cold Stores	Metropolitan Meat Industry Board (The), State Abattoirs & Meat Works, Homebush Abattoir	69560	1965	Area Match	0m
	Fertilizer Manufacturers	Metropolitan Meat Industry Board (The), State Abattoirs & Meat Works, Homebush Abattoirs	85786	1965	Area Match	0m
	ABATTOIRS	Metropolitan Meat Industry Commissioner, Abattoirs, Homebush	43242	1965	Area Match	0m
	ABATTOIRS	N.S.W. State Abattoirs, Homebush	43243	1965	Area Match	0m
	Butchers' - Wholesale	Ryan, T. J. & Son (Carcase Butchers) Pty. Ltd., Meat Hall, Abattoirs, Homebush	59700	1965	Area Match	0m
	Meat Cartage Contractors	Ryan, T. J. & Son (Carcase Butchers) Pty. Ltd., Meat Hall, Abattoirs, Homebush	110504	1965	Area Match	0m
	STOCK FOODS MANUFACTURERS &/OR DISTRIBUTORS	Stockman Arthur (1939) Pty. Ltd., Dessicator Rd., Abattoirs Area, Homebush	149013	1965	Area Match	0m
	Produce Merch. - W'Sale	Stockman, Arthur (1939) Pty. Ltd., Dessicator Rd., Abattoirs Area, Homebush	136962	1965	Area Match	0m
	Butchers' - Wholesale	Walker, F. J. (Wholesale) Pty. Ltd., Country Meat Hall, Abattoirs Homebush	59713	1965	Area Match	0m
	Butchers' - Wholesale	White, J. L. (Meat Co.) Pty. Ltd., Abattoir St., Homebush	59715	1965	Area Match	0m
	ABATTOIRS	Woodham, T. G. Abattoirs, Homebush	43249	1965	Area Match	0m
	BUTCHERS-WHOLESALE	Amory Meat Co. Pty. Ltd., State Abattoirs, Homebush	281439	1961	Area Match	0m
	BACON & HAM CURERS	Barnes Bacon Co. Pty. Ltd., Abattoirs, Homebush	270703	1961	Area Match	0m
	SMALLGOODS MANUFACTURERS &/OR WHOLESALERS	Barnes Bacon Co. Pty. Ltd., Abattoirs, Homebush	250786	1961	Area Match	0m

Map Id	Business Activity	Premise	Ref No.	Year	Location Confidence	Distance to Road Corridor or Area
8	ABATTOIRS	Bawn, J. H. &. Co. Pty. Ltd., Abattoirs, Homebush	264442	1961	Area Match	0m
	VETERINARY SURGEONS	Brydon, P., Meat Inspector Services, State Abattoirs, Homebush	261056	1961	Area Match	0m
	BUTCHERS-WHOLESALE	City Wholesale Meat Pty. Ltd., Abattoirs, Homebush	281458	1961	Area Match	0m
	MEAT CANNERS	Colonial Wholesale Meat Co. Pty. Ltd., Abattoirs, Homebush	334322	1961	Area Match	0m
	BUTCHERS-WHOLESALE	Gunning, W., State Abattoirs, Homebush	281471	1961	Area Match	0m
	ABATTOIRS	Harvey, Little & Co. Ltd., Homebush Abattoirs	264448	1961	Area Match	0m
	BUTCHERS-WHOLESALE	Humphrey's, H., Abattoirs Meat Hall., Homebush	281479	1961	Area Match	0m
	CANNERS & CANNED FOOD SPECIALISTS	Intercontinental Packers Pty. Ltd., Abattoirs, Homebush	283562	1961	Area Match	0m
	FOOD EXPORTERS	Intercontinental Packers Pty. Ltd., Abattoirs, Homebush	312384	1961	Area Match	0m
	MEAT CANNERS	Intercontinental Packers Pty. Ltd., Abattoirs, Homebush	334324	1961	Area Match	0m
	BUTCHERS-WHOLESALE	Knapp, R. A., State Abattoirs, Homebush Bay	281483	1961	Area Match	0m
	VETERINARY SURGEONS	Marshall, A. C., Abattoirs, Homebush Bay	261100	1961	Area Match	0m
	CANNERS & CANNED FOOD SPECIALISTS	Mayfair Distributors Pty. Ltd., Abattoirs, Homebush	283575	1961	Area Match	0m
	EXPORTERS	Mayfair Distributors Pty. Ltd., Abattoirs, Homebush	309291	1961	Area Match	0m
	FREEZING COMPANIES	Mayfair Distributors Pty. Ltd., Abattoirs, Homebush	313822	1961	Area Match	0m
	FOOD PROCESSORS/PACKERS	Mayfair Distributors Pty. Ltd., State Abattoirs, Homebush	312540	1961	Area Match	0m
	MEAT CANNERS	Mayfair Distributors Pty. Ltd., State Abattoirs, Homebush	334327	1961	Area Match	0m
	MEAT EXTRACT MFRS.	Mayfair Distributors Pty. Ltd., State Abattoirs, Homebush	334381	1961	Area Match	0m
	POULTRY DEALERS-W'SALE	Mayfair Distributors Pty. Ltd., State Abattoirs, Homebush	361536	1961	Area Match	0m
	SMALLGOODS MANUFACTURERS &/OR WHOLESALERS	Mayfair Distributors Pty. Ltd., State Abattoirs, Homebush	250804	1961	Area Match	0m
	ASSOCIATIONS-EMPLOYERS-INDUST. & PROFESSIONAL	Meat Traders' Protective Association, Wholesale, New Meat Hall, Abattoirs, Homebush	269868	1961	Area Match	0m
	ABATTOIRS	Metropolitan Meat Industry Commissioner., Abattoirs., Homebush	264449	1961	Area Match	0m
	ABATTOIRS	N.S.W. State Abattoirs, Homebush	264450	1961	Area Match	0m
	BUTCHERS-WHOLESALE	O'Gorman Bros Abattoirs., Homebush	281496	1961	Area Match	0m
	ABATTOIRS	Rogers Meat Co. Pty. Ltd., Abattoirs, Homebush	264452	1961	Area Match	0m
	BUTCHERS-WHOLESALE	Ryan, T. J. & Sons Pty. Ltd., Abattoirs, Homebush	281505	1961	Area Match	0m
	ABATTOIRS	Saulan Pty. Ltd., State Abattoirs, Homebush	264453	1961	Area Match	0m
	BUTCHERS-WHOLESALE	Smith, H. C. L., Abattoirs, Homebush	281509	1961	Area Match	0m
	VETERINARY SURGEONS	Thorpe, G. K., State Abattoirs, Homebush	261134	1961	Area Match	0m
	ABATTOIRS	Woodham, T. G., Abattoirs, Homebush	264457	1961	Area Match	0m
	ABATTOIRS	Adlam, R., Homebush Abattoirs, Homebush.	2	1950	Area Match	0m
	BUTCHERS-WHOLESALE	Amory, A., State Abattoirs, Homebush	14583	1950	Area Match	0m
	ABATTOIRS	Borthwick, Thos. and Sons (A/sia) Ltd., Abattoirs, Homebush	8	1950	Area Match	0m
	ABATTOIRS	Colonial Wholesale Meat Co Pty. Ltd., Abattoirs, Homebush.	1	1950	Area Match	0m

Map Id	Business Activity	Premise	Ref No.	Year	Location Confidence	Distance to Road Corridor or Area
8	MEAT CANNERS	Colonial Wholesale Meat Co. Pty. Ltd., Abattoirs, Homebush	72238	1950	Area Match	0m
	BUTCHERS-WHOLESALE	Knapp, R. A., State Abattoirs, Homebush Bay	14625	1950	Area Match	0m
	ABATTOIRS	McDonald Bros. Ltd., Abattoirs, Homebush	20	1950	Area Match	0m
	ABATTOIRS	N.S.W. State Abattoirs, Homebush	24	1950	Area Match	0m
	BUTCHERS-WHOLESALE	O'Connor, O., Abattoirs, Homebush	14640	1950	Area Match	0m
	BUTCHERS-WHOLESALE	O'Gorman Bros., Abattoirs, Homebush	14641	1950	Area Match	0m
	BUTCHERS-WHOLESALE	Oldham, G,. Abattoirs, Homebush	14642	1950	Area Match	0m
	BUTCHERS-WHOLESALE	Pistole, T., Abattoirs, Homebush	14643	1950	Area Match	0m
	BUTCHERS-RETAIL	Playfair, Thomas Ltd., Abattoirs	14136	1950	Area Match	0m
	ABATTOIRS	Rogers Meat Co. Pty. Ltd., Abattoirs, Homebush	28	1950	Area Match	0m
	ABATTOIRS	Ryan, G. C. and Sons, Abattoirs, Homebush	31	1950	Area Match	0m
	BUTCHERS-WHOLESALE	Ryan, G. C. and Sons, Abattoirs, Homebush	14650	1950	Area Match	0m
	BUTCHERS-RETAIL	Ryan, T. J., Homebush Abattoirs, Homebush	14262	1950	Area Match	0m
	BUTCHERS-WHOLESALE	Scott, G. M. and Son, Depot, State Abattoirs, Homebush Bay	14651	1950	Area Match	0m
	BUTCHERS-WHOLESALE	Smith, T., Abattoirs, Homebush	14655	1950	Area Match	0m
	BUTCHERS-WHOLESALE	Williams, R. and Sons, Abattoirs, Homebush	14669	1950	Area Match	0m
	BUTCHERS-WHOLESALE	Woodham, T. G., Abattoirs, Homebush	14671	1950	Area Match	0m

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Historical Business Directories

7 Figtree Drive, Sydney Olympic Park, NSW 2127

Dry Cleaners, Motor Garages & Service Stations 1948-1993 Premise or Road Intersection Matches

Dry Cleaners, Motor Garages & Service Stations from UBD Business Directories, mapped to a premise or road intersection, within the dataset buffer.

Note: The Universal Business Directories were published between 1948 and 1993. Dry Cleaners, Motor Garages & Service Stations have been extracted from all of these directories except the following years 1951, 1955, 1957, 1960, 1963, 1973, 1974, 1977, 1987.

Map Id	Business Activity	Premise	Ref No.	Year	Location Confidence	Distance to Property Boundary or Road Intersection	Direction
N/A	No records in buffer						

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Dry Cleaners, Motor Garages & Service Stations 1948-1993 Road or Area Matches

Dry Cleaners, Motor Garages & Service Stations from UBD Business Directories, mapped to a road or an area, within the dataset buffer. Records are mapped to the road when a building number is not supplied, cannot be found, or the road has been renumbered since the directory was published.

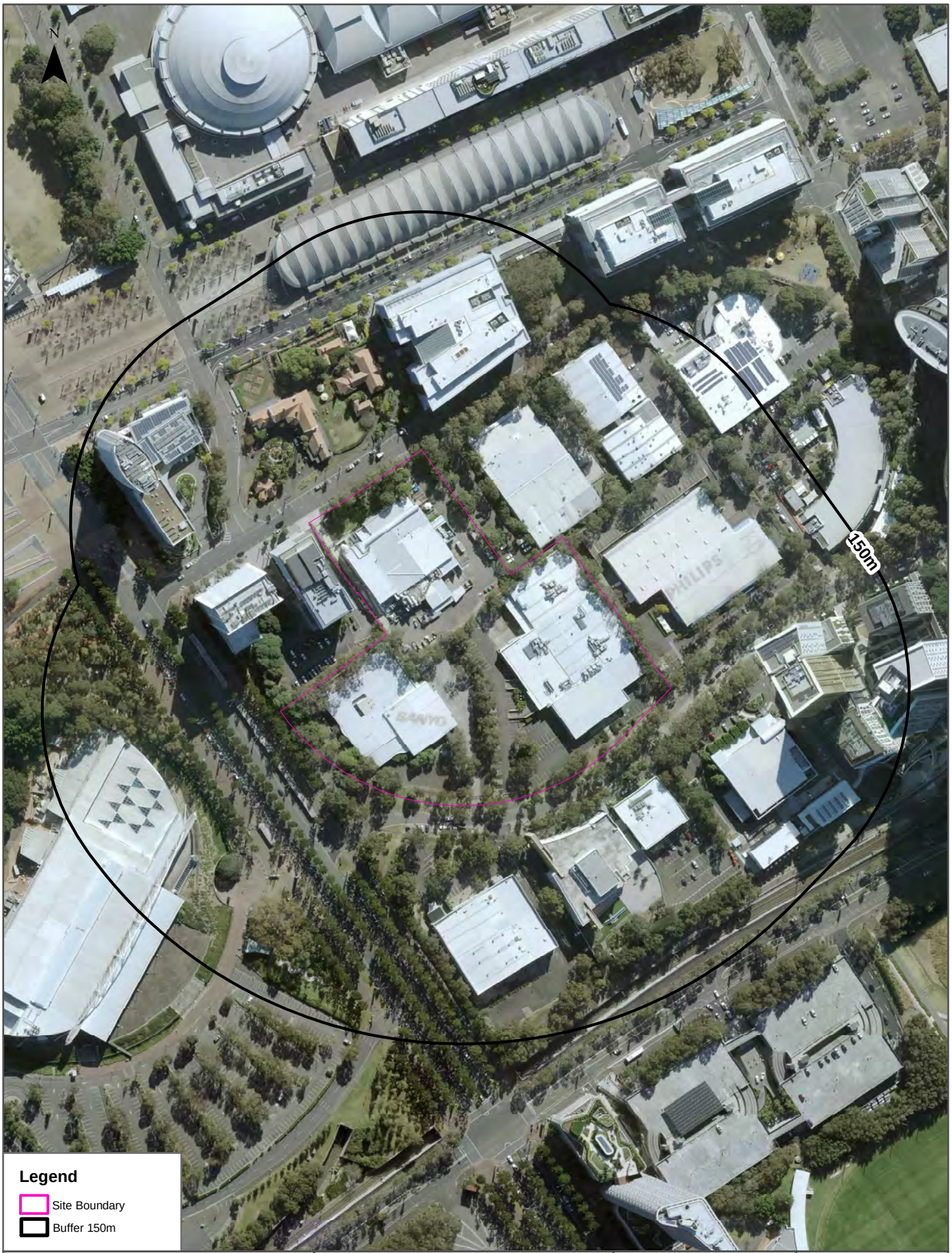
Note: The Universal Business Directories were published between 1948 and 1993. Dry Cleaners, Motor Garages & Service Stations have been extracted from all of these directories except the following years 1951, 1955, 1957, 1960, 1963, 1973, 1974, 1977, 1987.

Map Id	Business Activity	Premise	Ref No.	Year	Location Confidence	Distance to Road Corridor or Area
N/A	No records in buffer					

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Aerial Imagery 2021

7 Figtree Drive, Sydney Olympic Park, NSW 2127



Scale:	Data Source Aerial Imagery:	Coordinate System:	Date: 03 February 2022
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Aerial Imagery 2016

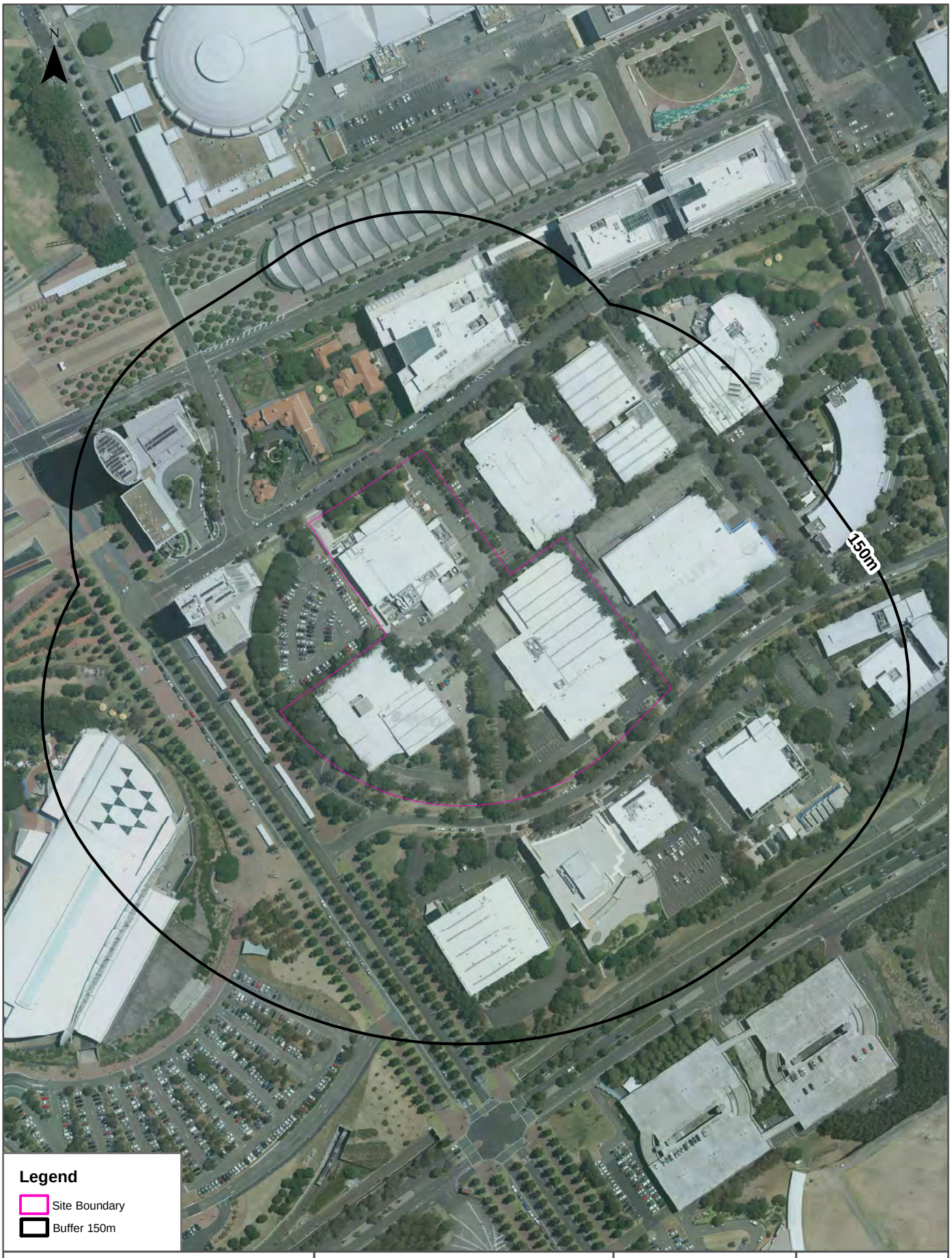
7 Figtree Drive, Sydney Olympic Park, NSW 2127



Scale: 0 30 60 90 120 Meters	Data Source Aerial Imagery: © Aerometrex Pty Ltd	Coordinate System: GDA 1994 MGA Zone 56	Date: 03 February 2022

Aerial Imagery 2011

7 Figtree Drive, Sydney Olympic Park, NSW 2127



Scale:	Data Source Aerial Imagery:	Coordinate System:	Date: 03 February 2022
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Aerial Imagery 2005

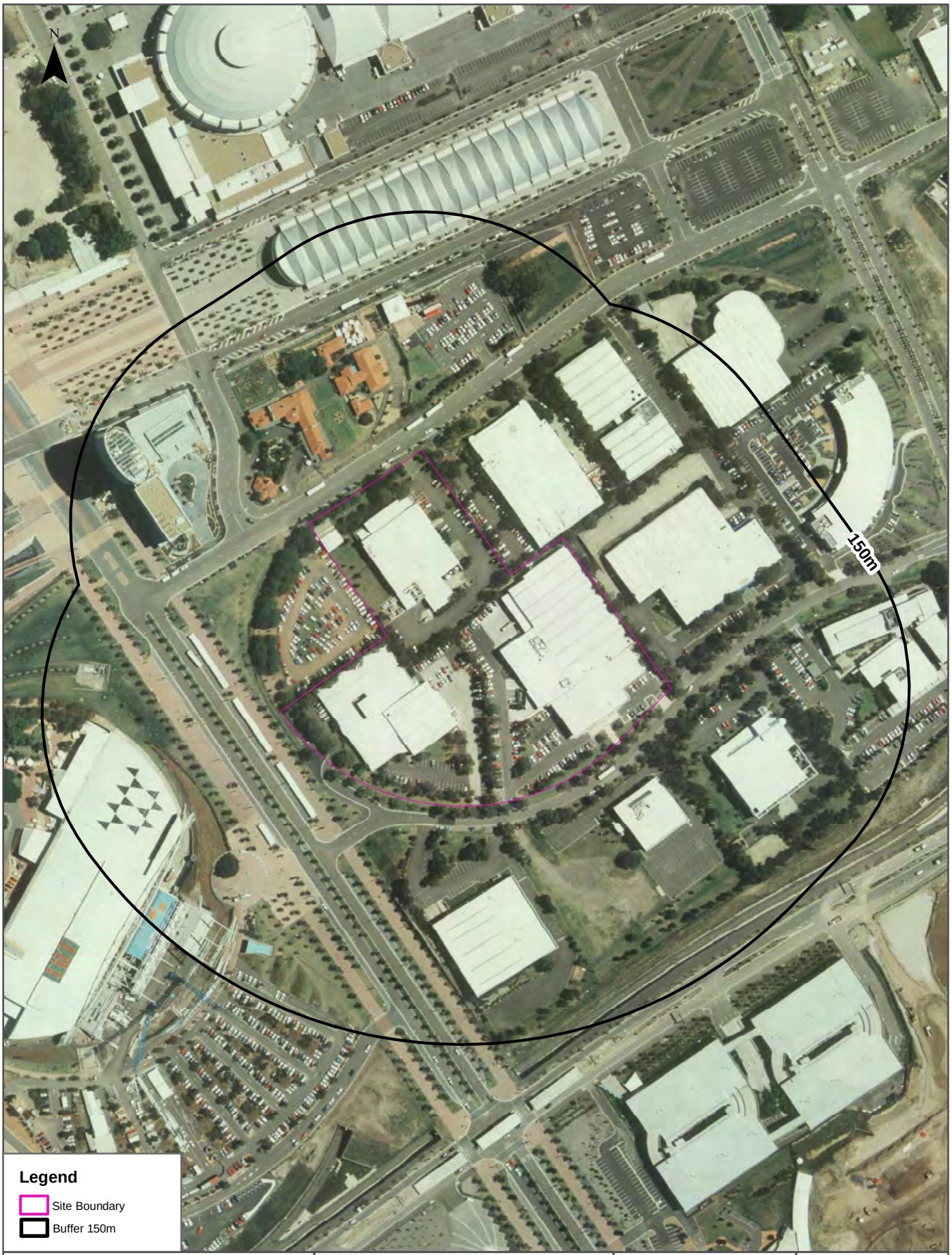
7 Figtree Drive, Sydney Olympic Park, NSW 2127



Scale: 0 30 60 90 120 Meters	Data Source Aerial Imagery: © Aerometrex Pty Ltd	Coordinate System: GDA 1994 MGA Zone 56	Date: 03 February 2022

Aerial Imagery 2000

7 Figtree Drive, Sydney Olympic Park, NSW 2127



Scale: 0 30 60 90 120 Meters	Data Source Aerial Imagery: © Aerometrex Pty Ltd	Coordinate System: GDA 1994 MGA Zone 56	Date: 03 February 2022

Aerial Imagery 1994

7 Figtree Drive, Sydney Olympic Park, NSW 2127



Aerial Imagery 1991

7 Figtree Drive, Sydney Olympic Park, NSW 2127



Scale: 0 30 60 90 120 Meters	Data Sources: Aerial Imagery: © NSW Department of Customer Service	Coordinate System: GDA 1994 MGA Zone 56	Date: 03 February 2022

Aerial Imagery 1986

7 Figtree Drive, Sydney Olympic Park, NSW 2127



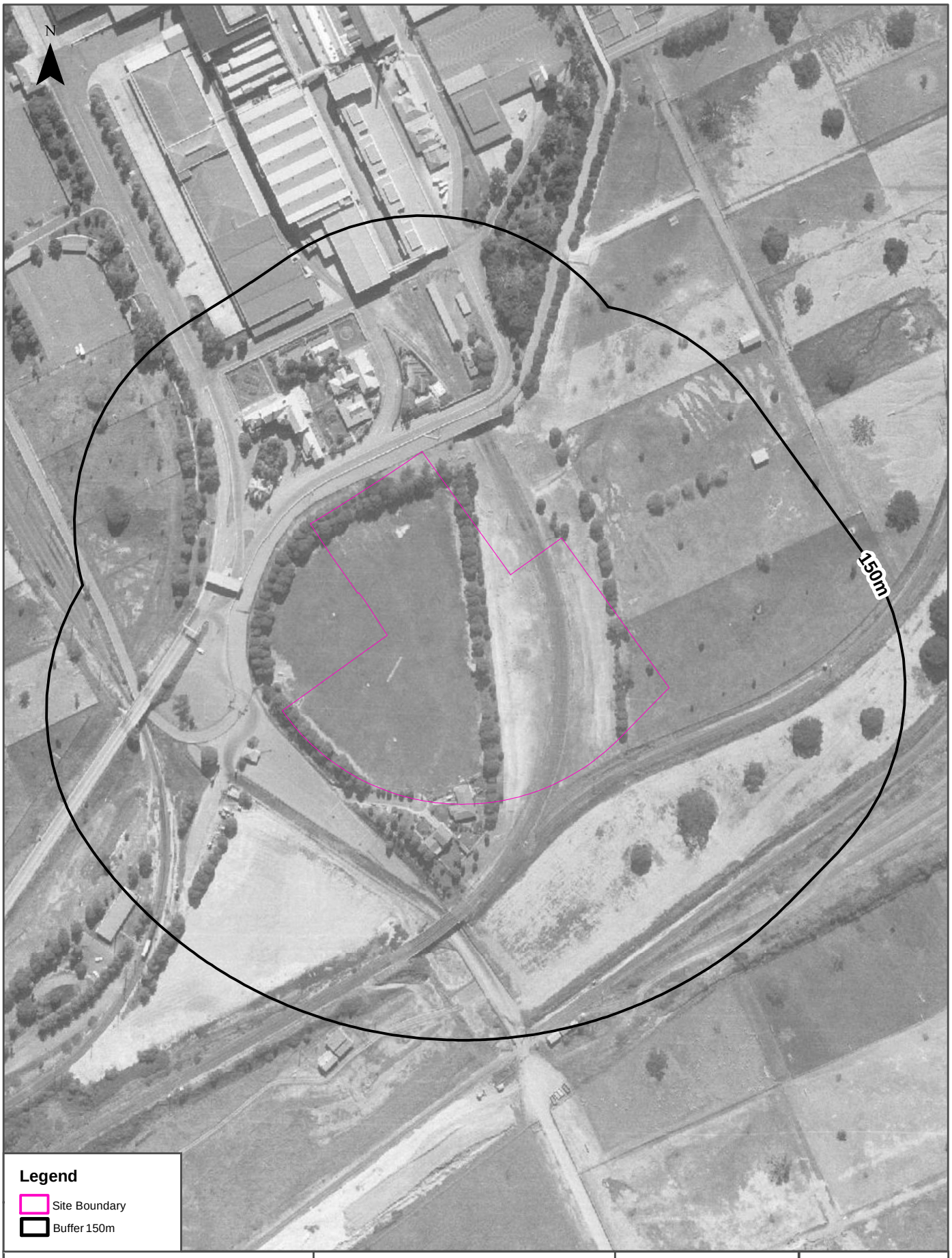
Aerial Imagery 1982

7 Figtree Drive, Sydney Olympic Park, NSW 2127



Aerial Imagery 1978

7 Figtree Drive, Sydney Olympic Park, NSW 2127



Aerial Imagery 1970

7 Figtree Drive, Sydney Olympic Park, NSW 2127



Aerial Imagery 1965

7 Figtree Drive, Sydney Olympic Park, NSW 2127



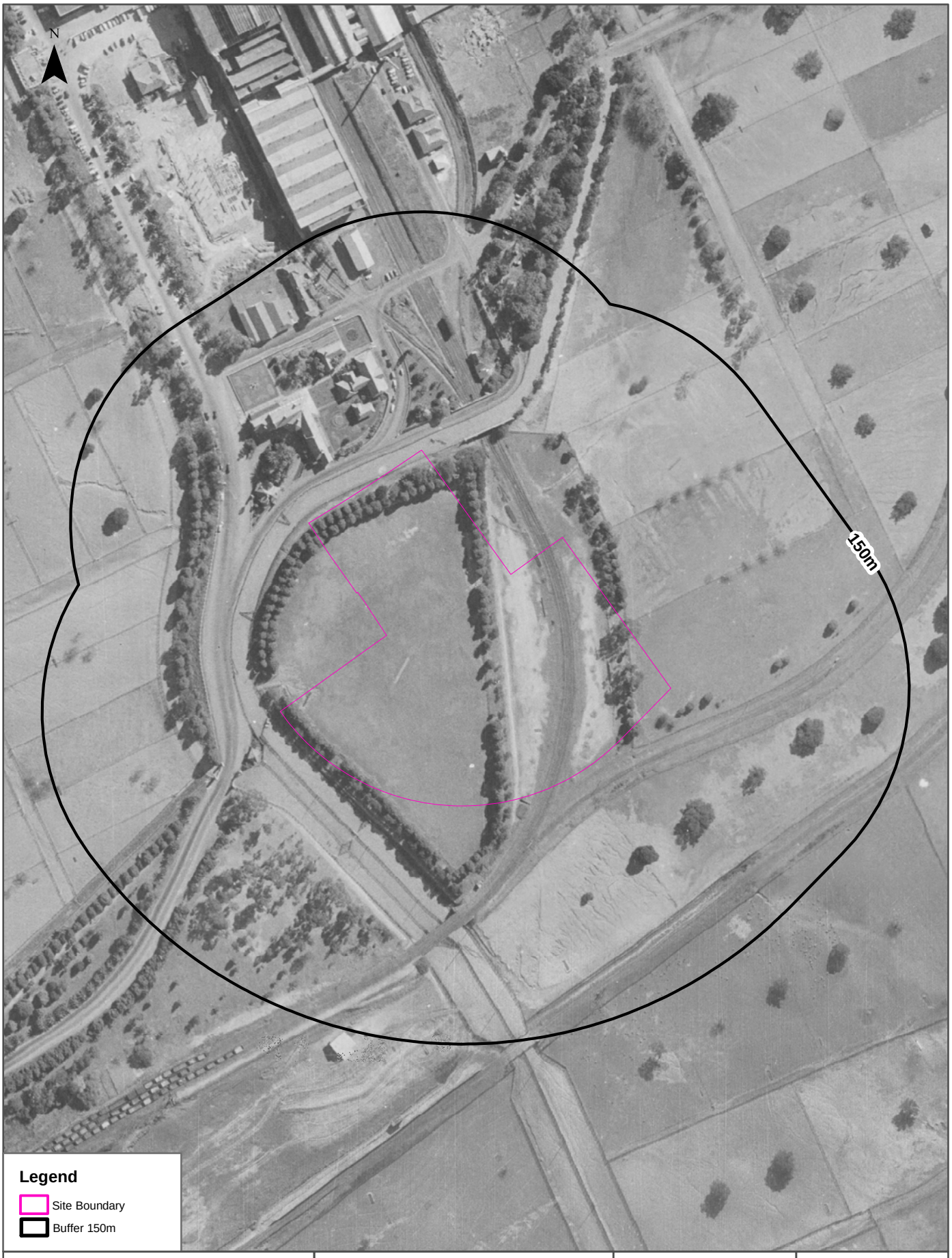
Aerial Imagery 1961

7 Figtree Drive, Sydney Olympic Park, NSW 2127



Aerial Imagery 1955, 1956

7 Figtree Drive, Sydney Olympic Park, NSW 2127



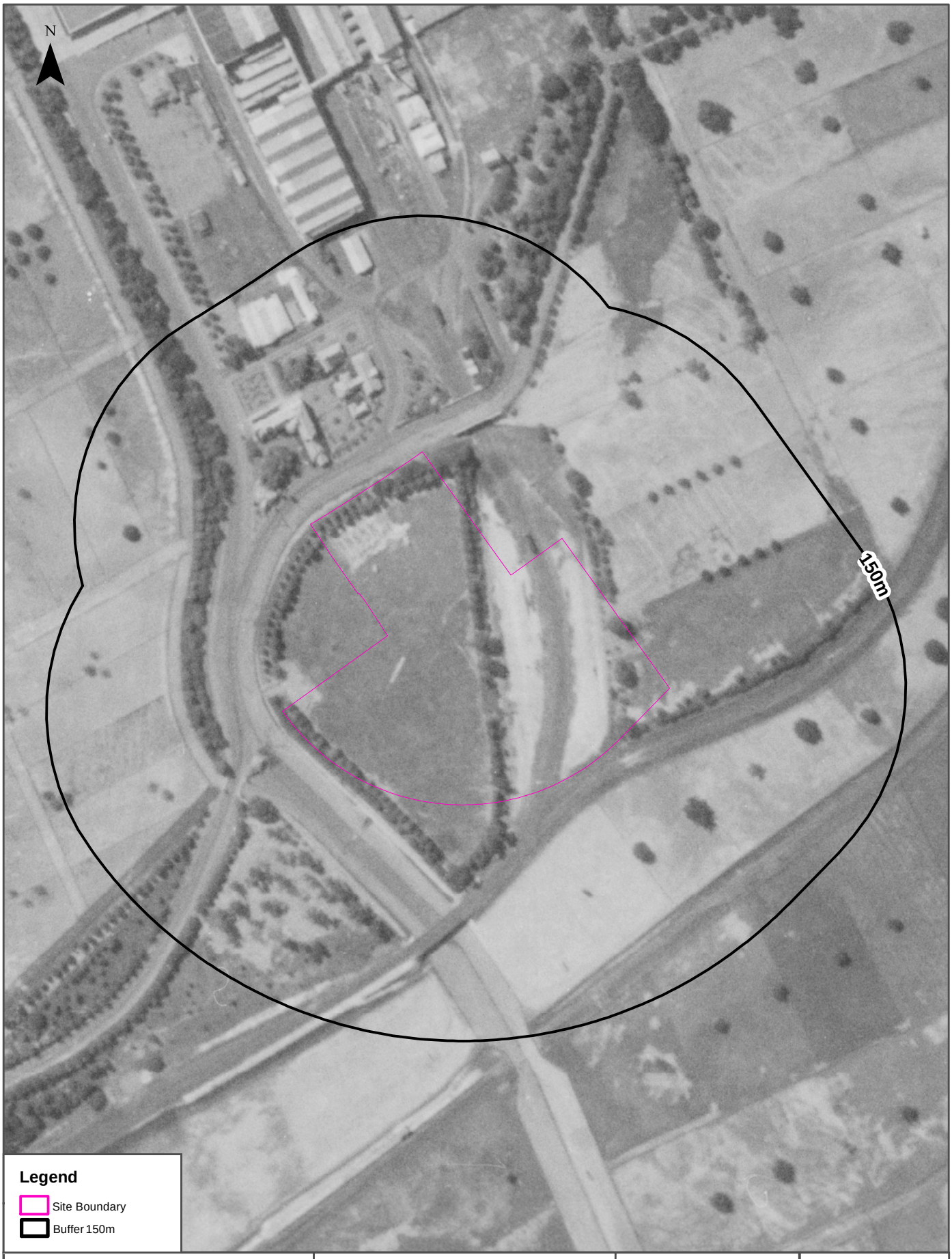
Aerial Imagery 1951

7 Figtree Drive, Sydney Olympic Park, NSW 2127



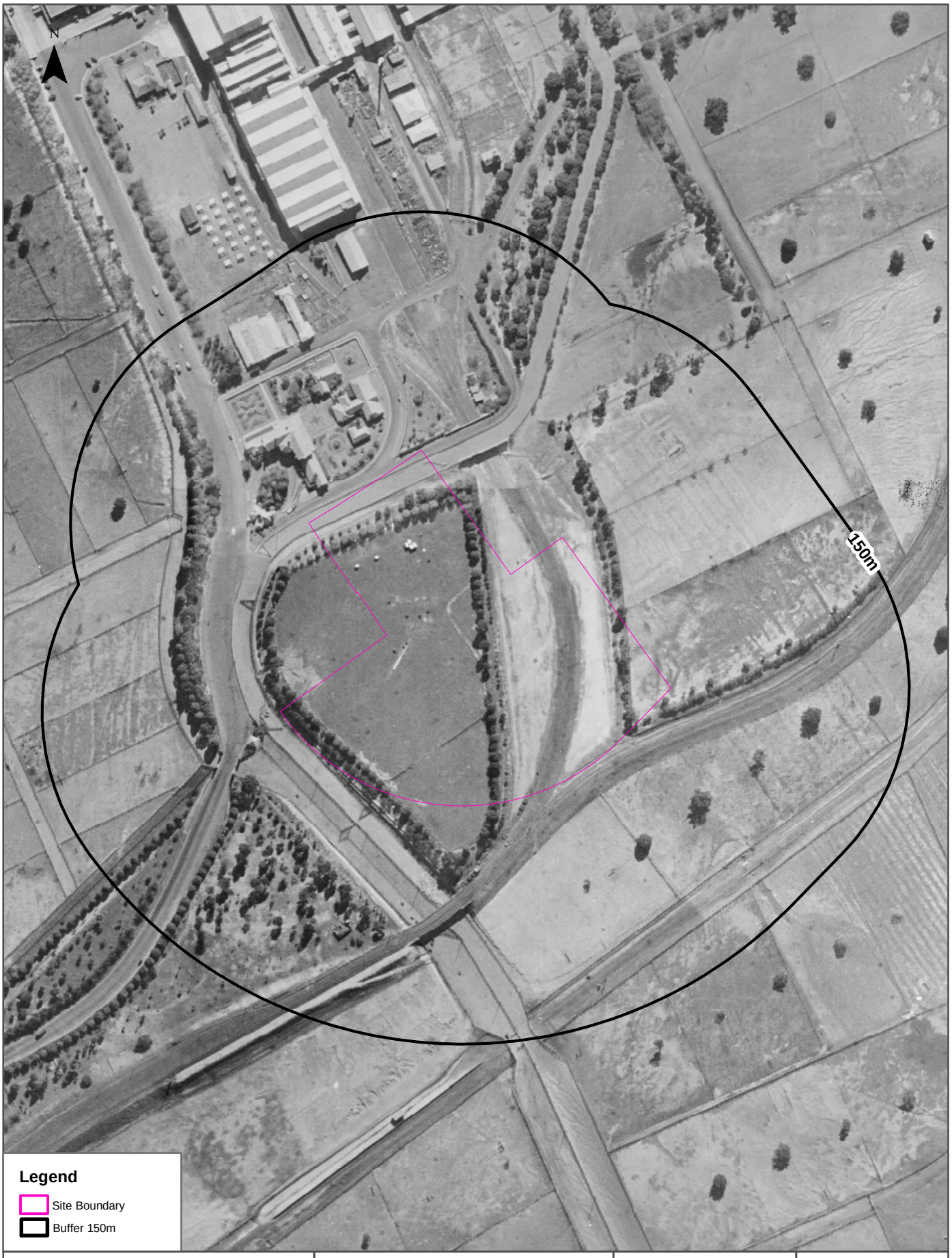
Aerial Imagery 1949

7 Figtree Drive, Sydney Olympic Park, NSW 2127



Aerial Imagery 1943

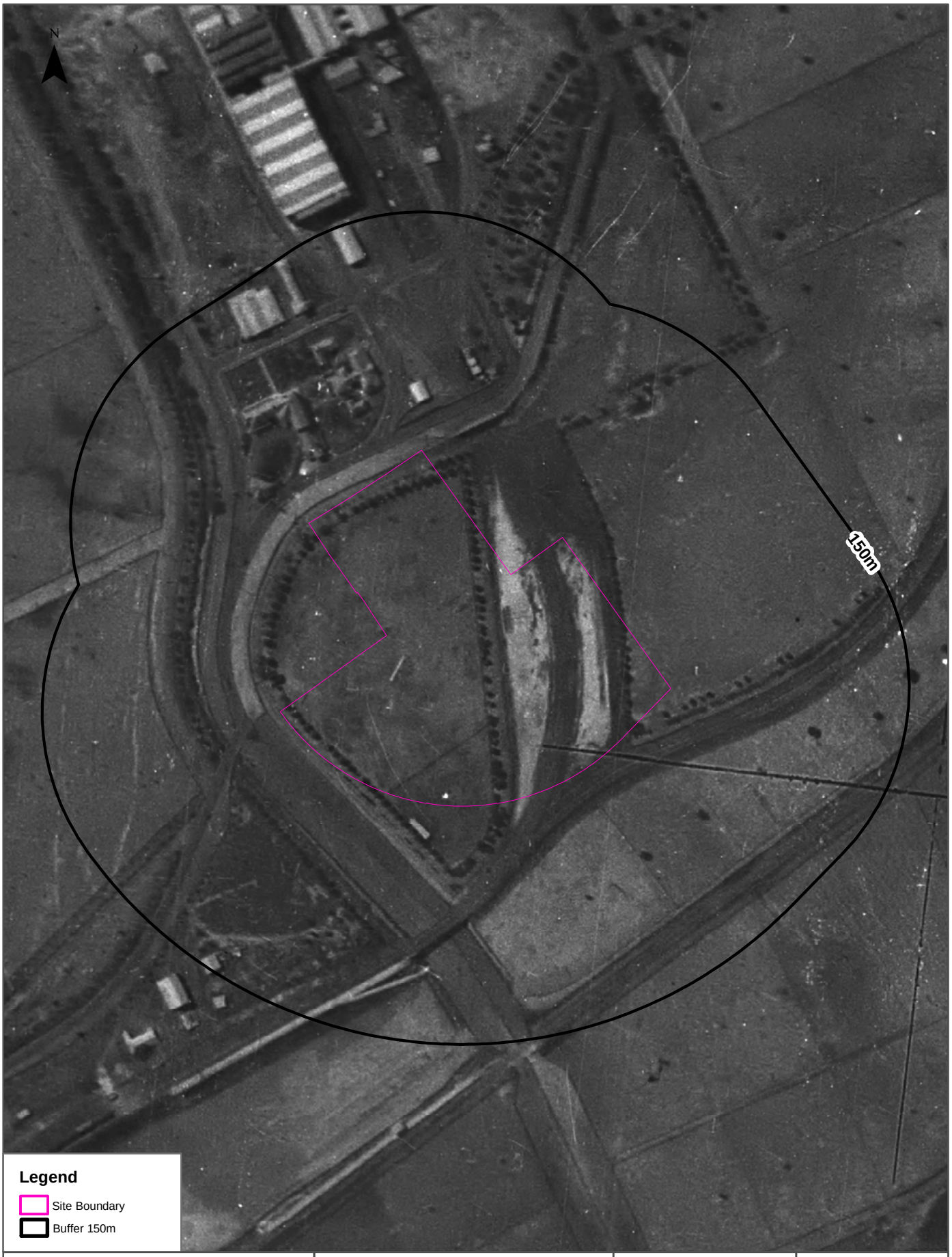
7 Figtree Drive, Sydney Olympic Park, NSW 2127



Scale: 0 30 60 90 120 Meters	Data Source Aerial Imagery: © Aerometrex Pty Ltd	Coordinate System: GDA 1994 MGA Zone 56	Date: 03 February 2022

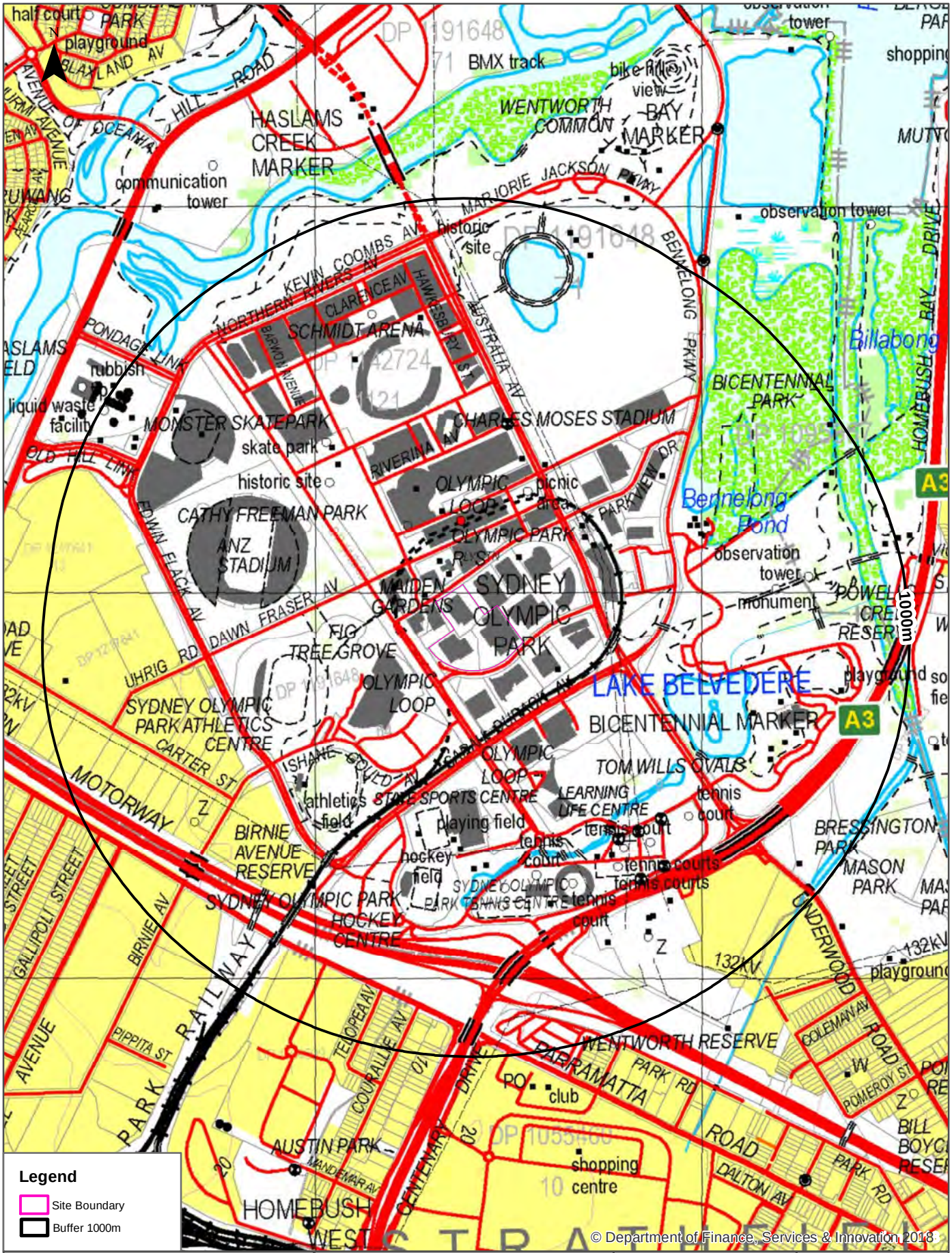
Aerial Imagery 1930

7 Figtree Drive, Sydney Olympic Park, NSW 2127



Topographic Map 2015

7 Figtree Drive, Sydney Olympic Park, NSW 2127



Scale: 0 150 300 450 600 Meters

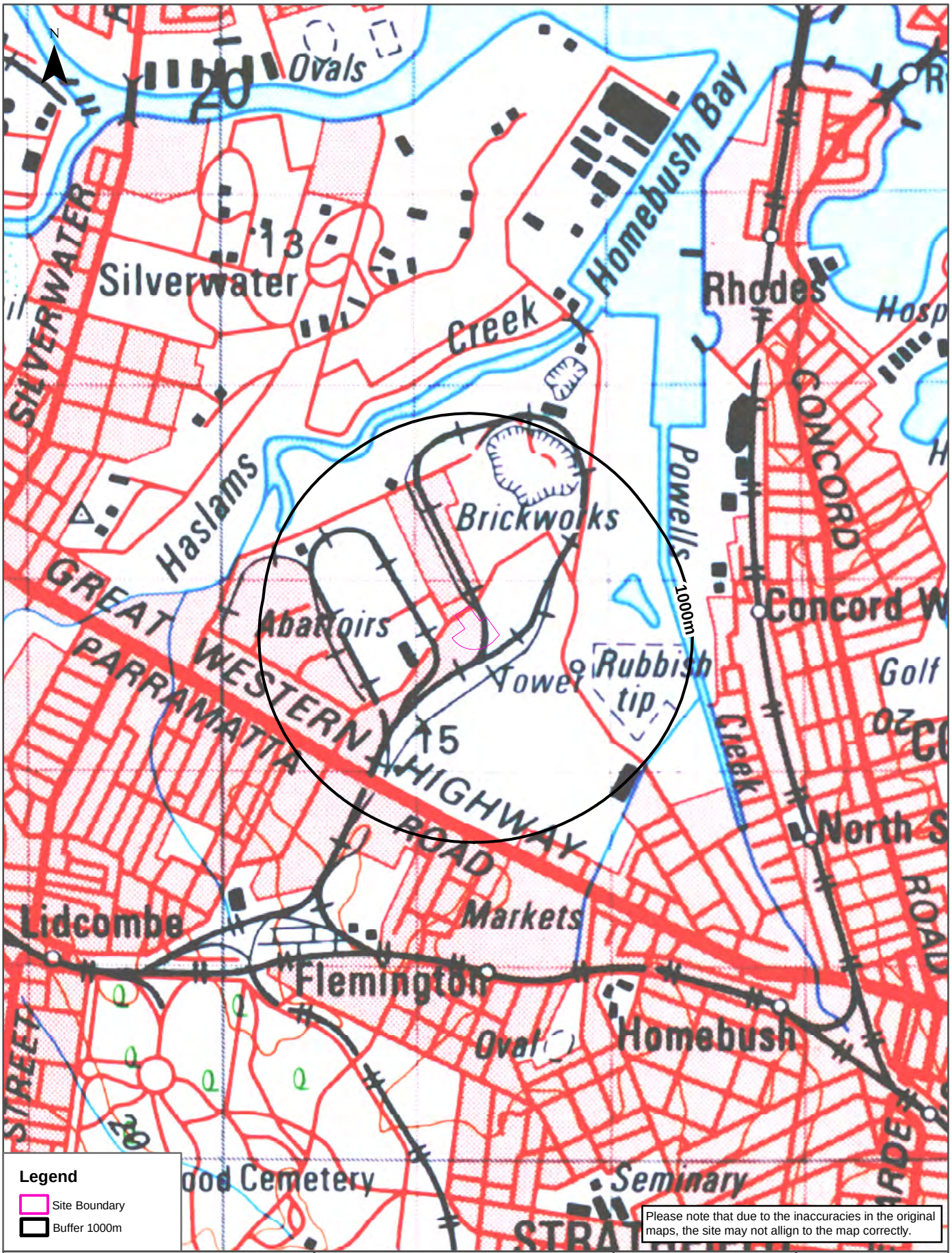
Data Sources: Topographic Map Data © NSW Land and Property Information

Coordinate System: GDA 1994 MGA Zone 56

Date: 03 February 2022

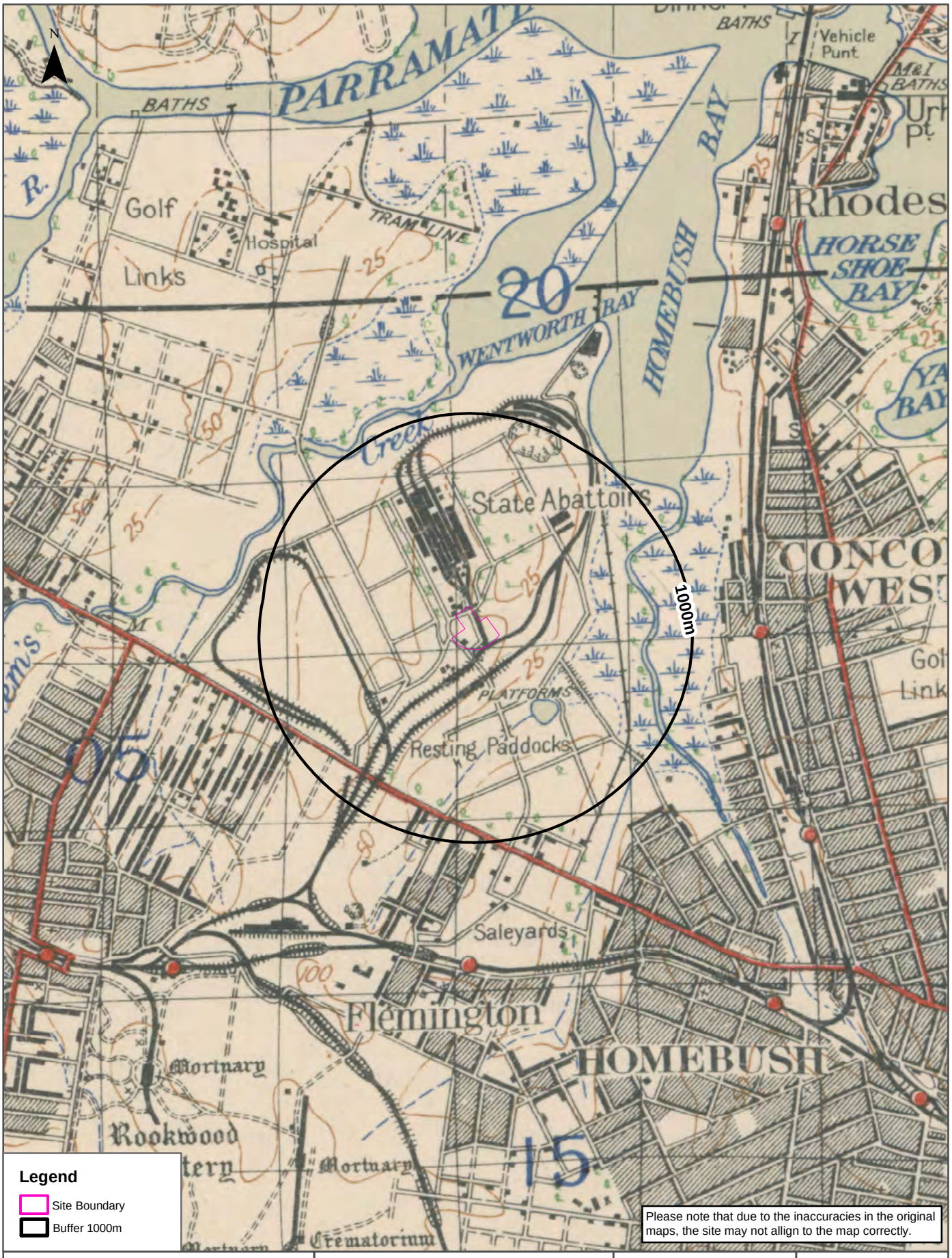
Historical Map 1975

7 Figtree Drive, Sydney Olympic Park, NSW 2127



Historical Map c.1936

7 Figtree Drive, Sydney Olympic Park, NSW 2127



Scale: 0 310 620 930 1,240 Meters

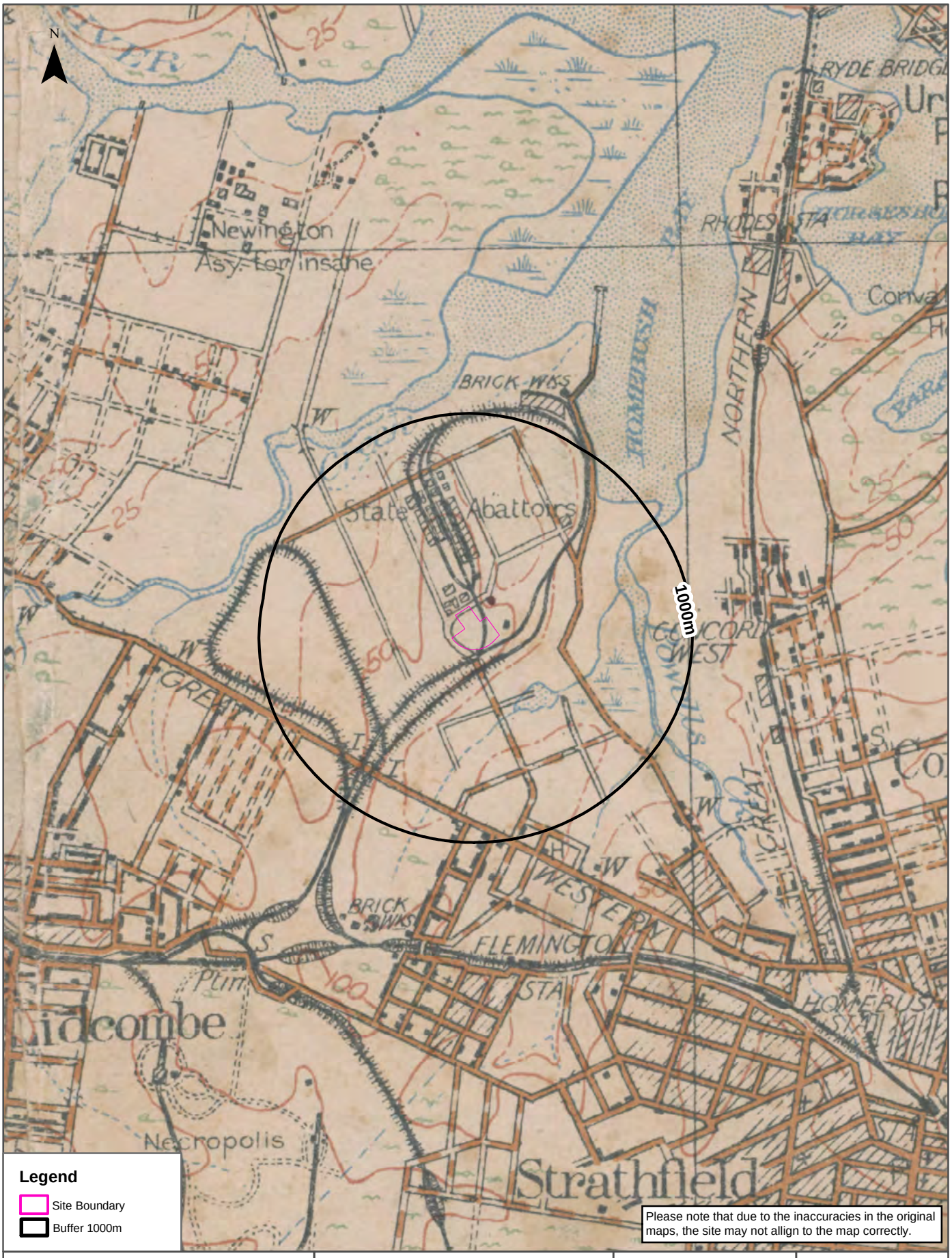
Data Sources: Australia 1:63360
Produced by Australian Section Imperial General Staff

Coordinate System:
GDA 1994 MGA Zone 56

Date: 03 February 2022

Historical Map c.1917

7 Figtree Drive, Sydney Olympic Park, NSW 2127



Scale: 0 310 620 930 1,240 Meters

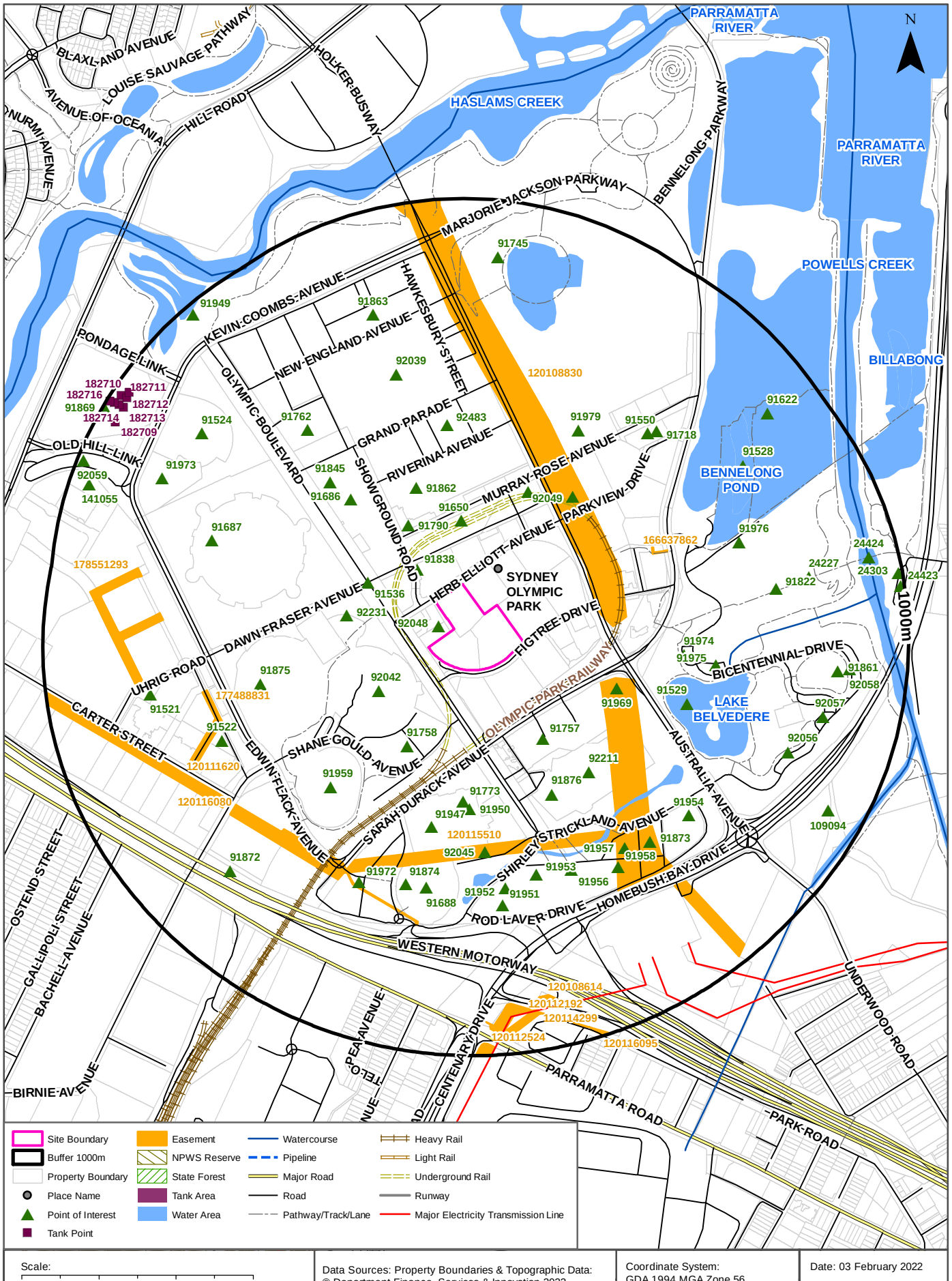
Data Sources: Australia 1:63360
Produced by Australian Section Imperial General Staff

Coordinate System:
GDA 1994 MGA Zone 56

Date: 03 February 2022

Topographic Features

7 Figtree Drive, Sydney Olympic Park, NSW 2127



Topographic Features

7 Figtree Drive, Sydney Olympic Park, NSW 2127

Points of Interest

What Points of Interest exist within the dataset buffer?

Map Id	Feature Type	Label	Distance	Direction
92048	Parking Area	Parking Area	30m	West
91838	Park	MAIDEN GARDENS	95m	North West
91650	Railway Station	OLYMPIC PARK RAILWAY STATION	164m	North
92042	Swimming Pool Facility	SYDNEY OLYMPIC PARK AQUATIC CENTRE	171m	South West
91536	Urban Place	SYDNEY OLYMPIC PARK	182m	North West
91790	Tourist Information Centre	SYDNEY OLYMPIC PARK VISITOR CENTRE	205m	North West
91757	Parking Area	Parking Area	226m	South East
92231	Park	FIG TREE GROVE	227m	West
91758	Parking Area	Parking Area	237m	South West
91969	Mountain Like	BICENTENNIAL MARKER	271m	East
91862	Community Facility	THE DOME	277m	North
91786	Park	STATION SQUARE	293m	North
91773	High School	SEDA COLLEGE NSW OLYMPIC PARK	342m	South
92049	Parking Area	Parking Area	343m	North East
91686	Park	CATHY FREEMAN PARK	344m	North West
91950	Sports Centre	STATE SPORTS CENTRE	360m	South
92211	Sports Field	TOM WILLS OVALS	364m	South East
91876	Sports Centre	LEARNING LIFE CENTRE	365m	South East
91845	Historic Site	OLYMPIC CAULDRON AT SYDNEY OLYMPIC PARK	412m	North West
92483	Sports Field	CHARLES MOSES STADIUM	415m	North
91947	Sports Field	PLAYING FIELD	417m	South
91974	Parking Area	Parking Area	418m	East
91959	Sports Field	ATHLETICS FIELD	436m	South West
91875	Sports Centre	SYDNEY OLYMPIC PARK ATHLETICS CENTRE	447m	West
91529	Manmade Waterbody	LAKE BELVEDERE	455m	East
92045	Parking Area	Parking Area	472m	South
91979	Parking Area	Parking Area	498m	North East
91975	Parking Area	Parking Area	504m	East
91953	Sports Court	TENNIS COURT	550m	South
91762	Sports Centre	MONSTER SKATEPARK	555m	North West
91956	Sports Centre	SYDNEY OLYMPIC PARK TENNIS CENTRE	565m	South

Map Id	Feature Type	Label	Distance	Direction
91952	Sports Court	TENNIS COURT	570m	South
92039	Showground	SYDNEY SHOWGROUND STADIUM	571m	North
91688	Sports Field	HOCKEY FIELD	574m	South
91874	Sports Centre	SYDNEY OLYMPIC PARK HOCKEY CENTRE	576m	South
91957	Sports Court	TENNIS COURTS	579m	South East
91522	Park	OSPREY PARK	588m	South West
91550	Community Facility	NSW RURAL FIRE SERVICE HEADQUARTERS	593m	North East
91687	Sports Centre	ANZ STADIUM	601m	West
91873	Sports Court	TENNIS COURT	604m	South East
91972	Parking Area	SOUTHERN CAR PARK	610m	South West
91958	Sports Court	TENNIS COURTS	612m	South East
91718	SES Facility	METRO SES HEADQUARTERS	613m	North East
91951	Sports Court	TENNIS COURTS	613m	South
91976	Parking Area	Parking Area	617m	East
91954	Sports Court	TENNIS COURT	622m	South East
91822	Monument	BICENTENNIAL FOUNTAINS	670m	East
91528	Natural Waterbody	BENNELONG POND	729m	North East
91521	Park	LITTLE EAGLE GREEN	732m	West
91863	Sports Court	SCHMIDT ARENA	736m	North
92056	Parking Area	Parking Area	744m	East
91524	Tourist Attraction	QUDOS BANK ARENA	747m	North West
24227	Observation Tower	TREILLAGE TOWER	760m	East
91872	Park	BIRNIE AVENUE RESERVE	772m	South West
91973	Parking Area	Parking Area	777m	North West
92057	Parking Area	Parking Area	801m	East
91861	Park	PLAYGROUND	819m	East
92058	Parking Area	Parking Area	850m	East
91745	Historic Site	THE BRICKPIT	852m	North
91622	Park	BICENTENNIAL PARK	860m	North East
109094	Sports Field	BRESSINGTON PARK	904m	South East
24424	Parking Area	Parking Area	922m	East
141055	Park	KESTREL PARK	948m	West
91949	Wharf	HASLAMS PIER	975m	North West
92059	Parking Area	Parking Area	983m	North West
91869	Rubbish Depot	LIQUID WASTE FACILITY	989m	North West
24423	Parking Area	Parking Area	989m	East
24303	Park	POWELLS CREEK RESERVE	989m	East

Topographic Data Source: © Land and Property Information (2015)
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Topographic Features

7 Figtree Drive, Sydney Olympic Park, NSW 2127

Tanks (Areas)

What are the Tank Areas located within the dataset buffer?
Note. The large majority of tank features provided by LPI are derived from aerial imagery & are therefore primarily above ground tanks.

Map Id	Tank Type	Status	Name	Feature Currency	Distance	Direction
N/A	No records in buffer					

Tanks (Points)

What are the Tank Points located within the dataset buffer?
Note. The large majority of tank features provided by LPI are derived from aerial imagery & are therefore primarily above ground tanks.

Map Id	Tank Type	Status	Name	Feature Currency	Distance	Direction
182709	Undefined	Operational		22/07/2018	951m	North West
182713	Undefined	Operational		22/07/2018	953m	North West
182711	Undefined	Operational		22/07/2018	958m	North West
182712	Undefined	Operational		22/07/2018	961m	North West
182714	Undefined	Operational		22/07/2018	966m	North West
182710	Undefined	Operational		22/07/2018	974m	North West
182715	Undefined	Operational		22/07/2018	979m	North West
182716	Undefined	Operational		22/07/2018	991m	North West

Tanks Data Source: © Land and Property Information (2015)
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Major Easements

What Major Easements exist within the dataset buffer?
Note. Easements provided by LPI are not at the detail of local governments. They are limited to major easements such as Right of Carriageway, Electrical Lines (66kVa etc.), Easement to drain water & Significant subterranean pipelines (gas, water etc.).

Map Id	Easement Class	Easement Type	Easement Width	Distance	Direction
120108830	Primary	Undefined		211m	North East
166637862	Primary	Right of way	4m	405m	North East
120115510	Primary	Undefined		452m	South
177488831	Primary	Right of way	20 & VAR	568m	West
120116080	Primary	Undefined		582m	South West
120111620	Primary	Undefined		594m	South West
178551293	Primary	Right of way	20m	691m	West

Map Id	Easement Class	Easement Type	Easement Width	Distance	Direction
120108614	Primary	Undefined		861m	South
120114299	Primary	Undefined		895m	South
120112192	Primary	Undefined		903m	South
120112524	Primary	Undefined		968m	South
120116095	Primary	Undefined		975m	South

Easements Data Source: © Land and Property Information (2015)
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Topographic Features

7 Figtree Drive, Sydney Olympic Park, NSW 2127

State Forest

What State Forest exist within the dataset buffer?

State Forest Number	State Forest Name	Distance	Direction
N/A	No records in buffer		

State Forest Data Source: © NSW Department of Finance, Services & Innovation (2018)
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National Parks and Wildlife Service Reserves

What NPWS Reserves exist within the dataset buffer?

Reserve Number	Reserve Type	Reserve Name	Gazetted Date	Distance	Direction
N/A	No records in buffer				

NPWS Data Source: © NSW Department of Finance, Services & Innovation (2018)
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Elevation Contours (m AHD)

7 Figtree Drive, Sydney Olympic Park, NSW 2127



Hydrogeology & Groundwater

7 Figtree Drive, Sydney Olympic Park, NSW 2127

Hydrogeology

Description of aquifers within the dataset buffer:

Description	Distance	Direction
Porous, extensive aquifers of low to moderate productivity	0m	On-site

Hydrogeology Map of Australia : Commonwealth of Australia (Geoscience Australia)
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Temporary Water Restriction (Botany Sands Groundwater Source) Order 2018

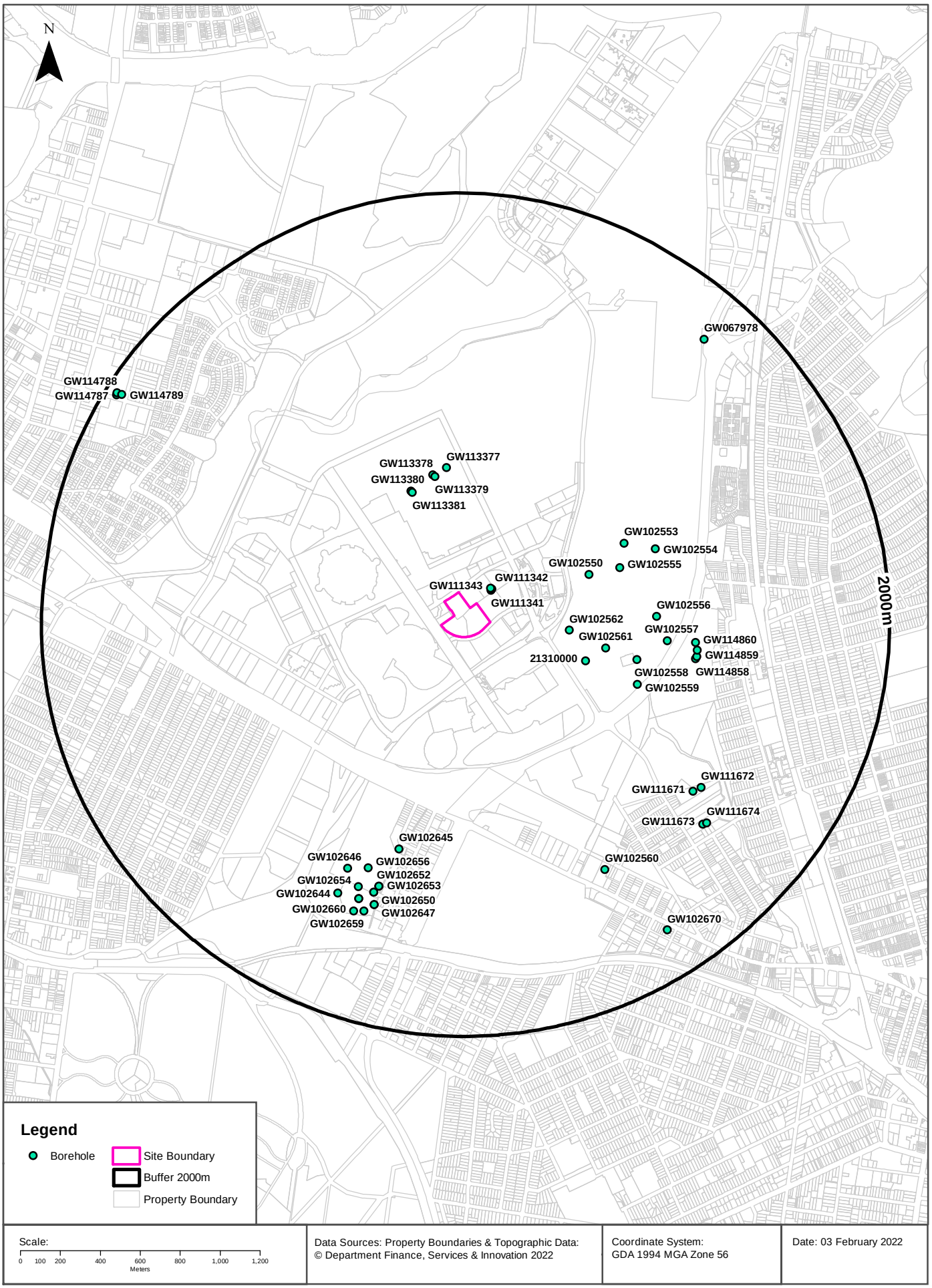
Temporary water restrictions relating to the Botany Sands aquifer within the dataset buffer:

Prohibition Area No.	Prohibition	Distance	Direction
N/A	No records in buffer		

Temporary Water Restriction (Botany Sands Groundwater Source) Order 2018 Data Source : NSW Department of Primary Industries

Groundwater Boreholes

7 Figtree Drive, Sydney Olympic Park, NSW 2127



Hydrogeology & Groundwater

7 Figtree Drive, Sydney Olympic Park, NSW 2127

Groundwater Boreholes

Boreholes within the dataset buffer:

GW No.	Licence No	Work Type	Owner Type	Authorised Purpose	Intended Purpose	Name	Complete Date	Final Depth (m)	Drilled Depth (m)	Salinity (mg/L)	SWL (m bgl)	Yield (L/s)	Elev (AHD)	Dist	Dir
GW111341	10BL604349	Bore	Other Govt	Monitoring Bore	Monitoring Bore		06/11/2010	8.00	8.00					98m	North East
GW111343	10BL604349	Bore	Other Govt	Monitoring Bore	Monitoring Bore		06/11/2010	8.00	8.00					102m	North East
GW111342	10BL604349	Bore	Other Govt	Monitoring Bore	Monitoring Bore		06/11/2010	8.00	8.00					104m	North East
GW102562	10BL157703	Bore		Monitoring Bore	Monitoring Bore		01/01/1996	4.00	4.00		1.83			399m	East
21310000					UNK								8.05	515m	East
GW102550	10BL157703	Bore		Monitoring Bore	Monitoring Bore		01/01/1996	4.00	4.00		1.80			549m	East
GW113381	10BL603181	Bore	Other Govt	Monitoring Bore	Monitoring Bore	Sydney Olympic Park Authority	03/07/2009	4.50	4.50					550m	North West
GW113380	10BL603181	Bore	Other Govt	Monitoring Bore	Monitoring Bore	Sydney Olympic Park Authority	31/07/2009	5.50	5.50					560m	North West
GW113379	10BL603181	Bore	Other Govt	Monitoring Bore	Monitoring Bore	Sydney Olympic Park Authority	30/07/2009	4.50	4.50					590m	North
GW102561	10BL157703	Bore		Monitoring Bore	Monitoring Bore		01/01/1996	4.00	4.00		1.83			593m	East
GW113378	10BL603181	Bore	Other Govt	Monitoring Bore	Monitoring Bore	Sydney Olympic Park Authority	30/07/2009	6.50	6.50					601m	North
GW113377	10BL603181	Bore	Other Govt	Monitoring Bore	Monitoring Bore	Sydney Olympic Park Authority	24/08/2010	8.00	8.00					626m	North
GW102555	10BL157703	Bore		Monitoring Bore	Monitoring Bore		01/01/1996	4.00	4.00		1.83			703m	East
GW102558	10BL157703	Bore		Monitoring Bore	Monitoring Bore		01/01/1996	4.00	4.00		1.83			758m	East
GW102553	10BL157703	Bore		Monitoring Bore	Monitoring Bore		01/01/1996	4.00	4.00		1.83			779m	North East
GW102559	10BL157703	Bore		Monitoring Bore	Monitoring Bore		01/01/1996	4.00	4.00		1.83			800m	East
GW102556	10BL157703	Bore		Monitoring Bore	Monitoring Bore		01/01/1996	4.00	4.00		1.83			833m	East
GW102557	10BL157703	Bore		Monitoring Bore	Monitoring Bore		01/01/1996	4.00	4.00					891m	East
GW102554	10BL157703	Bore		Monitoring Bore	Monitoring Bore		01/01/1996	4.00	4.00		1.83			904m	East
GW114860	10BL605531	Bore	Local Govt	Monitoring Bore	Monitoring Bore	City of Canada Bay - Powell's Creek Reserve	15/04/2014	2.30	2.30					1033m	East
GW114858	10BL605531	Bore	Local Govt	Monitoring Bore	Monitoring Bore	City of Canada Bay - Powell's Creek Reserve	15/04/2014	1.90	3.80					1045m	East

GW No.	Licence No	Work Type	Owner Type	Authorised Purpose	Intended Purpose	Name	Complete Date	Final Depth (m)	Drilled Depth (m)	Salinity (mg/L)	SWL (m bgl)	Yield (L/s)	Elev (AHD)	Dist	Dir
GW114861	10BL605531	Bore	Local Govt	Monitoring Bore	Monitoring Bore	City of Canada Bay - Powell's Creek Reserve	15/04/2014	5.60	5.60	30000	1.90	0.010		1046m	East
GW114859	10BL605531	Bore	Private	Monitoring Bore	Monitoring Bore	City of Canada Bay - Powell's Creek Reserve	15/04/2014	2.00	2.00	4700	1.30			1050m	East
GW102645	10BL150044	Bore		Monitoring Bore	Monitoring Bore		21/05/1992	10.00	10.00	13300				1105m	South
GW102656	10BL150044	Bore		Monitoring Bore	Monitoring Bore		19/05/1992	25.00	25.00	1640				1242m	South
GW102646	10BL150044	Bore		Monitoring Bore	Monitoring Bore		20/05/1992	25.00	25.00					1283m	South West
GW102652	10BL150044	Bore		Monitoring Bore	Monitoring Bore		18/05/1992	10.00	10.00	14600				1312m	South
GW102653	10BL150044	Bore		Monitoring Bore	Monitoring Bore		18/05/1992	25.00	25.00					1312m	South
GW111671	10BL602925	Bore	Private	Monitoring Bore	Monitoring Bore		09/02/2009	5.30	5.30		0.68			1323m	South East
GW111672	10BL602925	Bore	Private	Monitoring Bore	Monitoring Bore		09/02/2009	5.40	5.40		1.35			1342m	South East
GW102560	10BL157703	Bore		Monitoring Bore	Monitoring Bore		01/01/1996	4.00	4.00		1.83			1344m	South East
GW102654	10BL150044	Bore		Monitoring Bore	Monitoring Bore		15/05/1992	10.00	10.00	6430				1347m	South
GW102650	10BL150044	Bore		Monitoring Bore	Monitoring Bore		08/05/1992	10.00	10.00	4570				1349m	South
GW102651	10BL150044	Bore		Monitoring Bore	Monitoring Bore		08/05/1992	25.00	25.00	24700				1349m	South
GW102657	10BL150044	Bore	Private	Monitoring Bore	Monitoring Bore		21/05/1992	8.00	8.00	10900	1.00			1404m	South
GW102658	10BL150044	Bore	Private	Monitoring Bore	Monitoring Bore		25/05/1992	12.00	12.00	19300	1.00			1404m	South
GW102647	10BL150044	Bore		Monitoring Bore	Monitoring Bore		20/05/1992	10.00	10.00	2000				1408m	South
GW102649	10BL150044	Bore		Monitoring Bore	Monitoring Bore		13/05/1992	25.00	25.00					1408m	South
GW102644	10BL150044	Bore		Monitoring Bore	Monitoring Bore		15/05/1992	25.00	25.00	1360				1416m	South West
GW102659	10BL150044	Bore		Monitoring Bore	Monitoring Bore		29/05/1992	10.00	10.00	2620				1453m	South
GW111673	10BL602953	Bore	Private	Monitoring Bore	Monitoring Bore		09/02/2009	5.30	5.30		0.68			1469m	South East
GW102660	10BL150044	Bore		Monitoring Bore	Monitoring Bore		29/05/1992	8.00	8.00	1460				1471m	South
GW111674	10BL602953	Bore	Private	Monitoring Bore	Monitoring Bore		09/02/2009	5.40	5.40		1.35			1479m	South East
GW067978	10BL145562	Bore	Private	Test Bore	Irrigation, Test Bore		05/05/1992	180.00	180.00	12000	0.00	3.000		1745m	North East
GW102670	10BL152712	Bore		Monitoring Bore	Monitoring Bore		01/07/1993	2.00	2.00					1764m	South East
GW114789	10BL605674	Bore	Private	Monitoring Bore	Monitoring Bore	AUSTRALIAN BAKELS PTY LTD	06/01/2015	9.00	9.00					1917m	North West
GW114787	10BL605674	Bore	Private	Monitoring Bore	Monitoring Bore	AUSTRALIAN BAKELS PTY LTD	06/01/2015	10.00	10.00					1939m	North West
GW114788	10BL605674	Bore	Private	Monitoring Bore	Monitoring Bore	AUSTRALIAN BAKELS PTY LTD	06/01/2015	9.00	9.00					1943m	North West

Borehole Data Source : NSW Department of Primary Industries - Office of Water / Water Administration Ministerial Corporation for all bores prefixed with GW. All other bores © Commonwealth of Australia (Bureau of Meteorology) 2015. Creative Commons 3.0 © Commonwealth of Australia http://creativecommons.org/licenses/by/3.0/au/deed.en

Hydrogeology & Groundwater

7 Figtree Drive, Sydney Olympic Park, NSW 2127

Driller's Logs

Drill log data relevant to the boreholes within the dataset buffer:

Groundwater No	Drillers Log	Distance	Direction
GW111341	0.00m-0.20m BITUMEN 0.20m-0.40m GRAVELLY ROAD BASE,GREY/BROWN 0.40m-0.60m CLAY BROWN,GRAVELS MOIST 0.60m-8.00m SHALE BROWN,HARD,DRY	98m	North East
GW111343	0.00m-0.20m BITUMEN 0.20m-0.40m GRAVELLY ROAD BASE,GREY/BROWN 0.40m-0.60m CLAY BROWN,GRAVELS MOIST 0.60m-8.00m SHALE,BROWN,HARD,DRY	102m	North East
GW111342	0.00m-0.20m BITUMEN 0.20m-0.40m GRAVELLY ROAD BASE,GREY BROWN,MOIST 0.40m-0.60m CLAY BROWN,ANGULAR GRAVELS,MOIST 0.60m-8.00m SHALE BROWN,HARD,DRY	104m	North East
GW114860	0.00m-0.20m TOPSOIL BROWN 0.20m-1.00m SILTY GRAVELLY SAND LIGHT BROWN 1.00m-1.70m SILTY GRAVELLY SAND LIGHT BROWN 1.70m-2.30m SHALE GREY HARD	1033m	East
GW114858	0.00m-0.30m TOPSOIL DARK BROWN 0.30m-0.70m SILTY SAND 0.70m-1.30m FILL DARK GREY 1.30m-3.80m SILTY CLAY DARK GREY SOFT	1045m	East
GW114861	0.00m-0.30m TOPSOIL DARK BROWN 0.30m-0.70m SILTY SAND 0.70m-1.30m FILL WASTE DARK GREY 1.30m-3.80m SILTY CLAY DARK GREY SOFT 3.80m-5.60m SILTY CLAY DARK GREY STIFF.	1046m	East
GW114859	0.00m-0.20m TOPSOIL BROWN 0.20m-0.40m SAND LIGHT BROWN 0.40m-1.30m FILL WASTE DARK BROWN 1.30m-2.00m SILTY CLAY DARK GREY,SOFT	1050m	East
GW102645	0.00m-5.00m SHALE WEATHERED 5.00m-10.00m SHALE	1105m	South
GW102656	0.00m-6.00m CLAY 6.00m-25.00m SILTSTONE	1242m	South
GW102646	0.00m-5.00m CLAY 5.00m-7.00m SILTSTONE WEATHERED 7.00m-25.00m SILTSTONE	1283m	South West
GW102652	0.00m-9.00m CLAY 9.00m-10.00m SILTSTONE	1312m	South
GW102653	0.00m-9.00m CLAY 9.00m-25.00m SILTSTONE	1312m	South
GW111671	0.00m-0.60m FILL 0.60m-5.30m CLAY	1323m	South East
GW111672	0.00m-1.50m FILL 1.50m-5.40m CLAY	1342m	South East
GW102654	0.00m-7.00m CLAY 7.00m-10.00m SILTSTONE	1347m	South
GW102650	0.00m-4.00m CLAY 4.00m-5.00m SHALE WEATHERED 5.00m-7.00m CLAY 7.00m-10.00m SHALE	1349m	South
GW102651	0.00m-5.00m CLAY 5.00m-25.00m SHALE	1349m	South
GW102657	0.00m-1.00m CLAY 1.00m-8.00m WASTE	1404m	South
GW102658	0.00m-1.00m CLAY 1.00m-12.00m WASTE	1404m	South
GW102647	0.00m-7.00m CLAY 7.00m-10.00m SILTSTONE	1408m	South
GW102649	0.00m-7.00m CLAY 7.00m-25.00m SILTSTONE	1408m	South

Groundwater No	Drillers Log	Distance	Direction
GW102644	0.00m-5.00m SILTSTONE WEATHERED 5.00m-25.00m SILTSTONE	1416m	South West
GW102659	0.00m-7.00m CLAY 7.00m-10.00m SHALE	1453m	South
GW111673	0.00m-0.60m FILL 0.60m-5.30m CLAY	1469m	South East
GW102660	0.00m-7.00m CLAY 7.00m-8.00m SHALE	1471m	South
GW111674	0.00m-1.50m FILL 1.50m-5.40m CLAY	1479m	South East
GW067978	0.00m-1.80m SOIL, CLAY 1.80m-12.70m WEATHERED SHALE 12.70m-29.50m SHALE, MICACEOUS, SILTY 29.50m-45.00m I/B FIG GREY SST AND SH 45.00m-59.50m WH CALC SST, AND SLST 51-55M 59.50m-78.00m I/B BR SST AND THIN SLST CALCAREOUSTO 70M 78.00m-121.00m WH F.G. SST, MORE SILTY 96-113, MASSIVE 90-96 AND 113-121M 121.00m-142.00m GREY F.G. SLST AND SH 142.00m-156.00m WL/GREY KAOL F.G. SST WITH SH, AND CGLAT 154M 156.00m-180.00m NO SAMPLE RECOVERY	1745m	North East
GW102670	0.00m-1.00m SOIL 1.00m-2.00m SANDSTONE	1764m	South East
GW114789	0.00m-0.05m BITUMEN 0.05m-0.20m ROADBASE,GRAVEL 0.20m-0.80m CLAY,RED/GREY/FIRM/STREAKED 0.80m-1.80m CLAY,GREY,FIRM 1.80m-3.80m CLAY,RED/GREY 3.80m-9.00m SHALE,DARK GREY	1917m	North West
GW114787	0.00m-0.10m CONCRETE 0.10m-0.80m CLAY DARK BROWN,GRAVEL FINE TO MED. 0.80m-1.20m CLAY RED FIRM 1.20m-3.50m CLAY RED GREY FIRM 3.50m-5.60m SHALE GREY 5.60m-8.00m SHALE DARK BROWN GREY 8.00m-8.50m SHALE GREY HARD 8.50m-10.00m SHALE GREY	1939m	North West
GW114788	0.00m-0.20m ROADBASE, GRAVEL 0.20m-0.50m CLAY,FIRM,GRAVELLY (ROAD BASE) 0.50m-2.50m CLAY,RED FIRM 2.50m-9.00m SHALE,BROWN,GREY RED	1943m	North West

Drill Log Data Source: NSW Department of Primary Industries - Office of Water / Water Administration Ministerial Corp
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Geology

7 Figtree Drive, Sydney Olympic Park, NSW 2127



Geology

7 Figtree Drive, Sydney Olympic Park, NSW 2127

Geological Units 1:100,000

What are the Geological Units within the dataset buffer?

Symbol	Description	Unit Name	Group	Sub Group	Age	Dom Lith	Map Sheet	Dist	Dir
Rwa	Black to dark grey shale and laminate	Ashfield Shale	Wianamatta Group		Triassic		Sydney	0m	On-site
mf/Qha	Man-made fill (dredged estuarine sand and mud, demolition rubble, industrial and household waste) overlying silty to peaty quartz sand, silt and clay with ferruginous & humic cementation in places and common shell layers				Quaternary		Sydney	218m	East
Qha	Silty to peaty quartz sand, silt, and clay. Ferruginous and humic cementation in places. Common shell layers				Quaternary		Sydney	369m	South
water							Sydney	557m	East
mf	Man-made fill. Dredged estuarine sand and mud, demolition rubble, industrial and household waste.				Quaternary		Sydney	599m	East

Geological Structures 1:100,000

What are the Geological Structures within the dataset buffer?

Feature	Name	Description	Map Sheet	Distance	Direction
N/A	No records in buffer				

Geological Data Source : NSW Department of Industry, Resources & Energy

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Naturally Occurring Asbestos Potential

7 Figtree Drive, Sydney Olympic Park, NSW 2127

Naturally Occurring Asbestos Potential

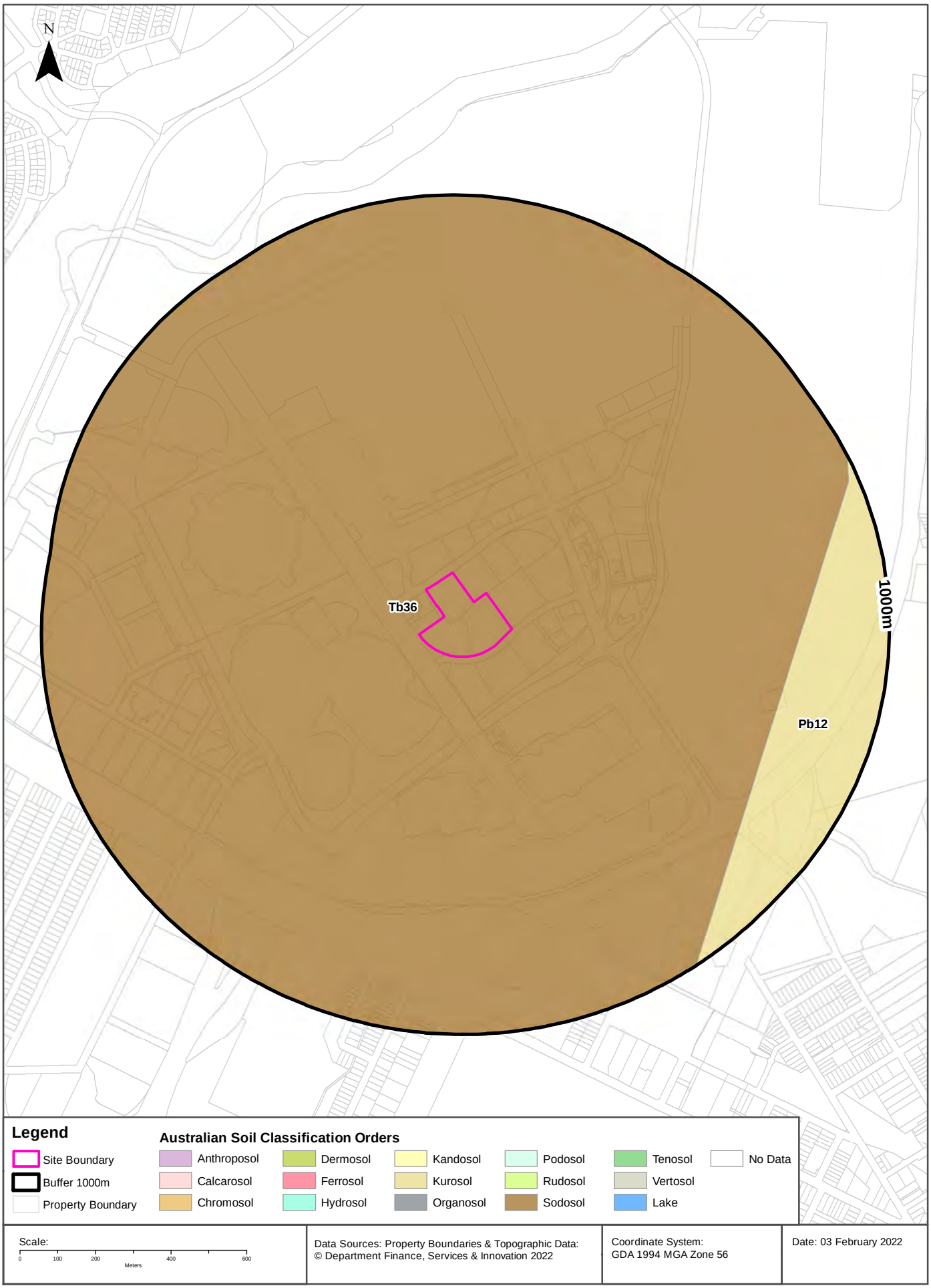
Naturally Occurring Asbestos Potential within the dataset buffer:

Potential	Sym	Strat Name	Group	Formation	Scale	Min Age	Max Age	Rock Type	Dom Lith	Description	Dist	Dir
No records in buffer												

Naturally Occurring Asbestos Potential Data Source: © State of New South Wales through NSW Department of Industry, Resources & Energy

Atlas of Australian Soils

7 Figtree Drive, Sydney Olympic Park, NSW 2127



Soils

7 Figtree Drive, Sydney Olympic Park, NSW 2127

Atlas of Australian Soils

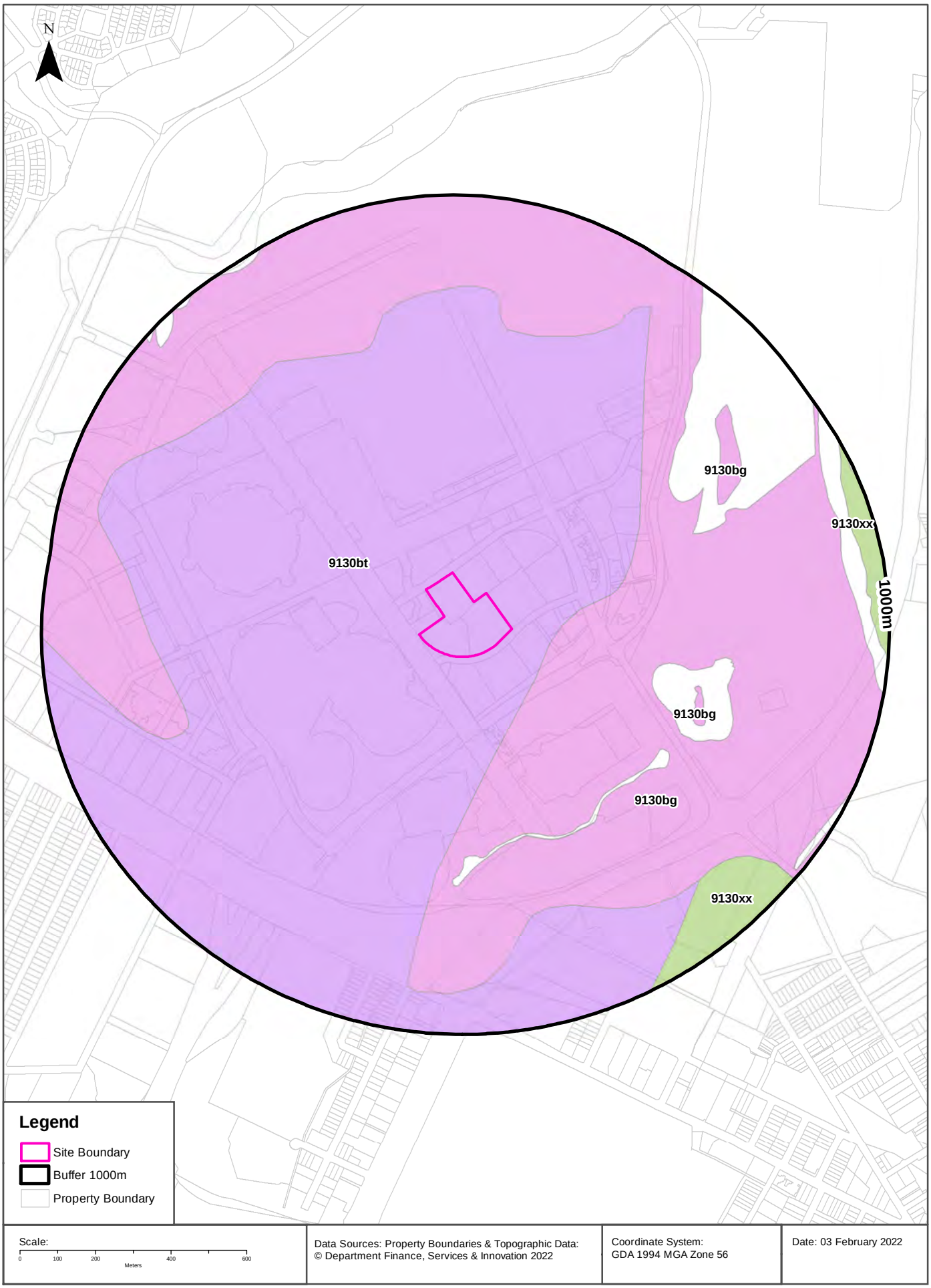
Soil mapping units and Australian Soil Classification orders within the dataset buffer:

Map Unit Code	Soil Order	Map Unit Description	Distance	Direction
Tb36	Sodosol	Undulating: chief soils are hard acidic yellow mottled soils (Dy3.41) usually containing some ironstone gravels throughout the profile. Associated are small areas of units Pb12 and Pb13.	0m	On-site
Pb12	Kurosol	Gently rolling to rounded hilly country with some steep slopes and broad valleys: chief soils are hard acidic red soils (Dr2.21) with hard neutral and acidic yellow mottled soils (Dy3.42 and Dy3.41) on lower slopes and in valleys. Associated are small areas of various soils including (Gn3.54) on some ridges, (Dr3.31) on some slopes; (Dr2.23) in saddles and some mid-slope positions, and some low- lying swampy areas of (Uf6) soils and (Uc1.2) soils with peaty surfaces. Small areas of other soils such as (Db1.2) are likely throughout.	730m	East

Atlas of Australian Soils Data Source: CSIRO
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Soil Landscapes of Central and Eastern NSW

7 Figtree Drive, Sydney Olympic Park, NSW 2127



Soils

7 Figtree Drive, Sydney Olympic Park, NSW 2127

Soil Landscapes of Central and Eastern NSW

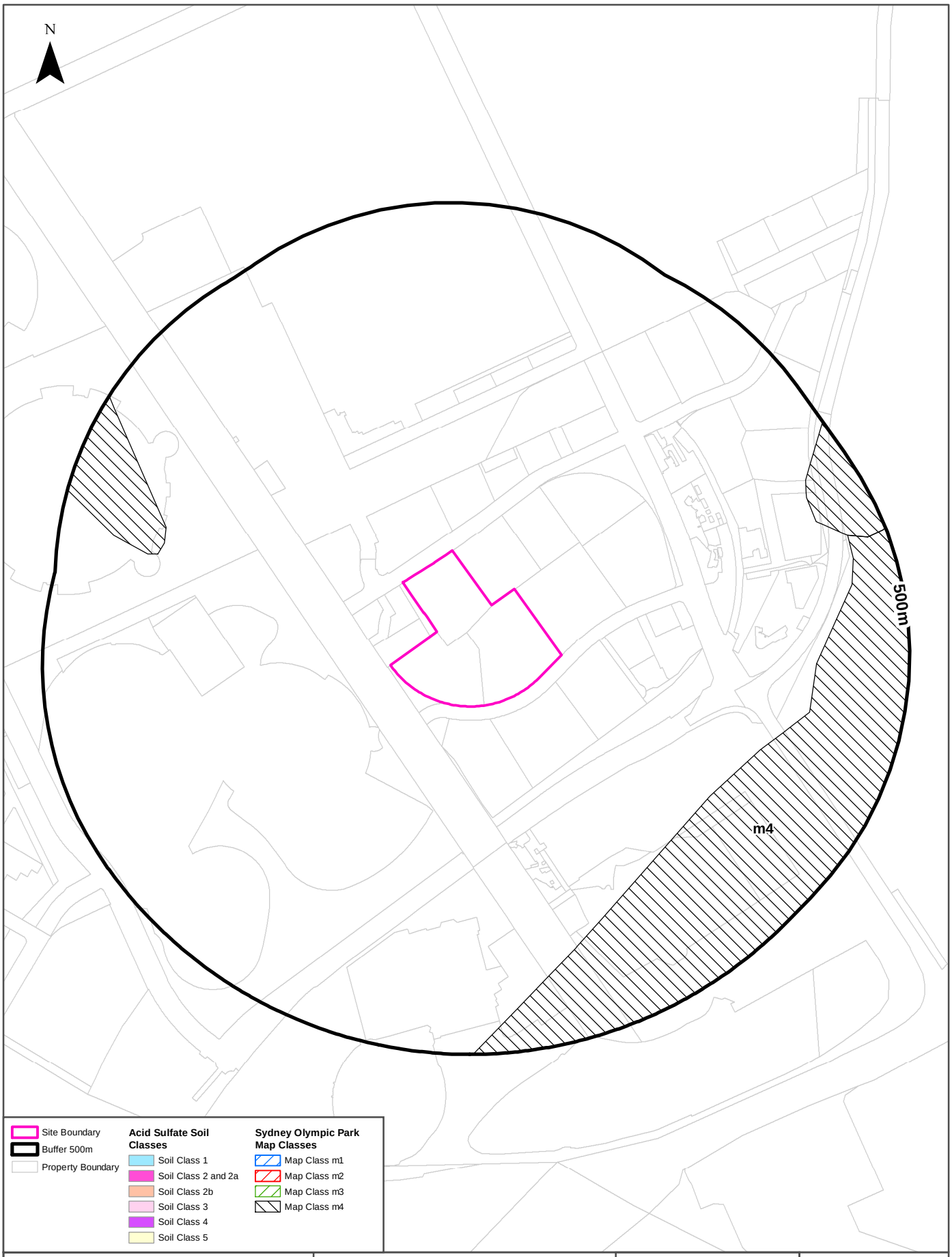
Soil Landscapes of Central and Eastern NSW within the dataset buffer:

Soil Code	Name	Distance	Direction
9130bt	Blacktown	0m	On-site
9130bg	Birrong	106m	East
9130xx	Disturbed Terrain	822m	South East

Soil Landscapes of Central and Eastern NSW: NSW Department of Planning, Industry and Environment
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Acid Sulfate Soils

7 Figtree Drive, Sydney Olympic Park, NSW 2127



Acid Sulfate Soils

7 Figtree Drive, Sydney Olympic Park, NSW 2127

Environmental Planning Instrument - Acid Sulfate Soils

What is the on-site Acid Sulfate Soil Plan Class that presents the largest environmental risk?

Soil Class	Description	EPI Name
N/A		

If the on-site Soil Class is 5, what other soil classes exist within 500m?

Soil Class	Description	EPI Name	Distance	Direction
N/A				

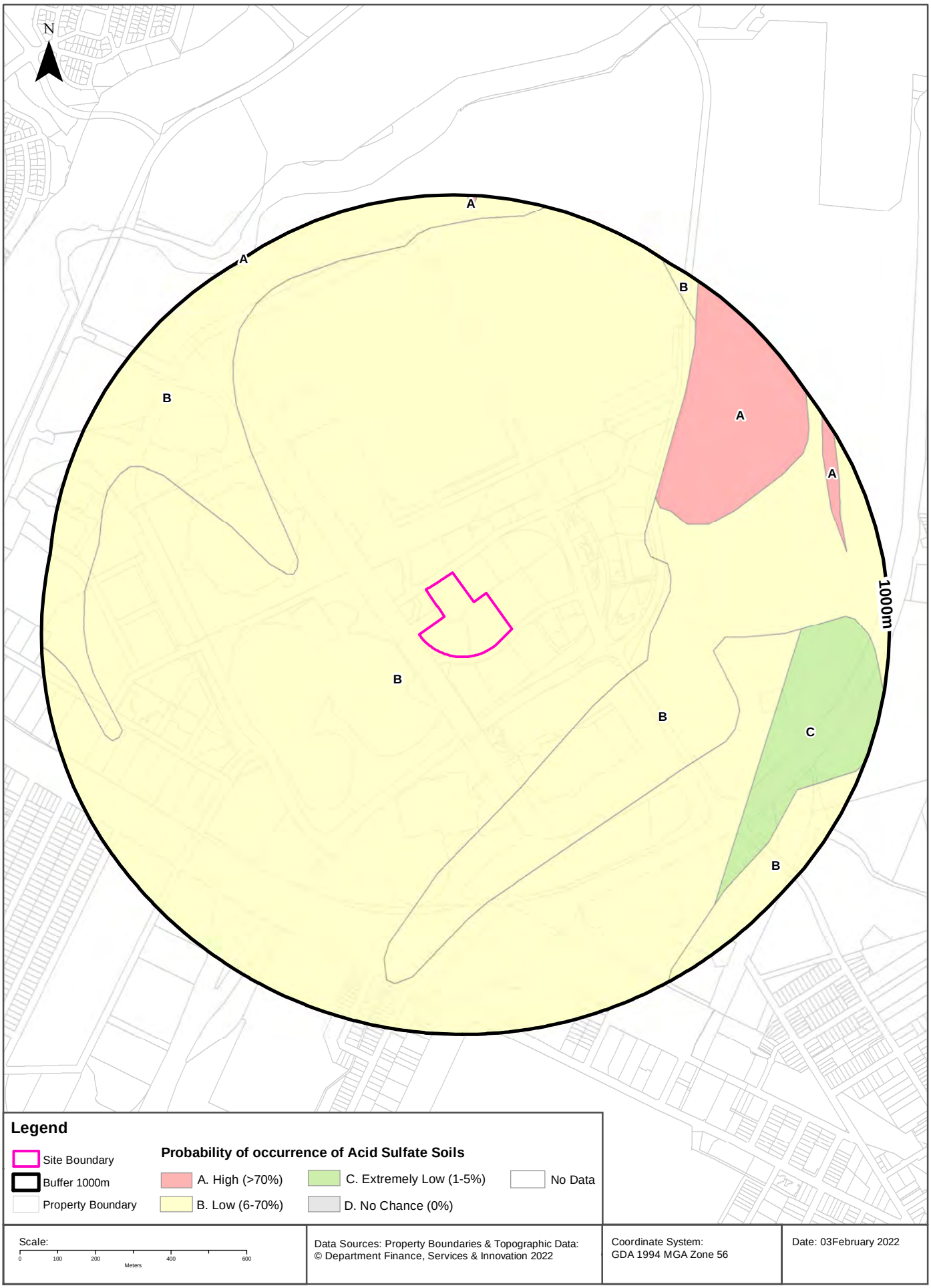
What Sydney Olympic Park Acid Sulfate map classes exist within 500m?

Map Class	Description	EPI Name	Distance	Direction
m4	Disturbed terrain	State Environmental Planning Policy (State Significant Precincts) 2005	295m	South East

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Atlas of Australian Acid Sulfate Soils

7 Figtree Drive, Sydney Olympic Park, NSW 2127



Acid Sulfate Soils

7 Figtree Drive, Sydney Olympic Park, NSW 2127

Atlas of Australian Acid Sulfate Soils

Atlas of Australian Acid Sulfate Soil categories within the dataset buffer:

Class	Description	Distance	Direction
B	Low Probability of occurrence. 6-70% chance of occurrence.	0m	On-site
A	High Probability of occurrence. >70% chance of occurrence.	505m	North East
C	Extremely low probability of occurrence. 1-5% chance of occurrence with occurrences in small localised areas.	729m	East

Atlas of Australian Acid Sulfate Soils Data Source: CSIRO
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Dryland Salinity

7 Figtree Drive, Sydney Olympic Park, NSW 2127



Dryland Salinity

7 Figtree Drive, Sydney Olympic Park, NSW 2127

Dryland Salinity - National Assessment

Is there Dryland Salinity - National Assessment data onsite?

No

Is there Dryland Salinity - National Assessment data within the dataset buffer?

No

What Dryland Salinity assessments are given?

Assessment 2000	Assessment 2020	Assessment 2050	Distance	Direction
N/A	N/A	N/A		

Dryland Salinity Data Source : National Land and Water Resources Audit
The Commonwealth and all suppliers of source data used to derive the maps of "Australia, Forecast Areas Containing Land of High Hazard or Risk of Dryland Salinity from 2000 to 2050" do not warrant the accuracy or completeness of information in this product. Any person using or relying upon such information does so on the basis that the Commonwealth and data suppliers shall bear no responsibility or liability whatsoever for any errors, faults, defects or omissions in the information. Any persons using this information do so at their own risk.
In many cases where a high risk is indicated, less than 100% of the area will have a high hazard or risk.

Dryland Salinity Potential of Western Sydney

Dryland Salinity Potential of Western Sydney within the dataset buffer?

Feature Id	Classification	Description	Distance	Direction
274	MODERATE	Area of Moderate Salinity Potential	0m	On-site

Dryland Salinity Potential of Western Sydney Data Source : NSW Office of Environment and Heritage
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Mining

7 Figtree Drive, Sydney Olympic Park, NSW 2127

Mining Subsidence Districts

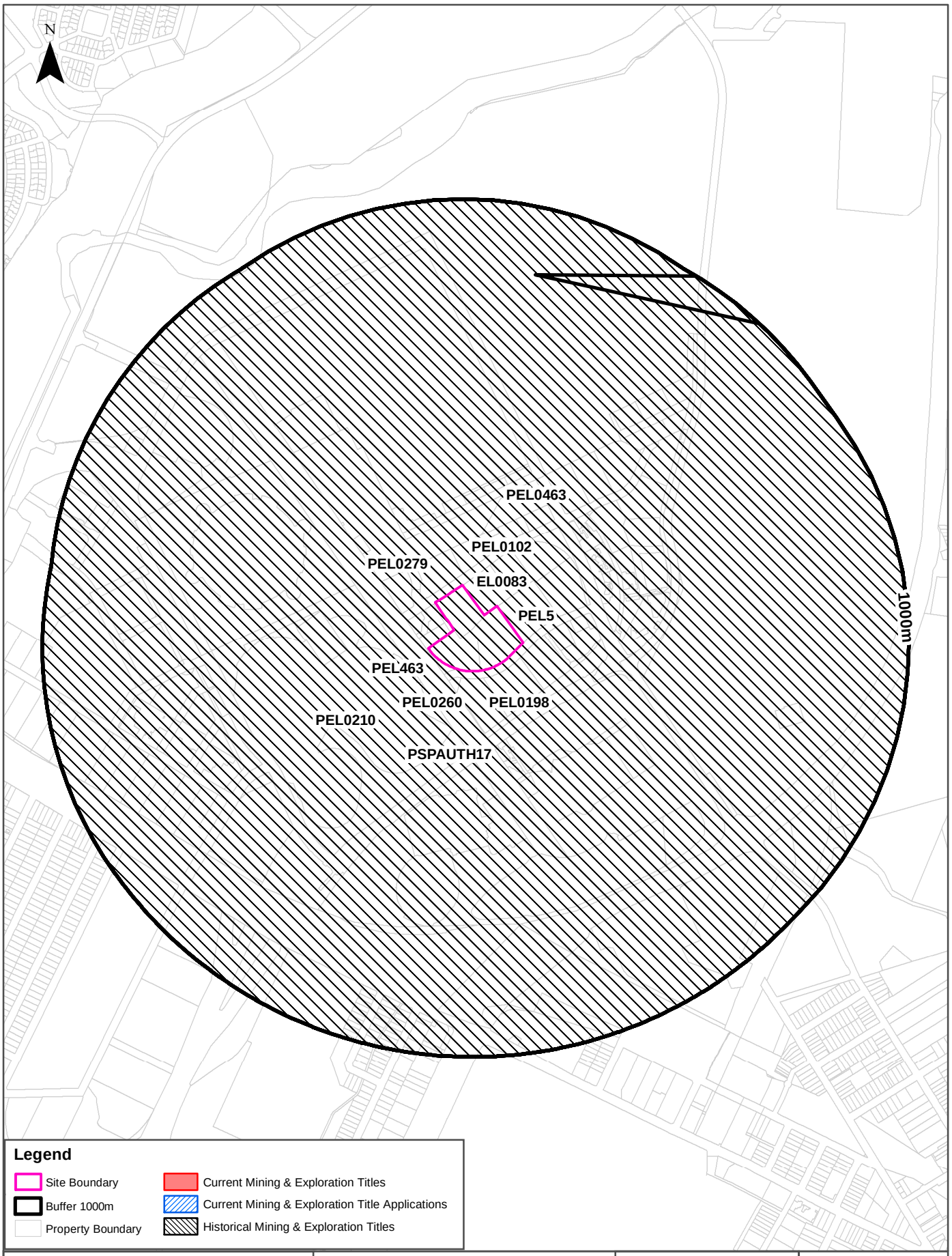
Mining Subsidence Districts within the dataset buffer:

District	Distance	Direction
There are no Mining Subsidence Districts within the report buffer		

Mining Subsidence District Data Source: © Land and Property Information (2016)
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Mining & Exploration Titles

7 Figtree Drive, Sydney Olympic Park, NSW 2127



Mining

7 Figtree Drive, Sydney Olympic Park, NSW 2127

Current Mining & Exploration Titles

Current Mining & Exploration Titles within the dataset buffer:

Title Ref	Holder	Grant Date	Expiry Date	Last Renewed	Operation	Resource	Minerals	Dist	Dir
N/A	No records in buffer								

Current Mining & Exploration Titles Data Source: © State of New South Wales through NSW Department of Industry

Current Mining & Exploration Title Applications

Current Mining & Exploration Title Applications within the dataset buffer:

Application Ref	Applicant	Application Date	Operation	Resource	Minerals	Dist	Dir
N/A	No records in buffer						

Current Mining & Exploration Title Applications Data Source: © State of New South Wales through NSW Department of Industry

Mining

7 Figtree Drive, Sydney Olympic Park, NSW 2127

Historical Mining & Exploration Titles

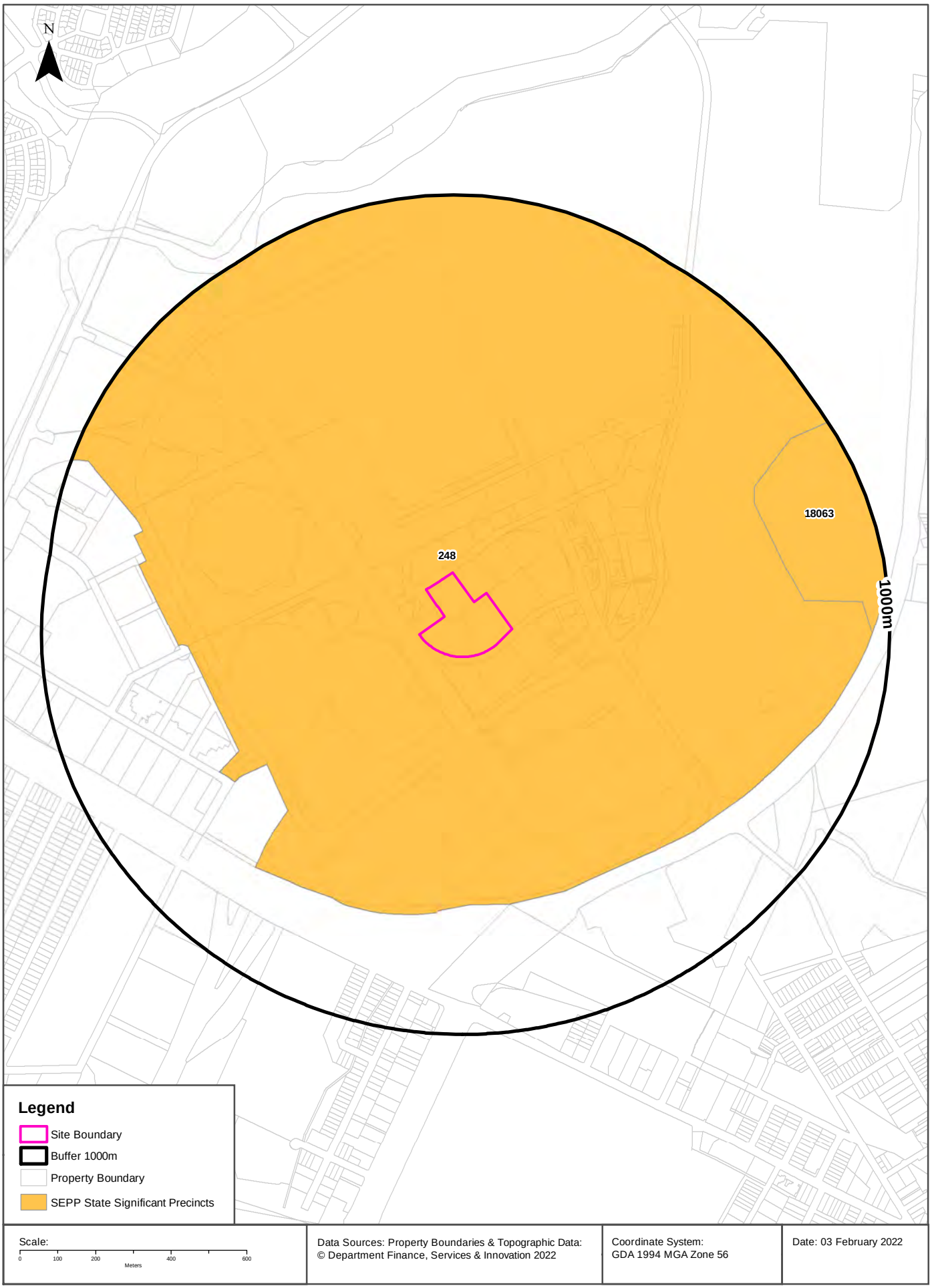
Historical Mining & Exploration Titles within the dataset buffer:

Title Ref	Holder	Start Date	End Date	Resource	Minerals	Dist	Dir
PEL0210	THE AUSTRALIAN GAS LIGHT COMPANY (AGL), NORTH BULLI COLLIERIES PTY LTD			PETROLEUM	Petroleum	0m	On-site
PEL0463	DART ENERGY (APOLLO) PTY LTD	22/10/2008	6/03/2015	PETROLEUM	Petroleum	0m	On-site
EL0083	CONTINENTAL OIL CO OF AUSTRALIA LIMITED	01 Feb 1967	01 Feb 1968	MINERALS		0m	On-site
PEL463	DART ENERGY (APOLLO) PTY LTD			MINERALS		0m	On-site
PEL5	AGL UPSTREAM INVESTMENTS PTY LIMITED			MINERALS		0m	On-site
PSPAUTH17	MACQUARIE ENERGY PTY LTD	8/03/2007	7/03/2008	PETROLEUM	Petroleum	0m	On-site
PEL0260	NORTH BULLI COLLIERIES PTY LTD, AGL PETROLEUM OPERATIONS PTY LTD, THE AUSTRALIAN GAS LIGHT CO.	9/09/1981	8/03/1993	PETROLEUM	Petroleum	0m	On-site
PEL0198	JOHN STREVENS (TERRIGAL) NL			PETROLEUM	Petroleum	0m	On-site
PEL0102	AUSTRALIAN OIL AND GAS CORPORATION LTD			PETROLEUM	Petroleum	0m	On-site
PEL0279	THE ELECTRICITY COMMISSION OF NSW (TRADING AS PACIFIC POWER)	17/04/1990	11/11/1993	PETROLEUM	Petroleum	0m	On-site

Historical Mining & Exploration Titles Data Source: © State of New South Wales through NSW Department of Industry

SEPP State Significant Precincts

7 Figtree Drive, Sydney Olympic Park, NSW 2127



State Environmental Planning Policy

7 Figtree Drive, Sydney Olympic Park, NSW 2127

State Significant Precincts

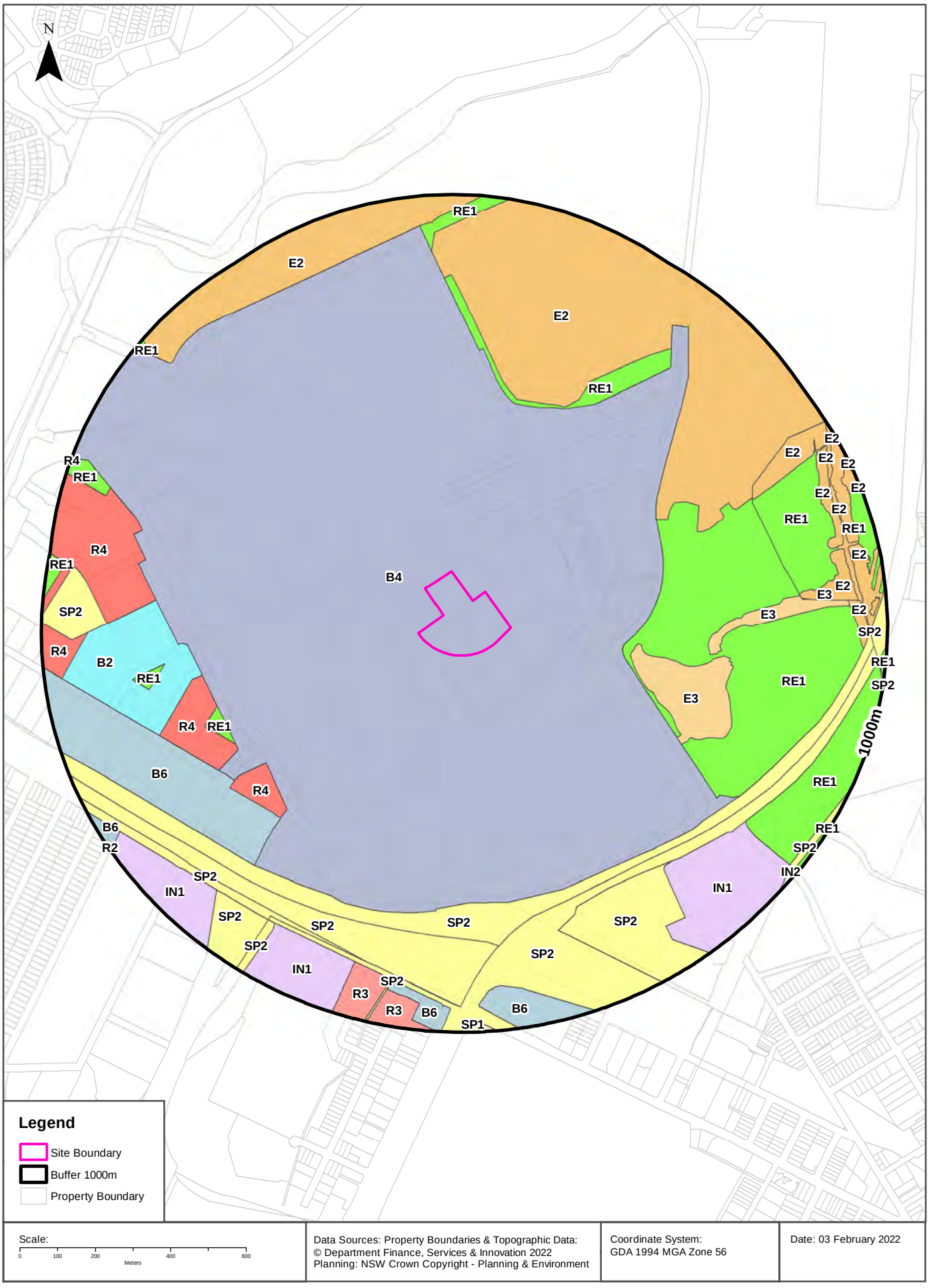
What SEPP State Significant Precincts exist within the dataset buffer?

Map Id	Precinct	EPI Name	Published Date	Commenced Date	Currency Date	Amendment	Distance	Direction
248	Sydney Olympic Park	State Environmental Planning Policy (State Significant Precincts) 2005	31/08/2018	31/08/2018	31/08/2018	State Environmental Planning Policy (State Significant Precincts) Amendment (Sydney Olympic Park) 2017	0m	On-site
18063	Sydney Olympic Park	State Environmental Planning Policy (State Significant Precincts) 2005	31/08/2018	31/08/2018	31/08/2018	State Environmental Planning Policy (State Significant Precincts) Amendment (Sydney Olympic Park) 2017	721m	East

State Environment Planning Policy Data Source: NSW Crown Copyright - Planning & Environment
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EPI Planning Zones

7 Figtree Drive, Sydney Olympic Park, NSW 2127



Environmental Planning Instrument

7 Figtree Drive, Sydney Olympic Park, NSW 2127

Land Zoning

What EPI Land Zones exist within the dataset buffer?

Zone	Description	Purpose	EPI Name	Published Date	Commenced Date	Currency Date	Amendment	Distance	Direction
B4	Mixed Use		State Environmental Planning Policy (State Significant Precincts) 2005	24/03/2016	24/03/2016	24/03/2016	State Environmental Planning Policy (Major Development) Amendment (State Significant Precincts) 2016	0m	On-site
RE1	Public Recreation		State Environmental Planning Policy (State Significant Precincts) 2005	24/03/2016	24/03/2016	24/03/2016	State Environmental Planning Policy (Major Development) Amendment (State Significant Precincts) 2016	301m	East
E3	Environmental Management		State Environmental Planning Policy (State Significant Precincts) 2005	24/03/2016	24/03/2016	24/03/2016	State Environmental Planning Policy (Major Development) Amendment (State Significant Precincts) 2016	325m	East
RE1	Public Recreation		State Environmental Planning Policy (State Significant Precincts) 2005	24/03/2016	24/03/2016	24/03/2016	State Environmental Planning Policy (Major Development) Amendment (State Significant Precincts) 2016	477m	North East
E2	Environmental Conservation		State Environmental Planning Policy (State Significant Precincts) 2005	24/03/2016	24/03/2016	24/03/2016	State Environmental Planning Policy (Major Development) Amendment (State Significant Precincts) 2016	480m	North
E3	Environmental Management		State Environmental Planning Policy (State Significant Precincts) 2005	24/03/2016	24/03/2016	24/03/2016	State Environmental Planning Policy (Major Development) Amendment (State Significant Precincts) 2016	523m	East
R4	High Density Residential		Auburn Local Environmental Plan 2010	27/11/2015	27/11/2015	12/03/2021	State Environmental Planning Policy Amendment (Carter Street Priority Precinct) 2015	530m	South West

Zone	Description	Purpose	EPI Name	Published Date	Commenced Date	Currency Date	Amendment	Distance	Direction
RE1	Public Recreation		Auburn Local Environmental Plan 2010	27/11/2015	27/11/2015	12/03/2021	State Environmental Planning Policy Amendment (Carter Street Priority Precinct) 2015	565m	South West
R4	High Density Residential		Auburn Local Environmental Plan 2010	27/11/2015	27/11/2015	12/03/2021	State Environmental Planning Policy Amendment (Carter Street Priority Precinct) 2015	568m	West
B2	Local Centre		Auburn Local Environmental Plan 2010	18/12/2020	18/12/2020	12/03/2021	State Environmental Planning Policy Amendment (Carter Street Priority Precinct) 2020	585m	West
B6	Enterprise Corridor		Auburn Local Environmental Plan 2010	27/11/2015	27/11/2015	12/03/2021	State Environmental Planning Policy Amendment (Carter Street Priority Precinct) 2015	606m	South West
SP2	Infrastructure	Motorway	Auburn Local Environmental Plan 2010	29/10/2010	29/10/2010	12/03/2021		657m	South
RE1	Public Recreation		Auburn Local Environmental Plan 2010	18/12/2020	18/12/2020	12/03/2021	State Environmental Planning Policy Amendment (Carter Street Priority Precinct) 2020	678m	West
SP2	Infrastructure	Classified Road	Strathfield Local Environmental Plan 2012	15/03/2013	29/03/2013	19/07/2019		692m	South
R4	High Density Residential		Auburn Local Environmental Plan 2010	18/12/2020	18/12/2020	12/03/2021	State Environmental Planning Policy Amendment (Carter Street Priority Precinct) 2020	702m	West
SP2	Infrastructure	Electricity Supply	Strathfield Local Environmental Plan 2012	15/03/2013	29/03/2013	19/07/2019		711m	South East
RE1	Public Recreation		State Environmental Planning Policy (State Significant Precincts) 2005	24/03/2016	24/03/2016	05/06/2020	State Environmental Planning Policy (Major Development) Amendment (State Significant Precincts) 2016	721m	East
E2	Environmental Conservation		Canada Bay Local Environmental Plan 2013	26/02/2021	26/02/2021	30/10/2021	Amendment No 18	725m	North East
E2	Environmental Conservation		State Environmental Planning Policy (State Significant Precincts) 2005	24/03/2016	24/03/2016	05/06/2020	State Environmental Planning Policy (Major Development) Amendment (State Significant Precincts) 2016	727m	East
IN1	General Industrial		Strathfield Local Environmental Plan 2012	15/03/2013	29/03/2013	19/07/2019		742m	South East

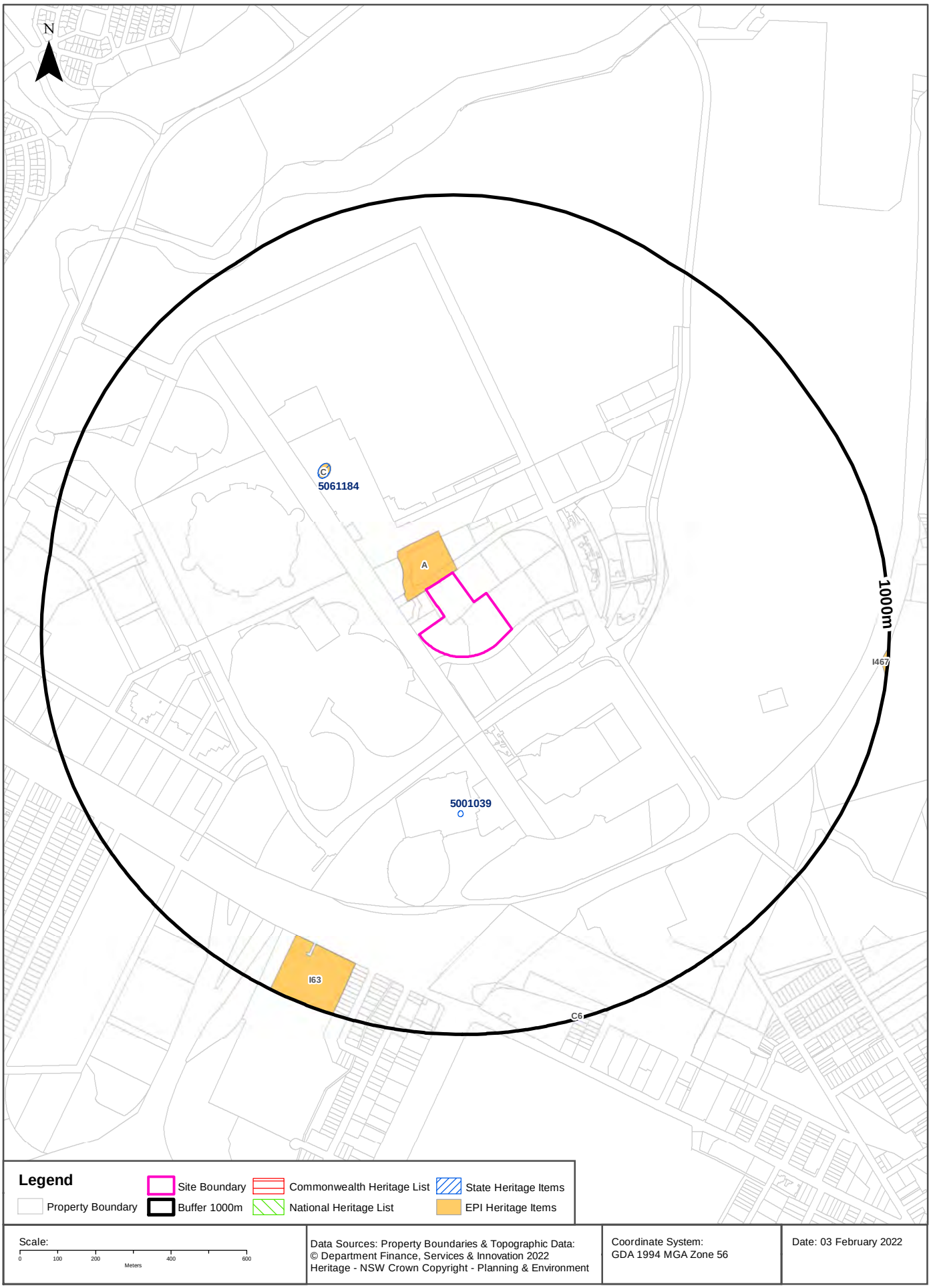
Zone	Description	Purpose	EPI Name	Published Date	Commenced Date	Currency Date	Amendment	Distance	Direction
SP2	Infrastructure	Motorway	Cumberland Local Environmental Plan 2021	05/11/2021	05/11/2021	05/11/2021		743m	South West
E2	Environmental Conservation		Canada Bay Local Environmental Plan 2013	26/02/2021	26/02/2021	30/10/2021	Amendment No 18	770m	East
E3	Environmental Management		State Environmental Planning Policy (State Significant Precincts) 2005	24/03/2016	24/03/2016	05/06/2020	State Environmental Planning Policy (Major Development) Amendment (State Significant Precincts) 2016	771m	East
RE1	Public Recreation		Strathfield Local Environmental Plan 2012	15/03/2013	29/03/2013	19/07/2019		806m	South East
SP2	Infrastructure	Road	Cumberland Local Environmental Plan 2021	05/11/2021	05/11/2021	05/11/2021		819m	South West
SP2	Infrastructure	School	Auburn Local Environmental Plan 2010	18/12/2020	18/12/2020	12/03/2021	State Environmental Planning Policy Amendment (Carter Street Priority Precinct) 2020	827m	West
IN1	General Industrial		Strathfield Local Environmental Plan 2012	15/03/2013	29/03/2013	19/07/2019		841m	South West
SP2	Infrastructure	Rail Infrastructure	Strathfield Local Environmental Plan 2012	15/03/2013	29/03/2013	19/07/2019		844m	South West
SP2	Infrastructure	Railway	Cumberland Local Environmental Plan 2021	05/11/2021	05/11/2021	05/11/2021		845m	South West
RE1	Public Recreation		State Environmental Planning Policy (State Significant Precincts) 2005	24/03/2016	24/03/2016	24/03/2016	State Environmental Planning Policy (Major Development) Amendment (State Significant Precincts) 2016	851m	North
R3	Medium Density Residential		Strathfield Local Environmental Plan 2012	15/03/2013	29/03/2013	19/07/2019		854m	South
IN1	General Industrial		Cumberland Local Environmental Plan 2021	05/11/2021	05/11/2021	05/11/2021		861m	South West
E2	Environmental Conservation		Canada Bay Local Environmental Plan 2013	26/02/2021	26/02/2021	30/10/2021	Amendment No 18	867m	East
SP2	Infrastructure	Stormwater Management	Strathfield Local Environmental Plan 2012	15/03/2013	29/03/2013	19/07/2019		876m	South
RE1	Public Recreation		Auburn Local Environmental Plan 2010	27/11/2015	27/11/2015	12/03/2021	State Environmental Planning Policy Amendment (Carter Street Priority Precinct) 2015	877m	West
B6	Enterprise Corridor		Strathfield Local Environmental Plan 2012	15/03/2013	29/03/2013	19/07/2019		878m	South
B6	Enterprise Corridor		Strathfield Local Environmental Plan 2012	15/03/2013	29/03/2013	19/07/2019		881m	South
E2	Environmental Conservation		State Environmental Planning Policy (State Significant Precincts) 2005	24/03/2016	24/03/2016	24/03/2016	State Environmental Planning Policy (Major Development) Amendment (State Significant Precincts) 2016	895m	East
E2	Environmental Conservation		Canada Bay Local Environmental Plan 2013	26/02/2021	26/02/2021	30/10/2021	Amendment No 18	917m	East
E2	Environmental Conservation		Canada Bay Local Environmental Plan 2013	26/02/2021	26/02/2021	30/10/2021	Amendment No 18	919m	East

Zone	Description	Purpose	EPI Name	Published Date	Commenced Date	Currency Date	Amendment	Distance	Direction
RE1	Public Recreation		State Environmental Planning Policy (State Significant Precincts) 2005	24/03/2016	24/03/2016	05/06/2020	State Environmental Planning Policy (Major Development) Amendment (State Significant Precincts) 2016	947m	East
RE1	Public Recreation		State Environmental Planning Policy (State Significant Precincts) 2005	24/03/2016	24/03/2016	24/03/2016	State Environmental Planning Policy (Major Development) Amendment (State Significant Precincts) 2016	948m	North West
B6	Enterprise Corridor		Cumberland Local Environmental Plan 2021	05/11/2021	05/11/2021	05/11/2021		951m	South West
SP2	Infrastructure	Classified Road	Canada Bay Local Environmental Plan 2013	19/07/2013	02/08/2013	30/10/2021		951m	East
RE1	Public Recreation		Auburn Local Environmental Plan 2010	18/12/2020	18/12/2020	12/03/2021	State Environmental Planning Policy Amendment (Carter Street Priority Precinct) 2020	954m	West
SP1	Special Activities	Wholesale and Retail Markets	Strathfield Local Environmental Plan 2012	15/03/2013	29/03/2013	19/07/2019		968m	South
SP2	Infrastructure	Stormwater Management	Strathfield Local Environmental Plan 2012	15/03/2013	29/03/2013	19/07/2019		970m	South East
E2	Environmental Conservation		Canada Bay Local Environmental Plan 2013	26/02/2021	26/02/2021	30/10/2021	Amendment No 18	971m	East
RE1	Public Recreation		Canada Bay Local Environmental Plan 2013	19/07/2013	02/08/2013	30/10/2021		978m	East
E2	Environmental Conservation		Canada Bay Local Environmental Plan 2013	26/02/2021	26/02/2021	30/10/2021	Amendment No 18	983m	North East
IN2	Light Industrial		Strathfield Local Environmental Plan 2012	15/03/2013	29/03/2013	19/07/2019		984m	South East
RE1	Public Recreation		Strathfield Local Environmental Plan 2012	15/03/2013	29/03/2013	19/07/2019		988m	South East
E2	Environmental Conservation		Canada Bay Local Environmental Plan 2013	26/02/2021	26/02/2021	30/10/2021	Amendment No 18	989m	East
R2	Low Density Residential		Cumberland Local Environmental Plan 2021	05/11/2021	05/11/2021	05/11/2021		991m	South West

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Heritage Items

7 Figtree Drive, Sydney Olympic Park, NSW 2127



Heritage

7 Figtree Drive, Sydney Olympic Park, NSW 2127

Commonwealth Heritage List

What are the Commonwealth Heritage List Items located within the dataset buffer?

Place Id	Name	Address	Place File No	Class	Status	Register Date	Distance	Direction
N/A	No records in buffer							

Heritage Data Source: Australian Government Department of the Environment and Energy - Heritage Branch
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National Heritage List

What are the National Heritage List Items located within the dataset buffer?
Note. Please click on Place Id to activate a hyperlink to online website.

Place Id	Name	Address	Place File No	Class	Status	Register Date	Distance	Direction
N/A	No records in buffer							

Heritage Data Source: Australian Government Department of the Environment and Energy - Heritage Branch
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State Heritage Register - Curtilages

What are the State Heritage Register Items located within the dataset buffer?

Map Id	Name	Address	LGA	Listing Date	Listing No	Plan No	Distance	Direction
5061184	Olympic Cauldron at Sydney Olympic Park	Cathy Freeman Park near corner of Olympic Boulevard and the Grand Parade, Sydney Olympic Park	CITY OF PARRAMATTA	10/09/2010	01839	2343	399m	North West
5001039	Hall of Champions (collection)	Australia Avenue, State Sports Centre, Homebush	CITY OF PARRAMATTA	02/04/1999	01295	2931	407m	South

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Environmental Planning Instrument - Heritage

What are the EPI Heritage Items located within the dataset buffer?

Map Id	Name	Classification	Significance	EPI Name	Published Date	Commenced Date	Currency Date	Distance	Direction
A	State Abattoirs	Conservation Area - General	State	State Environmental Planning Policy (State Significant Precincts) 2005	31/08/2018	31/08/2018	31/08/2018	1m	North West

Map Id	Name	Classification	Significance	EPI Name	Published Date	Commenced Date	Currency Date	Distance	Direction
C	Olympic Cauldron	Item - General	State	State Environmental Planning Policy (State Significant Precincts) 2005	31/08/2018	31/08/2018	31/08/2018	399m	North West
I63	Former Ford Factory Building (brick façade)	Item - General	Local	Strathfield Local Environmental Plan 2012	15/03/2013	29/03/2013	18/11/2016	841m	South West
I467	Powell's Creek Reserve - landscape	Item - General	Local	Canada Bay Local Environmental Plan 2013	19/07/2013	02/08/2013	26/02/2021	979m	East
C6	Welfare Street Conservation Area, Homebush West-Inter-War Bungalow Style Group	Conservation Area - General	Local	Strathfield Local Environmental Plan 2012	15/03/2013	29/03/2013	18/11/2016	988m	South

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Natural Hazards

7 Figtree Drive, Sydney Olympic Park, NSW 2127

Bush Fire Prone Land

What are the nearest Bush Fire Prone Land Categories that exist within the dataset buffer?

Bush Fire Prone Land Category	Distance	Direction
No records in buffer		

NSW Bush Fire Prone Land - © NSW Rural Fire Service under Creative Commons 4.0 International Licence

Ecological Constraints - Vegetation & Ramsar Wetlands

7 Figtree Drive, Sydney Olympic Park, NSW 2127



Ecological Constraints

7 Figtree Drive, Sydney Olympic Park, NSW 2127

Native Vegetation

What native vegetation exists within the dataset buffer?

Map ID	Map Unit Name	Threatened Ecological Community NSW	Threatened Ecological Community EPBC Act	Understorey	Disturbance	Disturbance Index	Dominant Species	Dist	Dir
Urban_E/N	Urban_E/N: Urban Exotic/Native			00: Not assessed	00: Not assessed	0: Not assessed	Urban Exotic/Native	0m	On-site
S_FrW06	S_FrW06: Estuarine Reedland	Swamp Oak Floodplain Forest		00: Not assessed	00: Not assessed	0: Not assessed	P.australis/B.juncea	481m	East
S_SW01	S_SW01: Estuarine Mangrove Forest			00: Not assessed	00: Not assessed	0: Not assessed	Mangroves	557m	North East
S_SW02	S_SW02: Estuarine Saltmarsh	Coastal Saltmarsh	Subtropical and Temperate Coastal Saltmarsh (possible)	00: Not assessed	00: Not assessed	0: Not assessed	S.repens/S.quinqueflora/S.virginicusJ.krausii	567m	East
S_FoW08	S_FoW08: Estuarine Swamp Oak Forest	Swamp Oak Floodplain Forest		18: Swampy sedges, shrubs, ferns and herbs	20: Previously cleared 1943	3: High	C.glauca	611m	East
S_FoW08	S_FoW08: Estuarine Swamp Oak Forest	Swamp Oak Floodplain Forest		31: Saltmarsh	99: No visible disturbance	5: No visible disturbance	C.glauca	642m	North East
Art_WL	Art_WL: Artificial Wetland			00: Not assessed	00: Not assessed	0: Not assessed	Artificial wetland	683m	North
Plant_n	Plant_n: Plantation (native and/or exotic)			00: Not assessed	00: Not assessed	0: Not assessed	Native or Exotic Plantations	688m	East
S_FoW08	S_FoW08: Estuarine Swamp Oak Forest	Swamp Oak Floodplain Forest		31: Saltmarsh	20: Previously cleared 1943	3: High	C.glauca	975m	North West
S_SW01	S_SW01: Estuarine Mangrove Forest			00: Not assessed	20: Previously cleared 1943	3: High	Mangroves	983m	North West
S_FoW08	S_FoW08: Estuarine Swamp Oak Forest	Swamp Oak Floodplain Forest		00: Not assessed	00: Not assessed	0: Not assessed	C.glauca	996m	North West

Native Vegetation of the Sydney Metropolitan Area : NSW Office of Environment and Heritage
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Ramsar Wetlands

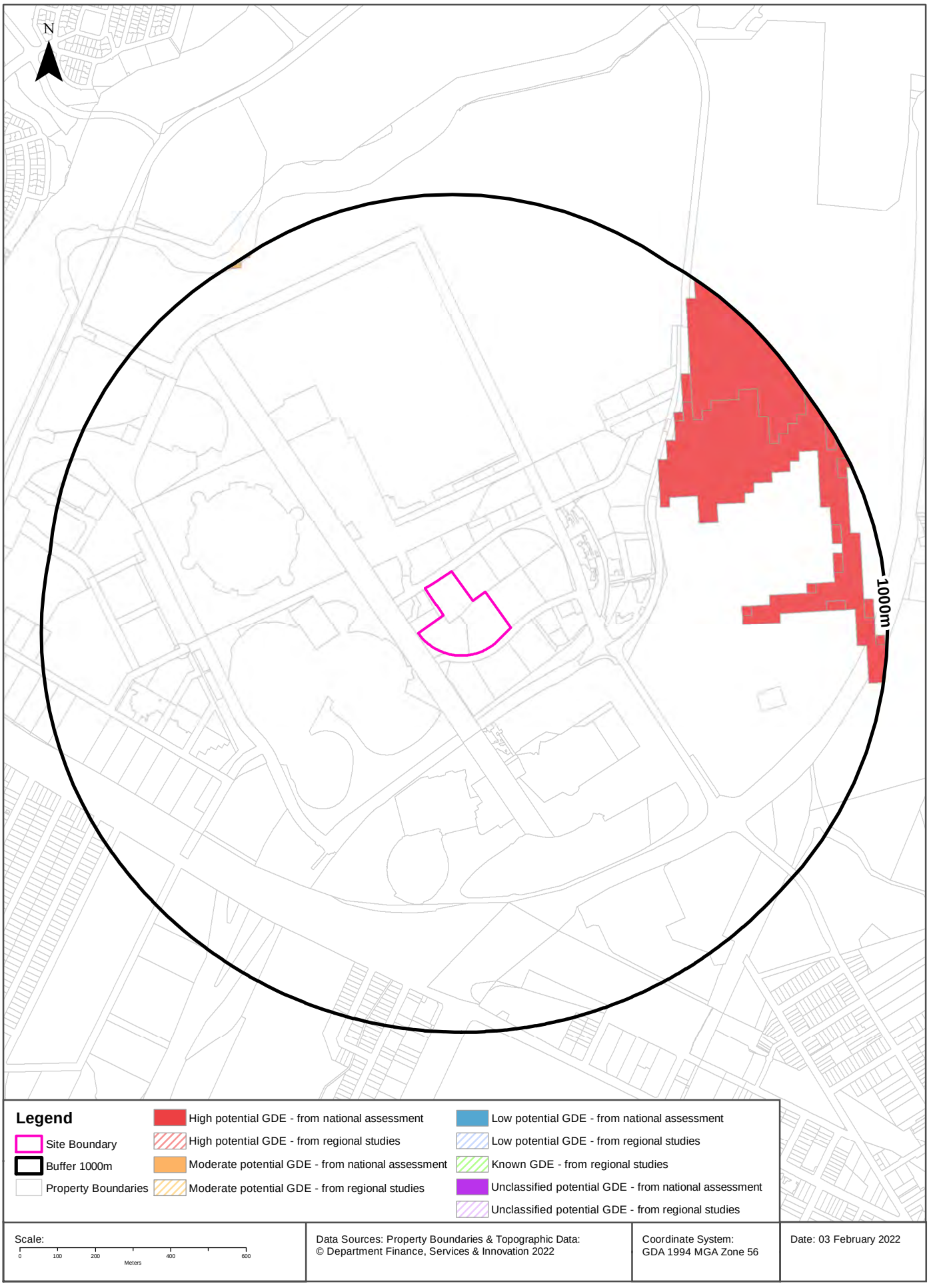
What Ramsar Wetland areas exist within the dataset buffer?

Map Id	Ramsar Name	Wetland Name	Designation Date	Source	Distance	Direction
N/A	No records in buffer					

Ramsar Wetlands Data Source: © Commonwealth of Australia - Department of Agriculture, Water and the Environment

Ecological Constraints - Groundwater Dependent Ecosystems Atlas

7 Figtree Drive, Sydney Olympic Park, NSW 2127



Ecological Constraints

7 Figtree Drive, Sydney Olympic Park, NSW 2127

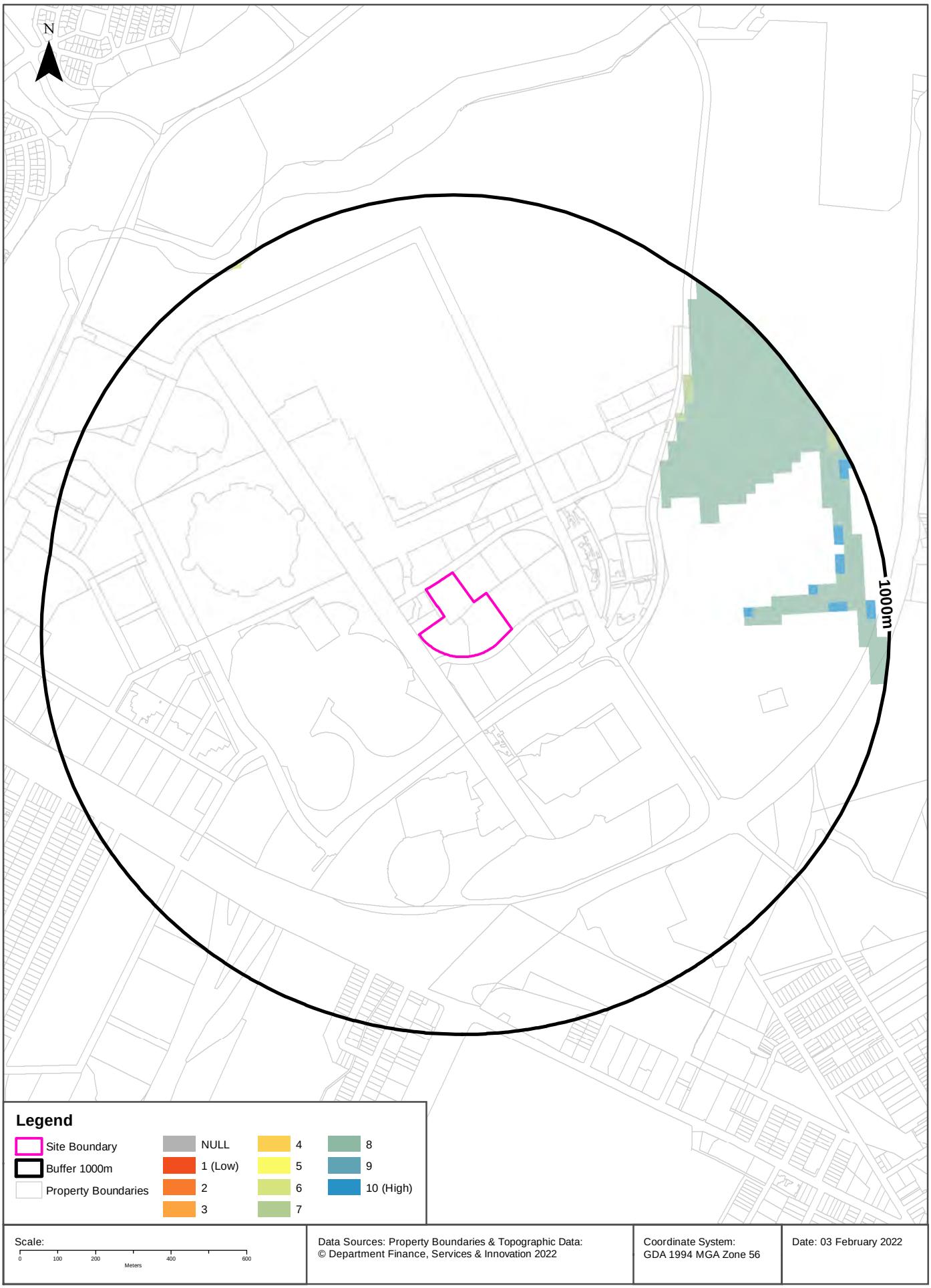
Groundwater Dependent Ecosystems Atlas

Type	GDE Potential	Geomorphology	Ecosystem Type	Aquifer Geology	Distance	Direction
Terrestrial	High potential GDE - from national assessment	Undulating to low hilly country, mainly on shale.	Vegetation	Consolidated sedimentary	508m	North East
Terrestrial	High potential GDE - from national assessment	Undulating to low hilly country, mainly on shale.	Vegetation		938m	East
Terrestrial	Moderate potential GDE - from national assessment	Undulating to low hilly country, mainly on shale.	Vegetation		981m	North West

Groundwater Dependent Ecosystems Atlas Data Source: The Bureau of Meteorology
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Ecological Constraints - Inflow Dependent Ecosystems Likelihood

7 Figtree Drive, Sydney Olympic Park, NSW 2127



Ecological Constraints

7 Figtree Drive, Sydney Olympic Park, NSW 2127

Inflow Dependent Ecosystems Likelihood

Type	IDE Likelihood	Geomorphology	Ecosystem Type	Aquifer Geology	Distance	Direction
Terrestrial	8	Undulating to low hilly country, mainly on shale.	Vegetation	Consolidated sedimentary	508m	North East
Terrestrial	10	Undulating to low hilly country, mainly on shale.	Vegetation	Consolidated sedimentary	613m	East
Terrestrial	7	Undulating to low hilly country, mainly on shale.	Vegetation	Consolidated sedimentary	675m	North East
Terrestrial	10	Undulating to low hilly country, mainly on shale.	Vegetation		938m	East
Terrestrial	7	Undulating to low hilly country, mainly on shale.	Vegetation		960m	North East
Terrestrial	6	Undulating to low hilly country, mainly on shale.	Vegetation		981m	North West

Inflow Dependent Ecosystems Likelihood Data Source: The Bureau of Meteorology

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Ecological Constraints

7 Figtree Drive, Sydney Olympic Park, NSW 2127

NSW BioNet Atlas

Species on the NSW BioNet Atlas that have a NSW or federal conservation status, a NSW sensitivity status, or are listed under a migratory species agreement, and are within 10km of the site?

Kingdom	Class	Scientific	Common	NSW Conservation Status	NSW Sensitivity Class	Federal Conservation Status	Migratory Species Agreements
Animalia	Amphibia	Litoria aurea	Green and Golden Bell Frog	Endangered	Not Sensitive	Vulnerable	
Animalia	Amphibia	Pseudophryne australis	Red-crowned Toadlet	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Actitis hypoleucos	Common Sandpiper	Not Listed	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Anseranas semipalmata	Magpie Goose	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Anthochaera phrygia	Regent Honeyeater	Critically Endangered	Not Sensitive	Critically Endangered	
Animalia	Aves	Apus pacificus	Fork-tailed Swift	Not Listed	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Ardenna grisea	Sooty Shearwater	Not Listed	Not Sensitive	Not Listed	JAMBA
Animalia	Aves	Ardenna pacifica	Wedge-tailed Shearwater	Not Listed	Not Sensitive	Not Listed	JAMBA
Animalia	Aves	Ardenna tenuirostris	Short-tailed Shearwater	Not Listed	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Arenaria interpres	Ruddy Turnstone	Not Listed	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Artamus cyanopterus cyanopterus	Dusky Woodswallow	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Botaurus poiciloptilus	Australasian Bittern	Endangered	Not Sensitive	Endangered	
Animalia	Aves	Burhinus grallarius	Bush Stone-curlew	Endangered	Not Sensitive	Not Listed	
Animalia	Aves	Calidris acuminata	Sharp-tailed Sandpiper	Not Listed	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Calidris alba	Sanderling	Vulnerable	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Calidris canutus	Red Knot	Not Listed	Not Sensitive	Endangered	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Calidris ferruginea	Curlew Sandpiper	Endangered	Not Sensitive	Critically Endangered	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Calidris melanotos	Pectoral Sandpiper	Not Listed	Not Sensitive	Not Listed	ROKAMBA;JAMBA
Animalia	Aves	Calidris ruficollis	Red-necked Stint	Not Listed	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Calidris tenuirostris	Great Knot	Vulnerable	Not Sensitive	Critically Endangered	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Callocephalon fimbriatum	Gang-gang Cockatoo	Endangered Population, Vulnerable	Category 3	Not Listed	
Animalia	Aves	Callocephalon fimbriatum	Gang-gang Cockatoo	Vulnerable	Category 3	Not Listed	
Animalia	Aves	Calyptorhynchus banksii samueli	Red-tailed Black-Cockatoo (inland subspecies)	Vulnerable	Category 2	Not Listed	
Animalia	Aves	Calyptorhynchus lathami	Glossy Black-Cockatoo	Vulnerable	Category 2	Not Listed	
Animalia	Aves	Certhionyx variegatus	Pied Honeyeater	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Charadrius leschenaultii	Greater Sand-plover	Vulnerable	Not Sensitive	Vulnerable	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Chlidonias leucopterus	White-winged Black Tern	Not Listed	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA

Kingdom	Class	Scientific	Common	NSW Conservation Status	NSW Sensitivity Class	Federal Conservation Status	Migratory Species Agreements
Animalia	Aves	Circus assimilis	Spotted Harrier	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Climacteris picumnus victoriae	Brown Treecreeper (eastern subspecies)	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Cuculus optatus	Oriental Cuckoo	Not Listed	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Daphoenositta chrysoptera	Varied Sittella	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Ephippiorhynchus asiaticus	Black-necked Stork	Endangered	Not Sensitive	Not Listed	
Animalia	Aves	Epthianura albifrons	White-fronted Chat	Endangered Population, Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Falco hypoleucos	Grey Falcon	Endangered	Category 2	Not Listed	
Animalia	Aves	Falco subniger	Black Falcon	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Gallinago hardwickii	Latham's Snipe	Not Listed	Not Sensitive	Not Listed	ROKAMBA;JAMBA
Animalia	Aves	Gelochelidon nilotica	Gull-billed Tern	Not Listed	Not Sensitive	Not Listed	CAMBA
Animalia	Aves	Glossopsitta pusilla	Little Lorikeet	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Grantiella picta	Painted Honeyeater	Vulnerable	Not Sensitive	Vulnerable	
Animalia	Aves	Haematopus longirostris	Pied Oystercatcher	Endangered	Not Sensitive	Not Listed	
Animalia	Aves	Haliaeetus leucogaster	White-bellied Sea-Eagle	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Hieraaetus morphnoides	Little Eagle	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Hirundapus caudacutus	White-throated Needletail	Not Listed	Not Sensitive	Vulnerable	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Hydroprogne caspia	Caspian Tern	Not Listed	Not Sensitive	Not Listed	JAMBA
Animalia	Aves	Ixobrychus flavicollis	Black Bittern	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Lathamus discolor	Swift Parrot	Endangered	Category 3	Critically Endangered	
Animalia	Aves	Limicola falcinellus	Broad-billed Sandpiper	Vulnerable	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Limosa lapponica	Bar-tailed Godwit	Not Listed	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Limosa limosa	Black-tailed Godwit	Vulnerable	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Lophochroa leadbeateri	Major Mitchell's Cockatoo	Vulnerable	Category 2	Not Listed	
Animalia	Aves	Manorina melanotis	Black-eared Miner	Critically Endangered	Not Sensitive	Endangered	
Animalia	Aves	Motacilla flava	Yellow Wagtail	Not Listed	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Neophema pulchella	Turquoise Parrot	Vulnerable	Category 3	Not Listed	
Animalia	Aves	Ninox connivens	Barking Owl	Vulnerable	Category 3	Not Listed	
Animalia	Aves	Ninox strenua	Powerful Owl	Vulnerable	Category 3	Not Listed	
Animalia	Aves	Numenius madagascariensis	Eastern Curlew	Not Listed	Not Sensitive	Critically Endangered	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Numenius minutus	Little Curlew	Not Listed	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Numenius phaeopus	Whimbrel	Not Listed	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Onychoprion fuscata	Sooty Tern	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Oxyura australis	Blue-billed Duck	Vulnerable	Not Sensitive	Not Listed	

Kingdom	Class	Scientific	Common	NSW Conservation Status	NSW Sensitivity Class	Federal Conservation Status	Migratory Species Agreements
Animalia	Aves	Pandion cristatus	Eastern Osprey	Vulnerable	Category 3	Not Listed	
Animalia	Aves	Petroica boodang	Scarlet Robin	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Petroica phoenicea	Flame Robin	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Philomachus pugnax	Ruff	Not Listed	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Pluvialis fulva	Pacific Golden Plover	Not Listed	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Pluvialis squatarola	Grey Plover	Not Listed	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Polytelis anthopeplus monarchoides	Regent Parrot (eastern subspecies)	Endangered	Category 3	Vulnerable	
Animalia	Aves	Polytelis swainsonii	Superb Parrot	Vulnerable	Category 3	Vulnerable	
Animalia	Aves	Ptilinopus regina	Rose-crowned Fruit-Dove	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Ptilinopus superbus	Superb Fruit-Dove	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Rostratula australis	Australian Painted Snipe	Endangered	Not Sensitive	Endangered	
Animalia	Aves	Sterna hirundo	Common Tern	Not Listed	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Sternula albifrons	Little Tern	Endangered	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Stictonetta naevosa	Freckled Duck	Vulnerable	Not Sensitive	Not Listed	
Animalia	Aves	Thalasseus bergii	Crested Tern	Not Listed	Not Sensitive	Not Listed	JAMBA
Animalia	Aves	Tringa brevipes	Grey-tailed Tattler	Not Listed	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Tringa glareola	Wood Sandpiper	Not Listed	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Tringa nebularia	Common Greenshank	Not Listed	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Tringa stagnatilis	Marsh Sandpiper	Not Listed	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Aves	Tyto longimembris	Eastern Grass Owl	Vulnerable	Category 3	Not Listed	
Animalia	Aves	Tyto novaehollandiae	Masked Owl	Vulnerable	Category 3	Not Listed	
Animalia	Aves	Xenus cinereus	Terek Sandpiper	Vulnerable	Not Sensitive	Not Listed	ROKAMBA;CAMBA; JAMBA
Animalia	Gastropoda	Meridolum corneovirens	Cumberland Plain Land Snail	Endangered	Not Sensitive	Not Listed	
Animalia	Gastropoda	Pommerhelix duralensis	Dural Land Snail	Endangered	Not Sensitive	Endangered	
Animalia	Mammalia	Cercartetus nanus	Eastern Pygmy-possum	Vulnerable	Not Sensitive	Not Listed	
Animalia	Mammalia	Chalinolobus dwyeri	Large-eared Pied Bat	Vulnerable	Not Sensitive	Vulnerable	
Animalia	Mammalia	Dasyurus maculatus	Spotted-tailed Quoll	Vulnerable	Not Sensitive	Endangered	
Animalia	Mammalia	Dasyurus viverrinus	Eastern Quoll	Endangered	Not Sensitive	Endangered	
Animalia	Mammalia	Falsistrellus tasmaniensis	Eastern False Pipistrelle	Vulnerable	Not Sensitive	Not Listed	
Animalia	Mammalia	Micronomus norfolkensis	Eastern Coastal Free-tailed Bat	Vulnerable	Not Sensitive	Not Listed	
Animalia	Mammalia	Miniopterus australis	Little Bent-winged Bat	Vulnerable	Not Sensitive	Not Listed	
Animalia	Mammalia	Miniopterus orianae oceanensis	Large Bent-winged Bat	Vulnerable	Not Sensitive	Not Listed	
Animalia	Mammalia	Myotis macropus	Southern Myotis	Vulnerable	Not Sensitive	Not Listed	
Animalia	Mammalia	Perameles nasuta	Long-nosed Bandicoot	Endangered Population	Not Sensitive	Not Listed	

Kingdom	Class	Scientific	Common	NSW Conservation Status	NSW Sensitivity Class	Federal Conservation Status	Migratory Species Agreements
Animalia	Mammalia	Petauroides volans	Greater Glider	Not Listed	Not Sensitive	Vulnerable	
Animalia	Mammalia	Petaurus australis	Yellow-bellied Glider	Vulnerable	Not Sensitive	Not Listed	
Animalia	Mammalia	Phascogale tapoatafa	Brush-tailed Phascogale	Vulnerable	Not Sensitive	Not Listed	
Animalia	Mammalia	Phascolarctos cinereus	Koala	Vulnerable	Not Sensitive	Vulnerable	
Animalia	Mammalia	Pseudomys gracilicaudatus	Eastern Chestnut Mouse	Vulnerable	Not Sensitive	Not Listed	
Animalia	Mammalia	Pteropus poliocephalus	Grey-headed Flying-fox	Vulnerable	Not Sensitive	Vulnerable	
Animalia	Mammalia	Saccolaimus flaviventris	Yellow-bellied Sheathtail-bat	Vulnerable	Not Sensitive	Not Listed	
Animalia	Mammalia	Scoteanax rueppellii	Greater Broad-nosed Bat	Vulnerable	Not Sensitive	Not Listed	
Animalia	Mammalia	Vespadelus troughtoni	Eastern Cave Bat	Vulnerable	Not Sensitive	Not Listed	
Animalia	Reptilia	Aspidites ramsayi	Woma	Vulnerable	Not Sensitive	Not Listed	
Animalia	Reptilia	Caretta caretta	Loggerhead Turtle	Endangered	Not Sensitive	Endangered	
Animalia	Reptilia	Chelonia mydas	Green Turtle	Vulnerable	Not Sensitive	Vulnerable	
Animalia	Reptilia	Tiliqua occipitalis	Western Blue-tongued Lizard	Vulnerable	Not Sensitive	Not Listed	
Fungi	Flora	Camarophyllopsis kearneyi		Endangered	Not Sensitive	Not Listed	
Fungi	Flora	Hygrocybe anomala var. ianthinomarginata		Vulnerable	Not Sensitive	Not Listed	
Fungi	Flora	Hygrocybe aurantipes		Vulnerable	Not Sensitive	Not Listed	
Fungi	Flora	Hygrocybe austropratensis		Endangered	Not Sensitive	Not Listed	
Fungi	Flora	Hygrocybe lanecovensis		Endangered	Not Sensitive	Not Listed	
Fungi	Flora	Hygrocybe reesiae		Vulnerable	Not Sensitive	Not Listed	
Fungi	Flora	Hygrocybe rubronivea		Vulnerable	Not Sensitive	Not Listed	
Plantae	Flora	Acacia bynoeana	Bynoe's Wattle	Endangered	Not Sensitive	Vulnerable	
Plantae	Flora	Acacia cluniesrossiae	Kanangra Wattle	Vulnerable	Not Sensitive	Not Listed	
Plantae	Flora	Acacia pubescens	Downy Wattle	Vulnerable	Not Sensitive	Vulnerable	
Plantae	Flora	Acacia terminalis subsp. Eastern Sydney	Sunshine wattle	Endangered	Not Sensitive	Endangered	
Plantae	Flora	Callistemon linearifolius	Netted Bottle Brush	Vulnerable	Category 3	Not Listed	
Plantae	Flora	Darwinia biflora		Vulnerable	Not Sensitive	Vulnerable	
Plantae	Flora	Dillwynia tenuifolia		Vulnerable	Not Sensitive	Not Listed	
Plantae	Flora	Epacris purpurascens var. purpurascens		Vulnerable	Not Sensitive	Not Listed	
Plantae	Flora	Epacris sparsa	Sparse Heath	Vulnerable	Not Sensitive	Vulnerable	
Plantae	Flora	Eucalyptus leucoxylon subsp. pruinosa	Yellow Gum	Vulnerable	Not Sensitive	Not Listed	
Plantae	Flora	Eucalyptus nicholii	Narrow-leaved Black Peppermint	Vulnerable	Not Sensitive	Vulnerable	
Plantae	Flora	Eucalyptus scoparia	Wallangarra White Gum	Endangered	Not Sensitive	Vulnerable	
Plantae	Flora	Genoplesium baueri	Bauer's Midge Orchid	Endangered	Category 2	Endangered	

Kingdom	Class	Scientific	Common	NSW Conservation Status	NSW Sensitivity Class	Federal Conservation Status	Migratory Species Agreements
Plantae	Flora	Grammitis stenophylla	Narrow-leaf Finger Fern	Endangered	Category 3	Not Listed	
Plantae	Flora	Grevillea beadleana	Beadle's Grevillea	Endangered	Category 3	Endangered	
Plantae	Flora	Hibbertia spanantha	Julian's Hibbertia	Critically Endangered	Category 2	Critically Endangered	
Plantae	Flora	Isotoma fluviatilis subsp. fluviatilis		Not Listed	Not Sensitive	Extinct	
Plantae	Flora	Leptospermum deanei		Vulnerable	Not Sensitive	Vulnerable	
Plantae	Flora	Macadamia integrifolia	Macadamia Nut	Not Listed	Not Sensitive	Vulnerable	
Plantae	Flora	Macadamia tetraphylla	Rough-shelled Bush Nut	Vulnerable	Not Sensitive	Vulnerable	
Plantae	Flora	Marsdenia viridiflora subsp. viridiflora	Native Pear	Endangered Population	Not Sensitive	Not Listed	
Plantae	Flora	Melaleuca deanei	Deane's Paperbark	Vulnerable	Not Sensitive	Vulnerable	
Plantae	Flora	Persoonia hirsuta	Hairy Geebung	Endangered	Category 3	Endangered	
Plantae	Flora	Persoonia nutans	Nodding Geebung	Endangered	Not Sensitive	Endangered	
Plantae	Flora	Pimelea curviflora var. curviflora		Vulnerable	Not Sensitive	Vulnerable	
Plantae	Flora	Pimelea spicata	Spiked Rice-flower	Endangered	Not Sensitive	Endangered	
Plantae	Flora	Pomaderris brunnea	Brown Pomaderris	Endangered	Not Sensitive	Vulnerable	
Plantae	Flora	Pomaderris prunifolia	Plum-leaf Pomaderris	Endangered Population	Not Sensitive	Not Listed	
Plantae	Flora	Prostanthera marifolia	Seaforth Mintbush	Critically Endangered	Category 3	Critically Endangered	
Plantae	Flora	Pultenaea parviflora		Endangered	Not Sensitive	Vulnerable	
Plantae	Flora	Pultenaea pedunculata	Matted Bush-pea	Endangered	Not Sensitive	Not Listed	
Plantae	Flora	Rhodamnia rubescens	Scrub Turpentine	Critically Endangered	Not Sensitive	Critically Endangered	
Plantae	Flora	Syzygium paniculatum	Magenta Lilly Pilly	Endangered	Not Sensitive	Vulnerable	
Plantae	Flora	Tetratheca glandulosa		Vulnerable	Not Sensitive	Not Listed	
Plantae	Flora	Tetratheca juncea	Black-eyed Susan	Vulnerable	Not Sensitive	Vulnerable	
Plantae	Flora	Triplarina imbricata	Creek Triplarina	Endangered	Not Sensitive	Endangered	
Plantae	Flora	Wahlenbergia multicaulis	Tadgell's Bluebell	Endangered Population	Not Sensitive	Not Listed	
Plantae	Flora	Wilsonia backhousei	Narrow-leafed Wilsonia	Vulnerable	Not Sensitive	Not Listed	
Plantae	Flora	Zannichellia palustris		Endangered	Not Sensitive	Not Listed	

Data does not include NSW category 1 sensitive species.

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Location Confidences

Where Lotsearch has had to georeference features from supplied addresses, a location confidence has been assigned to the data record. This indicates a confidence to the positional accuracy of the feature. Where applicable, a code is given under the field heading “LC” or “LocConf”. These codes lookup to the following location confidences:

LC Code	Location Confidence
Premise Match	Georeferenced to the site location / premise or part of site
Area Match	Georeferenced to an approximate or general area
Road Match	Georeferenced to a road or rail corridor
Road Intersection	Georeferenced to a road intersection
Buffered Point	A point feature buffered to x metres
Adjacent Match	Land adjacent to a georeferenced feature
Network of Features	Georeferenced to a network of features
Suburb Match	Georeferenced to a suburb boundary
As Supplied	Spatial data supplied by provider

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APPENDIX B BORELOGS

BORE LOG ID SOP_BH101

Client: AFJV
Project No: 0628507
Project Name: SMW_SOP
Site Address: corner of Olympic Boulevard and Figtree Drive, Sydney Olympic Park, NSW 2127
Drilling Date: 20/01/2022 - 20/01/2022

Drilling Method: Augering Solid Fligh
Hole Diam./Width (mm): 100
Surface Completion:
Final Water Level (m bgl):

Elevation (Ground):
Elevation (Case):
Easting (MGA): 321314
Northing (MGA): 6252857

Comments:

Log By: AR
Checked By:

Material Description	Symbol	Well Diagram	Depth (m)	% Recovery	Analysed	PID	Samples	Additional Observations
ROADBASE: Grey gravelly sand, poorly sorted, sub-angular roadbase			0.2					
FILL: Brown silty sandy clay fill with rocks, medium firmness, medium plasticity			0.4		Y	0	SOP_BH101_0.5_220120	
			0.6					
			0.8					
FILL: Brown coarse sand with rock, well graded, sub rounded			1					
			1.2		Y	0.1	SOP_BH101_1.3_220120	
			1.4					
SILTY CLAY: Red brown silty clay, medium-hard, low-medium plasticity (Natural)			1.6					
			1.8					
			2		Y	0	SOP_BH101_2.0_220120	
			2.2					
SHALE: Grey/brown weathered shale			2.4					
SHALE: Brown shale			2.6					
			2.8					
			3					
Termination Depth at:3 m			3.2					
			3.4					
			3.6					
			3.8					
			4					
			4.2					
			4.4					
			4.6					
			4.8					

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BORE LOG ID SOP_BH102

Client: AFJV
Project No: 0628507
Project Name: SMW_SOP
Site Address: corner of Olympic Boulevard and Figtree Drive, Sydney Olympic Park, NSW 2127
Drilling Date: 20/01/2022 - 20/01/2022

Drilling Method: Augering Solid Fligh
Hole Diam./Width (mm): 100
Surface Completion:
Final Water Level (m bgl):

Elevation (Ground):
Elevation (Case):
Easting (MGA): 321320
Northing (MGA): 6252830

Comments:

Log By: AR
Checked By:

Material Description	Symbol	Well Diagram	Depth (m)	% Recovery	Analysed	PID	Samples	Additional Observations
ROADBASE: Grey gravelly sand, poorly sorted, sub-angular roadbase			0.2 0.4 0.6					
CLAY (RE-WORKED): Brown/red/grey mottled silty clay with minor shale, medium-hard, low plasticity, browner with depth			0.8 1 1.2 1.4		Y	0.1	SOP_BH102_0.7_220120	
SHALE: Grey/brown weathered shale			1.6 1.8					
SHALE: Brown/grey brown shale			2 2.2 2.4 2.6 2.8 3		Y		SOP_BH102_3.0_220120	
Termination Depth at:3 m			3.2 3.4 3.6 3.8 4 4.2 4.4 4.6 4.8					

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BORE LOG ID SOP_BH103

Client: AFJV
Project No: 0628507
Project Name: SMW_SOP
Site Address: corner of Olympic Boulevard and Figtree Drive, Sydney Olympic Park, NSW 2127
Drilling Date: 17/01/2022 - 17/01/2022

Drilling Method: Hand Augering
Hole Diam./Width (mm): 100
Surface Completion:
Final Water Level (m bgl):

Elevation (Ground):
Elevation (Case):
Easting (MGA): 321368
Northing (MGA): 62522819

Comments:

Log By: AR
Checked By:

Material Description	Symbol	Well Diagram	Depth (m)	% Recovery	Analysed	PID	Samples	Additional Observations
FILL: Orange/grey crushed shale and clay fill			0.2		Y	3.3	SOP_BH103_0.2_220117	
SHALE: Brown Shale (Natural)			1		Y		SOP_BH103_1.0_220117	
Termination Depth at:3 m			3					

BORE LOG ID SOP_BH104

Client: AFJV
Project No: 0628507
Project Name: SMW_SOP
Site Address: corner of Olympic Boulevard and Figtree Drive, Sydney Olympic Park, NSW 2127
Drilling Date: 17/01/2022 - 17/01/2022

Drilling Method: Hand Augering
Hole Diam./Width (mm): 100
Surface Completion:
Final Water Level (m bgl):

Elevation (Ground):
Elevation (Case):
Easting (MGA): 321388
Northing (MGA): 6252814

Comments:

Log By: AR
Checked By:

Material Description	Symbol	Well Diagram	Depth (m)	% Recovery	Analysed	PID	Samples	Additional Observations
FILL: Orange/grey crushed shale and clay fill			0.2, 0.4, 0.6, 0.8					
SHALE: Orange/brown shale fading to grey brown shale @1.8m			1		Y	9.1	SOP_BH104_1.0_220117	
			1.2, 1.4, 1.6, 1.8					
			2		Y		SOP_BH104_2.0_220117	
			2.2, 2.4, 2.6, 2.8					
Termination Depth at:3 m			3, 3.2, 3.4, 3.6, 3.8, 4, 4.2, 4.4, 4.6, 4.8					

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BORE LOG ID SOP_BH105

Client: AFJV
Project No: 0628507
Project Name: SMW_SOP
Site Address: corner of Olympic Boulevard and Figtree Drive, Sydney Olympic Park, NSW 2127
Drilling Date: 17/01/2022 - 17/01/2022

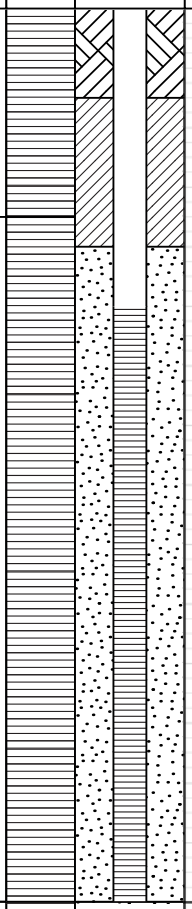
Drilling Method: Augering Solid Fligh
Hole Diam./Width (mm): 100
Surface Completion:
Final Water Level (m bgl):

Elevation (Ground):
Elevation (Case):
Easting (MGA): 321400
Northing (MGA): 6252816

Comments:

Log By: AR
Checked By:

Material Description	Symbol	Well Diagram	Depth (m)	% Recovery	Analysed	PID	Samples	Additional Observations
SHALE: Grey/brown crushed shale			0.2		Y	4.1	SOP_BH105_0.2_220117	
SHALE: Light brown shale			2		Y		SOP_BH105_2.0_220117	
Termination Depth at:3 m			3					



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BORE LOG ID SOP_BH106

Client: AFJV
Project No: 0628507
Project Name: SMW_SOP
Site Address: corner of Olympic Boulevard and Figtree Drive, Sydney Olympic Park, NSW 2127
Drilling Date: 17/01/2022 - 18/01/2022

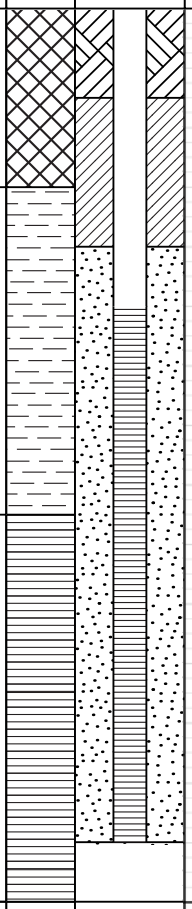
Drilling Method: Augering Solid Fligh
Hole Diam./Width (mm): 100
Surface Completion:
Final Water Level (m bgl):

Elevation (Ground):
Elevation (Case):
Easting (MGA): 321395
Northing (MGA): 6252838

Comments:

Log By: AR
Checked By:

Material Description	Symbol	Well Diagram	Depth (m)	% Recovery	Analysed	PID	Samples	Additional Observations
FILL: Brown silty clay with gravels, organic matter, soft, low plasticity			0.2		Y	3.2	SOP_BH106_0.2_220117	
CLAY (RE-WORKED): Grey/orange crushed shale and clay			1		Y		SOP_BH106_1.0_220117	
SHALE: Grey/brown Shale			2					
Termination Depth at:3 m			3					



BORE LOG ID SOP_BH107

Client: AFJV
Project No: 0628507
Project Name: SMW_SOP
Site Address: corner of Olympic Boulevard and Figtree Drive, Sydney Olympic Park, NSW 2127
Drilling Date: 20/01/2022 - 20/01/2022

Drilling Method: Augering Solid Fligh
Hole Diam./Width (mm): 100
Surface Completion:
Final Water Level (m bgl):

Elevation (Ground):
Elevation (Case):
Easting (MGA): 321400
Northing (MGA): 625281

Comments:

Log By: AR
Checked By:

Material Description	Symbol	Well Diagram	Depth (m)	% Recovery	Analysed	PID	Samples	Additional Observations
CONCRETE: Concrete slab			0.2					
ROADBASE: Grey gravelly sand, poorly sorted, sub-angular roadbase			0.4					
CLAY (RE-WORKED): Brown crushed shale with clay			0.6					
			0.8					
SHALE: Brown shale, darker brown with depth			1		Y		SOP_BH107_1.0_220120	
			1.2					
			1.4					
			1.6					
			1.8					
			2		Y		SOP_BH107_2.0_220120	
			2.2					
			2.4					
			2.6					
			2.8					
Termination Depth at:3 m			3					
			3.2					
			3.4					
			3.6					
			3.8					
			4					
			4.2					
			4.4					
			4.6					
			4.8					

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BORE LOG ID SOP_BH108

Client: AFJV
Project No: 0628507
Project Name: SMW_SOP
Site Address: corner of Olympic Boulevard and Figtree Drive, Sydney Olympic Park, NSW 2127
Drilling Date: 20/01/2022 - 20/01/2022

Drilling Method: Augering Solid Fligh
Hole Diam./Width (mm): 100
Surface Completion:
Final Water Level (m bgl):

Elevation (Ground):
Elevation (Case):
Easting (MGA):
Northing (MGA):

Comments:

Log By: AR
Checked By:

Material Description	Symbol	Well Diagram	Depth (m)	% Recovery	Analysed	PID	Samples	Additional Observations
CONCRETE: Concrete slab			0.2					
ROADBASE: Grey gravelly sand, poorly sorted, sub-angular roadbase			0.4		Y	0.2	SOP_BH108_0.4_220120	
CLAY (RE-WORKED): Brown crushed shale with clay			0.6					
SHALE: Brown shale			0.8					
			1					
			1.2					
			1.4					
			1.6					
			1.8					
			2					
			2.2					
			2.4					
			2.6					
			2.8					
			3		Y		SOP_BH108_3.0_220120	
Termination Depth at:3 m			3.2					
			3.4					
			3.6					
			3.8					
			4					
			4.2					
			4.4					
			4.6					
			4.8					

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BORE LOG ID SOP_BH109

Client: AFJV
Project No: 0628507
Project Name: SMW_SOP
Site Address: corner of Olympic Boulevard and Figtree Drive, Sydney Olympic Park, NSW 2127
Drilling Date: 20/01/2022 - 20/01/2022

Drilling Method: Hand Augering
Hole Diam./Width (mm): 100
Surface Completion:
Final Water Level (m bgl):

Elevation (Ground):
Elevation (Case):
Easting (MGA):
Northing (MGA):

Comments:

Log By: AR
Checked By:

Material Description	Symbol	Well Diagram	Depth (m)	% Recovery	Analysed	PID	Samples	Additional Observations
CONCRETE: Concrete slab								
ROADBASE: Grey gravelly sand, poorly sorted, sub-angular roadbase			0.2		Y	0.1	SOP_BH109_0.3_220120	
FILL: Brown silty clay and shale/rock, hard, poor plasticity			0.4					
			0.6					
CLAY: Red/brown clay, hard, low plasticity			0.8					
			1		Y	0.1	SOP_BH109_1.0_220120	
			1.2					
SHALE: Grey/brown weathered shale			1.4					
Termination Depth at:1.5 m			1.6					
			1.8					
			2					
			2.2					
			2.4					
			2.6					
			2.8					
			3					
			3.2					
			3.4					
			3.6					
			3.8					
			4					
			4.2					
			4.4					
			4.6					
			4.8					

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BORE LOG ID SOP_BH110

Client: AFJV
Project No: 0628507
Project Name: SMW_SOP
Site Address: corner of Olympic Boulevard and Figtree Drive, Sydney Olympic Park, NSW 2127
Drilling Date: 17/01/2022 - 18/01/2022

Drilling Method: Hand Augering
Hole Diam./Width (mm): 100
Surface Completion:
Final Water Level (m bgl):

Elevation (Ground):
Elevation (Case):
Easting (MGA): 321373
Northing (MGA): 6252901

Comments:

Log By: AR
Checked By:

Material Description	Symbol	Well Diagram	Depth (m)	% Recovery	Analysed	PID	Samples	Additional Observations
FILL: Light grey/brown clayey sand, poor-moderately sorted, fine, sub-angular with gravel			0.2		Y	2.1	SOP_BH110_0.2_220117	
FILL: Brown crushed shale fill			0.4 0.6 0.8 1					
SHALE: Light brown shale			1.2		Y		SOP_BH110_1.3_220118	
Termination Depth at:1.3 m			1.4 1.6 1.8 2 2.2 2.4 2.6 2.8 3 3.2 3.4 3.6 3.8 4 4.2 4.4 4.6 4.8					

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BORE LOG ID SOP_BH111

Client: AFJV
Project No: 0628507
Project Name: SMW_SOP
Site Address: corner of Olympic Boulevard and Figtree Drive, Sydney Olympic Park, NSW 2127
Drilling Date: 18/01/2022 - 18/01/2022

Drilling Method: Augering Solid Fligh
Hole Diam./Width (mm): 100
Surface Completion:
Final Water Level (m bgl):

Elevation (Ground):
Elevation (Case):
Easting (MGA): 321344
Northing (MGA): 6252978

Comments:

Log By: AR
Checked By:

Material Description	Symbol	Well Diagram	Depth (m)	% Recovery	Analysed	PID	Samples	Additional Observations
FILL: Brown/ red brown silty clay with gravels, soft-medium firmness, low-medium plasticity			0.2 0.4 0.6 0.8 1 1.2 1.4 1.6		Y	0.2	SOP_BH111_1.0_220118	
SHALE: Brown shale, becoming grey/brown with depth			1.8 2 2.2 2.4 2.6 2.8 3 3.2 3.4 3.6 3.8 4 4.2 4.4 4.6 4.8 5		Y		SOP_BH111_3.0_220118	
Termination Depth at:5 m			5.2					

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BORE LOG ID SOP_BH112

Client: AFJV
Project No: 0628507
Project Name: SMW_SOP
Site Address: corner of Olympic Boulevard and Figtree Drive, Sydney Olympic Park, NSW 2127
Drilling Date: 18/01/2022 - 18/01/2022

Drilling Method: Augering Solid Fligh
Hole Diam./Width (mm): 100
Surface Completion:
Final Water Level (m bgl):

Elevation (Ground):
Elevation (Case):
Easting (MGA): 321353
Northing (MGA): 6252990

Comments:

Log By: AR
Checked By:

Material Description	Symbol	Well Diagram	Depth (m)	% Recovery	Analysed	PID	Samples	Additional Observations
FILL: Brown/dark brown silty clay with gravels, soft, medium plasticity			0.2 0.4 0.6 0.8 1 1.2 1.4 1.6		Y	0.3	SOP_BH112_1.0_220118	
SHALE: Brown Shale (Natural)			1.8 2 2.2 2.4 2.6 2.8 3 3.2 3.4 3.6 3.8 4 4.2 4.4 4.6 4.8 5		Y		SOP_BH112_5.0_220118	
Termination Depth at:5 m			5.2					

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BORE LOG ID SOP_BH113

Client: AFJV
Project No: 0628507
Project Name: SMW_SOP
Site Address: corner of Olympic Boulevard and Figtree Drive, Sydney Olympic Park, NSW 2127
Drilling Date: 18/01/2022 - 18/01/2022

Drilling Method: Augering Solid Fligh
Hole Diam./Width (mm): 100
Surface Completion:
Final Water Level (m bgl):

Elevation (Ground):
Elevation (Case):
Easting (MGA): 321381
Northing (MGA): 6252991

Comments:

Log By: AR
Checked By:

Material Description	Symbol	Well Diagram	Depth (m)	% Recovery	Analysed	PID	Samples	Additional Observations
FILL: Grey/brown silty clayey sand with gravels, moderately sorted, sub-angular to sub-rounded			0.2		Y	0.1	SOP_BH113_0.1_220118	
CLAY (RE-WORKED): Mottled brown/red clay with shale fragments, hard, medium plasticity			0.4		Y	0.3	SOP_BH113_0.3_220118	
			0.6					
			0.8					
SHALE: Brown crushed/weathered shale			1					
			1.2					
SHALE: Brown Shale			1.4					
			1.6					
			1.8					
			2					
			2.2					
			2.4					
			2.6					
			2.8					
Termination Depth at:3 m			3					
			3.2					
			3.4					
			3.6					
			3.8					
			4					
			4.2					
			4.4					
			4.6					
			4.8					

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BORE LOG ID SOP_BH114

Client: AFJV
Project No: 0628507
Project Name: SMW_SOP
Site Address: corner of Olympic Boulevard and Figtree Drive, Sydney Olympic Park, NSW 2127
Drilling Date: 18/01/2022 - 18/01/2022

Drilling Method: Augering Solid Fligh
Hole Diam./Width (mm): 100
Surface Completion:
Final Water Level (m bgl):

Elevation (Ground):
Elevation (Case):
Easting (MGA): 321399
Northing (MGA): 6252986

Comments:

Log By: AR
Checked By:

Material Description	Symbol	Well Diagram	Depth (m)	% Recovery	Analysed	PID	Samples	Additional Observations
FILL: Grey/brown silty clayey sand with gravels, moderately sorted, sub-angular to sub-rounded			0.2		Y	0.1	SOP_BH114_0.3_220118	
CLAY (RE-WORKED): Mottled brown/red clay with shale fragments, hard, medium plasticity			0.4 0.6 0.8					
SHALE: Grey/brown weathered shale			1					
SHALE: Brown Shale			1.2 1.4 1.6 1.8 2 2.2 2.4 2.6 2.8		Y		SOP_BH114_2._220118	
Termination Depth at:3 m			3 3.2 3.4 3.6 3.8 4 4.2 4.4 4.6 4.8					

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BORE LOG ID SOP_BH115

Client: AFJV
Project No: 0628507
Project Name: SMW_SOP
Site Address: corner of Olympic Boulevard and Figtree Drive, Sydney Olympic Park, NSW 2127
Drilling Date: 18/01/2022 - 18/01/2022

Drilling Method: Augering Solid Fligh
Hole Diam./Width (mm): 100
Surface Completion:
Final Water Level (m bgl):

Elevation (Ground):
Elevation (Case):
Easting (MGA): 321408
Northing (MGA): 6252975

Comments:

Log By: AR
Checked By:

Material Description	Symbol	Well Diagram	Depth (m)	% Recovery	Analysed	PID	Samples	Additional Observations
FILL: Grey/brown silty clayey sand with gravels, poor- moderately sorted, sub-angular to sub-rounded CLAY (RE-WORKED): Brown crushed shale and clay			0.2 0.4 0.6 0.8 1 1.2 1.4 1.6 1.8 2 2.2 2.4 2.6 2.8 3		Y Y	0.9	SOP_BH115_0.1_220118 SOP_BH115_2._220118	
Termination Depth at:3 m			3.2 3.4 3.6 3.8 4 4.2 4.4 4.6 4.8					

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BORE LOG ID SOP_BH116

Client: AFJV
Project No: 0628507
Project Name: SMW_SOP
Site Address: corner of Olympic Boulevard and Figtree Drive, Sydney Olympic Park, NSW 2127
Drilling Date: 17/01/2022 - 17/01/2022

Drilling Method: Augering Solid Fligh
Hole Diam./Width (mm): 100
Surface Completion:
Final Water Level (m bgl):

Elevation (Ground):
Elevation (Case):
Easting (MGA): 321425
Northing (MGA): 6252960

Comments:

Log By: AR
Checked By:

Material Description	Symbol	Well Diagram	Depth (m)	% Recovery	Analysed	PID	Samples	Additional Observations
FILL: Brown sand, fine with gravels, poor-moderately sorted, sub angular to sub-rounded			0.2		Y	3.1	SOP_BH116_0.2_220117	
CLAY (RE-WORKED): Orange/brown crushed shale and clay			0.4 0.6 0.8 1 1.2 1.4 1.6					
SHALE: Grey/brown shale, weathered @1.7m-2.0m			1.8 2		Y		SOP_BH116_2.0_220117	
Termination Depth at:3 m			2.2 2.4 2.6 2.8 3 3.2 3.4 3.6 3.8 4 4.2 4.4 4.6 4.8					

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BORE LOG ID SOP_BH117

Client: AFJV
Project No: 0628507
Project Name: SMW_SOP
Site Address: corner of Olympic Boulevard and Figtree Drive, Sydney Olympic Park, NSW 2127
Drilling Date: 17/01/2022 - 18/01/2022

Drilling Method: Augering Solid Fligh
Hole Diam./Width (mm): 100
Surface Completion:
Final Water Level (m bgl):

Elevation (Ground):
Elevation (Case):
Easting (MGA): 321419
Northing (MGA): 6252934

Comments:

Log By: AR
Checked By:

Material Description	Symbol	Well Diagram	Depth (m)	% Recovery	Analysed	PID	Samples	Additional Observations
FILL: Grey/brown silty sand with gravels, fine, poor-moderately sorted, sub-angular to sub-rounded			0.2		Y	0.8	SOP_BH117_0.2_220117	
SHALE: Orange/brown crushed shale			0.4 0.6 0.8 1 1.2					
SHALE: Brown shale, gradual colour change to light red/brown			1.4 1.6 1.8 2 2.2 2.4 2.6 2.8 3		Y		SOP_BH117_3.0_220118	
Termination Depth at:3 m			3.2 3.4 3.6 3.8 4 4.2 4.4 4.6 4.8					

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BORE LOG ID SOP_BH118

Client: AFJV
Project No: 0628507
Project Name: SMW_SOP
Site Address: corner of Olympic Boulevard and Figtree Drive, Sydney Olympic Park, NSW 2127
Drilling Date: 19/01/2022 - 19/01/2022

Drilling Method: Hydraulic Hammer
Hole Diam./Width (mm): 100
Surface Completion:
Final Water Level (m bgl):

Elevation (Ground):
Elevation (Case):
Easting (MGA): 321381
Northing (MGA): 6252914

Comments:

Log By: AR
Checked By:

Material Description	Symbol	Well Diagram	Depth (m)	% Recovery	Analysed	PID	Samples	Additional Observations
FILL: Grey silty sand roadbase with gravels and rock, poor-moderately sorted, sub-angular			0		Y	0.2	SOP_BH118_0.1_220119	
			1		Y		SOP_BH118_1.0_220119	
FILL: Grey/brown silty sandy clay with rock, soft-medium firmness, low plasticity			2					
SHALE: Grey/brown crushed/weathered shale (Natural)			3					Slightly softer @11-12m, harder @21-22m, water @14.8m, wet @15m, saturated @20m
SHALE: Grey/brown shale			4					
			5		Y		SOP_BH118_5.0_220119	
			6					
			7					
			8					
			9					
			10		Y		SOP_BH118_10.0_220119	
			11					
			12					
			13					
			14					
			15		Y		SOP_BH118_15.0_220119	
			16					
			17					
			18					
			19					
			20		Y	0.1	SOP_BH118_20.0_220119	
			21					
			22					
			23					
			24					
			25		Y		SOP_BH118_25.0_220119	
Termination Depth at:25 m			26					

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BORE LOG ID SOP_BH119

Client: AFJV
Project No: 0628507
Project Name: SMW_SOP
Site Address: corner of Olympic Boulevard and Figtree Drive, Sydney Olympic Park, NSW 2127
Drilling Date: 17/01/2022 - 17/01/2022

Drilling Method: Augering Solid Fligh
Hole Diam./Width (mm): 100
Surface Completion:
Final Water Level (m bgl):

Elevation (Ground):
Elevation (Case):
Easting (MGA): 321395
Northing (MGA): 6252911

Comments:

Log By: AR
Checked By:

Material Description	Symbol	Well Diagram	Depth (m)	% Recovery	Analysed	PID	Samples	Additional Observations
FILL: Grey/brown silty sand with gravels, fine, moderately sorted, sub-rounded			0.2		Y	4.9	SOP_BH119_0.2_220117	
CLAY (RE-WORKED): Grey/brown mottled shaley clay, increased clay with depth			1		Y		SOP_BH119_1.0_220117	
SHALE: Orange/brown shale, becoming grey/brown @3.5m			3		Y		SOP_BH119_3.0_220117	Harder @ 4.5m
Termination Depth at:5 m			5					

BORE LOG ID SOP_BH120

Client: AFJV
Project No: 0628507
Project Name: SMW_SOP
Site Address: corner of Olympic Boulevard and Figtree Drive, Sydney Olympic Park, NSW 2127
Drilling Date: 20/01/2022 - 20/01/2022

Drilling Method: Augering Solid Fligh
Hole Diam./Width (mm): 100
Surface Completion:
Final Water Level (m bgl):

Elevation (Ground):
Elevation (Case):
Easting (MGA): 321409
Northing (MGA): 6252900

Comments:

Log By: AR
Checked By:

Material Description	Symbol	Well Diagram	Depth (m)	% Recovery	Analysed	PID	Samples	Additional Observations
ROADBASE: Grey gravelly sand, poorly sorted, sub-angular roadbase			0.2					
CLAY (RE-WORKED): Grey/brown crushed shale and clay			0.4		Y	0.1	SOP_BH120_0.5_220120	Perched water present
SHALE: Brown weathered shale			0.6 0.8 1 1.2					
SHALE: Brown shale			1.4 1.6 1.8 2 2.2 2.4 2.6 2.8 3 3.2 3.4 3.6 3.8 4 4.2 4.4 4.6 4.8 5		Y		SOP_BH120_3.0_220120	
Termination Depth at:5 m			5.2					

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BORE LOG ID SOP_BH121

Client: AFJV
Project No: 0628507
Project Name: SMW_SOP
Site Address: corner of Olympic Boulevard and Figtree Drive, Sydney Olympic Park, NSW 2127
Drilling Date: 20/01/2022 - 20/01/2022

Drilling Method: Augering Solid Fligh
Hole Diam./Width (mm): 100
Surface Completion:
Final Water Level (m bgl):

Elevation (Ground):
Elevation (Case):
Easting (MGA): 321411
Northing (MGA): 6252875

Comments:

Log By: AR
Checked By:

Material Description	Symbol	Well Diagram	Depth (m)	% Recovery	Analysed	PID	Samples	Additional Observations
CONCRETE: Concrete slab			0.2					
ROADBASE: Grey gravelly sand, poorly sorted, sub-angular roadbase			0.4					
SHALE: Brown weathered shale			0.6					
			0.8					
SHALE: Brown shale			1		Y	0.1	SOP_BH121_1.0_220120	
			1.2					
			1.4					
			1.6					
			1.8					
			2					
			2.2					
			2.4					
			2.6					
			2.8					
			3					
			3.2					
			3.4					
			3.6					
			3.8					
			4					
			4.2					
			4.4					
			4.6					
			4.8					
			5		Y	0.4	SOP_BH121_5.0_220120	
Termination Depth at:5 m			5.2					

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BORE LOG ID SOP_BH122

Client: AFJV
Project No: 0628507
Project Name: SMW_SOP
Site Address: corner of Olympic Boulevard and Figtree Drive, Sydney Olympic Park, NSW 2127
Drilling Date: 24/01/2022 - 24/01/2022

Drilling Method: Augering Solid Fligh
Hole Diam./Width (mm): 100
Surface Completion:
Final Water Level (m bgl):

Elevation (Ground):
Elevation (Case):
Easting (MGA): 321424
Northing (MGA): 6252909

Comments:

Log By: AR
Checked By:

Material Description	Symbol	Well Diagram	Depth (m)	% Recovery	Analysed	PID	Samples	Additional Observations
CONCRETE: Concrete slab			0.2					
FILL: Brown coarse sand with rock, poorly graded, sub angular			0.4					
ROADBASE: Gravel/rock roadbase			0.6					
SHALE: Brown weathered shale			0.8					
SHALE: Brown shale, darker brown with depth			1		Y		SOP_BH122_1.0_220124	
			1.2					
			1.4					
			1.6					
			1.8					
			2		Y		SOP_BH122_2.0_220124	
			2.2					
			2.4					
			2.6					
			2.8					
Termination Depth at:3 m			3					
			3.2					
			3.4					
			3.6					
			3.8					
			4					
			4.2					
			4.4					
			4.6					
			4.8					

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BORE LOG ID SOP_BH123

Client: AFJV
Project No: 0628507
Project Name: SMW_SOP
Site Address: corner of Olympic Boulevard and Figtree Drive, Sydney Olympic Park, NSW 2127
Drilling Date: 24/01/2022 - 25/01/2022

Drilling Method: Augering Solid Fligh
Hole Diam./Width (mm): 100
Surface Completion:
Final Water Level (m bgl):

Elevation (Ground):
Elevation (Case):
Easting (MGA): 321422
Northing (MGA): 6252891

Comments:

Log By: AR
Checked By:

Material Description	Symbol	Well Diagram	Depth (m)	% Recovery	Analysed	PID	Samples	Additional Observations
FILL: Grey/brown coarse sand with gravels, poorly sorted, sub-angular			0.2					
SHALE: Brown weathered shale			0.4					
SHALE: Brown shale, grey/brown changing to grey with depth			0.6					
			0.8					
			1		Y	0.1	SOP_BH123_1.0_220124	
			1.2					
			1.4					
			1.6					
			1.8					
			2					
			2.2					
			2.4					
			2.6					
			2.8					
			3		Y		SOP_BH123_3.0_220124	
Termination Depth at:3 m			3.2					
			3.4					
			3.6					
			3.8					
			4					
			4.2					
			4.4					
			4.6					
			4.8					

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BORE LOG ID SOP_BH124

Client: AFJV
Project No: 0628507
Project Name: SMW_SOP
Site Address: corner of Olympic Boulevard and Figtree Drive, Sydney Olympic Park, NSW 2127
Drilling Date: 21/01/2022 - 21/01/2022

Drilling Method: Augering Solid Fligh
Hole Diam./Width (mm): 100
Surface Completion:
Final Water Level (m bgl):

Elevation (Ground):
Elevation (Case):
Easting (MGA): 321420
Northing (MGA): 6252861

Comments:

Log By: AR
Checked By:

Material Description	Symbol	Well Diagram	Depth (m)	% Recovery	Analysed	PID	Samples	Additional Observations
SAND: Brown coarse sand FILL: Brown/light brown silty clay with rock and gravels, medium firmness, medium plasticity			0.2 0.4 0.6 0.8		Y	0.2	SOP_BH124_0.5_220120	
SHALE: Light brown weathered shale			1 1.2					
SHALE: Brown shale, darker brown with depth			1.4 1.6 1.8 2 2.2 2.4 2.6 2.8 3 3.2 3.4 3.6 3.8 4 4.2 4.4 4.6 4.8 5		Y	0.2	SOP_BH124_3.0_220120	
Termination Depth at:5 m			5.2					

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BORE LOG ID SOP_BH125

Client: AFJV
Project No: 0628507
Project Name: SMW_SOP
Site Address: corner of Olympic Boulevard and Figtree Drive, Sydney Olympic Park, NSW 2127
Drilling Date: 21/01/2022 - 21/01/2022

Drilling Method: Augering Solid Fligh
Hole Diam./Width (mm): 100
Surface Completion:
Final Water Level (m bgl):

Elevation (Ground):
Elevation (Case):
Easting (MGA): 321427
Northing (MGA): 6252855

Comments:

Log By: AR
Checked By:

Material Description	Symbol	Well Diagram	Depth (m)	% Recovery	Analysed	PID	Samples	Additional Observations
ROADBASE: Brown coarse sand roadbase					Y	0.2	SOP_BH125_0.5_220121	
FILL: Brown clayey sand with rock, angular, poorly sorted			1					
CLAY (RE-WORKED): Brown crushed shale with clay			2					
SHALE: Brown shale, grey/brown @5.0m, increase in hardness @ 6m, Grey @ 10m			3					
			4					
			5		Y		SOP_BH125_5.0_220121	
			6					
			7					
			8					
			9					
			10		Y	3.2	SOP_BH125_10.0_220121	
			11					
			12					
			13					
			14					
			15		Y	16.9	SOP_BH125_15.0_220121	
			16					
			17					
			18					
			19					
			20		Y	13.9	SOP_BH125_20.0_220121	
			21					
			22					
			23					
			24					
			25		Y	2.9	SOP_BH125_25.0_220121	
Termination Depth at:25 m			26					

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BORE LOG ID SOP_BH126

Client: AFJV
Project No: 0628507
Project Name: SMW_SOP
Site Address: corner of Olympic Boulevard and Figtree Drive, Sydney Olympic Park, NSW 2127
Drilling Date: 21/01/2022 - 21/01/2022

Drilling Method: Augering Solid Fligh
Hole Diam./Width (mm): 100
Surface Completion:
Final Water Level (m bgl):

Elevation (Ground):
Elevation (Case):
Easting (MGA): 321439
Northing (MGA): 6252843

Comments:

Log By: AR
Checked By:

Material Description	Symbol	Well Diagram	Depth (m)	% Recovery	Analysed	PID	Samples	Additional Observations
FILL: Grey coarse sand with gravels, sub-angular, poorly sorted			0.2					
FILL: Red/brown/grey mottled silty clay with rick, medium-hard, low plasticity			0.4		Y	0.2	SOP_BH126_0.5_220121	
			0.6					
			0.8					
			1					
CLAY (RE-WORKED): Grey/brown crushed shale and clay			1.2					
SHALE: Brown shale becoming grey with depth			1.4					
			1.6					
			1.8					
			2		Y		SOP_BH126_2.0_220121	
			2.2					
			2.4					
			2.6					
			2.8					
			3					
			3.2					
			3.4					
			3.6					
			3.8					
			4					
			4.2					
			4.4					
			4.6					
			4.8					
			5					
Termination Depth at:5 m			5.2					

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BORE LOG ID SOP_BH127

Client: AFJV
Project No: 0628507
Project Name: SMW_SOP
Site Address: corner of Olympic Boulevard and Figtree Drive, Sydney Olympic Park, NSW 2127
Drilling Date: 21/01/2022 - 21/01/2022

Drilling Method: Augering Solid Fligh
Hole Diam./Width (mm): 100
Surface Completion:
Final Water Level (m bgl):

Elevation (Ground):
Elevation (Case):
Easting (MGA): 321431
Northing (MGA): 6252811

Comments:

Log By: AR
Checked By:

Material Description	Symbol	Well Diagram	Depth (m)	% Recovery	Analysed	PID	Samples	Additional Observations
ROADBASE: Grey gravelly sand, poorly sorted, sub-angular roadbase			0.2					
FILL: Brown/red silty clay with rock, medium-hard, low plasticity			0.4 0.6 0.8 1					
CLAY (RE-WORKED): Grey/brown crushed shale and clay			1.2		Y	0.2	SOP_BH127_1.2_220121	
SHALE: Brown shale, minor colour change to darker brown @ 2-3m, grey/brown @ 4m, grey @ 5m			1.4 1.6 1.8 2 2.2 2.4 2.6 2.8 3 3.2 3.4 3.6 3.8 4 4.2 4.4 4.6 4.8 5		Y		SOP_BH127_4.0_220121	
Termination Depth at:5 m			5.2					

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BORE LOG ID SOP_BH128

Client: AFJV
Project No: 0628507
Project Name: SMW_SOP
Site Address: corner of Olympic Boulevard and Figtree Drive, Sydney Olympic Park, NSW 2127
Drilling Date: 24/01/2022 - 24/01/2022

Drilling Method: Augering Solid Fligh
Hole Diam./Width (mm): 100
Surface Completion:
Final Water Level (m bgl):

Elevation (Ground):
Elevation (Case):
Easting (MGA): 321468
Northing (MGA): 6252839

Comments:

Log By: AR
Checked By:

Material Description	Symbol	Well Diagram	Depth (m)	% Recovery	Analysed	PID	Samples	Additional Observations
ROADBASE: Grey gravelly sand, poorly sorted, sub-angular roadbase			0.2					
FILL: Brown coarse, clayey sand with rock, sandstone			0.4					
			0.6					
			0.8					
CLAY (RE-WORKED): Grey/brown crushed shale and clay			1			0.1	SOP_BH128_0.9_220124	
SHALE: Grey/brown shale, greyer with depth			1.2					
			1.4					
			1.6					
			1.8					
			2					
			2.2					
			2.4					
			2.6					
			2.8					
			3					
			3.2					
			3.4					
			3.6					
			3.8					
			4					
			4.2					
			4.4					
			4.6					
			4.8					
			5			0.9	SOP_BH128_5.0_220124	
Termination Depth at:5 m			5.2					

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BORE LOG ID SOP_BH129

Client: AFJV
Project No: 0628507
Project Name: SMW_SOP
Site Address: corner of Olympic Boulevard and Figtree Drive, Sydney Olympic Park, NSW 2127
Drilling Date: 24/01/2022 - 24/01/2022

Drilling Method: Augering Solid Fligh
Hole Diam./Width (mm): 100
Surface Completion:
Final Water Level (m bgl):

Elevation (Ground):
Elevation (Case):
Easting (MGA): 321409
Northing (MGA): 6252826

Comments:

Log By: AR
Checked By:

Material Description	Symbol	Well Diagram	Depth (m)	% Recovery	Analysed	PID	Samples	Additional Observations
ROADBASE: Grey gravelly sand, poorly sorted, sub-angular roadbase			0.2					
FILL: Brown/grey silty clay with gravels and rock, soft, low plasticity			0.4			0.1	SOP_BH129_0.5_220124	
			0.6					
			0.8					
CLAY (RE-WORKED): Grey/brown crushed shale and clay			1			0.2	SOP_BH129_1.0_220124	
SHALE: Grey/brown shale, darker with depth, Grey @ 4.1m			1.2					
			1.4					
			1.6					
			1.8					
			2					
			2.2					
			2.4					
			2.6					
			2.8					
			3					
			3.2					
			3.4					
			3.6					
			3.8					
			4					
			4.2					
			4.4					
			4.6					
			4.8					
			5					
Termination Depth at:5 m			5.2					

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BORE LOG ID SOP_BH130

Client: AFJV
Project No: 0628507
Project Name: SMW_SOP
Site Address: corner of Olympic Boulevard and Figtree Drive, Sydney Olympic Park, NSW 2127
Drilling Date: 24/01/2022 - 24/01/2022

Drilling Method: Augering Solid Fligh
Hole Diam./Width (mm): 100
Surface Completion:
Final Water Level (m bgl):

Elevation (Ground):
Elevation (Case):
Easting (MGA): 321489
Northing (MGA): 6252836

Comments:

Log By: AR
Checked By:

Material Description	Symbol	Well Diagram	Depth (m)	% Recovery	Analysed	PID	Samples	Additional Observations
ROADBASE: Grey/brown silty coarse sand with gravels, poorly sorted, sub angular			0.2					
FILL: Brown/grey silty clay with gravels and rock			0.4			0.1	SOP_BH130_0.4_220124	
CLAY (RE-WORKED): Grey/brown crushed shale and clay			0.6					
SHALE: Brown/grey shale			0.8					
			1					
			1.2					
			1.4					
			1.6					
			1.8					
			2				SOP_BH130_2.0_220124	
			2.2					
			2.4					
			2.6					
			2.8					
Termination Depth at:3 m			3					
			3.2					
			3.4					
			3.6					
			3.8					
			4					
			4.2					
			4.4					
			4.6					
			4.8					

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BORE LOG ID SOP_BH131

Client: AFJV
Project No: 0628507
Project Name: SMW_SOP
Site Address: corner of Olympic Boulevard and Figtree Drive, Sydney Olympic Park, NSW 2127
Drilling Date: 24/01/2022 - 24/01/2022

Drilling Method: Augering Solid Fligh
Hole Diam./Width (mm): 100
Surface Completion:
Final Water Level (m bgl):

Elevation (Ground):
Elevation (Case):
Easting (MGA): 321501
Northing (MGA): 6252879

Comments:

Log By: AR
Checked By:

Material Description	Symbol	Well Diagram	Depth (m)	% Recovery	Analysed	PID	Samples	Additional Observations
ROADBASE: Grey/brown silty coarse sand with gravels, poorly sorted, sub angular			0.2					
FILL: Brown/grey silty clay with gravels and rock			0.4					
CLAY (RE-WORKED): Grey/brown crushed shale and clay			0.6					
			0.8					
			1				SOP_BH131_1.0_220124	
SHALE: Brown/grey shale			1.2					
			1.4					
			1.6					
			1.8					
			2				SOP_BH131_2.0_220124	
			2.2					
			2.4					
			2.6					
			2.8					
			3					
Termination Depth at:3 m			3.2					
			3.4					
			3.6					
			3.8					
			4					
			4.2					
			4.4					
			4.6					
			4.8					

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BORE LOG ID SOP_BH132

Client: AFJV
Project No: 0628507
Project Name: SMW_SOP
Site Address: corner of Olympic Boulevard and Figtree Drive, Sydney Olympic Park, NSW 2127
Drilling Date: 25/01/2022 - 25/01/2022

Drilling Method: Augering Solid Fligh
Hole Diam./Width (mm): 100
Surface Completion:
Final Water Level (m bgl):

Elevation (Ground):
Elevation (Case):
Easting (MGA): 321527
Northing (MGA): 6252888

Comments:

Log By: AR
Checked By:

Material Description	Symbol	Well Diagram	Depth (m)	% Recovery	Analysed	PID	Samples	Additional Observations
FILL: Brown coarse sand with gravels, sub-angular, well sorted			0.2					
FILL: Brown silty clay with rock and gravels, soft-medium, low-medium plasticity			0.4					
CLAY (RE-WORKED): Grey/brown shaley clay, soft-medium, low plasticity			0.6					
			0.8					
			1		Y	0.2	SOP_BH132_1.0_220125	
			1.2					
SHALE: Grey/brown weathered shale			1.4					
			1.6					
SHALE: Grey/brown shale becoming greyer with depth			1.8					
			2					
			2.2					
			2.4					
			2.6					
			2.8					
			3		Y	0.7	SOP_BH132_3.0_220125	
Termination Depth at:3 m			3.2					
			3.4					
			3.6					
			3.8					
			4					
			4.2					
			4.4					
			4.6					
			4.8					

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BORE LOG ID SOP_BH133

Client: AFJV
Project No: 0628507
Project Name: SMW_SOP
Site Address: corner of Olympic Boulevard and Figtree Drive, Sydney Olympic Park, NSW 2127
Drilling Date: 25/01/2022 - 25/01/2022

Drilling Method: Hand Augering
Hole Diam./Width (mm): 100
Surface Completion:
Final Water Level (m bgl):

Elevation (Ground):
Elevation (Case):
Easting (MGA):
Northing (MGA):

Comments:

Log By: AR
Checked By:

Material Description	Symbol	Well Diagram	Depth (m)	% Recovery	Analysed	PID	Samples	Additional Observations
CONCRETE: Concrete slab			0.2		Y	0.1	SOP_BH133_0.3_220125	
FILL: Dark brown silty sandy clay with gravels and rock, soft-medium firmness, medium plasticity			0.4					
FILL: Grey/brown silty clay with gravels, soft-medium firmness, low plasticity			0.6					
FILL: Grey/black silty clay with dark ash, soft, low plasticity			0.8		Y	0.5	SOP_BH133_0.8_220125	
SHALE: Grey/brown weathered shale			1					
			1.2					
			1.4					
Termination Depth at:1.4 m			1.6					
			1.8					
			2					
			2.2					
			2.4					
			2.6					
			2.8					
			3					
			3.2					
			3.4					
			3.6					
			3.8					
			4					
			4.2					
			4.4					
			4.6					
			4.8					

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BORE LOG ID SOP_BH134

Client: AFJV
Project No: 0628507
Project Name: SMW_SOP
Site Address: corner of Olympic Boulevard and Figtree Drive, Sydney Olympic Park, NSW 2127
Drilling Date: 25/01/2022 - 25/01/2022

Drilling Method: Augering Solid Fligh
Hole Diam./Width (mm): 100
Surface Completion:
Final Water Level (m bgl):

Elevation (Ground):
Elevation (Case):
Easting (MGA):
Northing (MGA):

Comments:

Log By: AR
Checked By:

Material Description	Symbol	Well Diagram	Depth (m)	% Recovery	Analysed	PID	Samples	Additional Observations
CONCRETE: Concrete slab			0.2					
FILL: Grey/brown silty sandy clay			0.4		Y	0.1	SOP_BH134_0.5_220125	
CLAY: Grey shaley clay with rock			0.6 0.8 1 1.2 1.4					
SHALE: Grey/brown weathered shale			1.6 1.8					
SHALE: Grey/brown shale			2		Y	0.3	SOP_BH134_2.0_220125	
Termination Depth at:3 m			2.2 2.4 2.6 2.8 3 3.2 3.4 3.6 3.8 4 4.2 4.4 4.6 4.8					

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BORE LOG ID SOP_BH135

Client: AFJV
Project No: 0628507
Project Name: SMW_SOP
Site Address: corner of Olympic Boulevard and Figtree Drive, Sydney Olympic Park, NSW 2127
Drilling Date: 25/01/2022 - 25/01/2022

Drilling Method: Hand Augering
Hole Diam./Width (mm): 100
Surface Completion:
Final Water Level (m bgl):

Elevation (Ground):
Elevation (Case):
Easting (MGA):
Northing (MGA):

Comments:

Log By: AR
Checked By:

Material Description	Symbol	Well Diagram	Depth (m)	% Recovery	Analysed	PID	Samples	Additional Observations
CONCRETE: Concrete slab								
FILL: Brown sandy clay with rock and gravels, medium firmness, low plasticity, angular, poorly sorted			0.2 0.4		Y	0.1	SOP_BH135_0.5_220125	
CLAY (RE-WORKED): Brown crushed shale and clay, medium firmness, low plasticity			0.6 0.8		Y	0.2	SOP_BH135_0.8_220125	
Termination Depth at:0.9 m			1 1.2 1.4 1.6 1.8 2 2.2 2.4 2.6 2.8 3 3.2 3.4 3.6 3.8 4 4.2 4.4 4.6 4.8					

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BORE LOG ID SOP_BH136

Client: AFJV
Project No: 0628507
Project Name: SMW_SOP
Site Address: corner of Olympic Boulevard and Figtree Drive, Sydney Olympic Park, NSW 2127
Drilling Date: 25/01/2022 - 25/01/2022

Drilling Method: Hand Augering
Hole Diam./Width (mm): 100
Surface Completion:
Final Water Level (m bgl):

Elevation (Ground):
Elevation (Case):
Easting (MGA):
Northing (MGA):

Comments:

Log By: AR
Checked By:

Material Description	Symbol	Well Diagram	Depth (m)	% Recovery	Analysed	PID	Samples	Additional Observations
CONCRETE: Concrete slab								
FILL: Rock and gravels with sandy clay, soft, medium plasticity, angular to sub-angular, poorly sorted			0.2		Y	0.1	SOP_BH136_0.2_220125	Water @0.1-water pumps in basement beneath slab, potential hydraulic pressure
SHALE: Weathered shale			0.4					
Termination Depth at:0.5 m			0.6					
			0.8					
			1					
			1.2					
			1.4					
			1.6					
			1.8					
			2					
			2.2					
			2.4					
			2.6					
			2.8					
			3					
			3.2					
			3.4					
			3.6					
			3.8					
			4					
			4.2					
			4.4					
			4.6					
			4.8					

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BORE LOG ID SOP_BH137

Client: AFJV
Project No: 0628507
Project Name: SMW_SOP
Site Address: corner of Olympic Boulevard and Figtree Drive, Sydney Olympic Park, NSW 2127
Drilling Date: 25/01/2022 - 25/01/2022

Drilling Method: Hand Augering
Hole Diam./Width (mm): 100
Surface Completion:
Final Water Level (m bgl):

Elevation (Ground):
Elevation (Case):
Easting (MGA):
Northing (MGA):

Comments:

Log By: AR
Checked By:

Material Description	Symbol	Well Diagram	Depth (m)	% Recovery	Analysed	PID	Samples	Additional Observations
CONCRETE: Concrete slab								
FILL: Sandy silty clay with rock and gravels, soft, low-medium plasticity, angular gravels/rock			0.2		Y		SOP_BH137_0.2_220125	Water to 0.05, positive hydraulic pressure
Termination Depth at:0.35 m			0.4 0.6 0.8 1 1.2 1.4 1.6 1.8 2 2.2 2.4 2.6 2.8 3 3.2 3.4 3.6 3.8 4 4.2 4.4 4.6 4.8					

BORE LOG ID SOP_BH138

Client: AFJV
Project No: 0628507
Project Name: SMW_SOP
Site Address: corner of Olympic Boulevard and Figtree Drive, Sydney Olympic Park, NSW 2127
Drilling Date: 25/01/2022 - 25/01/2022

Drilling Method: Hand Augering
Hole Diam./Width (mm): 100
Surface Completion:
Final Water Level (m bgl):

Elevation (Ground):
Elevation (Case):
Easting (MGA):
Northing (MGA):

Comments:

Log By: AR
Checked By:

Material Description	Symbol	Well Diagram	Depth (m)	% Recovery	Analysed	PID	Samples	Additional Observations
CONCRETE: Concrete slab								Puddle of water on concrete surface
FILL: Brown silty clay with gravels and rock, soft, medium plasticity, angular, poorly sorted			0.2		Y	0	SOP_BH138_0.2_220125	
Termination Depth at:0.25 m			0.4					
			0.6					
			0.8					
			1					
			1.2					
			1.4					
			1.6					
			1.8					
			2					
			2.2					
			2.4					
			2.6					
			2.8					
			3					
			3.2					
			3.4					
			3.6					
			3.8					
			4					
			4.2					
			4.4					
			4.6					
			4.8					

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BORE LOG ID SOP_BH139

Client: AFJV
Project No: 0628507
Project Name: SMW_SOP
Site Address: corner of Olympic Boulevard and Figtree Drive, Sydney Olympic Park, NSW 2127
Drilling Date: 24/01/2022 - 25/01/2022

Drilling Method: Augering Solid Fligh
Hole Diam./Width (mm): 100
Surface Completion:
Final Water Level (m bgl):

Elevation (Ground):
Elevation (Case):
Easting (MGA):
Northing (MGA):

Comments:

Log By: AR
Checked By:

Material Description	Symbol	Well Diagram	Depth (m)	% Recovery	Analysed	PID	Samples	Additional Observations
CONCRETE: Concrete slab			0					
SAND: Coarse sand			0.2					
CONCRETE: Concrete slab			0.4					
FILL: Rock and gravels with clay, sub angular, poorly sorted			0.6					
			0.8					
FILL: Brown clay with gravels, rock, soft, low-medium plasticity			1					
			1.2		Y	0.2	SOP_BH139_1.2_220125	
			1.4					
			1.6					
			1.8					
SHALE: Weathered shale			2		Y	0.3	SOP_BH139_2.0_220125	
			2.2					
			2.4					
SHALE: Brown shale			2.6					
			2.8					
			3					
Termination Depth at:3 m			3.2					
			3.4					
			3.6					
			3.8					
			4					
			4.2					
			4.4					
			4.6					
			4.8					

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BORE LOG ID SOP_BH140

Client: AFJV
Project No: 0628507
Project Name: SMW_SOP
Site Address: corner of Olympic Boulevard and Figtree Drive, Sydney Olympic Park, NSW 2127
Drilling Date: 24/01/2022 - 24/01/2022

Drilling Method: Augering Solid Fligh
Hole Diam./Width (mm): 100
Surface Completion:
Final Water Level (m bgl):

Elevation (Ground):
Elevation (Case):
Easting (MGA):
Northing (MGA):

Comments:

Log By: AR
Checked By:

Material Description	Symbol	Well Diagram	Depth (m)	% Recovery	Analysed	PID	Samples	Additional Observations
CONCRETE: Concrete slab			0.2					
FILL: Brown sandy clay with rock and gravels, soft, low plasticity			0.4					
FILL: Brown/dark brown silty clay with rocks, soft, medium plasticity, less rock than previous layer			0.6 0.8 1		Y	0.2	SOP_BH140_1.0_220124	
SHALE: Brown weathered shale			1.2 1.4					
SHALE: Brown shale			1.6 1.8 2		Y		SOP_BH140_2.0_220124	
Termination Depth at:3 m			2.2 2.4 2.6 2.8 3 3.2 3.4 3.6 3.8 4 4.2 4.4 4.6 4.8					

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BORE LOG ID SOP_BH141

Client: AFJV
Project No: 0628507
Project Name: SMW_SOP
Site Address: corner of Olympic Boulevard and Figtree Drive, Sydney Olympic Park, NSW 2127
Drilling Date: 24/01/2022 - 24/01/2022

Drilling Method: Hand Augering
Hole Diam./Width (mm): 100
Surface Completion:
Final Water Level (m bgl):

Elevation (Ground):
Elevation (Case):
Easting (MGA):
Northing (MGA):

Comments:

Log By: AR
Checked By:

Material Description	Symbol	Well Diagram	Depth (m)	% Recovery	Analysed	PID	Samples	Additional Observations
CONCRETE: Concrete slab			0.1					
FILL: Brown silty clay with rock, low plasticity, medium firmness			0.2					
			0.3		Y	0.1	SOP_BH141_0.3_220124	
FILL: Grey/brown silty sandy clay with shale			0.4		Y	0.2	SOP_BH141_0.4_220124	
CLAY (RE-WORKED): Crushed shale with clay			0.5					
Termination Depth at:0.5 m			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					

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BORE LOG ID SOP_BH142

Client: AFJV
Project No: 0628507
Project Name: SMW_SOP
Site Address: corner of Olympic Boulevard and Figtree Drive, Sydney Olympic Park, NSW 2127
Drilling Date: 19/01/2022 - 19/01/2022

Drilling Method: Augering Solid Fligh
Hole Diam./Width (mm): 100
Surface Completion:
Final Water Level (m bgl):

Elevation (Ground):
Elevation (Case):
Easting (MGA):
Northing (MGA):

Comments:

Log By: AR
Checked By:

Material Description	Symbol	Well Diagram	Depth (m)	% Recovery	Analysed	PID	Samples	Additional Observations
CONCRETE: Concrete slab			0.2					
FILL: Brown/grey silty sandy clay with gravels and shale fragments, soft, low plasticity			0.4		Y	0.3	SOP_BH142_0.4_220119	
			0.6					
			0.8					
			1					
			1.2					
SHALE: Brown shale becoming grey with depth			1.4					
			1.6					
			1.8					
			2					
			2.2					
			2.4					
			2.6					
			2.8					
			3					
			3.2					
			3.4					
			3.6					
			3.8					
			4		Y	0.3	SOP_BH142_4.0_220119	
			4.2					
			4.4					
			4.6					
			4.8					
			5					
Termination Depth at:5 m			5.2					

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BORE LOG ID SOP_BH143

Client: AFJV
Project No: 0628507
Project Name: SMW_SOP
Site Address: corner of Olympic Boulevard and Figtree Drive, Sydney Olympic Park, NSW 2127
Drilling Date: 19/01/2022 - 19/01/2022

Drilling Method: Hand Augering
Hole Diam./Width (mm): 100
Surface Completion:
Final Water Level (m bgl):

Elevation (Ground):
Elevation (Case):
Easting (MGA):
Northing (MGA):

Comments:

Log By: AR
Checked By:

Material Description	Symbol	Well Diagram	Depth (m)	% Recovery	Analysed	PID	Samples	Additional Observations
SAND: Bedding sand below ceramic tiles CONCRETE: Concrete slab			0.2		Y	0.3	SOP_BH143_0.3_220119	
FILL: Brown clayey sand with rock, sub-angular to sub-rounded, poorly sorted			0.4					
SILTY CLAY: Brown silty clay with shale, medium plasticity, medium hardness, darker @0.8			0.6 0.8 1		Y		SOP_BH143_1.0_220119	
			1.2					
Termination Depth at:1.3 m			1.4 1.6 1.8 2 2.2 2.4 2.6 2.8 3 3.2 3.4 3.6 3.8 4 4.2 4.4 4.6 4.8					

BORE LOG ID SOP_BH144

Client: AFJV
Project No: 0628507
Project Name: SMW_SOP
Site Address: corner of Olympic Boulevard and Figtree Drive, Sydney Olympic Park, NSW 2127
Drilling Date: 19/01/2022 - 19/01/2022

Drilling Method: Hand Augering
Hole Diam./Width (mm): 75
Surface Completion:
Final Water Level (m bgl):

Elevation (Ground):
Elevation (Case):
Easting (MGA):
Northing (MGA):

Comments:

Log By: AR
Checked By:

Material Description	Symbol	Well Diagram	Depth (m)	% Recovery	Analysed	PID	Samples	Additional Observations
CONCRETE: Concrete slab			0.2					
FILL: Brown clayey sand with rock, poorly sorted, sub-angular to sub-rounded			0.4		Y	0.1	SOP_BH144_0.3_220119	
SILTY CLAY: Brown silty clay with shale, medium plasticity, medium-hard			0.6		Y		SOP_BH144_0.6_220119	
Termination Depth at:0.6 m			0.8					
			1					
			1.2					
			1.4					
			1.6					
			1.8					
			2					
			2.2					
			2.4					
			2.6					
			2.8					
			3					
			3.2					
			3.4					
			3.6					
			3.8					
			4					
			4.2					
			4.4					
			4.6					
			4.8					

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BORE LOG ID SOP_BH145

Client: AFJV
Project No: 0628507
Project Name: SMW_SOP
Site Address: corner of Olympic Boulevard and Figtree Drive, Sydney Olympic Park, NSW 2127
Drilling Date: 19/01/2022 - 19/01/2022

Drilling Method: Augering Solid Fligh
Hole Diam./Width (mm): 100
Surface Completion:
Final Water Level (m bgl):

Elevation (Ground):
Elevation (Case):
Easting (MGA):
Northing (MGA):

Comments:

Log By: AR
Checked By:

Material Description	Symbol	Well Diagram	Depth (m)	% Recovery	Analysed	PID	Samples	Additional Observations
CONCRETE: Concrete slab			0		Y	0.3	SOP_BH145_0.3_220119	
FILL: Brown clayey sand with rock, poorly sorted, sub-angular to sub-rounded			0.5					
SILTY CLAY: Brown silty clay with shale, medium plasticity, medium-hard			1		Y	0.2	SOP_BH145_1.0_220119	
SHALE: Brown weathered shale			1.5					
SHALE: Brown Shale			2					
			2.5					
			3					
			3.5					
			4					
			4.5					
			5		Y	6.3	SOP_BH145_5.0_220119	
			5.5					
			6					
			6.5					
			7					
Termination Depth at:7 m			7.5					
			8					
			8.5					
			9					
			9.5					

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APPENDIX C FIELD NOTES AND CALIBRATION RECORDS

ERM

Groundwater Gauging Log

Site: North of Strathfield Job Number: 0628507

Well ID	Date / Time	Depth to PSH (m btoc)	Depth to Water (m btoc)	Total Depth (m btoc)	Notes/Well Condition (sheen/odour/turbidity, PSH/water colour, cap loss, well damage, dry..etc)	Lab Analysis (Type I, II, V etc)
SMW-BH009	17-02-21	-	30.536	42.952	Data logger present	- Clear, no odour
SMW-BH009_S	↓	-	3.720	4.928	Water top of gatic, data logger/tubing	- "
SMW_BH036	18-02-22	—	12.548	34.309	Data logger, NO	
SMW BH055	18-02-22	—	35.355	50.981	Data logger, NO	
SMW_BH055_S	"	-	1.498	2.698	"	
					Tunnel NS to B	
SMW_BH040	17-02-21	—	24.196	60+	1x bolt missing, data logger, depth > IP, NO	
					Sydney Olympic Park	
SMW BH068_S	21-02-22	—	—	-	Crate on top of well, could not access	
	↓					
SMW- BH019		—	13.370	26.9 278	Data logger, organic, odour	

ERM

Groundwater Gauging Log

Site: AFJV SOP Job Number 0628507

Well ID	Date / Time	Depth to PSH (m btoc)	Depth to Water (m btoc)	Total Depth (m btoc)	Notes/Well Condition (sheen/odour/turbidity, PSH/water colour, cap loss, well damage, dry..etc)	Lab Analysis (Type I, II, V etc)
SMW_BH120	4-2-22 7:13	—	16.86	26.90	Level logger	—
SMW_BH032_S	4-2-22 7:59	—	7.09	7.13	Level logger / Dry	—
SMW_BH032	4-2-22 8:14	—	9.29	22.36	Level logger	See Sheet
SMW_BH019	4-2-22 1936	—	1445	26.16	Level Logger	—

Groundwater - Well Sampling Data Form

ERM

Job Information	
Date: 4-2-22	Time: arrive depart
Project Name: AFJV SOP	Project Number: 0628507
Site Location: SOP	Sampler: AR
Well ID: SMW_BH032	Weather: Cloudy

Equipment

Water quality equipment description: IP + WQM Interface probe number:

Purging equipment (please circle):
Bailer type: (Plastic) Teflon
Pump type: Peristaltic Submersible Micro-purge Amazon Other:

Well Gauging and Purge Volume Calculations

Casing Diameter	25mm	(50mm)	100mm	125mm	150mm	200mm	250mm	300mm
Conversion Factor (volume in factor L/m)	0.98	1.96	7.85	31.4	49.1	70.7	125.7	196.3

Volume of water in well / V = Pr x r x h
V = volume in litres
P = 3.14159
r = radius in cm
h = height of water column in cm

Total Well Depth (-) Water level (=) Water Column
22.36 m (-) 9.29 m (=) 13.07 m

Water Column (x) Conversion Factor (=) Litres per 1 Well Volume
13.07 m (x) 1.96 (=) 25.6 L

Depth to product: N/A m Product Thickness: — m Verified with Bailer: (Y) N

Water Quality Parameters

Beginning purge time: 830 Ending purge time: 1020

Litres	Time	PH	Temp °C	Cond µS/cm	DO mg/L	Redox mV	Drawdown <10cm	Comments
1	8:38	6.74	19.9	2608	1.34	23.2		Water level 9.29 Clear
20	9:28	7.26	20.8	14103	1.69	56.8		water level 17.98 Cloudy
28ish	10:16	—	—	—	—	—		DRY
Sample	1250	7.47	20.2	15800	5.45	152.2		20.95 water level

*pH, temp, cond readings not necessary if well is purged dry

Example Comments: clear / slightly cloudy / turbid / very turbid / no odour / slight odour / odour / strong odour / drawdown depth

2.76 Total Well Volume — Actual amount of water prior to sampling
— Flow rate mL/minute

Sample time 1250 Containers used 13

Did field parameters stabilise? Y N (NA) Was the well dry purged? (Y) N

Field QC Checks

Was pre-cleaning sampling equipment used for these samples?	(Y)	N		
Was pre-cleaning sampling equipment properly protected from contamination?	(Y)	N		
Was documentation of equipment conducted?	(Y)	N	NA	WQM Cal Cert
Were air bubbles present in vials at time of collection?	Y	(N)	NA	
Was sample for metals field filtered prior to preservations?	(Y)	N	NA	
Duplicate sample collected?	Y	(N)		Duplicate sample ID N/A
Rinsate blank collected?	Y	(N)		Rinsate blank ID N/A

Groundwater Gauging Field Data Sheet

Site Name: Olympic Park, North Strathfield

Date: 15/3/22

Field Operator: Jack Embleton, William JH.

Monitoring well ID	Date	Depth to LNAPL (mbTOC)	Depth to SWL (mbTOC)	Depth to Bottom (mbTOC)	Comments (Odour, sheen, well integrity issues)
SMW_BH019	15/3/22	—	14.070	26.080	—
SMW_BH035	15/3/22	—	12.494	34.193	Front of School / No odour
SMW_BH040	15/3/22	—	22.416	39.866	
SMW_BH044	15/3/22	—	7.706	32.403	No odour.
SMW_BH046S	15/3/22	—	1.330	2.865	No odour.
RY18_BH331	15/03/22	—	—	9.696	Dry / mud at bottom.
SMW_BH050	15/03/22	—	33.018	36.053	
SMW_BH051S	15/03/22	—	2.075	6.874	No odour.
SMW_BH051_S	15/03/22	—	1.269	1.800	No odour.
Sub_W1	15/03/22	—	3.909	6.110	Olympic Park — Ants living in well
Sub_W2	16/03/22	—	10.040	10.176	Insufficient water for sampling. No odour.
SMW_BH009	16/03/22	—	30.500	43.046	No odour.
SMW_BH009S	16/03/22	—	3.175	4.916	Tubing + data logger in well. No odour.
SMW_BH082	16/03/22	—	2.555	13.215	Datalogger in well. No odour.
BH25	16/03/22	—	17.882	35.315	Hydrosleeve in well? / lot of resistance on rope.
SMW_BH035_S	16/3/22		1.250	1.431	Data logger / no odour
SMW_BH035	16/3/22	—	15.826	35.259	Data logger / no odour.
Sub-W1	16/3/22	—	3.909	6.110	Substitude well. ~~Very low water~~ Ants in well cap
Sub-W2	16/3/22	—	10.040	10.176	Substitude well. Very low water level.

Same: Five dock

BVR_MW108
RY18_BH331

Groundwater - Well Sampling Data Form

Job Information

Date:	21-02-22	Time: arrive	depart
Project Name:	AFJV GME 2	Project Number:	0628507
Site Location:	SOP	Sampler:	TM, WO
Well ID:	SMW-BH019	Weather:	Fine

Equipment

Water quality equipment description: YC100766 Interface probe number: 483915

Purging equipment: (please circle)
Bailer type: (Plastic) Teflon
Pump type: Peristaltic Submersible (Micro-purge) Amazon Other:

Well Gauging and Purge Volume Calculations

Casing Diameter	25mm	(50mm)	100mm	125mm	150mm	200mm	250mm	300mm
Conversion Factor (volume in factor L/m)	0.98	1.96	7.85	31.4	49.1	70.7	125.7	196.3

Volume of water in well / V
= Pr x r x h
V = volume in litres
P = 3.14159
r = radius in cm
h = height of water column in cm

Total Well Depth (-) Water level (=) Water Column
26.278 m (-) 13.376 m (=) ~12.908 m

Water Column (x) Conversion Factor (=) Litres per 1 Well Volume
~12.908 m (x) 1.96 (=) ~25 L

Depth to product: ~ m Product Thickness: ~ m Verified with Bailer: Y (N)

Water Quality Parameters

Beginning purge time: 10:55 Ending purge time: 11:39

Litres	Time	PH	Temp °C	Cond µS/cm	DO mg/L	Redox mV	Drawdown <10cm	Comments
1	11:06	6.91	24.3	115.3	9.03	-58.2	14.46	Cloudy, black/dark brown, organic odour
2	11:19	6.60	24.0	11791	0.85	-45.1	14.59	" "
3	11:28	6.57	24.2	12831	1.00	-27.3	14.64	Cloudy, grey, organic odour
4	11:39	6.56	22.8	12453	1.01	-21.9	14.68	" "

*pH, temp, cond readings not necessary if well is purged dry

Example Comments: clear / slightly cloudy / turbid / very turbid / no odour / slight odour / odour / strong odour / drawdown depth

4 **Total Well Volume** Actual amount of water prior to sampling
Flow rate mL/minute

Sample time 11:40 Containers used 9

Did field parameters stabilise? (Y) N NA Was the well dry purged? Y (N)

Field QC Checks

Was pre-cleaning sampling equipment used for these samples?	(Y)	N	
Was pre-cleaning sampling equipment properly protected from contamination?	(Y)	N	
Was documentation of equipment conducted?	(Y)	N	NA
Were air bubbles present in vials at time of collection?	Y	(N)	NA
Was sample for metals field filtered prior to preservations?	(Y)	N	NA
Duplicate sample collected?	Y	(N)	Duplicate sample ID ~
Rinsate blank collected?	Y	(N)	Rinsate blank ID ~

Groundwater - Well Sampling Data Form

ERM

Job Information			
Date:	15/3/22	Time: arrive	830 depart
Project Name:	Metro GME	Project Number:	0628607
Site Location:	Olympic Park	Sampler:	JE, WO
Well ID:	SMW_BH019	Weather:	clear

Equipment

Water quality equipment description: YSI 10H100325 Interface probe number: 3882

Purging equipment (please circle): Bailer type: (Plastic) Teflon

Pump type: Peristaltic (Submersible) Micro-purge Amazon Other:

Well Gauging and Purge Volume Calculations

Casing Diameter	25mm	(50mm)	100mm	125mm	150mm	200mm	250mm	300mm
Conversion Factor (volume in factor L/m)	0.98	1.96	7.85	31.4	49.1	70.7	125.7	196.3

Volume of water in well / V = Pr x r x h
V = volume in litres
P = 3.14159
r = radius in cm
h = height of water column in cm

Total Well Depth (-) Water level (=) Water Column

26.080 m (-) 14.070 m (=) 12.010 m

Water Column (x) Conversion Factor (=) Litres per 1 Well Volume

12.010 m (x) 1.96 (=) 24 L

Depth to product: — m Product Thickness: — m Verified with Bailer: (Y) N

Water Quality Parameters

Beginning purge time: 9:17 Ending purge time:

Litres	Time	PH	Temp °C	Cond mS/cm	DO mg/L	Redox mV	Drawdown <10cm	Comments
0.15	09:22	6.39	20.9	659	7.95	102.3		Clear, colourless, odourless.
0.3	9:26	6.61	20.8	291.5	3.77	103.2		" "
0.45	9:30	6.58	20.9	216.2	3.08	104.9		" "
0.8	9:34	6.52	21.0	203.8	3.18	105.8		" "
1.1	9:39	6.52	21.3	199.4	2.4	106.1		" "

*pH, temp, cond readings not necessary if well is purged dry

Example Comments: clear / slightly cloudy / turbid / very turbid / no odour / slight odour / odour / strong odour / drawdown depth

24L **Total Well Volume** Actual amount of water prior to sampling Sample time 09:40 Containers used 12

50 **Flow rate** mL/minute Did field parameters stabilise? (Y) N NA Was the well dry purged? Y (N)

Field QC Checks

Was pre-cleaning sampling equipment used for these samples?	(Y)	N		
Was pre-cleaning sampling equipment properly protected from contamination?	(Y)	N		
Was documentation of equipment conducted?	(Y)	N	NA	
Were air bubbles present in vials at time of collection?	Y	(N)	NA	
Was sample for metals field filtered prior to preservations?	(Y)	N	NA	
Duplicate sample collected?	Y	(N)		Duplicate sample ID —
Rinsate blank collected?	Y	(N)		Rinsate blank ID —

Groundwater - Well Sampling Data Form

ERM

Job Information

Date: 16.03.2022	Time: arrive 09:00 depart
Project Name: AF/SV Metro	Project Number: 0628507
Site Location: Olympic Park	Sampler:
Well ID: Sub_W2	Weather: Overcast

Equipment

Water quality equipment description: Interface probe number: 3882

Purging equipment: (please circle)
Bailer type: **Plastic** **Teflon**
Pump type: **Peristaltic** **Submersible** **Micro-purge** **Amazon** **Other:**

Well Gauging and Purge Volume Calculations

Casing Diameter	25mm	50mm	100mm	125mm	150mm	200mm	250mm	300mm
Conversion Factor (volume in factor L/m)	0.98	1.96	7.85	31.4	49.1	70.7	125.7	196.3

Volume of water in well / V = Pr x r x h
V = volume in litres
P = 3.14159
r = radius in cm
h = height of water column in cm

Total Well Depth (-) Water level (=) Water Column
10.176 m (-) 10.040 m (=) 0.136 m

Water Column (x) Conversion Factor (=) Litres per 1 Well Volume
0.136 m (x) 1.96 (=) 0.267 L

Depth to product: — m Product Thickness: — m Verified with Bailer: (Y) N

Water Quality Parameters

Beginning purge time: Ending purge time:

Litres	Time	PH	Temp °C	Cond mS/cm	DO mg/L	Redox mV	Drawdown <10cm	Comments
								Insufficient water in well, PFAS sampling only.

*pH, temp, cond readings not necessary if well is purged dry

Example Comments: clear / slightly cloudy / turbid / very turbid / no odour / slight odour / odour / strong odour / drawdown depth

— **Total Well Volume** Actual amount of water prior to sampling Sample time — Containers used 2

— **Flow rate** mL/minute Did field parameters stabilise? Y N (NA) Was the well dry purged? Y (N)

Field QC Checks

Was pre-cleaning sampling equipment used for these samples?	(Y)	N		
Was pre-cleaning sampling equipment properly protected from contamination?	(Y)	N		
Was documentation of equipment conducted?	(Y)	N	NA	
Were air bubbles present in vials at time of collection?	Y	N	(NA)	
Was sample for metals field filtered prior to preservations?	Y	N	(NA)	
Duplicate sample collected?	Y	(N)		Duplicate sample ID —
Rinsate blank collected?	Y	(N)		Rinsate blank ID —

Groundwater - Well Sampling Data Form

ERM

Job Information			
Date:	16/3/22	Time: arrive 7:50	depart
Project Name:	Metro Core	Project Number:	0628504
Site Location:	Sq. Sydney Olympic Park	Sampler:	JE, WO
Well ID:	Sub-W3	Weather:	Cloudy

Equipment

Water quality equipment description: YSI Interface probe number: 3882

Purging equipment: (please circle)
Bailer type: (Plastic) Teflon
Pump type: Peristaltic Submersible (Micro-purge) Amazon Other:

Well Gauging and Purge Volume Calculations

Casing Diameter	25mm	(50mm)	100mm	125mm	150mm	200mm	250mm	300mm
Conversion Factor (volume in factor L/m)	0.98	1.96	7.85	31.4	49.1	70.7	125.7	196.3

Volume of water in well / V = Pr x r x h
V = volume in litres
P = 3.14159
r = radius in cm
h = height of water column in cm

Total Well Depth (-) Water level (=) Water Column
6.110 m (-) 3.909 m (=) 2.201 m

Water Column (x) Conversion Factor (=) Litres per 1 Well Volume
2.201 m (x) 1.96 (=) 4.31 L

Depth to product: ~~7.65~~ m Product Thickness: _____ m Verified with Bailer: Y N

Water Quality Parameters

Beginning purge time: 7:50 Ending purge time: 8:12

Litres	Time	PH	Temp °C	Cond mS/cm	DO mg/L	Redox mV	Drawdown <10cm	Comments
0	7:55	6.91	22.6	4012	2.37	104.9	4.055	clear, odorless. Ants living in well.
0.5	8:01	7.18	22.7	2892	0.54	107.6	4.187	Well cap missing.
1	8:05	7.03	22.9	2166	0.67	104.1	4.292	
1.5	8:09	7.54	22.9	2162	1.16	96.5	4.375	
2	8:12	7.51	22.9	2172	1.46	105.1	4.431	

*pH, temp, cond readings not necessary if well is purged dry

Example Comments: clear / slightly cloudy / turbid / very turbid / no odour / slight odour / odour / strong odour / drawdown depth

4.31 **Total Well Volume** Actual amount of water prior to sampling
Sample time 8:14 Containers used 12

Flow rate mL/minute
Did field parameters stabilise? Y N NA Was the well dry purged? Y N

Field QC Checks

Was pre-cleaning sampling equipment used for these samples?	(Y)	~~N~~		
Was pre-cleaning sampling equipment properly protected from contamination?	(Y)	N		
Was documentation of equipment conducted?	(Y)	N	NA	
Were air bubbles present in vials at time of collection?	~~Y~~	(N)	NA	
Was sample for metals field filtered prior to preservations?	(Y)	N	NA	
Duplicate sample collected?	Y	(N)		Duplicate sample ID —
Rinsate blank collected?	Y	(N)		Rinsate blank ID —

ERM

Groundwater Gauging Log

Site: AFSV Sydney Metro Job Number 0628507

Well ID	Date / Time	Depth to PSH (m btoc)	Depth to Water (m btoc)	Total Depth (m btoc)	Notes/Well Condition (sheen/odour/turbidity, PSH/water colour, cap loss, well damage, dry..etc)	Lab Analysis (Type I, II, V etc)
SMW_BH120	19/01/22	—	16.943	32.034	Data logger, organic	odour
SMW-BH019	19-01-22	—	14.452	26.365	Data logger, organic	odour
					The Bays	
S51	20-01-22	—	3.361	5.899	No odour	
S54	"	—	3.065	16.898	Data logger, tubing, organic odour	
S02_d	"	—	~~2.20~~ 2.20 (2.98 from ground)	16.95	Data logger, tubing, ~15.3 depth approx 0.9m to TOC from ground surface	
SMW-ENV21	"	-	-	-	Could not access, construction works	
SMW-ENV2_S	"	-	-	-	"	
S02_S	"	-	-	-	" Could not access, (covered)	
S06	"	-	2.225	21.229	water in well, depth to surface changed. re-surveyed.	
S40_d			3.254	15.235	2x data loggers, tubing, NO	
S40_S			1.699	4.340	Data logger, tubing, NO	
BUR_MW108	20.1.22	—	5.315	18.770		
BUR_BH121	"	—	7.609	7.866	NO odour, DRY, silt/mud. (1337)	
BUR_BH125	"	—	13.825	20.397	Logger. NO, grey silt.	
SMW_BH68_S	21-1-22	—	Dry	3.680	Data logger, tubing, dry, NO	
SMW_BH15_S		—	Dry	2.579	Data logger, dry	
SMW-BH15		—	15.489	29.622	Data logger, NO, minor silt	

ERM

Groundwater Gauging Log

Site: AFSV Sydney Metro Job Number 0628507

Well ID	Date / Time	Depth to PSH (m btoc)	Depth to Water (m btoc)	Total Depth (m btoc)	Notes/Well Condition (sheen/odour/turbidity, PSH/water colour, cap loss, well damage, dry..etc)	Lab Analysis (Type I, II, V etc)
					NORTH Strathfield	
SMW_BH009	19/01/22		~~+2.5m~~ 30	~~30~~ 35m	~~If not long enough to reach water/depth~~ (029-W4-Deep ↑ written on tag/well)	
SMW2BH009_S						
SMW-BH009S	19/01/22	—	3.692	4.933	Water in casing, string & tubing in well. No odour	
SMW_BH038	17/01/22	—	12.658	25.21	Data logger in well taken at	
SMW_BH035	18/01/22	—	35.551	42.240	Data logger. [illegible]	
SMW_BH035S	↓	—	1.589	2.700	Data logger, NO	
SMW_BH069		—	30.581	33.230	Data logger, NO	
					Five Dock	
SMW_BH050	17/01/22	—	23.181	26.008	Data logger, NO	
SMW_BH050S	↓	—	0.324	1.211	Data logger in well, NO	
SMW_BH051	18/01/22	—	2.258	10.615	Tubing & loc data logger x2, NO	
SMW-BH051-S	↓	—	Dry	1.811	Data logger, well dry	
					Tunnel - NS to B	
SMW_BH040	18/01/22	—	24.010	50+	Data logger, one bolt missing, depth > IP length, NO Located on Macnamara Avenue	
					Burwood	
SMW_BH046S	18/01/22	—	1.702	2.887	Data logger & tubing in well, NO	
SMW_BH046	18/01/22	—	—	—	Lost/destroyed, construction works fully destroyed/paved on well, see photos	
SMW-BH044	↓				Unable to be accessed, car parked over well. Note left but no response from owner	

Groundwater - Well Sampling Data Form

Job Information

Date:	19-01-22	Time: arrive	depart
Project Name:	AFJV Sydney Metro CSME	Project Number:	0628507
Site Location:	Sydney Olympic Park	Sampler:	TM + RM
Well ID:	SMW-BH120	Weather:	Raining

Equipment

Water quality equipment description: ERM YSI Interface probe number:

Purging equipment: (please cirlce) Bailer type: (Plastic) Teflon

Pump type: Peristaltic Submersible (Micro-purge) Amazon Other:

Well Gauging and Purge Volume Calculations

Casing Diameter	25mm	(50mm)	100mm	125mm	150mm	200mm	250mm	300mm
Conversion Factor (volume in factor L/m)	0.98	1.96	7.85	31.4	49.1	70.7	125.7	196.3

Volume of water in well / V = Pr x r x h
V = volume in litres
P = 3.14159
r = radius in cm
h = height of water column in cm

Total Well Depth (-) Water level (=) Water Column

2.034 m (-) 16.943 m (=) ~~14.091~~ m

Water Column (x) Conversion Factor (=) Litres per 1 Well Volume

~~14.091~~ m (x) 1.96 (=) ~8 L

Depth to product: ~ m Product Thickness: ✓ m Verified with Bailer: Y (N)

Water Quality Parameters

Beginning purge time: Ending purge time:

Litres	Time	PH	Temp °C	Cond mS/cm	DO mg/L	Redox mV	Drawdown <10cm	Comments
1	7:44	6.64	22.4	18.87	5.72	-135.9	17.97	Both bubbles. Cloudy, black, bubbling at top, leachate odour?
2	7:52	6.64	22.1	18.76	1.9	-128.8	17.62	Cloudy, black, slight organic odour
3	8:15	6.66	22.3	18.84	1.4	-139.7	17.62	" " plus white ss

*pH, temp, cond readings not necessary if well is purged dry

Example Comments: clear / slightly cloudy / turbid / very turbid / no odour / slight odour / odour / strong odour / drawdown depth

3 **Total Well Volume** Actual amount of water prior to sampling Sample time 8:20 Containers used 8

Flow rate mL/minute Did field parameters stabilise? (Y) N NA Was the well dry purged? Y (N)

Field QC Checks

s pre-cleaning sampling equipment used for these samples?	(Y)	N	
s pre-cleaning sampling equipment properly protected from contamination?	(Y)	N	
s documentation of equipment conducted?	(Y)	N	NA
re air bubbles present in vials at time of collection?	Y	(N)	NA
s sample for metals field filtered prior to preservations?	(Y)	N	NA
licate sample collected?	Y	(N)	
sate blank collected?	Y	(N)	

Duplicate sample ID: ~

Rinsate blank ID: ~

gt - well sampling data form.xls

11/04

Groundwater - Well Sampling Data Form

Job Information

Date:	19-01-22	Time: arrive	depart
Project Name:	AFJV Sydney Metro CSME	Project Number:	0628507
Site Location:	Sydney Olympic Park	Sampler:	TM + RM
Well ID:	SMW-BH019	Weather:	Raining

Equipment

Water quality equipment description: ERM YSI Interface probe number: 312482

Purging equipment: (please cirlce) Bailer type: (Plastic) Teflon

Pump type: Peristaltic Submersible (Micro-purge) Amazon Other:

Well Gauging and Purge Volume Calculations

Casing Diameter	25mm	(50mm)	100mm	125mm	150mm	200mm	250mm	300mm
Conversion Factor (volume in factor L/m)	0.98	1.96	7.85	31.4	49.1	70.7	125.7	196.3

Volume of water in well / V = Pr x r x h
V = volume in litres
P = 3.14159
r = radius in cm
h = height of water column in cm

Total Well Depth (-) Water level (=) Water Column

26.365 m (-) 14.452 m (=) ~11.913 m

Water Column (x) Conversion Factor (=) Litres per 1 Well Volume

~11.913 m (x) 1.96 (=) ~23 L

Depth to product: ✓ m Product Thickness: ~ m Verified with Bailer: Y N

Water Quality Parameters

Beginning purge time: 10:32 Ending purge time:

Litres	Time	PH	Temp °C	Cond mS/cm	DO mg/L	Redox mV	Drawdown <10cm	Comments
1	10:39	6.66	20.5	17.49	1.40	-139.6	14.66	Cloudy, grey, organics H2S odour
2	10:43	6.66	20.0	17.70	0.75	-161.8	14.80	" "
3	10:47	6.66	20.2	17.57	0.77	-170.4	15.08	" "

*pH, temp, cond readings not necessary if well is purged dry

Example Comments: clear / slightly cloudy / turbid / very turbid / no odour / slight odour / odour / strong odour / drawdown depth

3 **Total Well Volume** Actual amount of water prior to sampling Sample time 10:48 Containers used 24

Flow rate mL/minute Did field parameters stabilise? (Y) N NA Was the well dry purged? Y N

Field QC Checks

Was pre-cleaning sampling equipment used for these samples?	(Y)	N	
Was pre-cleaning sampling equipment properly protected from contamination?	(Y)	N	
Was documentation of equipment conducted?	(Y)	N	NA
Were air bubbles present in vials at time of collection?	Y	(N)	NA
Was sample for metals field filtered prior to preservations?	(Y)	N	NA
Duplicate sample collected?	(Y)	N	
Rinsate blank collected?	Y	(N)	

Duplicate sample ID: DO1-220119 / TO1-220119

Rinsate blank ID: ~

Groundwater - well sampling data form.xls

11/04

ERM The business of sustainability

Project: 0628507
Date: 02/02/2022 17:29 am
Time:
Barometric pressure (start): 1001 mb
Barometric pressure (finish): 1003 mb
Weather:
Ground conditions: Raining/cloudy

Technician: MB
Instrument: GA 5000 / 4502021

Ambient
Balance: 78%
O_2: 21.8%
CO: 0 ppm
H_2S: 0 ppm

Location	Date	Flow	Barometric Pressure	Standing Water Level	Pump Duration	Peak			Min			Stabilised				Ambient Methane % v/v	Ambient CO_2 % v/v	Comments
						CH_4	CO_2	O_2	CH_4	CO_2	O_2	Balance	H_2S	CO	Relative Pressure			
ID number		l/hr	mb	mBTOC	sec	% v/v	% v/v	% v/v	% v/v	% v/v	% v/v	% v/v	ppm	ppm	mb			
BH106	2/2	0.1	1001	-		0.1	7.5	15	0.1	7.5	15	77.4	0	0	0.07	0.1	0.1	
BH105	2/2	0.1	1001	-		0.1	12.8	10.5	0.1	12.8	10.3	76.6	0	0	0.01	0.1	0.1	
BH123	2/2	0.1	1002	-		0.1	8.1	10.6	0.1	8.0	10.6	81.3	0	0	0.02	0.1	0.1	
BH130	2/2	0.1	1002	-		0.1	10.2	11.4	0.1	10.1	11.4	78.3	0	0	0.02	0.1	0.1	
BH131	2/2	0.1	1003	-		0.1	4.7	17.4	0.1	4.6	17.4	77.9	0	0	0.01	0.1	0.1	

Scanned with CamScanner

ERM The business of sustainability

Project: 0628507

Date: 8/2/22

Time: 12pm start.

Barometric pressure (start): 1015.4 hPa

Barometric pressure (finish): 1015. hPa

Weather: overcast.

Technician: RM

Instrument: GA 5000 G504209.

Ambient @ 12pm
O2 20.1
CO_2 0.1
CH_4 0
H_2S 0

Ground conditions: ~~Soil~~ Slab, hardstand.

Location ID Number	Date	Flow	Barometric Pressure	Pump Duration	Peak		Min	Stabilised							Ambient Methane % v/v	Ambient CO2 % v/v	Comments
					CH_4	CO_2	O_2	CH_4	CO_2	O_2	Balance	H2S	CO	Relative Pressure			
		l/hr	mb	Sec	% v/v	% v/v	% v/v	% v/v	% v/v	% v/v	% v/v	ppm	ppm	mb			
BH105	8.2.22	0.1	1015	5mins	0	10.9	11.4	0.0	0.9	19.3	79.9	0	0		0	0.1	
BH130	"	0.1	1015	5mins	0	9.0	13.7	0	1.1	18.8	80.2	0	0		0	0.1	
BH131	"	0.1	1015	5mins	0	4.4	16.3	0	2.1	17.8	80.2	0	0		0	0.1	
BH123	"	0.1	1015	5mins	0	7.5	14.4	0	1.2	18.1	80.9	0	0		0	0.1	
BH106																	could no access due to drilling activities

ERM

Project: 0628507
Date: 22/03/2022
Time: 7:20 am
Barometric Pressure (Start): 1008
Barometric Pressure (Finish): 1009
Weather: Overcast
Ground Conditions: Dry.

Technician: TR
Instrument: GA 5000 / 234907
Kennards

Location	Date	Flow	Barometric Pressure	Standing water Level	Pump Duration	Peak		Min	Stabalised							Ambient CO2	Comments
						CH4	CO2	O2	CH4	CO2	O2	Balance	H2S	CO	Relative Pressure		
ID Number		L/Hr	mb	mBTOC	Sec	%v/v	%v/v	%v/v	%v/v	%v/v	%v/v	%v/v	ppm	ppm	mb	% v/v	
BH105	22/3/22	0.0	1009		60	0.0	0.4	18.3	0.0	0.3	20.6	79.1	0	0	0.07	0.2	
BH106	22/3/22	0.0	1009	—	60	0.0	9.0	8.5	0.0	9.0	8.5	82.4	0	0	-0.26	0.2	
BH123	22/3/22	0.3	1008	—	60	0.0	8.6	8.3	0.0	8.6	8.3	83.1	0	0	-0.02	0.2	Dry well.
BH130	22/3/22	0.1	1009	—	60	0.0	6.5	13.5	0.0	6.5	13.5	80.0	0	0	0.10	0.2	Dry
BH131	22/3/22	0.2	1009	—	60	0.0	0.5	20.3	0.0	0.5	20.2	79.3	0	0	0.09	0.2	Dry
Ambient																	
BH123									—	0.2	20.5	79.3	—	—			
131									—	0.2	20.6	79.2	—	—			
130									—	0.2	20.5	79.2	—	—			
106									—	0.2	20.7	79.2	—	—			
105									—	0.2	20.6	79.2	—	—			

Multi Parameter Water Meter

Instrument **YSI Quatro Pro Plus**
Serial No. **10H100325**

Air-Met Scientific Pty Ltd
1300 137 067

Item	Test	Pass	Comments
Battery	Charge Condition	✓	
	Fuses	✓	
	Capacity	✓	
Switch/keypad	Operation	✓	
Display	Intensity	✓	
	Operation (segments)	✓	
Grill Filter	Condition	✓	
	Seal	✓	
PCB	Condition	✓	
Connectors	Condition	✓	
Sensor	1. pH	✓	
	2. mV	✓	
	3. EC	✓	
	4. D.O	✓	
	5. Temp	✓	
Alarms	Beeper		
	Settings		
Software	Version		
Data logger	Operation		
Download	Operation		
Other tests:			

Certificate of Calibration

This is to certify that the above instrument has been calibrated to the following specifications:

Sensor	Serial no	Standard Solutions	Certified	Solution Bottle Number	Instrument Reading
1. pH 10.00		pH 10.00		370064	10.03
2. pH 7.00		pH 7.00		368081	pH 7.01
3. pH 4.00		pH 4.00		380327	pH 3.91
4. mV		229.6mV		365451/370891	230.1mV
5. EC		2.76mS		377099	2.76mS
6. D.O		0.00ppm		371864	0.00ppm
7. Temp		21.7°C		MultiTherm	21.2°C

Calibrated by: **Gary Needs**

Calibration date: **11/03/2022**

Next calibration due: **10/04/2022**

PID Calibration and Bump Test

Week Starting: 17-1-22

Model: TIGER | Serial Number: ERM PID05 | Project Number: 0628507

Day 1	Date:	17-1-22		Desired	Actual	Calibrated by	Comments
Calibration	Fresh air:	0.0	Isobutylene:	100.0	100.1	AR	
Day 2	**Date:**	18-1-22		**Desired**	**Actual**	**Calibrated by**	**Comments**
Bump	Fresh air:	0.0	Isobutylene:	100.0	100.3	AR	
Day 3	**Date:**	19-1-22		**Desired**	**Actual**	**Calibrated by**	**Comments**
Bump	Fresh air:	0.0	Isobutylene:	100.0	100.5	AR	
Day 4	**Date:**	20-1-22		**Desired**	**Actual**	**Calibrated by**	**Comments**
Bump	Fresh air:	0.0	Isobutylene:	100.0	100.3	AR	
Day 5	**Date:**	21-1-22		**Desired**	**Actual**	**Calibrated by**	**Comments**
Bump	Fresh air:	0.0	Isobutylene:	100.0	100.1	AR	
Day 6	**Date:**	24-1-22		**Desired**	**Actual**	**Calibrated by**	**Comments**
Bump	Fresh air:	0.0	Isobutylene:	100.0	100.7	AR	
Day 7	**Date:**	25-1-22		**Desired**	**Actual**	**Calibrated by**	**Comments**
Bump	Fresh air:	0.0	Isobutylene:	100.0	100.8	AR	
Extra Calibration If needed	**Date:**			**Desired**	**Actual**	**Calibrated by**	**Comments**
	Fresh air:		Isobutylene:				

Even if bump test is not done due to no use for the PID, please dash boxes (do not leave blank).

If bump test fails, please calibrate again.

ERM

Multi Parameter Water Meter

Instrument YSI Quatro Pro Plus
Serial No. 11C100763

airmet
Air-Met Scientific Pty Ltd
1300 137 067

Item	Test	Pass	Comments
Battery	Charge Condition	✓	
	Fuses	✓	
	Capacity	✓	
Switch/keypad	Operation	✓	
Display	Intensity	✓	
	Operation (segments)	✓	
Grill Filter	Condition	✓	
	Seal	✓	
PCB	Condition	✓	
Connectors	Condition	✓	
Sensor	1. pH	✓	
	2. mV	✓	
	3. EC	✓	
	4. D.O	✓	
	5. Temp	✓	
Alarms	Beeper		
	Settings		
Software	Version		
Data logger	Operation		
Download	Operation		
Other tests:			

Certificate of Calibration

This is to certify that the above instrument has been calibrated to the following specifications:

Sensor	Serial no	Standard Solutions	Certified	Solution Bottle Number	Instrument Reading
1. pH 7.00		pH 7.00		368081	pH 6.94
2. pH 4.00		pH 4.00		380327	pH 4.04
3. pH 10.00		pH 10.00		370064	pH 9.77
3. mV		229.6mV		365451/370891	229.6mV
4. EC		2.76 mS		377099	2.74mS
5. D.O		0.00ppm		371864	0.00ppm
6. Temp		22.5°C		MultiTherm	21.9°C

Calibrated by: Sarah Lian

Calibration date: 3/02/2022

Next calibration due: 5/03/2022

Gas Calibration Certificate

airmet

Air-Met Scientific Pty Ltd
1300 137 067

Instrument GA5000
Serial No. G504209
Sensors CH4, CO2, O2, CO, H2S

Item	Test	Pass	Comments
Battery	Charge Condition	✓	
	Fuses	✓	
	Capacity	✓	
	Recharge OK?	✓	
Switch/keypad	Operation	✓	
Display	Intensity	✓	
	Operation (segments)	✓	
Grill Filter	Condition	✓	
	Seal	✓	
Pump	Operation	✓	
	Filter	✓	
	Flow	✓	
	Valves, Diaphragm	✓	
PCB	Condition	✓	
Connectors	Condition	✓	
Sensor	O2	✓	
	CH4	✓	
	CO2	✓	
	CO	✓	
	H2S	✓	
Alarms	Beeper	✓	
	Settings	✓	
Software	Version		
Datalogger	Operation		
Download	Operation		
Other tests:			

Certificate of Calibration

This is to certify that the above instrument has been calibrated to the following specifications:

Diffusion mode Aspirated mode

Sensor	Serial no	Calibration gas and concentration	Certified	Gas bottle No	Instrument Reading
O2		18.0% Vol O2		Fresh Air	18.0% O2
CH4		60% CH4	NATA	SY420	59.9% CH4
CO2		40% CO2	NATA	SY420	40.0% CO2
CO		103ppm CO	NATA	SY396	102ppm CO
H2S		24ppm H2S	NATA	SY396	24ppm H2S

SY420 Jacqualine Begman

Calibration date: 28/01/2022

Next calibration due: 27/07/2022

EQUIPMENT CERTIFICATION REPORT

KENNARDS HIRE

PGN9003823 GAS ANALYSER – LANDFILL GA5000

Plant Number: 234907

SENSOR	CONCENTRATION	INSTRUMENT READING	TRACEABILITY	PASS
CH4	60 %	60 %	Lot # 1485461	☑
CO2	40 %	40 %	Lot # 1485461	☑
O2	15 %	15 %	Lot # 258502	☑
CO	60 ppm	60 ppm	Lot # 258502	☑
H2S	20 ppm	20 ppm	Lot # 258502	☑

Data Cleared ☑

Battery Status 100 (%)	Temperature 19.5 °C
Electrical Test & Tag (AS/NZS 3760)	Inlet Filter Cleaned/Replaced

Note: Calibration traceability information is available upon request.

Please clean/decontaminate instrument and accessories before returning. A minimum 'Cleaning Fee' $55.00 (Inc GST) may apply if instrument is returned contaminated.

Checked By: Brad Alcock Date: 22/03/2022 Signed: _____

Accessories List:

User's Manual & USB	1x Gas Inlet Hoses	1X Gas Inlet Hose With Filter
1x Gas Inlet Hose & Clip Fitting	2x Spare Inlet Filters	1x Flow Through Desiccant
1x Wall Charger	Carry Pouch With Neck Strap	1x USB Comms Cable
Carry Transit Case	Calibration Certificate	

Oil / Water Interface Meter

airmet

Air-Met Scientific Pty Ltd
1300 137 067

Instrument **Interface Meter (60M)**
Serial No. **483915**

Item	Test	Pass	Comments
Battery	Compartment	✓	
	Capacity	✓	
Probe	Cleaned/Decon.	✓	
	Operation	✓	
Connectors	Condition	✓	
		✓	
Tape Check	Cleaned	✓	
	Checked for cuts	✓	
Instrument Test	At surface level	✓	

Certificate of Calibration

This is to certify that the above instrument has been cleaned and tested.

Calibrated by: **Evan Weller**

Calibration date: **20/01/2022**

Next calibration due: **21/03/2022**

Multi Parameter Water Meter

Instrument YSI Quatro Pro Plus
Serial No. 11C100760

airmet
Air-Met Scientific Pty Ltd
1300 137 067

Item	Test	Pass	Comments
Battery	Charge Condition	✓	
	Fuses	✓	
	Capacity	✓	
Switch/keypad	Operation	✓	
Display	Intensity	✓	
	Operation (segments)	✓	
Grill Filter	Condition	✓	
	Seal	✓	
PCB	Condition	✓	
Connectors	Condition	✓	
Sensor	1. pH	✓	
	2. mV	✓	
	3. EC	✓	
	4. D.O	✓	
	5. Temp	✓	
Alarms	Beeper		
	Settings		
Software	Version		
Data logger	Operation		
Download	Operation		
Other tests:			

Certificate of Calibration

This is to certify that the above instrument has been calibrated to the following specifications:

Sensor	Serial no	Standard Solutions	Certified	Solution Bottle Number	Instrument Reading
1. D.O		0.00 ppm		371864	0.01ppm
2. Conductivity		2.76mS		377099	2.75mS
3. pH 10		pH 10.00		370064	pH 9.74
4. pH7		pH 7.00		368081	pH 7.15
5. pH4		pH 4.00		380327	pH 4.12
6. ORP mV		229.6 mV		365451/370891	229.5 mV
7. Temp °C		22 °C		MultiMeter	21.9 °C

Calibrated by: Gary Needs

Calibration date: 15-Feb-22

Next calibration due: 14-Aug-22

APPENDIX D PHOTOGRAPHIC LOG



Photo 001	Site Surface – Inside warehouse

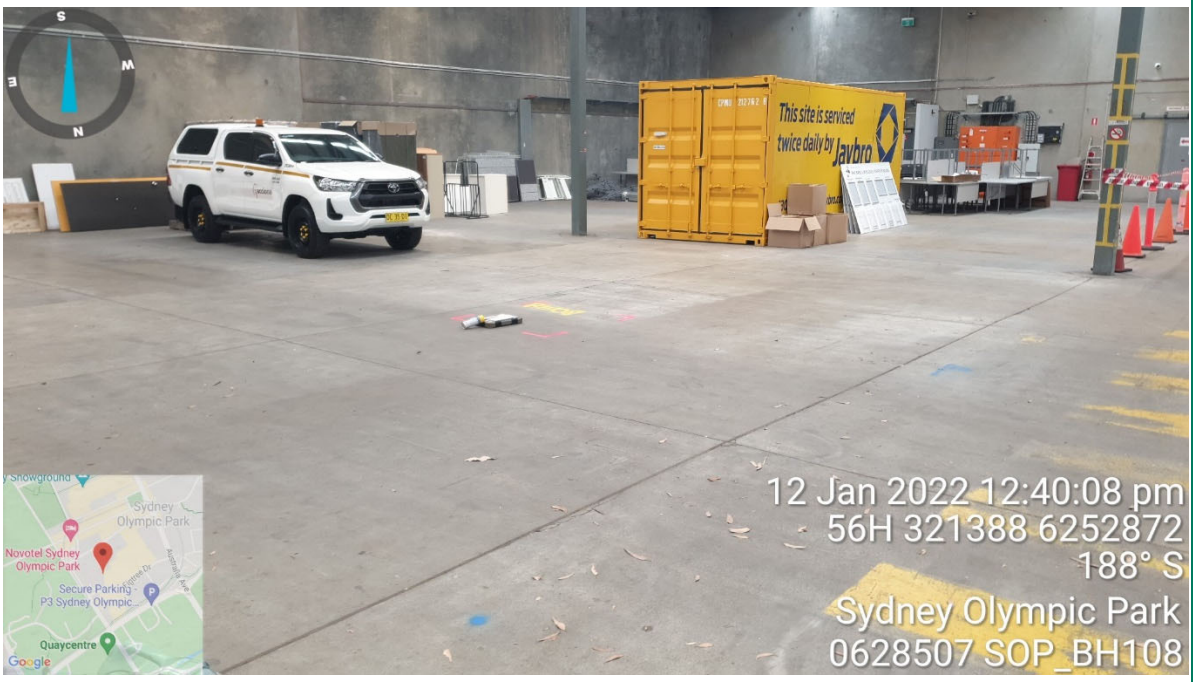


Photo 002	Site surface – BH108 inside warehouse



Photo 003	Site Surface – southern off-site location



Photo 004	Site surface – South East portion off site location

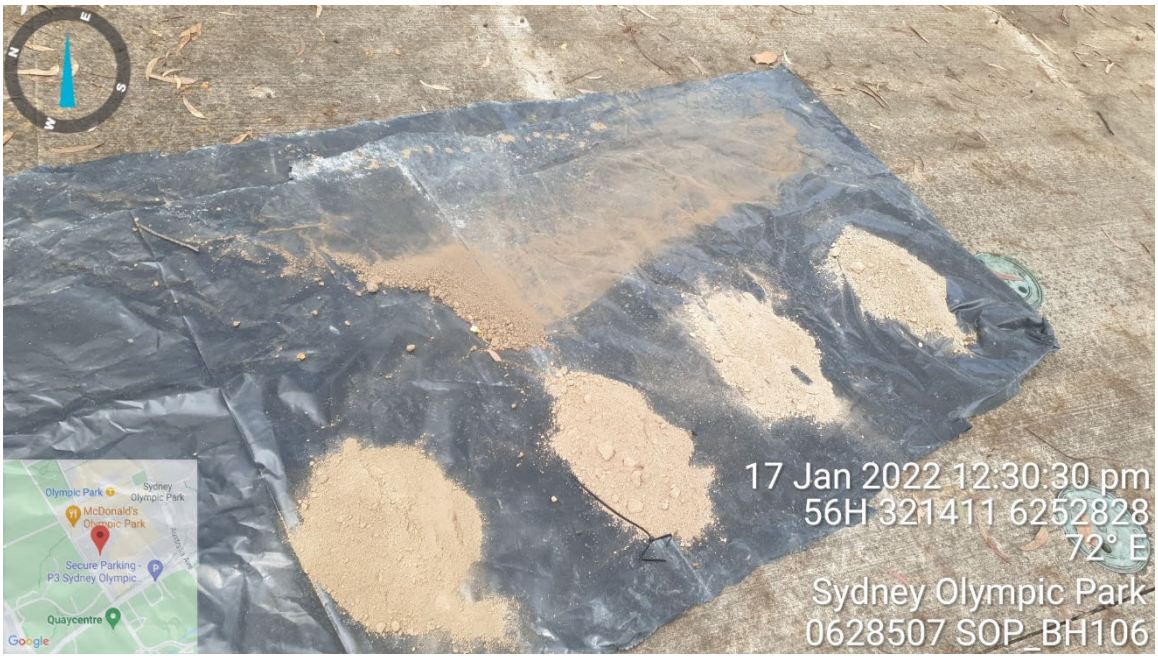


Photo 005	Material profile from BH106

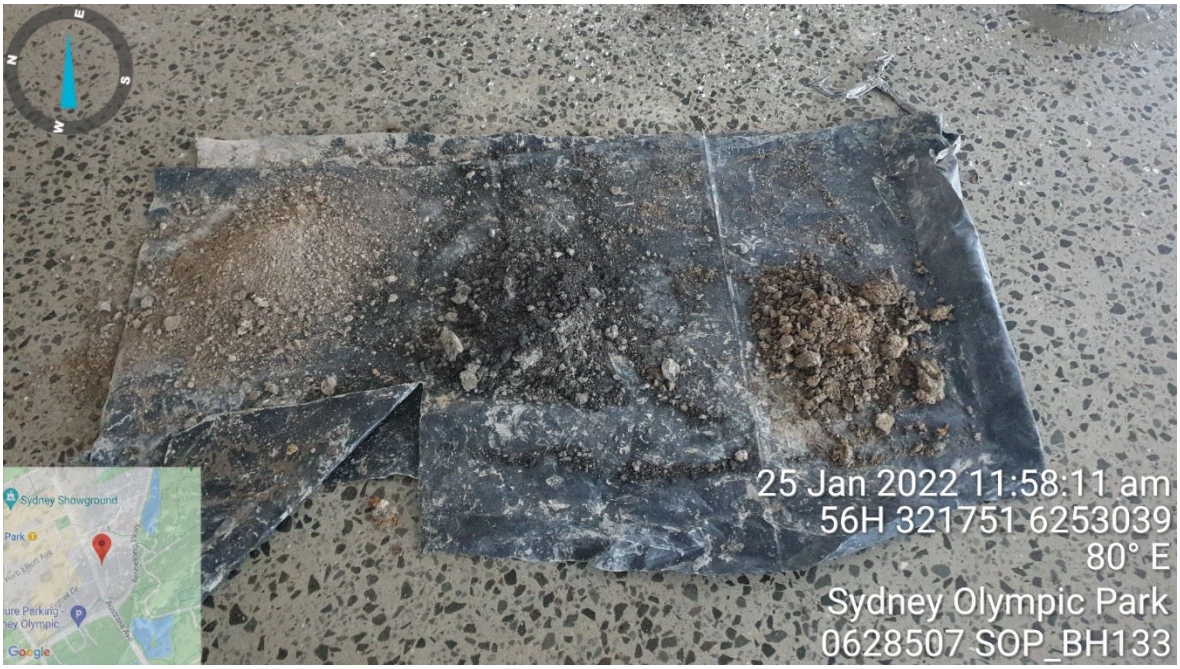


Photo 006	Materials from BH133, Grey /black silty clay with dark ash.



Photo 007	Close up of dark ash material from BH113

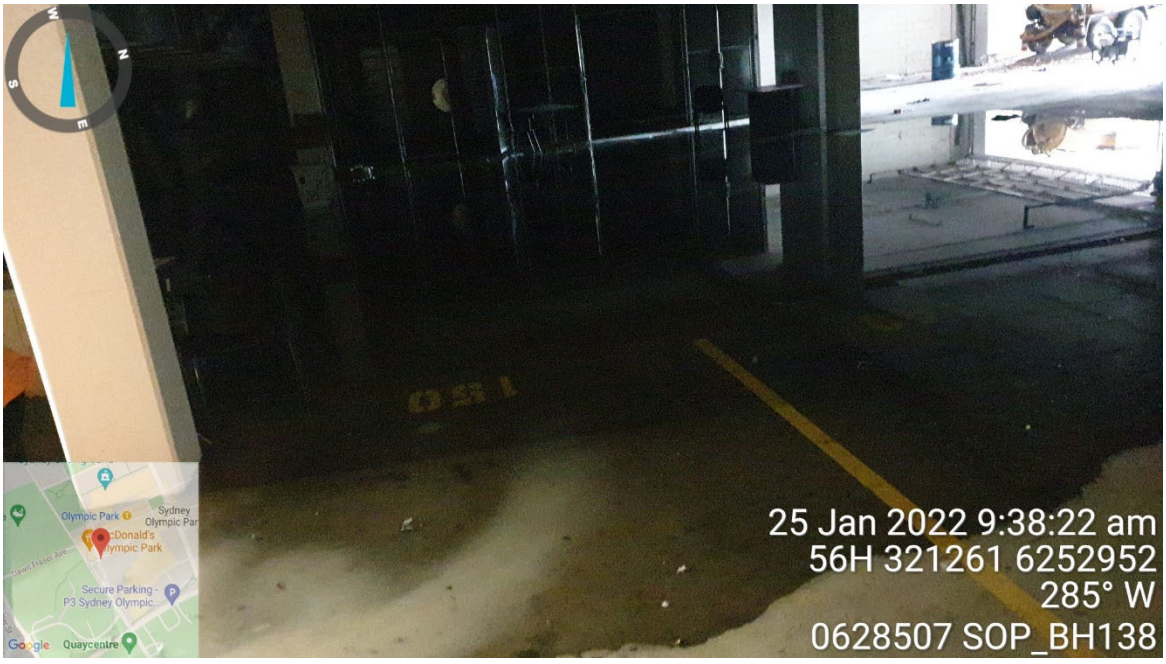


Photo 008	Surface of BH138- water pooling on concrete surface



Photo 009	Example material from push-tube in BH119.



Photo 010	Material profile of location BH121 showing concrete slab, roadbase and underlying natural shales

APPENDIX E DATA QUALITY ASSESSMENT

1. QUALITY ASSURANCE AND QUALITY CONTROL

The objective of this data assessment is to evaluate the quality of data gathered during the assessment detailed in this report. This process has been undertaken to assess whether the sample data is of a suitable standard to be utilised in this report. The data assessment consists of comparing field and laboratory QA/QC results to documented NEPC, ANZECC, USEPA SW-846 guidelines, USEPA CLP National Functional Guidelines for Inorganic and Organic Data Review, and other internationally recognised publications. The data assessment has been prepared in accordance with the ASC NEPM. Particular reference is made to the PARCC parameters (precision, accuracy, representativeness, completeness and comparability) in evaluating the data quality.

Table E1 below discusses the QA/QC measures pertinent to the site investigation sampling. **Table E2** presented at the end of this annex identifies laboratory reports relevant to the investigation works.

Table E1: Field QA/QC Assessment

QA/QC Criterion	Comments
QA/QC program includes intra-laboratory duplicates and inter-laboratory duplicates samples	Field duplicate samples, including intra and inter laboratory duplicates were collected at a minimum ratio of one duplicate to twenty primary samples (5%). For PFAS sampling, intra and inter laboratory duplicates were collected at a minimum ratio of one duplicate to ten primary samples (10%). **Soil:** The Relative Percentage Difference (RPDs) of soil duplicate sample pairs were generally within the acceptance limits (30% RPD (or 50% RPD for organics) where one or both values were greater than 10 x LOR or 50% RPD where one or both values were less than 10 x LOR). RPDs for all soil duplicate pairs are presented in Table E4a. Based on the results obtained from the soil RPDs, it is considered that the dataset quality is adequate and acceptable for the purposes of the Detailed Site Investigation. The following information is noted: Of the 99 primary soil samples analysed, nine intra-laboratory field duplicate samples and five inter-laboratory field duplicate sample were collected, at a rate of 9 and 5% for each, which was above the required frequency of 5%. Soil samples were not homogenised prior to splitting to minimise potential loss of volatile analytes. A total of 991 soil RPDs were calculated, the majority of which were reported to be within the aforementioned criteria, with 15 soil RPD results (1.5%) reported outside of RPD limits, with 14 of those were for sample results <10 times the LOR. Exceedances of the soil RPD criteria were considered likely to be due to matrix heterogeneity between primary and duplicate samples collected of fill materials from the site. **Water:** The Relative Percentage Difference (RPDs) of water duplicate sample pairs were generally within the acceptance limits (30% RPD (or 50% RPD for organics) where one or both values were greater than 10 x LOR or 50% RPD where one or both values were less than 10 x LOR). RPDs for all water duplicate pairs are presented in Table E4b. Based on the results obtained from the water RPDs, it is considered that the dataset quality is adequate and acceptable for the purposes of the Detailed Site Investigation. The following information is noted: Of the 7 primary water samples analysed, one intra-laboratory field duplicate sample and one inter-laboratory field duplicate sample were collected, however the intra-laboratory duplicate was analysed by the primary laboratory in error. A total of 190 water RPDs were calculated, the majority of which were reported to be within the aforementioned criteria, with 2 water RPD results (1%) reported outside of RPD limits, with both of those occurring for sample results <10 times the LOR.

QA/QC Criterion	Comments
	In all instances, results from both primary and duplicate samples have been used for the purpose of the investigations. As such, where duplicate RPDs were reported outside of acceptable limits, the variability in concentrations between samples have been accounted for in decision-making, and are therefore not considered to affect the overall conclusions or usability of the dataset as a whole.
Appropriate decontamination procedures were adopted	**Soil:** Soil samples were collected using a fresh pair of nitrile gloves. Soils were either collected from the push tube sleeve, hand auger, solid flight auger or from cutting from air rotary drilling. Decontamination of down hole drilling equipment prior to starting each new location was conducted, and collection of rinsate samples was conducted to evaluate the decontamination process. **Water:** Decontamination of the non-dedicated sampling equipment (interface probe and bladder pump was conducted between locations by scrubbing or wiping the equipment in a solution of Liquinox and water, and then rinsing using deionised water. Rinsate Blank results (for both soil and groundwater fieldworks) are shown in Table E5 Concentrations of COPCs were not detected above the laboratory LOR in any rinsate blank samples collected with the exception of minor detections of ammonia in R01_220119 and PFOS and PFOA in samples R01_20220221 and R01_20220222. These rinsate samples were collected during the groundwater sampling on the 19 January 2022 and 21st and 22nd February 2022. It should be noted that primary samples collected on these days did not report detections of PFAS in any of the samples collected indicating that cross contamination of PFAS is unlikely to have affected sample results.
All relevant media assessed	The scope involved soil and groundwater sampling, and the collection of field readings from ground gas wells. Soil samples were collected from various depths within the soil profile and were submitted for laboratory analysis. Groundwater sampling was conducted at depths representative of the Sites groundwater and as part of a larger groundwater monitoring program across multiple Sydney Metro Station sites.
Appropriateness of Sampling Strategy	Investigation locations were chosen to provide adequate coverage of the Site and assess potential sources of contamination. Additionally to provide waste classification data for materials within the Station Box. A sampling strategy was designed based on the conceptual site model and is considered appropriate to meet the project objectives.
Trip Blank and Trip Spikes Collected	A total of two laboratory-prepared soil trip blank samples, were prepared, stored and transported with soil samples. Soil trip blanks are presented in Table E6a. A total of six laboratory-prepared water trip blank samples, were prepared, stored and transported with water samples (this includes he sample labelled TripSpike that was a mislabelled trip blank). Water trip blanks are presented in Table E6c. The concentrations of COPCs (BTEX) in trip blanks were reported below the laboratory LOR for all samples analysed, indicating a low likelihood of cross-contamination having occurred during transport and storage of samples. Four laboratory prepared soil trip spike (TS) samples and four laboratory prepared water trip spike (TS) samples were analysed as part of the investigation. Soil trip spike results are presented in Table E6b and water trip spike results are presented in Table E6c. Trip spikes submitted were all reported within the acceptable recovery range (70-130%) indicating appropriate sample presentation during transport and storage of samples. It is noted that one sample labelled Trip Spike was a mislabelled trip blank as confirmed in correspondence with the laboratory, provided in Appendix F.

QA/QC Criterion	Comments
Sample Collection, handling, and transportation procedures	Borelogs describing the media sampled, sampling locations, observations of potential contamination (e.g. odour) and field QA/QC samples were completed. Soil encountered was also photographed (Appendix A and B). Soil samples were placed in laboratory supplied sample jars, stored in a chilled cooler on ice, and forwarded to the NATA-accredited laboratory under COC conditions. The methods used to collect the samples, the types of sample containers, preservation techniques and custody protocols were generally documented appropriately. Attempts to chill were recorded as present by the laboratory upon sample receipt.
Sampling is representative of the site conditions	The number and type of samples collected were considered to be appropriate and in accordance with the NSW EPA Sampling Design Guidelines (1995) with minimum sampling density requirement for the site having been achieved. While site operations prevented the access of two on-site groundwater monitoring locations, data from previous sampling was used in the Detailed Site Investigation to assess groundwater conditions at the site.
Other field QA/QC	Field instruments used as part of the investigation were appropriately calibrated and used according to the manufacturer's instructions. Calibration records are included in Appendix C.

Table E2 below summarises the laboratory's QA/QC measures pertinent to the analytical program.

Table E2: Laboratory QA/QC Assessment

QA/QC criterion	Comments
Appropriate methodologies used for sample analyses	The laboratories used for the investigation works were NATA accredited ALS (NATA Registration No. 825) and Eurofins (NATA Registration No. 1261). All laboratory reports were NATA stamped and signed by a NATA signatory. All methodologies were considered appropriate for the identified contaminants of concern in the matrix.
Appropriate Limit of Reporting	The laboratory LOR for each analyte is presented in the laboratory reports and summary tables. LORs were appropriate to allow screening of results against the nominated criteria with the exception of PFOS and some PAHs in water, where the LORs were above ecological screening criteria. ERM notes that there are laboratory limitations with meeting the criteria used. ERM also notes that during dewatering, treatment of groundwater is proposed prior to discharge to waters containing ecological receptors, and that site specific impacts will be assessed and managed under an Environmental Protection Licence (EPL).
Laboratory QA/QC Plan	Copies of signed chain of custody forms were returned by the laboratory. The primary and secondary laboratories were NATA accredited. It is noted that all analytical methods completed were NATA approved as documented on the laboratory reports. Laboratory reports indicate results not covered by NATA accreditation which were limited to calculations of totals (e.g. total BTEX, total PAH). Laboratory quality control samples included laboratory control samples, internal duplicates, matrix spikes and method blanks. The types of QA/QC samples analysed by the laboratory for the documented samples were considered sufficient to assess the precision and accuracy of the laboratory methods used. The data presented in the laboratory QA/QC reports were considered adequate in demonstrating the precision and accuracy of the methods used to analyse field samples.

Table E3 summarises the QA/QC results in relation to the data quality indicators of precision, accuracy, representativeness, comparability and completeness for the investigation sampling program.

Table E3: Overall Sampling and Analysis Methodology Assessment

Field Considerations	Laboratory Considerations
Precision Requirements	
The soil and groundwater sampling was conducted following ERM's SOPs and any variations from these procedures were documented.	Analysis of the following were reported: ■ Laboratory duplicates; and ■ Field intra- and inter- laboratory duplicates;
Precision Comments	
No significant variations from ERM's SOPs were noted. Field and laboratory duplicates were generally reported within the acceptance limits. Minor exceedances were noted, as presented in Table E1.	

Field Considerations	Laboratory Considerations
Accuracy Requirements	
The soil sampling was conducted following ERM's SOPs and any variations from these procedures were documented.	Analysis of the following were reported: ■ Trip blanks; ■ Method blanks; ■ Matrix spikes; ■ Surrogate spikes; and ■ Laboratory control samples.
Accuracy Comments	
Decontamination of the down hole drilling equipment was conducted prior to drilling at each location and decontamination of the interface probe and bladder pump were conducted between groundwater monitoring locations. Rinsate samples were collected and considered acceptable for the purposes of this investigation. Minor non-conformances reported as discussed in Table E1. Overall decontamination procedures were adequate. No significant variations from ERM SOPs were noted. Laboratory QA/QC samples were generally reported within the acceptance limits specified in the laboratory reports.	
Representativeness Requirements	
Appropriate media were identified and sampled.	Samples were analysed according to the Sampling and Analysis Plan.
Representativeness Comments	
The number and type of samples collected as part of investigation works was considered to be representative of the Site**.** The number and locations of boreholes was generally in accordance with the SAQP. While on-site groundwater sampling locations were not accessible, ERM has incorporated historical groundwater results from these locations to enable evaluation of site conditions. ERM considers that sufficient data is available to establish a representative dataset across the site for the purposes of the investigation.	
Comparability Requirements	
■ SOPs were used. ■ All sampling was conducted by an appropriately qualified and experienced sampler. ■ Impacts of climatic conditions on sample integrity were minimised by storing samples in a chilled cooler. ■ The types of samples collected were consistent.	■ Analytical methods suitable for the target media were used. ■ The laboratory LORs used to report analyte concentrations were less than the adopted investigation criteria. ■ Results of laboratory analysis comparable with field screening results where applicable (field observations, PID screening).
Comparability Comments	
The laboratory LOR for each analyte is presented in the laboratory reports and summary tables.	

Completeness Requirements

- Relevant locations were sampled.
- The sampling program was conducted following ERM's SOPs and any variations from these procedures were documented.
- All sampling was conducted by an appropriately qualified and experienced sampler.
- Documentation of field works was provided (refer Appendices A, B and C).
- All critical samples were analysed.
- All analytes were analysed according to the Sampling and Analysis Plan.
- Appropriate analysis methods and laboratory LORs were used in the majority of cases.
- Sample documentation was provided.
- Sample holding times were generally complied with.

Completeness Comments

The number and type of samples collected were considered to be representative of the Site. Evaluation of soil for asbestos in fill was only able to be done to a limited degree due to boreholes being used to collect samples and inspect soil.

Lab Report			ES2201683	ES2201683		ES2202264	ES2202264		ES2202264	ES2202264		ES2202264	ES2202264	
Field ID			SOP_BH103_1.0	DUP01_220117	**RPD**	SOP_BH118_5.0	DUP02_220119	**RPD**	SOP_BH142_4.0	DUP03_220119	**RPD**	SOP_BH142_4.0	TRIP03_220119	**RPD**
Sampled Date			17-Jan-22	17-Jan-22		19-Jan-22	19-Jan-22		19-Jan-22	19-Jan-22		19-Jan-22	19-Jan-22	
Chem_Group	**ChemName**	**Units**	**EQL**											
	Extraction Fluid Number	-	1											
	Final pH	pH_Units	0.1											
	Initial pH	pH_Units	0.1											
	N-Nitrosodiphenyl & Diphenylamine	mg/kg	1				<1.0	<1.0	0					
Chlorinated HCs	1,2,3-trichlorobenzene	mg/kg	0.5				<0.5	<0.5	0					
	1,2,4-trichlorobenzene	mg/kg	0.5				<0.5	<0.5	0					
	1,2-dichlorobenzene	mg/kg	0.5				<0.5	<0.5	0					
	1,3-dichlorobenzene	mg/kg	0.5				<0.5	<0.5	0					
	1,4-dichlorobenzene	mg/kg	0.5				<0.5	<0.5	0					
	Chlorobenzene	mg/kg	0.5				<0.5	<0.5	0					
Moisture Content	Moisture Content	%	1 : 0.1 (Dupe)	8.7	7.4	16	**6.4**	**9.2**	**36**	12.5	10.3	19	12.5	11.0	13
NA	2,4,5-Trichlorophenol	mg/kg	0.5 (Primary): 1 (Interlab)				<0.5	<0.5	0					
	2,4,6-Trichlorophenol	mg/kg	0.5 (Primary): 1 (Interlab)				<0.5	<0.5	0					
	Pentachlorophenol	mg/kg	1				<1.0	<1.0	0					
	Phenol	mg/kg	0.5				<0.5	<0.5	0					
	o-Cresol	mg/kg	0.5 (Primary): 0.2 (Interlab)				<0.5	<0.5	0					
Naphthalene	Naphthalene	mg/kg	1 (Primary): 0.5 (Interlab	<1.0	<1.0	0	<1.0	<1.0	0					
	Naphthalene	mg/kg	0.5	<0.5	<0.5	0	<0.5	<0.5	0					
PAH/Phenols (SIM)	Acenaphthene	mg/kg	0.5	<0.5	<0.5	0	<0.5	<0.5	0					
	Acenaphthylene	mg/kg	0.5	<0.5	<0.5	0	<0.5	<0.5	0					
	Anthracene	mg/kg	0.5	<0.5	<0.5	0	<0.5	<0.5	0					
	Fluoranthene	mg/kg	0.5	<0.5	<0.5	0	<0.5	<0.5	0					
	Fluorene	mg/kg	0.5	<0.5	<0.5	0	<0.5	<0.5	0					
	Benz(a)anthracene	mg/kg	0.5	<0.5	<0.5	0	<0.5	<0.5	0					
	Benzo(a)pyrene	mg/kg	0.5	<0.5	<0.5	0	<0.5	<0.5	0					
	Benzo(a)pyrene TEQ (half LOR)	mg/kg	0.5	0.6	0.6	0	0.6	0.6	0					
	Benzo(a)pyrene TEQ (LOR)	mg/kg	0.5	1.2	1.2	0	1.2	1.2	0					
	Benzo(a)pyrene TEQ (zero)	mg/kg	0.5	<0.5	<0.5	0	<0.5	<0.5	0					
	Benzo(b+j)fluoranthene	mg/kg	0.5	<0.5	<0.5	0	<0.5	<0.5	0					
	Benzo(g.h.i)perylene	mg/kg	0.5	<0.5	<0.5	0	<0.5	<0.5	0					
	Benzo(k)fluoranthene	mg/kg	0.5	<0.5	<0.5	0	<0.5	<0.5	0					
	Chrysene	mg/kg	0.5	<0.5	<0.5	0	<0.5	<0.5	0					
	Dibenz(a.h)anthracene	mg/kg	0.5	<0.5	<0.5	0	<0.5	<0.5	0					
	Indeno(1.2.3.cd)pyrene	mg/kg	0.5	<0.5	<0.5	0	<0.5	<0.5	0					
	Phenanthrene	mg/kg	0.5	<0.5	<0.5	0	<0.5	0.5	0					
	Pyrene	mg/kg	0.5	<0.5	<0.5	0	<0.5	<0.5	0					
	Sum of polycyclic aromatic hydrocarbons	mg/kg	0.5	<0.5	<0.5	0	<0.5	0.5	0					
PFAS	10:2 Fluorotelomer sulfonic acid (10:2 FTS)	µg/kg	0.5							<0.5	<0.5	0	<0.5	<0.5	0
	4:2 Fluorotelomer sulfonic acid (4:2 FTS)	µg/kg	0.5							<0.5	<0.5	0	<0.5	<0.5	0
	6:2 Fluorotelomer sulfonic acid (6:2 FTS)	µg/kg	0.5 (Primary): 10 (Interlab)							<0.5	<0.5	0	<0.5	<0.5	0
	8:2 Fluorotelomer sulfonic acid (8:2 FTS)	µg/kg	0.5							<0.5	<0.5	0	<0.5	<0.5	0
	N-Ethyl perfluorooctane sulfonamide (EtFOSA)	µg/kg	0.5							<0.5	<0.5	0	<0.5	<0.5	0
	N-Ethyl perfluorooctane sulfonamidoacetic acid (Et	µg/kg	0.2							<0.2	<0.2	0	<0.2	<0.2	0
	N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE	µg/kg	0.5							<0.5	<0.5	0	<0.5	<0.5	0
	N-Methyl perfluorooctane sulfonamide (MeFOSA)	µg/kg	0.5							<0.5	<0.5	0	<0.5	<0.5	0
	N-Methyl perfluorooctane sulfonamidoacetic acid (M	µg/kg	0.2							<0.2	<0.2	0	<0.2	<0.2	0
	N-Methyl perfluorooctane sulfonamidoethanol (MeFOS	µg/kg	0.5							<0.5	<0.5	0	<0.5	<0.5	0
	Perfluorobutanoic acid (PFBA)	µg/kg	1							<1.0	<1.0	0	<1.0	<1.0	0
	Perfluoroheptane sulfonic acid (PFHpS)	µg/kg	0.2							<0.2	<0.2	0	<0.2	<0.2	0
	Perfluorooctane sulfonic acid (PFOS)	µg/kg	0.2 (Primary): 5 (Interlab)							<0.2	<0.2	0	<0.2	<0.2	0
	Perfluoropentane sulfonic acid (PFPeS)	µg/kg	0.2							<0.2	<0.2	0	<0.2	<0.2	0
	Perfluoropentanoic acid (PFPeA)	µg/kg	0.2							<0.2	<0.2	0	<0.2	<0.2	0
	Perfluorooctanoic acid (PFOA)	µg/kg	0.2 (Primary): 5 (Interlab)							<0.2	<0.2	0	<0.2	<0.2	0
	Perfluorotetradecanoic acid (PFTeDA)	µg/kg	0.5							<0.5	<0.5	0	<0.5	<0.5	0
	Perfluorotridecanoic acid (PFTrDA)	µg/kg	0.2							<0.2	<0.2	0	<0.2	<0.2	0
	Sum of PFAS	µg/kg	0.2							<0.2	<0.2	0	<0.2	<0.2	0
	Sum of PFAS (WA DER List)	µg/kg	0.2							<0.2	<0.2	0	<0.2	<0.2	0
	Sum of PFHxS and PFOS	µg/kg	0.2 (Primary): 5 (Interlab)							<0.2	<0.2	0	<0.2	<0.2	0
PFOS and PFOA	Perfluorobutanesulfonic acid (PFBS)	µg/kg	0.2							<0.2	<0.2	0	<0.2	<0.2	0
	Perfluorodecanesulfonic acid (PFDS)	µg/kg	0.2							<0.2	<0.2	0	<0.2	<0.2	0
	Perfluorodecanoic acid (PFDA)	µg/kg	0.2							<0.2	<0.2	0	<0.2	<0.2	0
	Perfluorohexanesulfonic acid (PFHxS)	µg/kg	0.2 (Primary): 5 (Interlab)							<0.2	<0.2	0	<0.2	<0.2	0
	Perfluorododecanoic acid (PFDoA)	µg/kg	0.2							<0.2	<0.2	0	<0.2	<0.2	0
	Perfluoroheptanoic acid (PFHpA)	µg/kg	0.2							<0.2	<0.2	0	<0.2	<0.2	0
	Perfluorohexanoic acid (PFHxA)	µg/kg	0.2							<0.2	<0.2	0	<0.2	<0.2	0
	Perfluorononanoic acid (PFNA)	µg/kg	0.2							<0.2	<0.2	0	<0.2	<0.2	0
	Perfluorooctanesulfonamide (PFOSA)	µg/kg	0.2							<0.2	<0.2	0	<0.2	<0.2	0
	Perfluoroundecanoic acid (PFUnA)	µg/kg	0.2							<0.2	<0.2	0	<0.2	<0.2	0
SVOC	2.4-Dichlorophenol	µg/L	0.5				<0.5	<0.5	0						
	2.4-Dimethylphenol	µg/L	0.5				<0.5	<0.5	0						
	2.6-Dichlorophenol	µg/L	0.5				<0.5	<0.5	0						
	3-Methylcholanthrene	µg/L	0.5				<0.5	<0.5	0						
	2-Chlorophenol	µg/L	0.5				<0.5	<0.5	0						
	2-Methylnaphthalene	µg/L	0.5				1.4	1.4	0						
	2-Nitrophenol	µg/L	0.5 (Primary): 1 (Interlab)				<0.5	<0.5	0						
	3- & 4-Methylphenol	µg/L	0.5				<0.5	<0.5	0						
	4-Chloro-3-methylphenol	µg/L	0.5 (Primary): 1 (Interlab)				<0.5	<0.5	0						
	Bis(2-ethylhexyl) phthalate	mg/kg	5				<5.0	<5.0	0						
	Butyl benzyl phthalate	mg/kg	0.5				<0.5	<0.5	0						
	Diethylphthalate	mg/kg	0.5				<0.5	<0.5	0						
	Dimethyl phthalate	mg/kg	0.5				<0.5	<0.5	0						
	Di-n-butyl phthalate	mg/kg	0.5				<0.5	<0.5	0						
	Di-n-octyl phthalate	mg/kg	0.5				<0.5	<0.5	0						
	1-naphthylamine	mg/kg	0.5				<0.5	<0.5	0						
	2-(acetylamino) fluorene	mg/kg	0.5				<0.5	<0.5	0						
	2,4-Dinitrotoluene	mg/kg	1 (Primary): 0.5 (Interlab)				<1.0	<1.0	0						
	2,6-dinitrotoluene	mg/kg	1				<1.0	<1.0	0						
	2-chloronaphthalene	mg/kg	0.5				<0.5	<0.5	0						
	2-nitroaniline	mg/kg	1				<1.0	<1.0	0						
	2-Picoline	mg/kg	0.5				<0.5	<0.5	0						
	3,3-Dichlorobenzidine	mg/kg	0.5				<0.5	<0.5	0						
	3-nitroaniline	mg/kg	1				<1.0	<1.0	0						
	4-(dimethylamino) azobenzene	mg/kg	0.5				<0.5	<0.5	0						
	4-aminobiphenyl	mg/kg	0.5				<0.5	<0.5	0						
	4-bromophenyl phenyl ether	mg/kg	0.5				<0.5	<0.5	0						
	4-chloroaniline	mg/kg	0.5				<0.5	<0.5	0						
	4-chlorophenyl phenyl ether	mg/kg	0.5				<0.5	<0.5	0						
	4-nitroaniline	mg/kg	0.5				<0.5	<0.5	0						
	4-Nitroquinoline-N-oxide	mg/kg	0.5				<0.5	<0.5	0						
	5-nitro-o-toluidine	mg/kg	0.5				<0.5	<0.5	0						
	7,12-dimethylbenz(a)anthracene	mg/kg	0.5				<0.5	<0.5	0						
	Acetophenone	mg/kg	0.5				<0.5	<0.5	0						
	Aniline	mg/kg	0.5				<0.5	<0.5	0						
	Azobenzene	mg/kg	1				<1.0	<1.0	0						
	Bis(2-chloroethoxy) methane	mg/kg	0.5				<0.5	<0.5	0						
	Bis(2-chloroethyl)ether	mg/kg	0.5				<0.5	<0.5	0						
	Carbazole	mg/kg	0.5				<0.5	<0.5	0						
	Chlorobenzilate	mg/kg	0.5				<0.5	<0.5	0						
	Dibenzofuran	mg/kg	0.5				<0.5	<0.5	0						
	Hexachlorobutadiene	mg/kg	0.5				<0.5	<0.5	0						
	Hexachlorocyclopentadiene	mg/kg	2.5 (Primary): 1 (Interlab)				<2.5	<2.5	0						
	Hexachloroethane	mg/kg	0.5				<0.5	<0.5	0						
	Hexachloropropene	mg/kg	0.5				<0.5	<0.5	0						
	Isophorone	mg/kg	0.5				<0.5	<0.5	0						
	Methapyrilene	mg/kg	0.5				<0.5	<0.5	0						
	Nitrobenzene	mg/kg	0.5				<0.5	<0.5	0						
	N-nitrosodiethylamine	mg/kg	0.5				<0.5	<0.5	0						
	N-nitrosodi-n-butylamine	mg/kg	0.5				<0.5	<0.5	0						
	N-nitrosodi-n-propylamine	mg/kg	0.5				<0.5	<0.5	0						
	N-Nitrosomethylethylamine	mg/kg	0.5				<0.5	<0.5	0						
	N-nitrosomorpholine	mg/kg	0.5				<0.5	<0.5	0						
	N-nitrosopiperidine	mg/kg	0.5				<0.5	<0.5	0						
	N-nitrosopyrrolidine	mg/kg	1				<1.0	<1.0	0						
	Pentachlorobenzene	mg/kg	0.5				<0.5	<0.5	0						
	Pentachloronitrobenzene	mg/kg	0.5				<0.5	<0.5	0						
	Phenacetin	mg/kg	0.5				<0.5	<0.5	0						
	Pronamide	mg/kg	0.5				<0.5	<0.5	0						
TRH - Semivolatile Fraction	>C10 - C16 Fraction	mg/kg	50	<50.0	<50.0	0	<50.0	<50.0	0						
	>C10 - C16 Fraction minus Naphthalene (F2)	mg/kg	50	<50.0	<50.0	0	<50.0	<50.0	0						
	>C10 - C40 Fraction (sum)	mg/kg	50 (Primary): 100 (Interl	<50.0	<50.0	0	**120.0**	**<50.0**	**82**						
	>C16 - C34 Fraction	mg/kg	100	<100.0	<100.0	0	120.0	<100.0	18						
	>C34 - C40 Fraction	mg/kg	100	<100.0	<100.0	0	<100.0	<100.0	0						
	C10 - C14 Fraction	mg/kg	50 (Primary): 20 (Interla	<50.0	<50.0	0	<50.0	<50.0	0						
	C10 - C36 Fraction (sum)	mg/kg	50	<50.0	<50.0	0	<50.0	<50.0	0						
	C15 - C28 Fraction	mg/kg	100 (Primary): 50 (Interl	<100.0	<100.0	0	<100.0	<100.0	0						
	C29 - C36 Fraction	mg/kg	100 (Primary): 50 (Interl	<100.0	<100.0	0	<100.0	<100.0	0						
TRH Volatiles/BTEX	Toluene	mg/kg	0.5 (Primary): 0.1 (Interl	<0.5	<0.5	0	<0.5	<0.5	0						
	Total Xylenes	mg/kg	0.5 (Primary): 0.3 (Interl	<0.5	<0.5	0	<0.5	<0.5	0						
	Benzene	mg/kg	0.2 (Primary): 0.1 (Interl	<0.2	<0.2	0	<0.2	<0.2	0						
	C6 - C10 Fraction	mg/kg	10 (Primary): 20 (Interla	<10.0	<10.0	0	24.0	31.0	25						
	C6 - C10 Fraction minus BTEX (F1)	mg/kg	10 (Primary): 20 (Interla	<10.0	<10.0	0	24.0	31.0	25						
	C6 - C9 Fraction	mg/kg	10 (Primary): 20 (Interla	<10.0	<10.0	0	19.0	25.0	27						
	Ethylbenzene	mg/kg	0.5 (Primary): 0.1 (Interl	<0.5	<0.5	0	<0.5	<0.5	0						
	meta- & para-Xylene	mg/kg	0.5 (Primary): 0.2 (Interl	<0.5	<0.5	0	<0.5	<0.5	0						
	ortho-Xylene	mg/kg	0.5 (Primary): 0.1 (Interl	<0.5	<0.5	0	<0.5	<0.5	0						

				Lab Report	ES2201683	ES2201683		ES2202264	ES2202264		ES2202264	ES2202264		ES2202264	ES2202264	
				Field ID	SOP_BH103_1.0	DUP01_220117	RPD	SOP_BH118_5.0	DUP02_220119	RPD	SOP_BH142_4.0	DUP03_220119	RPD	SOP_BH142_4.0	TRIP03_220119	RPD
				Sampled Date	17-Jan-22	17-Jan-22		19-Jan-22	19-Jan-22		19-Jan-22	19-Jan-22		19-Jan-22	19-Jan-22	
	Sum of BTEX	mg/kg	0.2	<0.2	<0.2	0	<0.2	<0.2	0						
VOC	1,2,4-trimethylbenzene	mg/kg	0.5				0.5	0.6	18						
	1,3,5-trimethylbenzene	mg/kg	0.5				<0.5	<0.5	0						
	2-chlorotoluene	mg/kg	0.5				<0.5	<0.5	0						
	4-chlorotoluene	mg/kg	0.5				<0.5	<0.5	0						
	Bromobenzene	mg/kg	0.5				<0.5	<0.5	0						
	Isopropylbenzene	mg/kg	0.5				<0.5	<0.5	0						
	n-butylbenzene	mg/kg	0.5				<0.5	<0.5	0						
	n-propylbenzene	mg/kg	0.5				<0.5	<0.5	0						
	p-isopropyltoluene	mg/kg	0.5				<0.5	<0.5	0						
	sec-butylbenzene	mg/kg	0.5				<0.5	<0.5	0						
	Styrene	mg/kg	0.5				<0.5	<0.5	0						
	tert-butylbenzene	mg/kg	0.5				<0.5	<0.5	0						
	1,1,1,2-tetrachloroethane	mg/kg	0.5				<0.5	<0.5	0						
	1,1,1-trichloroethane	mg/kg	0.5				<0.5	<0.5	0						
	1,1,2,2-tetrachloroethane	mg/kg	0.5				<0.5	<0.5	0						
	1,1,2-trichloroethane	mg/kg	0.5				<0.5	<0.5	0						
	1,1-dichloroethane	mg/kg	0.5				<0.5	<0.5	0						
	1,1-dichloroethene	mg/kg	0.5				<0.5	<0.5	0						
	1,1-dichloropropene	mg/kg	0.5				<0.5	<0.5	0						
	1,2,3-trichloropropane	mg/kg	0.5				<0.5	<0.5	0						
	1,2-dibromo-3-chloropropane	mg/kg	0.5				<0.5	<0.5	0						
	1,2-dibromoethane	mg/kg	0.5				<0.5	<0.5	0						
	1,2-dichloroethane	mg/kg	0.5				<0.5	<0.5	0						
	1,2-dichloropropane	mg/kg	0.5				<0.5	<0.5	0						
	1,3-dichloropropane	mg/kg	0.5				<0.5	<0.5	0						
	2,2-dichloropropane	mg/kg	0.5				<0.5	<0.5	0						
	2-butanone (MEK)	mg/kg	5 (Primary): 0.5 (Interlab)				<5.0	<5.0	0						
	2-hexanone (MBK)	mg/kg	5				<5.0	<5.0	0						
	4-methyl-2-pentanone (MIBK)	mg/kg	5 (Primary): 0.5 (Interlab)				<5.0	<5.0	0						
	Bromodichloromethane	mg/kg	0.5				<0.5	<0.5	0						
	Bromoform	mg/kg	0.5				<0.5	<0.5	0						
	Bromomethane	mg/kg	5 (Primary): 0.5 (Interlab)				<5.0	<5.0	0						
	Carbon disulfide	mg/kg	0.5				<0.5	<0.5	0						
	Carbon tetrachloride	mg/kg	0.5				<0.5	<0.5	0						
	Chlorodibromomethane	mg/kg	0.5				<0.5	<0.5	0						
	Chloroethane	mg/kg	5 (Primary): 0.5 (Interlab)				<5.0	<5.0	0						
	Chloroform	mg/kg	0.5				<0.5	<0.5	0						
	Chloromethane	mg/kg	5 (Primary): 0.5 (Interlab)				<5.0	<5.0	0						
	cis-1,2-dichloroethene	mg/kg	0.5				<0.5	<0.5	0						
	cis-1,3-dichloropropene	mg/kg	0.5				<0.5	<0.5	0						
	cis-1,4-Dichloro-2-butene	mg/kg	0.5				<0.5	<0.5	0						
	Dibromomethane	mg/kg	0.5				<0.5	<0.5	0						
	Dichlorodifluoromethane	mg/kg	5 (Primary): 0.5 (Interlab)				<5.0	<5.0	0						
	Iodomethane	mg/kg	0.5				<0.5	<0.5	0						
	Pentachloroethane	mg/kg	0.5				<0.5	<0.5	0						
	TCE	mg/kg	0.5				<0.5	<0.5	0						
	Tetrachloroethene	mg/kg	0.5				<0.5	<0.5	0						
	trans-1,2-dichloroethene	mg/kg	0.5				<0.5	<0.5	0						
	trans-1,3-dichloropropene	mg/kg	0.5				<0.5	<0.5	0						
	trans-1,4-Dichloro-2-butene	mg/kg	0.5				<0.5	<0.5	0						
	Trichlorofluoromethane	mg/kg	5 (Primary): 0.5 (Interlab)				<5.0	<5.0	0						
	Vinyl acetate	mg/kg	5				<5.0	<5.0	0						
	Vinyl chloride	mg/kg	5 (Primary): 0.5 (Interlab)				<5.0	<5.0	0						
Explosives	1,3,5-Trinitrobenzene	mg/kg	0.5				<0.5	<0.5	0						
Metals	Arsenic	mg/kg	5 (Primary): 2 (Interlab)	10.0	10.0	0	8.0	8.0	0						
	Cadmium	mg/kg	1 (Primary): 0.4 (Interlab	<1.0	<1.0	0	<1.0	<1.0	0						
	Chromium	mg/kg	2 (Primary): 5 (Interlab)	6.0	7.0	15	7.0	8.0	13						
	Copper	mg/kg	5	26.0	29.0	11	37.0	39.0	5						
	Lead	mg/kg	5	17.0	13.0	27	15.0	16.0	6						
	Mercury	mg/kg	0.1	<0.1	<0.1	0	<0.1	<0.1	0						
	Nickel	mg/kg	2 (Primary): 5 (Interlab)	4.0	4.0	0	24.0	25.0	4						
	Zinc	mg/kg	5	34.0	38.0	11	178.0	176.0	1						
Metals (leached)	Nickel (Filtered)	µg/l	100													
PCBs	PCBs (Sum of total)	mg/kg	0.1	<0.1	<0.1	0	<0.1	<0.1	0						
Pesticides	4,4-DDE	mg/kg	0.05 (Primary): 0.5 (Inte	<0.05	<0.05	0	<0.05	<0.05	0						
	a-BHC	mg/kg	0.05 (Primary): 0.5 (Inte	<0.05	<0.05	0	<0.05	<0.05	0						
	Aldrin	mg/kg	0.05 (Primary): 0.5 (Inte	<0.05	<0.05	0	<0.05	<0.05	0						
	Aldrin + Dieldrin	mg/kg	0.05	<0.05	<0.05	0	<0.05	<0.05	0						
	Azinophos methyl	mg/kg	0.05 (Primary): 0.2 (Inte	<0.05	<0.05	0	<0.05	<0.05	0						
	b-BHC	mg/kg	0.05 (Primary): 0.5 (Inte	<0.05	<0.05	0	<0.05	<0.05	0						
	Bromophos-ethyl	mg/kg	0.05	<0.05	<0.05	0	<0.05	<0.05	0						
	Carbophenothion	mg/kg	0.05	<0.05	<0.05	0	<0.05	<0.05	0						
	Chlordane	mg/kg	0.05 (Primary): 0.1 (Inte	<0.05	<0.05	0	<0.05	<0.05	0						
	Chlordane (cis)	mg/kg	0.05	<0.05	<0.05	0	<0.05	<0.05	0						
	Chlordane (trans)	mg/kg	0.05	<0.05	<0.05	0	<0.05	<0.05	0						
	Chlorfenvinphos	mg/kg	0.05 (Primary): 0.2 (Inte	<0.05	<0.05	0	<0.05	<0.05	0						
	Chlorpyrifos	mg/kg	0.05 (Primary): 0.2 (Inte	<0.05	<0.05	0	<0.05	<0.05	0						
	Chlorpyrifos-methyl	mg/kg	0.05 (Primary): 0.2 (Inte	<0.05	<0.05	0	<0.05	<0.05	0						
	d-BHC	mg/kg	0.05 (Primary): 0.5 (Inte	<0.05	<0.05	0	<0.05	<0.05	0						
	DDD	mg/kg	0.05 (Primary): 0.5 (Inte	<0.05	<0.05	0	<0.05	<0.05	0						
	DDT	mg/kg	0.2 (Primary): 1 (Interlab	<0.2	<0.2	0	<0.2	<0.2	0						
	DDT+DDE+DDD	mg/kg	0.05	<0.05	<0.05	0	<0.05	<0.05	0						
	Demeton-S-methyl	mg/kg	0.05	<0.05	<0.05	0	<0.05	<0.05	0						
	Diazinon	mg/kg	0.05 (Primary): 0.2 (Inte	<0.05	<0.05	0	<0.05	<0.05	0						
	Dichlorvos	mg/kg	0.05 (Primary): 0.2 (Inte	<0.05	<0.05	0	<0.05	<0.05	0						
	Dieldrin	mg/kg	0.05 (Primary): 0.5 (Inte	<0.05	<0.05	0	<0.05	<0.05	0						
	Dimethoate	mg/kg	0.05 (Primary): 0.2 (Inte	<0.05	<0.05	0	<0.05	<0.05	0						
	Endosulfan	mg/kg	0.05	<0.05	<0.05	0	<0.05	<0.05	0						
	Endosulfan I	mg/kg	0.05 (Primary): 0.5 (Inte	<0.05	<0.05	0	<0.05	<0.05	0						
	Endosulfan II	mg/kg	0.05 (Primary): 0.5 (Inte	<0.05	<0.05	0	<0.05	<0.05	0						
	Endosulfan sulphate	mg/kg	0.05 (Primary): 0.5 (Inte	<0.05	<0.05	0	<0.05	<0.05	0						
	Endrin	mg/kg	0.05 (Primary): 0.5 (Inte	<0.05	<0.05	0	<0.05	<0.05	0						
	Endrin aldehyde	mg/kg	0.05 (Primary): 0.5 (Inte	<0.05	<0.05	0	<0.05	<0.05	0						
	Endrin ketone	mg/kg	0.05 (Primary): 0.5 (Inte	<0.05	<0.05	0	<0.05	<0.05	0						
	Ethion	mg/kg	0.05 (Primary): 0.2 (Inte	<0.05	<0.05	0	<0.05	<0.05	0						
	Fenamiphos	mg/kg	0.05	<0.05	<0.05	0	<0.05	<0.05	0						
	Fenthion	mg/kg	0.05 (Primary): 0.2 (Inte	<0.05	<0.05	0	<0.05	<0.05	0						
	g-BHC (Lindane)	mg/kg	0.05 (Primary): 0.5 (Inte	<0.05	<0.05	0	<0.05	<0.05	0						
	Heptachlor	mg/kg	0.05 (Primary): 0.5 (Inte	<0.05	<0.05	0	<0.05	<0.05	0						
	Heptachlor epoxide	mg/kg	0.05 (Primary): 0.5 (Inte	<0.05	<0.05	0	<0.05	<0.05	0						
	Hexachlorobenzene	mg/kg	1 (Primary): 0.5 (Interlab)				<1.0	<1.0	0						
	Hexachlorobenzene	mg/kg	0.05 (Primary): 0.5 (Inte	<0.05	<0.05	0	<0.05	<0.05	0						
	Malathion	mg/kg	0.05 (Primary): 0.2 (Inte	<0.05	<0.05	0	<0.05	<0.05	0						
	Methoxychlor	mg/kg	0.2 (Primary): 0.5 (Interl	<0.2	<0.2	0	<0.2	<0.2	0						
	Methyl parathion	mg/kg	0.2	<0.2	<0.2	0	<0.2	<0.2	0						
	Monocrotophos	mg/kg	0.2 (Primary): 2 (Interlab	<0.2	<0.2	0	<0.2	<0.2	0						
	Parathion	mg/kg	0.2	<0.2	<0.2	0	<0.2	<0.2	0						
	Pirimphos-ethyl	mg/kg	0.05	<0.05	<0.05	0	<0.05	<0.05	0						
	Prothiofos	mg/kg	0.05	<0.05	<0.05	0	<0.05	<0.05	0						

*RPDs have only been considered where a concentration is greater than 1 times the EQL.
**High RPDs are in bold (Acceptable RPDs for each EQL multiplier range are: 50 (1-10 x EQL); 30 (10-30 x EQL); 30 (> 30 x EQL))
***Interlab Duplicates are matched on a per compound basis as methods vary between laboratories. Any methods in the row header relate to those used in the primary laboratory

			Lab Report	ES2202264	ES2202264		ES2202264	ES2202264		ES2202264	ES2202264		ES2202692	ES2202692	
			Field ID	SOP_BH145_5.0	DUP04_220119	RPD	SOP_BH120_3.0	DUP05_220120	RPD	SOP_BH124_3.0	DUP06_220121	RPD	SOP_BH131_2.0	DUP07_220124	RPD
			Sampled Date	19-Jan-22	19-Jan-22		20-Jan-22	20-Jan-22		21-Jan-22	21-Jan-22		24-Jan-22	24-Jan-22	
Chem_Group	ChemName	Units	EQL												
	Extraction Fluid Number	-	1												
	Final pH	pH_Units	0.1												
	Initial pH	pH_Units	0.1												
	N-Nitrosodiphenyl & Diphenylamine	mg/kg	1				<1.0	<1.0	0						
Chlorinated HCs	1,2,3-trichlorobenzene	mg/kg	0.5				<0.5	<0.5	0						
	1,2,4-trichlorobenzene	mg/kg	0.5				<0.5	<0.5	0						
	1,2-dichlorobenzene	mg/kg	0.5				<0.5	<0.5	0						
	1,3-dichlorobenzene	mg/kg	0.5				<0.5	<0.5	0						
	1,4-dichlorobenzene	mg/kg	0.5				<0.5	<0.5	0						
	Chlorobenzene	mg/kg	0.5				<0.5	<0.5	0						
Moisture Content	Moisture Content	%	1 : 0.1 (Dupe)	8.3	8.4	1	7.0	9.0	25	7.9	8.0	1	8.6	7.7	11
NA	2,4,5-Trichlorophenol	mg/kg	0.5 (Primary): 1 (Interlab				<0.5	<0.5	0						
	2,4,6-Trichlorophenol	mg/kg	0.5 (Primary): 1 (Interlab				<0.5	<0.5	0						
	Pentachlorophenol	mg/kg	1				<1.0	<1.0	0						
	Phenol	mg/kg	0.5				<0.5	<0.5	0						
	o-Cresol	mg/kg	0.5 (Primary): 0.2 (Interla				<0.5	<0.5	0						
Naphthalene	Naphthalene	mg/kg	1 (Primary): 0.5 (Interlab	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	<1.0	0
	Naphthalene	mg/kg	0.5	<0.5	<0.5	0	<0.5	<0.5	0	<0.5	<0.5	0	<0.5	<0.5	0
PAH/Phenols (SIM)	Acenaphthene	mg/kg	0.5	<0.5	<0.5	0	<0.5	<0.5	0	<0.5	<0.5	0	<0.5	<0.5	0
	Acenaphthylene	mg/kg	0.5	<0.5	<0.5	0	<0.5	<0.5	0	<0.5	<0.5	0	<0.5	<0.5	0
	Anthracene	mg/kg	0.5	<0.5	<0.5	0	<0.5	<0.5	0	<0.5	<0.5	0	<0.5	<0.5	0
	Fluoranthene	mg/kg	0.5	<0.5	<0.5	0	<0.5	<0.5	0	<0.5	<0.5	0	<0.5	<0.5	0
	Fluorene	mg/kg	0.5	<0.5	<0.5	0	<0.5	<0.5	0	<0.5	<0.5	0	<0.5	<0.5	0
	Benz(a)anthracene	mg/kg	0.5	<0.5	<0.5	0	<0.5	<0.5	0	<0.5	<0.5	0	<0.5	<0.5	0
	Benzo(a)pyrene	mg/kg	0.5	<0.5	<0.5	0	<0.5	<0.5	0	<0.5	<0.5	0	<0.5	<0.5	0
	Benzo(a)pyrene TEQ (half LOR)	mg/kg	0.5	0.6	0.6	0	0.6	0.6	0	0.6	0.6	0	0.6	0.6	0
	Benzo(a)pyrene TEQ (LOR)	mg/kg	0.5	1.2	1.2	0	1.2	1.2	0	1.2	1.2	0	1.2	1.2	0
	Benzo(a)pyrene TEQ (zero)	mg/kg	0.5	<0.5	<0.5	0	<0.5	<0.5	0	<0.5	<0.5	0	<0.5	<0.5	0
	Benzo(b+j)fluoranthene	mg/kg	0.5	<0.5	<0.5	0	<0.5	<0.5	0	<0.5	<0.5	0	<0.5	<0.5	0
	Benzo(g.h.i)perylene	mg/kg	0.5	<0.5	<0.5	0	<0.5	<0.5	0	<0.5	<0.5	0	<0.5	<0.5	0
	Benzo(k)fluoranthene	mg/kg	0.5	<0.5	<0.5	0	<0.5	<0.5	0	<0.5	<0.5	0	<0.5	<0.5	0
	Chrysene	mg/kg	0.5	<0.5	<0.5	0	<0.5	<0.5	0	<0.5	<0.5	0	<0.5	<0.5	0
	Dibenz(a.h)anthracene	mg/kg	0.5	<0.5	<0.5	0	<0.5	<0.5	0	<0.5	<0.5	0	<0.5	<0.5	0
	Indeno(1.2.3.cd)pyrene	mg/kg	0.5	<0.5	<0.5	0	<0.5	<0.5	0	<0.5	<0.5	0	<0.5	<0.5	0
	Phenanthrene	mg/kg	0.5	<0.5	<0.5	0	<0.5	<0.5	0	<0.5	<0.5	0	<0.5	<0.5	0
	Pyrene	mg/kg	0.5	<0.5	<0.5	0	<0.5	<0.5	0	<0.5	<0.5	0	<0.5	<0.5	0
	Sum of polycyclic aromatic hydrocarbons	mg/kg	0.5	<0.5	<0.5	0	<0.5	<0.5	0	<0.5	<0.5	0	<0.5	<0.5	0
PFAS	10:2 Fluorotelomer sulfonic acid (10:2 FTS)	µg/kg	0.5	<0.5	<0.5	0	<0.5	<0.5	0	<0.5	<0.5	0	<0.5	<0.5	0
	4:2 Fluorotelomer sulfonic acid (4:2 FTS)	µg/kg	0.5	<0.5	<0.5	0	<0.5	<0.5	0	<0.5	<0.5	0	<0.5	<0.5	0
	6:2 Fluorotelomer sulfonic acid (6:2 FTS)	µg/kg	0.5 (Primary): 10 (Interla	<0.5	<0.5	0	<0.5	<0.5	0	<0.5	<0.5	0	<0.5	<0.5	0
	8:2 Fluorotelomer sulfonic acid (8:2 FTS)	µg/kg	0.5	<0.5	<0.5	0	<0.5	<0.5	0	<0.5	<0.5	0	<0.5	<0.5	0
	N-Ethyl perfluorooctane sulfonamide (EtFOSA)	µg/kg	0.5	<0.5	<0.5	0	<0.5	<0.5	0	<0.5	<0.5	0			
	N-Ethyl perfluorooctane sulfonamidoacetic acid (Et	µg/kg	0.2	<0.2	<0.2	0	<0.2	<0.2	0	<0.2	<0.2	0			
	N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE	µg/kg	0.5	<0.5	<0.5	0	<0.5	<0.5	0	<0.5	<0.5	0			
	N-Methyl perfluorooctane sulfonamide (MeFOSA)	µg/kg	0.5	<0.5	<0.5	0	<0.5	<0.5	0	<0.5	<0.5	0			
	N-Methyl perfluorooctane sulfonamidoacetic acid (M	µg/kg	0.2	<0.2	<0.2	0	<0.2	<0.2	0	<0.2	<0.2	0			
	N-Methyl perfluorooctane sulfonamidoethanol (MeFOS	µg/kg	0.5	<0.5	<0.5	0	<0.5	<0.5	0	<0.5	<0.5	0			
	Perfluorobutanoic acid (PFBA)	µg/kg	1	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	<1.0	0
	Perfluoroheptane sulfonic acid (PFHpS)	µg/kg	0.2	<0.2	<0.2	0	<0.2	<0.2	0	<0.2	<0.2	0			
	Perfluorooctane sulfonic acid (PFOS)	µg/kg	0.2 (Primary): 5 (Interlab	<0.2	<0.2	0	<0.2	<0.2	0	<0.2	<0.2	0	<0.2	<0.2	0
	Perfluoropentane sulfonic acid (PFPeS)	µg/kg	0.2	<0.2	<0.2	0	<0.2	<0.2	0	<0.2	<0.2	0			
	Perfluoropentanoic acid (PFPeA)	µg/kg	0.2	<0.2	<0.2	0	<0.2	<0.2	0	<0.2	<0.2	0	<0.2	<0.2	0
	Perfluorooctanoic acid (PFOA)	µg/kg	0.2 (Primary): 5 (Interlab	<0.2	<0.2	0	<0.2	<0.2	0	<0.2	<0.2	0	<0.2	<0.2	0
	Perfluorotetradecanoic acid (PFTeDA)	µg/kg	0.5	<0.5	<0.5	0	<0.5	<0.5	0	<0.5	<0.5	0			
	Perfluorotridecanoic acid (PFTrDA)	µg/kg	0.2	<0.2	<0.2	0	<0.2	<0.2	0	<0.2	<0.2	0			
	Sum of PFAS	µg/kg	0.2	<0.2	<0.2	0	<0.2	<0.2	0	<0.2	<0.2	0			
	Sum of PFAS (WA DER List)	µg/kg	0.2	<0.2	<0.2	0	<0.2	<0.2	0	<0.2	<0.2	0	<0.2	<0.2	0
	Sum of PFHxS and PFOS	µg/kg	0.2 (Primary): 5 (Interlab	<0.2	<0.2	0	<0.2	<0.2	0	<0.2	<0.2	0	<0.2	<0.2	0
PFOS and PFOA	Perfluorobutanesulfonic acid (PFBS)	µg/kg	0.2	<0.2	<0.2	0	<0.2	<0.2	0	<0.2	<0.2	0	<0.2	<0.2	0
	Perfluorodecanesulfonic acid (PFDS)	µg/kg	0.2	<0.2	<0.2	0	<0.2	<0.2	0	<0.2	<0.2	0			
	Perfluorodecanoic acid (PFDA)	µg/kg	0.2	<0.2	<0.2	0	<0.2	<0.2	0	<0.2	<0.2	0			
	Perfluorohexanesulfonic acid (PFHxS)	µg/kg	0.2 (Primary): 5 (Interlab	<0.2	<0.2	0	<0.2	<0.2	0	<0.2	<0.2	0	<0.2	<0.2	0
	Perfluorododecanoic acid (PFDoA)	µg/kg	0.2	<0.2	<0.2	0	<0.2	<0.2	0	<0.2	<0.2	0			
	Perfluoroheptanoic acid (PFHpA)	µg/kg	0.2	<0.2	<0.2	0	<0.2	<0.2	0	<0.2	<0.2	0	<0.2	<0.2	0
	Perfluorohexanoic acid (PFHxA)	µg/kg	0.2	<0.2	<0.2	0	<0.2	<0.2	0	<0.2	<0.2	0	<0.2	<0.2	0
	Perfluorononanoic acid (PFNA)	µg/kg	0.2	<0.2	<0.2	0	<0.2	<0.2	0	<0.2	<0.2	0			
	Perfluorooctanesulfonamide (PFOSA)	µg/kg	0.2	<0.2	<0.2	0	<0.2	<0.2	0	<0.2	<0.2	0			
	Perfluoroundecanoic acid (PFUnA)	µg/kg	0.2	<0.2	<0.2	0	<0.2	<0.2	0	<0.2	<0.2	0			
SVOC	2.4-Dichlorophenol	µg/L	0.5				<0.5	<0.5	0						
	2.4-Dimethylphenol	µg/L	0.5				<0.5	<0.5	0						
	2.6-Dichlorophenol	µg/L	0.5				<0.5	<0.5	0						
	3-Methylcholanthrene	µg/L	0.5				<0.5	<0.5	0						
	2-Chlorophenol	µg/L	0.5				<0.5	<0.5	0						
	2-Methylnaphthalene	µg/L	0.5				<0.5	<0.5	0						
	2-Nitrophenol	µg/L	0.5 (Primary): 1 (Interlab				<0.5	<0.5	0						
	3- & 4-Methylphenol	µg/L	0.5				<0.5	<0.5	0						
	4-Chloro-3-methylphenol	µg/L	0.5 (Primary): 1 (Interlab				<0.5	<0.5	0						
	Bis(2-ethylhexyl) phthalate	mg/kg	5				<5.0	<5.0	0						
	Butyl benzyl phthalate	mg/kg	0.5				<0.5	<0.5	0						
	Diethylphthalate	mg/kg	0.5				<0.5	<0.5	0						
	Dimethyl phthalate	mg/kg	0.5				<0.5	<0.5	0						
	Di-n-butyl phthalate	mg/kg	0.5				<0.5	<0.5	0						
	Di-n-octyl phthalate	mg/kg	0.5				<0.5	<0.5	0						
	1-naphthylamine	mg/kg	0.5				<0.5	<0.5	0						
	2-(acetylamino) fluorene	mg/kg	0.5				<0.5	<0.5	0						
	2,4-Dinitrotoluene	mg/kg	1 (Primary): 0.5 (Interlab				<1.0	<1.0	0						
	2,6-dinitrotoluene	mg/kg	1				<1.0	<1.0	0						
	2-chloronaphthalene	mg/kg	0.5				<0.5	<0.5	0						
	2-nitroaniline	mg/kg	1				<1.0	<1.0	0						
	2-Picoline	mg/kg	0.5				<0.5	<0.5	0						
	3,3-Dichlorobenzidine	mg/kg	0.5				<0.5	<0.5	0						
	3-nitroaniline	mg/kg	1				<1.0	<1.0	0						
	4-(dimethylamino) azobenzene	mg/kg	0.5				<0.5	<0.5	0						
	4-aminobiphenyl	mg/kg	0.5				<0.5	<0.5	0						
	4-bromophenyl phenyl ether	mg/kg	0.5				<0.5	<0.5	0						
	4-chloroaniline	mg/kg	0.5				<0.5	<0.5	0						
	4-chlorophenyl phenyl ether	mg/kg	0.5				<0.5	<0.5	0						
	4-nitroaniline	mg/kg	0.5				<0.5	<0.5	0						
	4-Nitroquinoline-N-oxide	mg/kg	0.5				<0.5	<0.5	0						
	5-nitro-o-toluidine	mg/kg	0.5				<0.5	<0.5	0						
	7,12-dimethylbenz(a)anthracene	mg/kg	0.5				<0.5	<0.5	0						
	Acetophenone	mg/kg	0.5				<0.5	<0.5	0						
	Aniline	mg/kg	0.5				<0.5	<0.5	0						
	Azobenzene	mg/kg	1				<1.0	<1.0	0						
	Bis(2-chloroethoxy) methane	mg/kg	0.5				<0.5	<0.5	0						
	Bis(2-chloroethyl)ether	mg/kg	0.5				<0.5	<0.5	0						
	Carbazole	mg/kg	0.5				<0.5	<0.5	0						
	Chlorobenzilate	mg/kg	0.5				<0.5	<0.5	0						
	Dibenzofuran	mg/kg	0.5				<0.5	<0.5	0						
	Hexachlorobutadiene	mg/kg	0.5				<0.5	<0.5	0						
	Hexachlorocyclopentadiene	mg/kg	2.5 (Primary): 1 (Interlab				<2.5	<2.5	0						
	Hexachloroethane	mg/kg	0.5				<0.5	<0.5	0						
	Hexachloropropene	mg/kg	0.5				<0.5	<0.5	0						
	Isophorone	mg/kg	0.5				<0.5	<0.5	0						
	Methapyrilene	mg/kg	0.5				<0.5	<0.5	0						
	Nitrobenzene	mg/kg	0.5				<0.5	<0.5	0						
	N-nitrosodiethylamine	mg/kg	0.5				<0.5	<0.5	0						
	N-nitrosodi-n-butylamine	mg/kg	0.5				<0.5	<0.5	0						
	N-nitrosodi-n-propylamine	mg/kg	0.5				<0.5	<0.5	0						
	N-Nitrosomethylethylamine	mg/kg	0.5				<0.5	<0.5	0						
	N-nitrosomorpholine	mg/kg	0.5				<0.5	<0.5	0						
	N-nitrosopiperidine	mg/kg	0.5				<0.5	<0.5	0						
	N-nitrosopyrrolidine	mg/kg	1				<1.0	<1.0	0						
	Pentachlorobenzene	mg/kg	0.5				<0.5	<0.5	0						
	Pentachloronitrobenzene	mg/kg	0.5				<0.5	<0.5	0						
	Phenacetin	mg/kg	0.5				<0.5	<0.5	0						
	Pronamide	mg/kg	0.5				<0.5	<0.5	0						
TRH - Semivolatile Fraction	>C10 - C16 Fraction	mg/kg	50	<50.0	<50.0	0	<50.0	<50.0	0	<50.0	<50.0	0	<50.0	<50.0	0
	>C10 - C16 Fraction minus Naphthalene (F2)	mg/kg	50	<50.0	<50.0	0	<50.0	<50.0	0	<50.0	<50.0	0	<50.0	<50.0	0
	>C10 - C40 Fraction (sum)	mg/kg	50 (Primary): 100 (Interl	<50.0	<50.0	0	<50.0	<50.0	0	<50.0	<50.0	0	<50.0	<50.0	0
	>C16 - C34 Fraction	mg/kg	100	<100.0	<100.0	0	<100.0	<100.0	0	<100.0	<100.0	0	<100.0	<100.0	0
	>C34 - C40 Fraction	mg/kg	100	<100.0	<100.0	0	<100.0	<100.0	0	<100.0	<100.0	0	<100.0	<100.0	0
	C10 - C14 Fraction	mg/kg	50 (Primary): 20 (Interla	<50.0	<50.0	0	<50.0	<50.0	0	<50.0	<50.0	0	<50.0	<50.0	0
	C10 - C36 Fraction (sum)	mg/kg	50	<50.0	<50.0	0	<50.0	<50.0	0	<50.0	<50.0	0	<50.0	<50.0	0
	C15 - C28 Fraction	mg/kg	100 (Primary): 50 (Interl	<100.0	<100.0	0	<100.0	<100.0	0	<100.0	<100.0	0	<100.0	<100.0	0
	C29 - C36 Fraction	mg/kg	100 (Primary): 50 (Interl	<100.0	<100.0	0	<100.0	<100.0	0	<100.0	<100.0	0	<100.0	<100.0	0
TRH Volatiles/BTEX	Toluene	mg/kg	0.5 (Primary): 0.1 (Interl	<0.5	<0.5	0	<0.5	<0.5	0	<0.5	<0.5	0	<0.5	<0.5	0
	Total Xylenes	mg/kg	0.5 (Primary): 0.3 (Interl	<0.5	<0.5	0	<0.5	<0.5	0	<0.5	<0.5	0	<0.5	<0.5	0
	Benzene	mg/kg	0.2 (Primary): 0.1 (Interl	<0.2	<0.2	0	<0.2	<0.2	0	<0.2	<0.2	0	<0.2	<0.2	0
	C6 - C10 Fraction	mg/kg	10 (Primary): 20 (Interla	<10.0	<10.0	0	<10.0	<10.0	0	<10.0	<10.0	0	<10.0	<10.0	0
	C6 - C10 Fraction minus BTEX (F1)	mg/kg	10 (Primary): 20 (Interla	<10.0	<10.0	0	<10.0	<10.0	0	<10.0	<10.0	0	<10.0	<10.0	0
	C6 - C9 Fraction	mg/kg	10 (Primary): 20 (Interla	<10.0	<10.0	0	<10.0	<10.0	0	<10.0	<10.0	0	<10.0	<10.0	0
	Ethylbenzene	mg/kg	0.5 (Primary): 0.1 (Interl	<0.5	<0.5	0	<0.5	<0.5	0	<0.5	<0.5	0	<0.5	<0.5	0
	meta- & para-Xylene	mg/kg	0.5 (Primary): 0.2 (Interl	<0.5	<0.5	0	<0.5	<0.5	0	<0.5	<0.5	0	<0.5	<0.5	0
	ortho-Xylene	mg/kg	0.5 (Primary): 0.1 (Interl	<0.5	<0.5	0	<0.5	<0.5	0	<0.5	<0.5	0	<0.5	<0.5	0

			Lab Report	ES2202264	ES2202264		ES2202264	ES2202264		ES2202264	ES2202264		ES2202692	ES2202692	
			Field ID	SOP_BH145_5.0	DUP04_220119	**RPD**	SOP_BH120_3.0	DUP05_220120	**RPD**	SOP_BH124_3.0	DUP06_220121	**RPD**	SOP_BH131_2.0	DUP07_220124	**RPD**
			Sampled Date	19-Jan-22	19-Jan-22		20-Jan-22	20-Jan-22		21-Jan-22	21-Jan-22		24-Jan-22	24-Jan-22	
	Sum of BTEX	mg/kg	0.2	<0.2	<0.2	0	<0.2	<0.2	0	<0.2	<0.2	0	<0.2	<0.2	0
VOC	1,2,4-trimethylbenzene	mg/kg	0.5				<0.5	<0.5	0						
	1,3,5-trimethylbenzene	mg/kg	0.5				<0.5	<0.5	0						
	2-chlorotoluene	mg/kg	0.5				<0.5	<0.5	0						
	4-chlorotoluene	mg/kg	0.5				<0.5	<0.5	0						
	Bromobenzene	mg/kg	0.5				<0.5	<0.5	0						
	Isopropylbenzene	mg/kg	0.5				<0.5	<0.5	0						
	n-butylbenzene	mg/kg	0.5				<0.5	<0.5	0						
	n-propylbenzene	mg/kg	0.5				<0.5	<0.5	0						
	p-isopropyltoluene	mg/kg	0.5				<0.5	<0.5	0						
	sec-butylbenzene	mg/kg	0.5				<0.5	<0.5	0						
	Styrene	mg/kg	0.5				<0.5	<0.5	0						
	tert-butylbenzene	mg/kg	0.5				<0.5	<0.5	0						
	1,1,1,2-tetrachloroethane	mg/kg	0.5				<0.5	<0.5	0						
	1,1,1-trichloroethane	mg/kg	0.5				<0.5	<0.5	0						
	1,1,2,2-tetrachloroethane	mg/kg	0.5				<0.5	<0.5	0						
	1,1,2-trichloroethane	mg/kg	0.5				<0.5	<0.5	0						
	1,1-dichloroethane	mg/kg	0.5				<0.5	<0.5	0						
	1,1-dichloroethene	mg/kg	0.5				<0.5	<0.5	0						
	1,1-dichloropropene	mg/kg	0.5				<0.5	<0.5	0						
	1,2,3-trichloropropane	mg/kg	0.5				<0.5	<0.5	0						
	1,2-dibromo-3-chloropropane	mg/kg	0.5				<0.5	<0.5	0						
	1,2-dibromoethane	mg/kg	0.5				<0.5	<0.5	0						
	1,2-dichloroethane	mg/kg	0.5				<0.5	<0.5	0						
	1,2-dichloropropane	mg/kg	0.5				<0.5	<0.5	0						
	1,3-dichloropropane	mg/kg	0.5				<0.5	<0.5	0						
	2,2-dichloropropane	mg/kg	0.5				<0.5	<0.5	0						
	2-butanone (MEK)	mg/kg	5 (Primary): 0.5 (Interlab				<5.0	<5.0	0						
	2-hexanone (MBK)	mg/kg	5				<5.0	<5.0	0						
	4-methyl-2-pentanone (MIBK)	mg/kg	5 (Primary): 0.5 (Interlab				<5.0	<5.0	0						
	Bromodichloromethane	mg/kg	0.5				<0.5	<0.5	0						
	Bromoform	mg/kg	0.5				<0.5	<0.5	0						
	Bromomethane	mg/kg	5 (Primary): 0.5 (Interlab				<5.0	<5.0	0						
	Carbon disulfide	mg/kg	0.5				<0.5	<0.5	0						
	Carbon tetrachloride	mg/kg	0.5				<0.5	<0.5	0						
	Chlorodibromomethane	mg/kg	0.5				<0.5	<0.5	0						
	Chloroethane	mg/kg	5 (Primary): 0.5 (Interlab				<5.0	<5.0	0						
	Chloroform	mg/kg	0.5				<0.5	<0.5	0						
	Chloromethane	mg/kg	5 (Primary): 0.5 (Interlab				<5.0	<5.0	0						
	cis-1,2-dichloroethene	mg/kg	0.5				<0.5	<0.5	0						
	cis-1,3-dichloropropene	mg/kg	0.5				<0.5	<0.5	0						
	cis-1,4-Dichloro-2-butene	mg/kg	0.5				<0.5	<0.5	0						
	Dibromomethane	mg/kg	0.5				<0.5	<0.5	0						
	Dichlorodifluoromethane	mg/kg	5 (Primary): 0.5 (Interlab				<5.0	<5.0	0						
	Iodomethane	mg/kg	0.5				<0.5	<0.5	0						
	Pentachloroethane	mg/kg	0.5				<0.5	<0.5	0						
	TCE	mg/kg	0.5				<0.5	<0.5	0						
	Tetrachloroethene	mg/kg	0.5				<0.5	<0.5	0						
	trans-1,2-dichloroethene	mg/kg	0.5				<0.5	<0.5	0						
	trans-1,3-dichloropropene	mg/kg	0.5				<0.5	<0.5	0						
	trans-1,4-Dichloro-2-butene	mg/kg	0.5				<0.5	<0.5	0						
	Trichlorofluoromethane	mg/kg	5 (Primary): 0.5 (Interlab				<5.0	<5.0	0						
	Vinyl acetate	mg/kg	5				<5.0	<5.0	0						
	Vinyl chloride	mg/kg	5 (Primary): 0.5 (Interlab				<5.0	<5.0	0						
Explosives	1,3,5-Trinitrobenzene	mg/kg	0.5				<0.5	<0.5	0						
Metals	Arsenic	mg/kg	5 (Primary): 2 (Interlab)	9.0	8.0	12	5.0	7.0	33	6.0	7.0	15	6.0	8.0	29
	Cadmium	mg/kg	1 (Primary): 0.4 (Interlab	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	<1.0	0	<1.0	<1.0	0
	Chromium	mg/kg	2 (Primary): 5 (Interlab)	8.0	7.0	13	5.0	6.0	18	4.0	4.0	0	6.0	6.0	0
	Copper	mg/kg	5	46.0	48.0	4	39.0	46.0	16	47.0	44.0	7	28.0	36.0	25
	Lead	mg/kg	5	16.0	16.0	0	18.0	18.0	0	16.0	17.0	6	17.0	17.0	0
	Mercury	mg/kg	0.1	<0.1	<0.1	0	<0.1	<0.1	0	<0.1	<0.1	0	<0.1	<0.1	0
	Nickel	mg/kg	2 (Primary): 5 (Interlab)	46.0	42.0	9	32.0	30.0	6	26.0	21.0	21	4.0	6.0	40
	Zinc	mg/kg	5	280.0	270.0	4	117.0	140.0	18	261.0	197.0	28	28.0	42.0	40
Metals (leached)	Nickel (Filtered)	µg/l	100												
PCBs	PCBs (Sum of total)	mg/kg	0.1	<0.1	<0.1	0	<0.1	<0.1	0	<0.1	<0.1	0	<0.1	<0.1	0
Pesticides	4,4-DDE	mg/kg	0.05 (Primary): 0.5 (Inte	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0
	a-BHC	mg/kg	0.05 (Primary): 0.5 (Inte	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0
	Aldrin	mg/kg	0.05 (Primary): 0.5 (Inte	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0
	Aldrin + Dieldrin	mg/kg	0.05	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0
	Azinophos methyl	mg/kg	0.05 (Primary): 0.2 (Inte	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0
	b-BHC	mg/kg	0.05 (Primary): 0.5 (Inte	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0
	Bromophos-ethyl	mg/kg	0.05	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0
	Carbophenothion	mg/kg	0.05	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0
	Chlordane	mg/kg	0.05 (Primary): 0.1 (Inte	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0
	Chlordane (cis)	mg/kg	0.05	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0
	Chlordane (trans)	mg/kg	0.05	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0
	Chlorfenvinphos	mg/kg	0.05 (Primary): 0.2 (Inte	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0
	Chlorpyrifos	mg/kg	0.05 (Primary): 0.2 (Inte	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0
	Chlorpyrifos-methyl	mg/kg	0.05 (Primary): 0.2 (Inte	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0
	d-BHC	mg/kg	0.05 (Primary): 0.5 (Inte	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0
	DDD	mg/kg	0.05 (Primary): 0.5 (Inte	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0
	DDT	mg/kg	0.2 (Primary): 1 (Interlab	<0.2	<0.2	0	<0.2	<0.2	0	<0.2	<0.2	0	<0.2	<0.2	0
	DDT+DDE+DDD	mg/kg	0.05	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0
	Demeton-S-methyl	mg/kg	0.05	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0
	Diazinon	mg/kg	0.05 (Primary): 0.2 (Inte	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0
	Dichlorvos	mg/kg	0.05 (Primary): 0.2 (Inte	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0
	Dieldrin	mg/kg	0.05 (Primary): 0.5 (Inte	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0
	Dimethoate	mg/kg	0.05 (Primary): 0.2 (Inte	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0
	Endosulfan	mg/kg	0.05	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0
	Endosulfan I	mg/kg	0.05 (Primary): 0.5 (Inte	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0
	Endosulfan II	mg/kg	0.05 (Primary): 0.5 (Inte	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0
	Endosulfan sulphate	mg/kg	0.05 (Primary): 0.5 (Inte	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0
	Endrin	mg/kg	0.05 (Primary): 0.5 (Inte	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0
	Endrin aldehyde	mg/kg	0.05 (Primary): 0.5 (Inte	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0
	Endrin ketone	mg/kg	0.05 (Primary): 0.5 (Inte	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0
	Ethion	mg/kg	0.05 (Primary): 0.2 (Inte	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0
	Fenamiphos	mg/kg	0.05	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0
	Fenthion	mg/kg	0.05 (Primary): 0.2 (Inte	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0
	g-BHC (Lindane)	mg/kg	0.05 (Primary): 0.5 (Inte	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0
	Heptachlor	mg/kg	0.05 (Primary): 0.5 (Inte	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0
	Heptachlor epoxide	mg/kg	0.05 (Primary): 0.5 (Inte	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0
	Hexachlorobenzene	mg/kg	1 (Primary): 0.5 (Interlab				<1.0	<1.0	0						
	Hexachlorobenzene	mg/kg	0.05 (Primary): 0.5 (Inte	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0
	Malathion	mg/kg	0.05 (Primary): 0.2 (Inte	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0
	Methoxychlor	mg/kg	0.2 (Primary): 0.5 (Interl	<0.2	<0.2	0	<0.2	<0.2	0	<0.2	<0.2	0	<0.2	<0.2	0
	Methyl parathion	mg/kg	0.2	<0.2	<0.2	0	<0.2	<0.2	0	<0.2	<0.2	0	<0.2	<0.2	0
	Monocrotophos	mg/kg	0.2 (Primary): 2 (Interlab	<0.2	<0.2	0	<0.2	<0.2	0	<0.2	<0.2	0	<0.2	<0.2	0
	Parathion	mg/kg	0.2	<0.2	<0.2	0	<0.2	<0.2	0	<0.2	<0.2	0	<0.2	<0.2	0
	Pirimphos-ethyl	mg/kg	0.05	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0
	Prothiofos	mg/kg	0.05	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0

*RPDs have only been considered where a concentration is greater than 1 times the EQL.
**High RPDs are in bold (Acceptable RPDs for each EQL multiplier range are: 50 (1-10 x EQL); 30 (10-30 x EQL); 30 (> 30 x E
***Interlab Duplicates are matched on a per compound basis as methods vary between laboratories. Any methods in the row h

			Lab Report	ES2204238	ES2204238		ES2201683	858847		ES2202264	858994		ES2202264	858994	
			Field ID	SOP_BH145_5.0	DUP04_220119	RPD	SOP_BH103_1.0	TRIP01_220117	RPD	SOP_BH118_5.0	TRIP02_220119	RPD	SOP_BH145_5.0	TRIP04_220119	RPD
			Sampled Date	19-Jan-22	19-Jan-22		17-Jan-22	17-Jan-22		19-Jan-22	19-Jan-22		19-Jan-22	19-Jan-22	
Chem_Group	ChemName	Units	EQL												
	Extraction Fluid Number	-	1	1.0	1.0	0									
	Final pH	pH_Units	0.1	5.0	4.9	2									
	Initial pH	pH_Units	0.1	7.3	7.0	4									
	N-Nitrosodiphenyl & Diphenylamine	mg/kg	1							<1.0					
Chlorinated HCs	1,2,3-trichlorobenzene	mg/kg	0.5							<0.5	<0.5	0			
	1,2,4-trichlorobenzene	mg/kg	0.5							<0.5	<0.5	0			
	1,2-dichlorobenzene	mg/kg	0.5							<0.5	<0.5	0			
	1,3-dichlorobenzene	mg/kg	0.5							<0.5	<0.5	0			
	1,4-dichlorobenzene	mg/kg	0.5							<0.5	<0.5	0			
	Chlorobenzene	mg/kg	0.5							<0.5	<0.5	0			
Moisture Content	Moisture Content	%	1 : 0.1 (Dupe)				8.7			6.4			8.3		
NA	2,4,5-Trichlorophenol	mg/kg	0.5 (Primary): 1 (Interlab							<0.5	<1.0	0			
	2,4,6-Trichlorophenol	mg/kg	0.5 (Primary): 1 (Interlab							<0.5	<1.0	0			
	Pentachlorophenol	mg/kg	1							<1.0	<1.0	0			
	Phenol	mg/kg	0.5							<0.5	<0.5	0			
	o-Cresol	mg/kg	0.5 (Primary): 0.2 (Interla							<0.5	<0.2	0			
Naphthalene	Naphthalene	mg/kg	1 (Primary): 0.5 (Interlab				<1.0	<0.5	0	<1.0	<0.5	0	<1.0	<0.5	0
	Naphthalene	mg/kg	0.5				<0.5	<0.5	0	<0.5	<0.5	0	<0.5	<0.5	0
PAH/Phenols (SIM)	Acenaphthene	mg/kg	0.5				<0.5	<0.5	0	<0.5	<0.5	0	<0.5	<0.5	0
	Acenaphthylene	mg/kg	0.5				<0.5	<0.5	0	<0.5	<0.5	0	<0.5	<0.5	0
	Anthracene	mg/kg	0.5				<0.5	<0.5	0	<0.5	<0.5	0	<0.5	<0.5	0
	Fluoranthene	mg/kg	0.5				<0.5	<0.5	0	<0.5	<0.5	0	<0.5	<0.5	0
	Fluorene	mg/kg	0.5				<0.5	<0.5	0	<0.5	<0.5	0	<0.5	<0.5	0
	Benz(a)anthracene	mg/kg	0.5				<0.5	<0.5	0	<0.5	<0.5	0	<0.5	<0.5	0
	Benzo(a)pyrene	mg/kg	0.5				<0.5	<0.5	0	<0.5	<0.5	0	<0.5	<0.5	0
	Benzo(a)pyrene TEQ (half LOR)	mg/kg	0.5				0.6	0.6	0	0.6	0.6	0	0.6	0.6	0
	Benzo(a)pyrene TEQ (LOR)	mg/kg	0.5				1.2	1.2	0	1.2	1.2	0	1.2	1.2	0
	Benzo(a)pyrene TEQ (zero)	mg/kg	0.5				<0.5	<0.5	0	<0.5	<0.5	0	<0.5	<0.5	0
	Benzo(b+j)fluoranthene	mg/kg	0.5				<0.5	<0.5	0	<0.5	<0.5	0	<0.5	<0.5	0
	Benzo(g.h.i)perylene	mg/kg	0.5				<0.5	<0.5	0	<0.5	<0.5	0	<0.5	<0.5	0
	Benzo(k)fluoranthene	mg/kg	0.5				<0.5	<0.5	0	<0.5	<0.5	0	<0.5	<0.5	0
	Chrysene	mg/kg	0.5				<0.5	<0.5	0	<0.5	<0.5	0	<0.5	<0.5	0
	Dibenz(a.h)anthracene	mg/kg	0.5				<0.5	<0.5	0	<0.5	<0.5	0	<0.5	<0.5	0
	Indeno(1.2.3.cd)pyrene	mg/kg	0.5				<0.5	<0.5	0	<0.5	<0.5	0	<0.5	<0.5	0
	Phenanthrene	mg/kg	0.5				<0.5	<0.5	0	<0.5	<0.5	0	<0.5	<0.5	0
	Pyrene	mg/kg	0.5				<0.5	<0.5	0	<0.5	<0.5	0	<0.5	<0.5	0
	Sum of polycyclic aromatic hydrocarbons	mg/kg	0.5				<0.5	<0.5	0	<0.5	<0.5	0	<0.5	<0.5	0
PFAS	10:2 Fluorotelomer sulfonic acid (10:2 FTS)	µg/kg	0.5										<0.5		
	4:2 Fluorotelomer sulfonic acid (4:2 FTS)	µg/kg	0.5										<0.5		
	6:2 Fluorotelomer sulfonic acid (6:2 FTS)	µg/kg	0.5 (Primary): 10 (Interla										<0.5	<10.0	0
	8:2 Fluorotelomer sulfonic acid (8:2 FTS)	µg/kg	0.5										<0.5		
	N-Ethyl perfluorooctane sulfonamide (EtFOSA)	µg/kg	0.5										<0.5		
	N-Ethyl perfluorooctane sulfonamidoacetic acid (Et	µg/kg	0.2										<0.2		
	N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE	µg/kg	0.5										<0.5		
	N-Methyl perfluorooctane sulfonamide (MeFOSA)	µg/kg	0.5										<0.5		
	N-Methyl perfluorooctane sulfonamidoacetic acid (M	µg/kg	0.2										<0.2		
	N-Methyl perfluorooctane sulfonamidoethanol (MeFOS	µg/kg	0.5										<0.5		
	Perfluorobutanoic acid (PFBA)	µg/kg	1										<1.0		
	Perfluoroheptane sulfonic acid (PFHpS)	µg/kg	0.2										<0.2		
	Perfluorooctane sulfonic acid (PFOS)	µg/kg	0.2 (Primary): 5 (Interlab										<0.2	<5.0	0
	Perfluoropentane sulfonic acid (PFPeS)	µg/kg	0.2										<0.2		
	Perfluoropentanoic acid (PFPeA)	µg/kg	0.2										<0.2		
	Perfluorooctanoic acid (PFOA)	µg/kg	0.2 (Primary): 5 (Interlab										<0.2	<5.0	0
	Perfluorotetradecanoic acid (PFTeDA)	µg/kg	0.5										<0.5		
	Perfluorotridecanoic acid (PFTrDA)	µg/kg	0.2										<0.2		
	Sum of PFAS	µg/kg	0.2										<0.2		
	Sum of PFAS (WA DER List)	µg/kg	0.2										<0.2		
	Sum of PFHxS and PFOS	µg/kg	0.2 (Primary): 5 (Interlab										<0.2	<5.0	0
PFOS and PFOA	Perfluorobutanesulfonic acid (PFBS)	µg/kg	0.2										<0.2		
	Perfluorodecanesulfonic acid (PFDS)	µg/kg	0.2										<0.2		
	Perfluorodecanoic acid (PFDA)	µg/kg	0.2										<0.2		
	Perfluorohexanesulfonic acid (PFHxS)	µg/kg	0.2 (Primary): 5 (Interlab										<0.2	<5.0	0
	Perfluorododecanoic acid (PFDoA)	µg/kg	0.2										<0.2		
	Perfluoroheptanoic acid (PFHpA)	µg/kg	0.2										<0.2		
	Perfluorohexanoic acid (PFHxA)	µg/kg	0.2										<0.2		
	Perfluorononanoic acid (PFNA)	µg/kg	0.2										<0.2		
	Perfluorooctanesulfonamide (PFOSA)	µg/kg	0.2										<0.2		
	Perfluoroundecanoic acid (PFUnA)	µg/kg	0.2										<0.2		
SVOC	2.4-Dichlorophenol	µg/L	0.5							<0.5	<0.5	0			
	2.4-Dimethylphenol	µg/L	0.5							<0.5	<0.5	0			
	2.6-Dichlorophenol	µg/L	0.5							<0.5	<0.5	0			
	3-Methylcholanthrene	µg/L	0.5							<0.5	<0.5	0			
	2-Chlorophenol	µg/L	0.5							<0.5	<0.5	0			
	2-Methylnaphthalene	µg/L	0.5							1.4	1.2	15			
	2-Nitrophenol	µg/L	0.5 (Primary): 1 (Interlab							<0.5	<1.0	0			
	3- & 4-Methylphenol	µg/L	0.5							<0.5					
	4-Chloro-3-methylphenol	µg/L	0.5 (Primary): 1 (Interlab							<0.5	<1.0	0			
	Bis(2-ethylhexyl) phthalate	mg/kg	5							<5.0	<5.0	0			
	Butyl benzyl phthalate	mg/kg	0.5							<0.5	<0.5	0			
	Diethylphthalate	mg/kg	0.5							<0.5	<0.5	0			
	Dimethyl phthalate	mg/kg	0.5							<0.5	<0.5	0			
	Di-n-butyl phthalate	mg/kg	0.5							<0.5	<0.5	0			
	Di-n-octyl phthalate	mg/kg	0.5							<0.5	<0.5	0			
	1-naphthylamine	mg/kg	0.5							<0.5	<1.0	0			
	2-(acetylamino) fluorene	mg/kg	0.5							<0.5					
	2,4-Dinitrotoluene	mg/kg	1 (Primary): 0.5 (Interlab							<1.0	<0.5	0			
	2,6-dinitrotoluene	mg/kg	1							<1.0	<1.0	0			
	2-chloronaphthalene	mg/kg	0.5							<0.5	<0.5	0			
	2-nitroaniline	mg/kg	1							<1.0	<1.0	0			
	2-Picoline	mg/kg	0.5							<0.5	<0.5	0			
	3,3-Dichlorobenzidine	mg/kg	0.5							<0.5	<0.5	0			
	3-nitroaniline	mg/kg	1							<1.0					
	4-(dimethylamino) azobenzene	mg/kg	0.5							<0.5	<0.5	0			
	4-aminobiphenyl	mg/kg	0.5							<0.5	<0.5	0			
	4-bromophenyl phenyl ether	mg/kg	0.5							<0.5	<0.5	0			
	4-chloroaniline	mg/kg	0.5							<0.5					
	4-chlorophenyl phenyl ether	mg/kg	0.5							<0.5	<0.5	0			
	4-nitroaniline	mg/kg	0.5							<0.5					
	4-Nitroquinoline-N-oxide	mg/kg	0.5							<0.5					
	5-nitro-o-toluidine	mg/kg	0.5							<0.5					
	7,12-dimethylbenz(a)anthracene	mg/kg	0.5							<0.5	<1.0	0			
	Acetophenone	mg/kg	0.5							<0.5	<0.5	0			
	Aniline	mg/kg	0.5							<0.5	<0.5	0			
	Azobenzene	mg/kg	1							<1.0					
	Bis(2-chloroethoxy) methane	mg/kg	0.5							<0.5	<0.5	0			
	Bis(2-chloroethyl)ether	mg/kg	0.5							<0.5					
	Carbazole	mg/kg	0.5							<0.5					
	Chlorobenzilate	mg/kg	0.5							<0.5					
	Dibenzofuran	mg/kg	0.5							<0.5	<0.5	0			
	Hexachlorobutadiene	mg/kg	0.5							<0.5	<0.5	0			
	Hexachlorocyclopentadiene	mg/kg	2.5 (Primary): 1 (Interlab							<2.5	<1.0	0			
	Hexachloroethane	mg/kg	0.5							<0.5	<0.5	0			
	Hexachloropropene	mg/kg	0.5							<0.5					
	Isophorone	mg/kg	0.5							<0.5					
	Methapyrilene	mg/kg	0.5							<0.5					
	Nitrobenzene	mg/kg	0.5							<0.5	<0.5	0			
	N-nitrosodiethylamine	mg/kg	0.5							<0.5					
	N-nitrosodi-n-butylamine	mg/kg	0.5							<0.5	<0.5	0			
	N-nitrosodi-n-propylamine	mg/kg	0.5							<0.5	<0.5	0			
	N-Nitrosomethylethylamine	mg/kg	0.5							<0.5					
	N-nitrosomorpholine	mg/kg	0.5							<0.5					
	N-nitrosopiperidine	mg/kg	0.5							<0.5	<0.5	0			
	N-nitrosopyrrolidine	mg/kg	1							<1.0					
	Pentachlorobenzene	mg/kg	0.5							<0.5	<0.5	0			
	Pentachloronitrobenzene	mg/kg	0.5							<0.5	<0.5	0			
	Phenacetin	mg/kg	0.5							<0.5					
	Pronamide	mg/kg	0.5							<0.5	<0.5	0			
TRH - Semivolatile Fraction	>C10 - C16 Fraction	mg/kg	50				<50.0	<50.0	0	<50.0	<50.0	0	<50.0	<50.0	0
	>C10 - C16 Fraction minus Naphthalene (F2)	mg/kg	50				<50.0	<50.0	0	<50.0	<50.0	0	<50.0	<50.0	0
	>C10 - C40 Fraction (sum)	mg/kg	50 (Primary): 100 (Interl				<50.0	<100.0	0	120.0	<100.0	18	<50.0	<100.0	0
	>C16 - C34 Fraction	mg/kg	100				<100.0	<100.0	0	120.0	<100.0	18	<100.0	<100.0	0
	>C34 - C40 Fraction	mg/kg	100				<100.0	<100.0	0	<100.0	<100.0	0	<100.0	<100.0	0
	C10 - C14 Fraction	mg/kg	50 (Primary): 20 (Interla				<50.0	<20.0	0	<50.0	33.0	0	<50.0	25.0	0
	C10 - C36 Fraction (sum)	mg/kg	50				<50.0	<50.0	0	**<50.0**	**95.0**	**62**	<50.0	77.0	43
	C15 - C28 Fraction	mg/kg	100 (Primary): 50 (Interl				<100.0	<50.0	0	<100.0	62.0	0	<100.0	52.0	0
	C29 - C36 Fraction	mg/kg	100 (Primary): 50 (Interl				<100.0	<50.0	0	<100.0	<50.0	0	<100.0	<50.0	0
TRH Volatiles/BTEX	Toluene	mg/kg	0.5 (Primary): 0.1 (Interl				<0.5	<0.1	0	<0.5	<0.1	0	<0.5	<0.1	0
	Total Xylenes	mg/kg	0.5 (Primary): 0.3 (Interl				<0.5	<0.3	0	<0.5	<0.3	0	<0.5	<0.3	0
	Benzene	mg/kg	0.2 (Primary): 0.1 (Interl				<0.2	<0.1	0	<0.2	<0.1	0	<0.2	<0.1	0
	C6 - C10 Fraction	mg/kg	10 (Primary): 20 (Interla				<10.0	<20.0	0	24.0	<20.0	18	<10.0	<20.0	0
	C6 - C10 Fraction minus BTEX (F1)	mg/kg	10 (Primary): 20 (Interla				<10.0	<20.0	0	24.0	<20.0	18	<10.0	<20.0	0
	C6 - C9 Fraction	mg/kg	10 (Primary): 20 (Interla				<10.0	<20.0	0	19.0	<20.0	0	<10.0	<20.0	0
	Ethylbenzene	mg/kg	0.5 (Primary): 0.1 (Interl				<0.5	<0.1	0	<0.5	<0.1	0	<0.5	<0.1	0
	meta- & para-Xylene	mg/kg	0.5 (Primary): 0.2 (Interl				<0.5	<0.2	0	<0.5	<0.2	0	<0.5	<0.2	0
	ortho-Xylene	mg/kg	0.5 (Primary): 0.1 (Interl				<0.5	<0.1	0	<0.5	<0.1	0	<0.5	<0.1	0

				Lab Report	ES2204238	ES2204238		ES2201683	858847		ES2202264	858994		ES2202264	858994	
				Field ID	SOP_BH145_5.0	DUP04_220119	RPD	SOP_BH103_1.0	TRIP01_220117	RPD	SOP_BH118_5.0	TRIP02_220119	RPD	SOP_BH145_5.0	TRIP04_220119	RPD
				Sampled Date	19-Jan-22	19-Jan-22		17-Jan-22	17-Jan-22		19-Jan-22	19-Jan-22		19-Jan-22	19-Jan-22	
	Sum of BTEX	mg/kg	0.2				<0.2			<0.2			<0.2		
VOC	1,2,4-trimethylbenzene	mg/kg	0.5							0.5	<0.5	0			
	1,3,5-trimethylbenzene	mg/kg	0.5							<0.5	<0.5	0			
	2-chlorotoluene	mg/kg	0.5							<0.5					
	4-chlorotoluene	mg/kg	0.5							<0.5	<0.5	0			
	Bromobenzene	mg/kg	0.5							<0.5	<0.5	0			
	Isopropylbenzene	mg/kg	0.5							<0.5	<0.5	0			
	n-butylbenzene	mg/kg	0.5							<0.5					
	n-propylbenzene	mg/kg	0.5							<0.5					
	p-isopropyltoluene	mg/kg	0.5							<0.5					
	sec-butylbenzene	mg/kg	0.5							<0.5					
	Styrene	mg/kg	0.5							<0.5	<0.5	0			
	tert-butylbenzene	mg/kg	0.5							<0.5					
	1,1,1,2-tetrachloroethane	mg/kg	0.5							<0.5	<0.5	0			
	1,1,1-trichloroethane	mg/kg	0.5							<0.5	<0.5	0			
	1,1,2,2-tetrachloroethane	mg/kg	0.5							<0.5	<0.5	0			
	1,1,2-trichloroethane	mg/kg	0.5							<0.5	<0.5	0			
	1,1-dichloroethane	mg/kg	0.5							<0.5	<0.5	0			
	1,1-dichloroethene	mg/kg	0.5							<0.5	<0.5	0			
	1,1-dichloropropene	mg/kg	0.5							<0.5					
	1,2,3-trichloropropane	mg/kg	0.5							<0.5	<0.5	0			
	1,2-dibromo-3-chloropropane	mg/kg	0.5							<0.5					
	1,2-dibromoethane	mg/kg	0.5							<0.5	<0.5	0			
	1,2-dichloroethane	mg/kg	0.5							<0.5	<0.5	0			
	1,2-dichloropropane	mg/kg	0.5							<0.5	<0.5	0			
	1,3-dichloropropane	mg/kg	0.5							<0.5	<0.5	0			
	2,2-dichloropropane	mg/kg	0.5							<0.5					
	2-butanone (MEK)	mg/kg	5 (Primary): 0.5 (Interlab							<5.0	<0.5	0			
	2-hexanone (MBK)	mg/kg	5							<5.0					
	4-methyl-2-pentanone (MIBK)	mg/kg	5 (Primary): 0.5 (Interlab							<5.0	<0.5	0			
	Bromodichloromethane	mg/kg	0.5							<0.5	<0.5	0			
	Bromoform	mg/kg	0.5							<0.5	<0.5	0			
	Bromomethane	mg/kg	5 (Primary): 0.5 (Interlab							<5.0	<0.5	0			
	Carbon disulfide	mg/kg	0.5							<0.5	<0.5	0			
	Carbon tetrachloride	mg/kg	0.5							<0.5	<0.5	0			
	Chlorodibromomethane	mg/kg	0.5							<0.5	<0.5	0			
	Chloroethane	mg/kg	5 (Primary): 0.5 (Interlab							<5.0	<0.5	0			
	Chloroform	mg/kg	0.5							<0.5	<0.5	0			
	Chloromethane	mg/kg	5 (Primary): 0.5 (Interlab							<5.0	<0.5	0			
	cis-1,2-dichloroethene	mg/kg	0.5							<0.5	<0.5	0			
	cis-1,3-dichloropropene	mg/kg	0.5							<0.5	<0.5	0			
	cis-1,4-Dichloro-2-butene	mg/kg	0.5							<0.5					
	Dibromomethane	mg/kg	0.5							<0.5	<0.5	0			
	Dichlorodifluoromethane	mg/kg	5 (Primary): 0.5 (Interlab							<5.0	<0.5	0			
	Iodomethane	mg/kg	0.5							<0.5	<0.5	0			
	Pentachloroethane	mg/kg	0.5							<0.5					
	TCE	mg/kg	0.5							<0.5	<0.5	0			
	Tetrachloroethene	mg/kg	0.5							<0.5	<0.5	0			
	trans-1,2-dichloroethene	mg/kg	0.5							<0.5	<0.5	0			
	trans-1,3-dichloropropene	mg/kg	0.5							<0.5	<0.5	0			
	trans-1,4-Dichloro-2-butene	mg/kg	0.5							<0.5					
	Trichlorofluoromethane	mg/kg	5 (Primary): 0.5 (Interlab							<5.0	<0.5	0			
	Vinyl acetate	mg/kg	5							<5.0					
	Vinyl chloride	mg/kg	5 (Primary): 0.5 (Interlab							<5.0	<0.5	0			
Explosives	1,3,5-Trinitrobenzene	mg/kg	0.5							<0.5					
Metals	Arsenic	mg/kg	5 (Primary): 2 (Interlab)				10.0	9.8	2	8.0	7.0	13	9.0	9.1	1
	Cadmium	mg/kg	1 (Primary): 0.4 (Interlab				<1.0	<0.4	0	<1.0	0.4	0	<1.0	<0.4	0
	Chromium	mg/kg	2 (Primary): 5 (Interlab)				6.0	8.6	36	7.0	8.2	16	8.0	8.6	7
	Copper	mg/kg	5				26.0	31.0	18	37.0	33.0	11	46.0	30.0	42
	Lead	mg/kg	5				17.0	12.0	34	15.0	15.0	0	16.0	15.0	6
	Mercury	mg/kg	0.1				<0.1	<0.1	0	<0.1	<0.1	0	<0.1	<0.1	0
	Nickel	mg/kg	2 (Primary): 5 (Interlab)				4.0	<5.0	0	24.0	23.0	4	**46.0**	**23.0**	**67**
	Zinc	mg/kg	5				34.0	41.0	19	178.0	140.0	24	**280.0**	**130.0**	**73**
Metals (leached)	Nickel (Filtered)	µg/l	100	200.0	200.0	0									
PCBs	PCBs (Sum of total)	mg/kg	0.1				<0.1	<0.1	0	<0.1	<0.1	0	<0.1	<0.1	0
Pesticides	4,4-DDE	mg/kg	0.05 (Primary): 0.5 (Inte				<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0
	a-BHC	mg/kg	0.05 (Primary): 0.5 (Inte				<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0
	Aldrin	mg/kg	0.05 (Primary): 0.5 (Inte				<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0
	Aldrin + Dieldrin	mg/kg	0.05				<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0
	Azinophos methyl	mg/kg	0.05 (Primary): 0.2 (Inte				<0.05	<0.2	0	<0.05	<0.2	0	<0.05	<0.2	0
	b-BHC	mg/kg	0.05 (Primary): 0.5 (Inte				<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0
	Bromophos-ethyl	mg/kg	0.05				<0.05			<0.05			<0.05		
	Carbophenothion	mg/kg	0.05				<0.05			<0.05			<0.05		
	Chlordane	mg/kg	0.05 (Primary): 0.1 (Inte				<0.05	<0.1	0	<0.05	<0.1	0	<0.05	<0.1	0
	Chlordane (cis)	mg/kg	0.05				<0.05			<0.05			<0.05		
	Chlordane (trans)	mg/kg	0.05				<0.05			<0.05			<0.05		
	Chlorfenvinphos	mg/kg	0.05 (Primary): 0.2 (Inte				<0.05	<0.2	0	<0.05	<0.2	0	<0.05	<0.2	0
	Chlorpyrifos	mg/kg	0.05 (Primary): 0.2 (Inte				<0.05	<0.2	0	<0.05	<0.2	0	<0.05	<0.2	0
	Chlorpyrifos-methyl	mg/kg	0.05 (Primary): 0.2 (Inte				<0.05	<0.2	0	<0.05	<0.2	0	<0.05	<0.2	0
	d-BHC	mg/kg	0.05 (Primary): 0.5 (Inte				<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0
	DDD	mg/kg	0.05 (Primary): 0.5 (Inte				<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0
	DDT	mg/kg	0.2 (Primary): 1 (Interlab				<0.2	<0.05	0	<0.2	<0.05	0	<0.2	<0.05	0
	DDT+DDE+DDD	mg/kg	0.05				<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0
	Demeton-S-methyl	mg/kg	0.05				<0.05			<0.05			<0.05		
	Diazinon	mg/kg	0.05 (Primary): 0.2 (Inte				<0.05	<0.2	0	<0.05	<0.2	0	<0.05	<0.2	0
	Dichlorvos	mg/kg	0.05 (Primary): 0.2 (Inte				<0.05	<0.2	0	<0.05	<0.2	0	<0.05	<0.2	0
	Dieldrin	mg/kg	0.05 (Primary): 0.5 (Inte				<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0
	Dimethoate	mg/kg	0.05 (Primary): 0.2 (Inte				<0.05	<0.2	0	<0.05	<0.2	0	<0.05	<0.2	0
	Endosulfan	mg/kg	0.05				<0.05			<0.05			<0.05		
	Endosulfan I	mg/kg	0.05 (Primary): 0.5 (Inte				<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0
	Endosulfan II	mg/kg	0.05 (Primary): 0.5 (Inte				<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0
	Endosulfan sulphate	mg/kg	0.05 (Primary): 0.5 (Inte				<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0
	Endrin	mg/kg	0.05 (Primary): 0.5 (Inte				<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0
	Endrin aldehyde	mg/kg	0.05 (Primary): 0.5 (Inte				<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0
	Endrin ketone	mg/kg	0.05 (Primary): 0.5 (Inte				<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0
	Ethion	mg/kg	0.05 (Primary): 0.2 (Inte				<0.05	<0.2	0	<0.05	<0.2	0	<0.05	<0.2	0
	Fenamiphos	mg/kg	0.05				<0.05			<0.05			<0.05		
	Fenthion	mg/kg	0.05 (Primary): 0.2 (Inte				<0.05	<0.2	0	<0.05	<0.2	0	<0.05	<0.2	0
	g-BHC (Lindane)	mg/kg	0.05 (Primary): 0.5 (Inte				<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0
	Heptachlor	mg/kg	0.05 (Primary): 0.5 (Inte				<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0
	Heptachlor epoxide	mg/kg	0.05 (Primary): 0.5 (Inte				<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0
	Hexachlorobenzene	mg/kg	1 (Primary): 0.5 (Interlab							<1.0	<0.05	0			
	Hexachlorobenzene	mg/kg	0.05 (Primary): 0.5 (Inte				<0.05	<0.05	0	<0.05	<0.05	0	<0.05	<0.05	0
	Malathion	mg/kg	0.05 (Primary): 0.2 (Inte				<0.05	<0.2	0	<0.05	<0.2	0	<0.05	<0.2	0
	Methoxychlor	mg/kg	0.2 (Primary): 0.5 (Interl				<0.2	<0.05	0	<0.2	<0.05	0	<0.2	<0.05	0
	Methyl parathion	mg/kg	0.2				<0.2	<0.2	0	<0.2	<0.2	0	<0.2	<0.2	0
	Monocrotophos	mg/kg	0.2 (Primary): 2 (Interlab				<0.2	<2.0	0	<0.2	<2.0	0	<0.2	<2.0	0
	Parathion	mg/kg	0.2				<0.2	<0.2	0	<0.2	<0.2	0	<0.2	<0.2	0
	Pirimphos-ethyl	mg/kg	0.05				<0.05			<0.05			<0.05		
	Prothiofos	mg/kg	0.05				<0.05			<0.05			<0.05		

*RPDs have only been considered where a concentration is greater than 1 times the EQL.
**High RPDs are in bold (Acceptable RPDs for each EQL multiplier range are: 50 (1-10 x EQL); 30 (10-30 x EQL); 30 (> 30 x E
***Interlab Duplicates are matched on a per compound basis as methods vary between laboratories. Any methods in the row h

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	Field ID	SOP_BH120_3.0	TRIP05_220120	**RPD**	SOP_BH124_3.0	TRIP06_220121	**RPD**		
	Sampled Date	20-Jan-22	20-Jan-22		21-Jan-22	21-Jan-22			
Chem_Group	**ChemName**	**Units**	**EQL**						
	Extraction Fluid Number	-	1						
	Final pH	pH_Units	0.1						
	Initial pH	pH_Units	0.1						
	N-Nitrosodiphenyl & Diphenylamine	mg/kg	1	<1.0					
Chlorinated HCs	1,2,3-trichlorobenzene	mg/kg	0.5	<0.5	<0.5	0			
	1,2,4-trichlorobenzene	mg/kg	0.5	<0.5	<0.5	0			
	1,2-dichlorobenzene	mg/kg	0.5	<0.5	<0.5	0			
	1,3-dichlorobenzene	mg/kg	0.5	<0.5	<0.5	0			
	1,4-dichlorobenzene	mg/kg	0.5	<0.5	<0.5	0			
	Chlorobenzene	mg/kg	0.5	<0.5	<0.5	0			
Moisture Content	Moisture Content	%	1 : 0.1 (Dupe)	7.0			7.9		
NA	2,4,5-Trichlorophenol	mg/kg	0.5 (Primary): 1 (Interlab	<0.5	<1.0	0			
	2,4,6-Trichlorophenol	mg/kg	0.5 (Primary): 1 (Interlab	<0.5	<1.0	0			
	Pentachlorophenol	mg/kg	1	<1.0	<1.0	0			
	Phenol	mg/kg	0.5	<0.5	<0.5	0			
	o-Cresol	mg/kg	0.5 (Primary): 0.2 (Interla	<0.5	<0.2	0			
Naphthalene	Naphthalene	mg/kg	1 (Primary): 0.5 (Interlab	<1.0	<0.5	0	<1.0	<0.5	0
	Naphthalene	mg/kg	0.5	<0.5	<0.5	0	<0.5	<0.5	0
PAH/Phenols (SIM)	Acenaphthene	mg/kg	0.5	<0.5	<0.5	0	<0.5	<0.5	0
	Acenaphthylene	mg/kg	0.5	<0.5	<0.5	0	<0.5	<0.5	0
	Anthracene	mg/kg	0.5	<0.5	<0.5	0	<0.5	<0.5	0
	Fluoranthene	mg/kg	0.5	<0.5	<0.5	0	<0.5	<0.5	0
	Fluorene	mg/kg	0.5	<0.5	<0.5	0	<0.5	<0.5	0
	Benz(a)anthracene	mg/kg	0.5	<0.5	<0.5	0	<0.5	<0.5	0
	Benzo(a)pyrene	mg/kg	0.5	<0.5	<0.5	0	<0.5	<0.5	0
	Benzo(a)pyrene TEQ (half LOR)	mg/kg	0.5	0.6	0.6	0	0.6	0.6	0
	Benzo(a)pyrene TEQ (LOR)	mg/kg	0.5	1.2	1.2	0	1.2	1.2	0
	Benzo(a)pyrene TEQ (zero)	mg/kg	0.5	<0.5	<0.5	0	<0.5	<0.5	0
	Benzo(b+j)fluoranthene	mg/kg	0.5	<0.5	<0.5	0	<0.5	<0.5	0
	Benzo(g.h.i)perylene	mg/kg	0.5	<0.5	<0.5	0	<0.5	<0.5	0
	Benzo(k)fluoranthene	mg/kg	0.5	<0.5	<0.5	0	<0.5	<0.5	0
	Chrysene	mg/kg	0.5	<0.5	<0.5	0	<0.5	<0.5	0
	Dibenz(a.h)anthracene	mg/kg	0.5	<0.5	<0.5	0	<0.5	<0.5	0
	Indeno(1.2.3.cd)pyrene	mg/kg	0.5	<0.5	<0.5	0	<0.5	<0.5	0
	Phenanthrene	mg/kg	0.5	<0.5	<0.5	0	<0.5	<0.5	0
	Pyrene	mg/kg	0.5	<0.5	<0.5	0	<0.5	<0.5	0
	Sum of polycyclic aromatic hydrocarbons	mg/kg	0.5	<0.5	<0.5	0	<0.5	<0.5	0
PFAS	10:2 Fluorotelomer sulfonic acid (10:2 FTS)	µg/kg	0.5	<0.5			<0.5		
	4:2 Fluorotelomer sulfonic acid (4:2 FTS)	µg/kg	0.5	<0.5			<0.5		
	6:2 Fluorotelomer sulfonic acid (6:2 FTS)	µg/kg	0.5 (Primary): 10 (Interla	<0.5	<10.0	0	<0.5	<10.0	0
	8:2 Fluorotelomer sulfonic acid (8:2 FTS)	µg/kg	0.5	<0.5			<0.5		
	N-Ethyl perfluorooctane sulfonamide (EtFOSA)	µg/kg	0.5	<0.5			<0.5		
	N-Ethyl perfluorooctane sulfonamidoacetic acid (Et	µg/kg	0.2	<0.2			<0.2		
	N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE	µg/kg	0.5	<0.5			<0.5		
	N-Methyl perfluorooctane sulfonamide (MeFOSA)	µg/kg	0.5	<0.5			<0.5		
	N-Methyl perfluorooctane sulfonamidoacetic acid (M	µg/kg	0.2	<0.2			<0.2		
	N-Methyl perfluorooctane sulfonamidoethanol (MeFOS	µg/kg	0.5	<0.5			<0.5		
	Perfluorobutanoic acid (PFBA)	µg/kg	1	<1.0			<1.0		
	Perfluoroheptane sulfonic acid (PFHpS)	µg/kg	0.2	<0.2			<0.2		
	Perfluorooctane sulfonic acid (PFOS)	µg/kg	0.2 (Primary): 5 (Interlab	<0.2	<5.0	0	<0.2	<5.0	0
	Perfluoropentane sulfonic acid (PFPeS)	µg/kg	0.2	<0.2			<0.2		
	Perfluoropentanoic acid (PFPeA)	µg/kg	0.2	<0.2			<0.2		
	Perfluorooctanoic acid (PFOA)	µg/kg	0.2 (Primary): 5 (Interlab	<0.2	<5.0	0	<0.2	<5.0	0
	Perfluorotetradecanoic acid (PFTeDA)	µg/kg	0.5	<0.5			<0.5		
	Perfluorotridecanoic acid (PFTrDA)	µg/kg	0.2	<0.2			<0.2		
	Sum of PFAS	µg/kg	0.2	<0.2			<0.2		
	Sum of PFAS (WA DER List)	µg/kg	0.2	<0.2			<0.2		
	Sum of PFHxS and PFOS	µg/kg	0.2 (Primary): 5 (Interlab	<0.2	<5.0	0	<0.2	<5.0	0
PFOS and PFOA	Perfluorobutanesulfonic acid (PFBS)	µg/kg	0.2	<0.2			<0.2		
	Perfluorodecanesulfonic acid (PFDS)	µg/kg	0.2	<0.2			<0.2		
	Perfluorodecanoic acid (PFDA)	µg/kg	0.2	<0.2			<0.2		
	Perfluorohexanesulfonic acid (PFHxS)	µg/kg	0.2 (Primary): 5 (Interlab	<0.2	<5.0	0	<0.2	<5.0	0
	Perfluorododecanoic acid (PFDoA)	µg/kg	0.2	<0.2			<0.2		
	Perfluoroheptanoic acid (PFHpA)	µg/kg	0.2	<0.2			<0.2		
	Perfluorohexanoic acid (PFHxA)	µg/kg	0.2	<0.2			<0.2		
	Perfluorononanoic acid (PFNA)	µg/kg	0.2	<0.2			<0.2		
	Perfluorooctanesulfonamide (PFOSA)	µg/kg	0.2	<0.2			<0.2		
	Perfluoroundecanoic acid (PFUnA)	µg/kg	0.2	<0.2			<0.2		
SVOC	2.4-Dichlorophenol	µg/L	0.5	<0.5	<0.5	0			
	2.4-Dimethylphenol	µg/L	0.5	<0.5	<0.5	0			
	2.6-Dichlorophenol	µg/L	0.5	<0.5	<0.5	0			
	3-Methylcholanthrene	µg/L	0.5	<0.5	<0.5	0			
	2-Chlorophenol	µg/L	0.5	<0.5	<0.5	0			
	2-Methylnaphthalene	µg/L	0.5	<0.5	<0.5	0			
	2-Nitrophenol	µg/L	0.5 (Primary): 1 (Interlab	<0.5	<1.0	0			
	3- & 4-Methylphenol	µg/L	0.5	<0.5					
	4-Chloro-3-methylphenol	µg/L	0.5 (Primary): 1 (Interlab	<0.5	<1.0	0			
	Bis(2-ethylhexyl) phthalate	mg/kg	5	<5.0	<5.0	0			
	Butyl benzyl phthalate	mg/kg	0.5	<0.5	<0.5	0			
	Diethylphthalate	mg/kg	0.5	<0.5	<0.5	0			
	Dimethyl phthalate	mg/kg	0.5	<0.5	<0.5	0			
	Di-n-butyl phthalate	mg/kg	0.5	<0.5	<0.5	0			
	Di-n-octyl phthalate	mg/kg	0.5	<0.5	<0.5	0			
	1-naphthylamine	mg/kg	0.5	<0.5	<1.0	0			
	2-(acetylamino) fluorene	mg/kg	0.5	<0.5					
	2,4-Dinitrotoluene	mg/kg	1 (Primary): 0.5 (Interlab	<1.0	<0.5	0			
	2,6-dinitrotoluene	mg/kg	1	<1.0	<1.0	0			
	2-chloronaphthalene	mg/kg	0.5	<0.5	<0.5	0			
	2-nitroaniline	mg/kg	1	<1.0	<1.0	0			
	2-Picoline	mg/kg	0.5	<0.5	<0.5	0			
	3,3-Dichlorobenzidine	mg/kg	0.5	<0.5	<0.5	0			
	3-nitroaniline	mg/kg	1	<1.0					
	4-(dimethylamino) azobenzene	mg/kg	0.5	<0.5	<0.5	0			
	4-aminobiphenyl	mg/kg	0.5	<0.5	<0.5	0			
	4-bromophenyl phenyl ether	mg/kg	0.5	<0.5	<0.5	0			
	4-chloroaniline	mg/kg	0.5	<0.5					
	4-chlorophenyl phenyl ether	mg/kg	0.5	<0.5	<0.5	0			
	4-nitroaniline	mg/kg	0.5	<0.5					
	4-Nitroquinoline-N-oxide	mg/kg	0.5	<0.5					
	5-nitro-o-toluidine	mg/kg	0.5	<0.5					
	7,12-dimethylbenz(a)anthracene	mg/kg	0.5	<0.5	<1.0	0			
	Acetophenone	mg/kg	0.5	<0.5	<0.5	0			
	Aniline	mg/kg	0.5	<0.5	<0.5	0			
	Azobenzene	mg/kg	1	<1.0					
	Bis(2-chloroethoxy) methane	mg/kg	0.5	<0.5	<0.5	0			
	Bis(2-chloroethyl)ether	mg/kg	0.5	<0.5					
	Carbazole	mg/kg	0.5	<0.5					
	Chlorobenzilate	mg/kg	0.5	<0.5					
	Dibenzofuran	mg/kg	0.5	<0.5	<0.5	0			
	Hexachlorobutadiene	mg/kg	0.5	<0.5	<0.5	0			
	Hexachlorocyclopentadiene	mg/kg	2.5 (Primary): 1 (Interlab	<2.5	<1.0	0			
	Hexachloroethane	mg/kg	0.5	<0.5	<0.5	0			
	Hexachloropropene	mg/kg	0.5	<0.5					
	Isophorone	mg/kg	0.5	<0.5					
	Methapyrilene	mg/kg	0.5	<0.5					
	Nitrobenzene	mg/kg	0.5	<0.5	<0.5	0			
	N-nitrosodiethylamine	mg/kg	0.5	<0.5					
	N-nitrosodi-n-butylamine	mg/kg	0.5	<0.5	<0.5	0			
	N-nitrosodi-n-propylamine	mg/kg	0.5	<0.5	<0.5	0			
	N-Nitrosomethylethylamine	mg/kg	0.5	<0.5					
	N-nitrosomorpholine	mg/kg	0.5	<0.5					
	N-nitrosopiperidine	mg/kg	0.5	<0.5	<0.5	0			
	N-nitrosopyrrolidine	mg/kg	1	<1.0					
	Pentachlorobenzene	mg/kg	0.5	<0.5	<0.5	0			
	Pentachloronitrobenzene	mg/kg	0.5	<0.5	<0.5	0			
	Phenacetin	mg/kg	0.5	<0.5					
	Pronamide	mg/kg	0.5	<0.5	<0.5	0			
TRH - Semivolatile Fraction	>C10 - C16 Fraction	mg/kg	50	<50.0	<50.0	0	<50.0	<50.0	0
	>C10 - C16 Fraction minus Naphthalene (F2)	mg/kg	50	<50.0	<50.0	0	<50.0	<50.0	0
	>C10 - C40 Fraction (sum)	mg/kg	50 (Primary): 100 (Interl	<50.0	<100.0	0	<50.0	<100.0	0
	>C16 - C34 Fraction	mg/kg	100	<100.0	<100.0	0	<100.0	<100.0	0
	>C34 - C40 Fraction	mg/kg	100	<100.0	<100.0	0	<100.0	<100.0	0
	C10 - C14 Fraction	mg/kg	50 (Primary): 20 (Interla	<50.0	<20.0	0	<50.0	<20.0	0
	C10 - C36 Fraction (sum)	mg/kg	50	<50.0	<50.0	0	<50.0	<50.0	0
	C15 - C28 Fraction	mg/kg	100 (Primary): 50 (Interl	<100.0	<50.0	0	<100.0	<50.0	0
	C29 - C36 Fraction	mg/kg	100 (Primary): 50 (Interl	<100.0	<50.0	0	<100.0	<50.0	0
TRH Volatiles/BTEX	Toluene	mg/kg	0.5 (Primary): 0.1 (Interl	<0.5	<0.1	0	<0.5	<0.1	0
	Total Xylenes	mg/kg	0.5 (Primary): 0.3 (Interl	<0.5	<0.3	0	<0.5	<0.3	0
	Benzene	mg/kg	0.2 (Primary): 0.1 (Interl	<0.2	<0.1	0	<0.2	<0.1	0
	C6 - C10 Fraction	mg/kg	10 (Primary): 20 (Interla	<10.0	<20.0	0	<10.0	<20.0	0
	C6 - C10 Fraction minus BTEX (F1)	mg/kg	10 (Primary): 20 (Interla	<10.0	<20.0	0	<10.0	<20.0	0
	C6 - C9 Fraction	mg/kg	10 (Primary): 20 (Interla	<10.0	<20.0	0	<10.0	<20.0	0
	Ethylbenzene	mg/kg	0.5 (Primary): 0.1 (Interl	<0.5	<0.1	0	<0.5	<0.1	0
	meta- & para-Xylene	mg/kg	0.5 (Primary): 0.2 (Interl	<0.5	<0.2	0	<0.5	<0.2	0
	ortho-Xylene	mg/kg	0.5 (Primary): 0.1 (Interl	<0.5	<0.1	0	<0.5	<0.1	0

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			Field ID	SOP_BH120_3.0	TRIP05_220120	**RPD**	SOP_BH124_3.0	TRIP06_220121	**RPD**	
			Sampled Date	20-Jan-22	20-Jan-22		21-Jan-22	21-Jan-22		
	Sum of BTEX	mg/kg	0.2	<0.2			<0.2			
VOC	1,2,4-trimethylbenzene	mg/kg	0.5	<0.5	<0.5	0				
	1,3,5-trimethylbenzene	mg/kg	0.5	<0.5	<0.5	0				
	2-chlorotoluene	mg/kg	0.5	<0.5						
	4-chlorotoluene	mg/kg	0.5	<0.5	<0.5	0				
	Bromobenzene	mg/kg	0.5	<0.5	<0.5	0				
	Isopropylbenzene	mg/kg	0.5	<0.5	<0.5	0				
	n-butylbenzene	mg/kg	0.5	<0.5						
	n-propylbenzene	mg/kg	0.5	<0.5						
	p-isopropyltoluene	mg/kg	0.5	<0.5						
	sec-butylbenzene	mg/kg	0.5	<0.5						
	Styrene	mg/kg	0.5	<0.5	<0.5	0				
	tert-butylbenzene	mg/kg	0.5	<0.5						
	1,1,1,2-tetrachloroethane	mg/kg	0.5	<0.5	<0.5	0				
	1,1,1-trichloroethane	mg/kg	0.5	<0.5	<0.5	0				
	1,1,2,2-tetrachloroethane	mg/kg	0.5	<0.5	<0.5	0				
	1,1,2-trichloroethane	mg/kg	0.5	<0.5	<0.5	0				
	1,1-dichloroethane	mg/kg	0.5	<0.5	<0.5	0				
	1,1-dichloroethene	mg/kg	0.5	<0.5	<0.5	0				
	1,1-dichloropropene	mg/kg	0.5	<0.5						
	1,2,3-trichloropropane	mg/kg	0.5	<0.5	<0.5	0				
	1,2-dibromo-3-chloropropane	mg/kg	0.5	<0.5						
	1,2-dibromoethane	mg/kg	0.5	<0.5	<0.5	0				
	1,2-dichloroethane	mg/kg	0.5	<0.5	<0.5	0				
	1,2-dichloropropane	mg/kg	0.5	<0.5	<0.5	0				
	1,3-dichloropropane	mg/kg	0.5	<0.5	<0.5	0				
	2,2-dichloropropane	mg/kg	0.5	<0.5						
	2-butanone (MEK)	mg/kg	5 (Primary): 0.5 (Interlab	<5.0	<0.5	0				
	2-hexanone (MBK)	mg/kg	5	<5.0						
	4-methyl-2-pentanone (MIBK)	mg/kg	5 (Primary): 0.5 (Interlab	<5.0	<0.5	0				
	Bromodichloromethane	mg/kg	0.5	<0.5	<0.5	0				
	Bromoform	mg/kg	0.5	<0.5	<0.5	0				
	Bromomethane	mg/kg	5 (Primary): 0.5 (Interlab	<5.0	<0.5	0				
	Carbon disulfide	mg/kg	0.5	<0.5	<0.5	0				
	Carbon tetrachloride	mg/kg	0.5	<0.5	<0.5	0				
	Chlorodibromomethane	mg/kg	0.5	<0.5	<0.5	0				
	Chloroethane	mg/kg	5 (Primary): 0.5 (Interlab	<5.0	<0.5	0				
	Chloroform	mg/kg	0.5	<0.5	<0.5	0				
	Chloromethane	mg/kg	5 (Primary): 0.5 (Interlab	<5.0	<0.5	0				
	cis-1,2-dichloroethene	mg/kg	0.5	<0.5	<0.5	0				
	cis-1,3-dichloropropene	mg/kg	0.5	<0.5	<0.5	0				
	cis-1,4-Dichloro-2-butene	mg/kg	0.5	<0.5						
	Dibromomethane	mg/kg	0.5	<0.5	<0.5	0				
	Dichlorodifluoromethane	mg/kg	5 (Primary): 0.5 (Interlab	<5.0	<0.5	0				
	Iodomethane	mg/kg	0.5	<0.5	<0.5	0				
	Pentachloroethane	mg/kg	0.5	<0.5						
	TCE	mg/kg	0.5	<0.5	<0.5	0				
	Tetrachloroethene	mg/kg	0.5	<0.5	<0.5	0				
	trans-1,2-dichloroethene	mg/kg	0.5	<0.5	<0.5	0				
	trans-1,3-dichloropropene	mg/kg	0.5	<0.5	<0.5	0				
	trans-1,4-Dichloro-2-butene	mg/kg	0.5	<0.5						
	Trichlorofluoromethane	mg/kg	5 (Primary): 0.5 (Interlab	<5.0	<0.5	0				
	Vinyl acetate	mg/kg	5	<5.0						
	Vinyl chloride	mg/kg	5 (Primary): 0.5 (Interlab	<5.0	<0.5	0				
Explosives	1,3,5-Trinitrobenzene	mg/kg	0.5	<0.5						
Metals	Arsenic	mg/kg	5 (Primary): 2 (Interlab)	**5.0**	**11.0**	**75**	6.0	7.9	27	
	Cadmium	mg/kg	1 (Primary): 0.4 (Interlab	<1.0	<0.4	0	<1.0	<0.4	0	
	Chromium	mg/kg	2 (Primary): 5 (Interlab)	**5.0**	**8.8**	**55**	**4.0**	**7.9**	**66**	
	Copper	mg/kg	5	39.0	52.0	29	47.0	51.0	8	
	Lead	mg/kg	5	18.0	20.0	11	16.0	18.0	12	
	Mercury	mg/kg	0.1	<0.1	<0.1	0	<0.1	<0.1	0	
	Nickel	mg/kg	2 (Primary): 5 (Interlab)	32.0	38.0	17	26.0	31.0	18	
	Zinc	mg/kg	5	**117.0**	**160.0**	**31**	261.0	300.0	14	
Metals (leached)	Nickel (Filtered)	µg/l	100							
PCBs	PCBs (Sum of total)	mg/kg	0.1	<0.1	<0.1	0	<0.1	<0.1	0	
Pesticides	4,4-DDE	mg/kg	0.05 (Primary): 0.5 (Inte	<0.05	<0.05	0	<0.05	<0.05	0	
	a-BHC	mg/kg	0.05 (Primary): 0.5 (Inte	<0.05	<0.05	0	<0.05	<0.05	0	
	Aldrin	mg/kg	0.05 (Primary): 0.5 (Inte	<0.05	<0.05	0	<0.05	<0.05	0	
	Aldrin + Dieldrin	mg/kg	0.05	<0.05	<0.05	0	<0.05	<0.05	0	
	Azinophos methyl	mg/kg	0.05 (Primary): 0.2 (Inte	<0.05	<0.2	0	<0.05	<0.2	0	
	b-BHC	mg/kg	0.05 (Primary): 0.5 (Inte	<0.05	<0.05	0	<0.05	<0.05	0	
	Bromophos-ethyl	mg/kg	0.05	<0.05			<0.05			
	Carbophenothion	mg/kg	0.05	<0.05			<0.05			
	Chlordane	mg/kg	0.05 (Primary): 0.1 (Inte	<0.05	<0.1	0	<0.05	<0.1	0	
	Chlordane (cis)	mg/kg	0.05	<0.05			<0.05			
	Chlordane (trans)	mg/kg	0.05	<0.05			<0.05			
	Chlorfenvinphos	mg/kg	0.05 (Primary): 0.2 (Inte	<0.05	<0.2	0	<0.05	<0.2	0	
	Chlorpyrifos	mg/kg	0.05 (Primary): 0.2 (Inte	<0.05	<0.2	0	<0.05	<0.2	0	
	Chlorpyrifos-methyl	mg/kg	0.05 (Primary): 0.2 (Inte	<0.05	<0.2	0	<0.05	<0.2	0	
	d-BHC	mg/kg	0.05 (Primary): 0.5 (Inte	<0.05	<0.05	0	<0.05	<0.05	0	
	DDD	mg/kg	0.05 (Primary): 0.5 (Inte	<0.05	<0.05	0	<0.05	<0.05	0	
	DDT	mg/kg	0.2 (Primary): 1 (Interlab	<0.2	<0.05	0	<0.2	<0.05	0	
	DDT+DDE+DDD	mg/kg	0.05	<0.05	<0.05	0	<0.05	<0.05	0	
	Demeton-S-methyl	mg/kg	0.05	<0.05			<0.05			
	Diazinon	mg/kg	0.05 (Primary): 0.2 (Inte	<0.05	<0.2	0	<0.05	<0.2	0	
	Dichlorvos	mg/kg	0.05 (Primary): 0.2 (Inte	<0.05	<0.2	0	<0.05	<0.2	0	
	Dieldrin	mg/kg	0.05 (Primary): 0.5 (Inte	<0.05	<0.05	0	<0.05	<0.05	0	
	Dimethoate	mg/kg	0.05 (Primary): 0.2 (Inte	<0.05	<0.2	0	<0.05	<0.2	0	
	Endosulfan	mg/kg	0.05	<0.05			<0.05			
	Endosulfan I	mg/kg	0.05 (Primary): 0.5 (Inte	<0.05	<0.05	0	<0.05	<0.05	0	
	Endosulfan II	mg/kg	0.05 (Primary): 0.5 (Inte	<0.05	<0.05	0	<0.05	<0.05	0	
	Endosulfan sulphate	mg/kg	0.05 (Primary): 0.5 (Inte	<0.05	<0.05	0	<0.05	<0.05	0	
	Endrin	mg/kg	0.05 (Primary): 0.5 (Inte	<0.05	<0.05	0	<0.05	<0.05	0	
	Endrin aldehyde	mg/kg	0.05 (Primary): 0.5 (Inte	<0.05	<0.05	0	<0.05	<0.05	0	
	Endrin ketone	mg/kg	0.05 (Primary): 0.5 (Inte	<0.05	<0.05	0	<0.05	<0.05	0	
	Ethion	mg/kg	0.05 (Primary): 0.2 (Inte	<0.05	<0.2	0	<0.05	<0.2	0	
	Fenamiphos	mg/kg	0.05	<0.05			<0.05			
	Fenthion	mg/kg	0.05 (Primary): 0.2 (Inte	<0.05	<0.2	0	<0.05	<0.2	0	
	g-BHC (Lindane)	mg/kg	0.05 (Primary): 0.5 (Inte	<0.05	<0.05	0	<0.05	<0.05	0	
	Heptachlor	mg/kg	0.05 (Primary): 0.5 (Inte	<0.05	<0.05	0	<0.05	<0.05	0	
	Heptachlor epoxide	mg/kg	0.05 (Primary): 0.5 (Inte	<0.05	<0.05	0	<0.05	<0.05	0	
	Hexachlorobenzene	mg/kg	1 (Primary): 0.5 (Interlab	<1.0	<0.05	0				
	Hexachlorobenzene	mg/kg	0.05 (Primary): 0.5 (Inte	<0.05	<0.05	0	<0.05	<0.05	0	
	Malathion	mg/kg	0.05 (Primary): 0.2 (Inte	<0.05	<0.2	0	<0.05	<0.2	0	
	Methoxychlor	mg/kg	0.2 (Primary): 0.5 (Interl	<0.2	<0.05	0	<0.2	<0.05	0	
	Methyl parathion	mg/kg	0.2	<0.2	<0.2	0	<0.2	<0.2	0	
	Monocrotophos	mg/kg	0.2 (Primary): 2 (Interlab	<0.2	<2.0	0	<0.2	<2.0	0	
	Parathion	mg/kg	0.2	<0.2	<0.2	0	<0.2	<0.2	0	
	Pirimphos-ethyl	mg/kg	0.05	<0.05			<0.05			
	Prothiofos	mg/kg	0.05	<0.05			<0.05			

*RPDs have only been considered where a concentration is greater than 1 times the EQL.
**High RPDs are in bold (Acceptable RPDs for each EQL multiplier range are: 50 (1-10 x EQL); 30 (10-30 x EQL); 30 (> 30 x E
***Interlab Duplicates are matched on a per compound basis as methods vary between laboratories. Any methods in the row h

Field Duplicates (WATER)
Filter: Lab_Report_Number in('ES2209368','ES2209170','ES2206020','ES2203937','

Lab Report	ES2201979	ES2201979		ES2202047	ES2202047		ES2202047	ES2202047	
Field ID	SMW_BH019	D01_220119	RPD	SMW_BH019	D01_220119	RPD	SMW_BH019	T01_220119	RPD
Sampled Date	19-Jan-22	19-Jan-22		19-Jan-22	19-Jan-22		19-Jan-22	19-Jan-22	

Chem_Group	ChemName	Units	EQL									
Alkalinity by PC Titrator	Carbonate Alkalinity as CaCO3	mg/l	1	<1.0	<1.0	0						
	Bicarbonate Alkalinity as CaCO3	mg/l	1	856.0	855.0	0						
Chlorinated HCs	1,2,3-trichlorobenzene	µg/L	5	<5.0	<5.0	0						
	1,2,4-trichlorobenzene	µg/L	5	<5.0	<5.0	0						
	1,2-dichlorobenzene	µg/L	5	<5.0	<5.0	0						
	1,3-dichlorobenzene	µg/L	5	<5.0	<5.0	0						
	1,4-dichlorobenzene	µg/L	5	<5.0	<5.0	0						
	Chlorobenzene	µg/L	5	<5.0	<5.0	0						
MNA	TDS	mg/l	10	11800.0	11700.0	1						
	Ammonia as N	mg/l	0.01	4.76	4.61	3						
	Nitrate (as N)	mg/l	0.01	0.02	0.02	0						
Naphthalene	Naphthalene	µg/L	5	<5.0	<5.0	0						
	Naphthalene	µg/L	1	<1.0	<1.0	0						
Nitrite and Nitrate as N (NOx	Nitrite + Nitrate as N	mg/l	0.01	0.02	0.02	0						
PAH/Phenols (SIM)	Acenaphthene	µg/L	1	<1.0	<1.0	0						
	Acenaphthylene	µg/L	1	<1.0	<1.0	0						
	Anthracene	µg/L	1	<1.0	<1.0	0						
	Fluoranthene	µg/L	1	<1.0	<1.0	0						
	Fluorene	µg/L	1	<1.0	<1.0	0						
	Benz(a)anthracene	µg/L	1	<1.0	<1.0	0						
	Benzo(a)pyrene	µg/L	0.5	<0.5	<0.5	0						
	Benzo(a)pyrene TEQ (zero)	µg/L	0.5	<0.5	<0.5	0						
	Benzo(b+j)fluoranthene	µg/L	1	<1.0	<1.0	0						
	Benzo(g.h.i)perylene	µg/L	1	<1.0	<1.0	0						
	Benzo(k)fluoranthene	µg/L	1	<1.0	<1.0	0						
	Chrysene	µg/L	1	<1.0	<1.0	0						
	Dibenz(a.h)anthracene	µg/L	1	<1.0	<1.0	0						
	Indeno(1.2.3.cd)pyrene	µg/L	1	<1.0	<1.0	0						
	Phenanthrene	µg/L	1	<1.0	<1.0	0						
	Pyrene	µg/L	1	<1.0	<1.0	0						
	Sum of polycyclic aromatic hydrocarbons	µg/L	0.5	<0.5	<0.5	0						
PFAS	10:2 Fluorotelomer sulfonic acid (10:2 FTS)	µg/L	0.05				<0.05	<0.05	0	<0.05	<0.05	0
	4:2 Fluorotelomer sulfonic acid (4:2 FTS)	µg/L	0.05				<0.05	<0.05	0	<0.05	<0.05	0
	6:2 Fluorotelomer sulfonic acid (6:2 FTS)	µg/L	0.05				<0.05	<0.05	0	<0.05	<0.05	0
	8:2 Fluorotelomer sulfonic acid (8:2 FTS)	µg/L	0.05				<0.05	<0.05	0	<0.05	<0.05	0
	N-Ethyl perfluorooctane sulfonamide (EtFOSA)	µg/L	0.05				<0.05	<0.05	0	<0.05	<0.05	0
	N-Ethyl perfluorooctane sulfonamidoacetic acid (Et	µg/L	0.02				<0.02	<0.02	0	<0.02	<0.02	0
	N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE	µg/L	0.05				<0.05	<0.05	0	<0.05	<0.05	0
	N-Methyl perfluorooctane sulfonamide (MeFOSA)	µg/L	0.05				<0.05	<0.05	0	<0.05	<0.05	0
	N-Methyl perfluorooctane sulfonamidoacetic acid (M	µg/L	0.02				<0.02	<0.02	0	<0.02	<0.02	0
	N-Methyl perfluorooctane sulfonamidoethanol (MeFOS	µg/L	0.05				<0.05	<0.05	0	<0.05	<0.05	0
	Perfluorobutanoic acid (PFBA)	µg/L	0.1				<0.1	<0.1	0	<0.1	<0.1	0
	Perfluoroheptane sulfonic acid (PFHpS)	µg/L	0.02				<0.02	<0.02	0	<0.02	<0.02	0
	Perfluorooctane sulfonic acid (PFOS)	µg/L	0.01				0.02	0.02	0	0.02	0.02	0
	Perfluoropentane sulfonic acid (PFPeS)	µg/L	0.02				<0.02	<0.02	0	<0.02	<0.02	0
	Perfluoropentanoic acid (PFPeA)	µg/L	0.02				<0.02	<0.02	0	<0.02	<0.02	0
	Perfluorooctanoic acid (PFOA)	µg/L	0.01				<0.01	<0.01	0	<0.01	<0.01	0
	Perfluorotetradecanoic acid (PFTeDA)	µg/L	0.05				<0.05	<0.05	0	<0.05	<0.05	0
	Perfluorotridecanoic acid (PFTrDA)	µg/L	0.02				<0.02	<0.02	0	<0.02	<0.02	0
	Sum of PFAS	µg/L	0.01				0.02	0.02	0	0.02	0.02	0
	Sum of PFAS (WA DER List)	µg/L	0.01				0.02	0.02	0	0.02	0.02	0
	Sum of PFHxS and PFOS	µg/L	0.01				0.02	0.02	0	0.02	0.02	0
PFOS and PFOA	Perfluorobutanesulfonic acid (PFBS)	µg/L	0.02				<0.02	<0.02	0	<0.02	<0.02	0
	Perfluorodecanesulfonic acid (PFDS)	µg/L	0.02				<0.02	<0.02	0	<0.02	<0.02	0
	Perfluorodecanoic acid (PFDA)	µg/L	0.02				<0.02	<0.02	0	<0.02	<0.02	0
	Perfluorohexanesulfonic acid (PFHxS)	µg/L	0.01				<0.01	<0.01	0	<0.01	<0.01	0
	Perfluorododecanoic acid (PFDoA)	µg/L	0.02				<0.02	<0.02	0	<0.02	<0.02	0
	Perfluoroheptanoic acid (PFHpA)	µg/L	0.02				<0.02	<0.02	0	<0.02	<0.02	0
	Perfluorohexanoic acid (PFHxA)	µg/L	0.02				<0.02	<0.02	0	<0.02	<0.02	0
	Perfluorononanoic acid (PFNA)	µg/L	0.02				<0.02	<0.02	0	<0.02	<0.02	0
	Perfluorooctanesulfonamide (PFOSA)	µg/L	0.02				<0.02	<0.02	0	<0.02	<0.02	0
	Perfluoroundecanoic acid (PFUnA)	µg/L	0.02				<0.02	<0.02	0	<0.02	<0.02	0
SVOC	Hexachlorobutadiene	µg/L	5	<5.0	<5.0	0						
Total Phosphorus as P	Total Phosphorus as P	mg/l	0.01	0.27	0.27	0						
TRH - Semivolatile Fraction	>C10 - C16 Fraction	µg/L	100	<100.0	<100.0	0						
	>C10 - C16 Fraction minus Naphthalene (F2)	µg/L	100	<100.0	<100.0	0						
	>C10 - C40 Fraction (sum)	µg/L	100	<100.0	<100.0	0						
	>C16 - C34 Fraction	µg/L	100	<100.0	<100.0	0						
	>C34 - C40 Fraction	µg/L	100	<100.0	<100.0	0						
	C10 - C14 Fraction	µg/L	50	<50.0	<50.0	0						
	C10 - C36 Fraction (sum)	µg/L	50	<50.0	<50.0	0						
	C15 - C28 Fraction	µg/L	100	<100.0	<100.0	0						
	C29 - C36 Fraction	µg/L	50	<50.0	<50.0	0						
TRH Volatiles/BTEX	Toluene	µg/L	2	<2.0	<2.0	0						
	Total Xylenes	µg/L	2	<2.0	<2.0	0						
	Benzene	µg/L	1	1.0	1.0	0						
	C6 - C10 Fraction	µg/L	20	<20.0	<20.0	0						
	C6 - C10 Fraction minus BTEX (F1)	µg/L	20	<20.0	<20.0	0						
	C6 - C9 Fraction	µg/L	20	<20.0	<20.0	0						
	Ethylbenzene	µg/L	2	<2.0	<2.0	0						
	meta- & para-Xylene	µg/L	2	<2.0	<2.0	0						
	ortho-Xylene	µg/L	2	<2.0	<2.0	0						
	Sum of BTEX	µg/L	1	1.0	1.0	0						
VOC	1,2,4-trimethylbenzene	µg/L	5	<5.0	<5.0	0						
	1,3,5-trimethylbenzene	µg/L	5	<5.0	<5.0	0						
	2-chlorotoluene	µg/L	5	<5.0	<5.0	0						
	4-chlorotoluene	µg/L	5	<5.0	<5.0	0						
	Bromobenzene	µg/L	5	<5.0	<5.0	0						
	Isopropylbenzene	µg/L	5	<5.0	<5.0	0						
	n-butylbenzene	µg/L	5	<5.0	<5.0	0						
	n-propylbenzene	µg/L	5	<5.0	<5.0	0						
	p-isopropyltoluene	µg/L	5	<5.0	<5.0	0						
	sec-butylbenzene	µg/L	5	<5.0	<5.0	0						
	Styrene	µg/L	5	<5.0	<5.0	0						
	tert-butylbenzene	µg/L	5	<5.0	<5.0	0						
	1,1,1,2-tetrachloroethane	µg/L	5	<5.0	<5.0	0						
	1,1,1-trichloroethane	µg/L	5	<5.0	<5.0	0						
	1,1,2,2-tetrachloroethane	µg/L	5	<5.0	<5.0	0						
	1,1,2-trichloroethane	µg/L	5	<5.0	<5.0	0						
	1,1-dichloroethane	µg/L	5	<5.0	<5.0	0						
	1,1-dichloroethene	µg/L	5	<5.0	<5.0	0						
	1,1-dichloropropene	µg/L	5	<5.0	<5.0	0						

Field Duplicates (WATER)
Filter: Lab_Report_Number in('ES2209368','ES2209170','ES2206020','ES2203937','

	Lab Report	ES2201979	ES2201979		ES2202047	ES2202047		ES2202047	ES2202047	
	Field ID	SMW_BH019	D01_220119	**RPD**	SMW_BH019	D01_220119	**RPD**	SMW_BH019	T01_220119	**RPD**
	Sampled Date	19-Jan-22	19-Jan-22		19-Jan-22	19-Jan-22		19-Jan-22	19-Jan-22	
	1,2,3-trichloropropane	µg/L	5	<5.0	<5.0	0							
	1,2-dibromo-3-chloropropane	µg/L	5	<5.0	<5.0	0							
	1,2-dibromoethane	µg/L	5	<5.0	<5.0	0							
	1,2-dichloroethane	µg/L	5	<5.0	<5.0	0							
	1,2-dichloropropane	µg/L	5	<5.0	<5.0	0							
	1,3-dichloropropane	µg/L	5	<5.0	<5.0	0							
	2,2-dichloropropane	µg/L	5	<5.0	<5.0	0							
	2-butanone (MEK)	µg/L	50	<50.0	<50.0	0							
	2-hexanone (MBK)	µg/L	50	<50.0	<50.0	0							
	4-methyl-2-pentanone (MIBK)	µg/L	50	<50.0	<50.0	0							
	Bromodichloromethane	µg/L	5	<5.0	<5.0	0							
	Bromoform	µg/L	5	<5.0	<5.0	0							
	Bromomethane	µg/L	50	<50.0	<50.0	0							
	Carbon disulfide	µg/L	5	<5.0	<5.0	0							
	Carbon tetrachloride	µg/L	5	<5.0	<5.0	0							
	Chlorodibromomethane	µg/L	5	<5.0	<5.0	0							
	Chloroethane	µg/L	50	<50.0	<50.0	0							
	Chloroform	µg/L	5	<5.0	<5.0	0							
	Chloromethane	µg/L	50	<50.0	<50.0	0							
	cis-1,2-dichloroethene	µg/L	5	<5.0	<5.0	0							
	cis-1,3-dichloropropene	µg/L	5	<5.0	<5.0	0							
	cis-1,4-Dichloro-2-butene	µg/L	5	<5.0	<5.0	0							
	Dibromomethane	µg/L	5	<5.0	<5.0	0							
	Dichlorodifluoromethane	µg/L	50	<50.0	<50.0	0							
	Iodomethane	µg/L	5	<5.0	<5.0	0							
	Pentachloroethane	µg/L	5	<5.0	<5.0	0							
	TCE	µg/L	5	<5.0	<5.0	0							
	Tetrachloroethene	µg/L	5	<5.0	<5.0	0							
	trans-1,2-dichloroethene	µg/L	5	<5.0	<5.0	0							
	trans-1,3-dichloropropene	µg/L	5	<5.0	<5.0	0							
	trans-1,4-Dichloro-2-butene	µg/L	5	<5.0	<5.0	0							
	Trichlorofluoromethane	µg/L	50	<50.0	<50.0	0							
	Vinyl acetate	µg/L	50	<50.0	<50.0	0							
	Vinyl chloride	µg/L	50	<50.0	<50.0	0							
Inorganics	Alkalinity (Hydroxide) as CaCO3	mg/l	1	<1.0	<1.0	0							
	Alkalinity (total) as CaCO3	mg/l	1	856.0	855.0	0							
	Anions Total	meq/L	0.01	203.0	201.0	1							
	Cations Total	meq/L	0.01	166.0	169.0	2							
	Chloride	mg/l	1	6580.0	6510.0	1							
	Ionic Balance	%	0.01	9.87	8.48	15							
	Sodium (Filtered)	mg/l	1	2650.0	2700.0	2							
	Sulfate as SO4 - Turbidimetric (Filtered)	mg/l	1	**2.0**	**1.0**	**67**							
	Kjeldahl Nitrogen Total	mg/l	0.1	6.4	6.3	2							
	Nitrite (as N)	mg/l	0.01	<0.01	<0.01	0							
	Nitrogen (Total)	µg/l	100	6400.0	6300.0	2							
Metals	Arsenic (Filtered)	µg/l	1	<1.0	<1.0	0							
	Cadmium (Filtered)	µg/l	0.1	<0.1	<0.1	0							
	Calcium (Filtered)	mg/l	1	411.0	416.0	1							
	Chromium (Filtered)	µg/l	1	<1.0	<1.0	0							
	Copper (Filtered)	µg/l	1	2.0	2.0	0							
	Iron (Filtered)	µg/l	50	5770.0	5780.0	0							
	Lead (Filtered)	µg/l	1	<1.0	<1.0	0							
	Magnesium (Filtered)	mg/l	1	358.0	365.0	2							
	Mercury (Filtered)	µg/l	0.1	<0.1	<0.1	0							
	Nickel (Filtered)	µg/l	1	**1.0**	**2.0**	**67**							
	Potassium (Filtered)	mg/l	1	43.0	43.0	0							
	Zinc (Filtered)	µg/l	5	14.0	13.0	7							

*RPDs have only been considered where a concentration is greater than 1 times the EQL.
**High RPDs are in bold (Acceptable RPDs for each EQL multiplier range are: 50 (1-10 x EQL); 30 (10-30 x EQL); 30 (> 30 x EQL))
***Interlab Duplicates are matched on a per compound basis as methods vary between laboratories. Any methods in the row header relate to those used in the primary laboratory

Lab Report	ES2201979	ES2201979	ES2202047	ES2202047	ES2202047	ES2202047	ES2202047	ES2206020	ES2206020	ES2209170	ES2209368
Field ID	RO1-220119	RO1-20-01-22	R01_220121	R01_220119	R01_220118	R01_220117	R01_220120	R01_20220221	R01_20220222	R01_20220315	R01_20220316
Sampled_Date	19-Jan-22	20-Jan-22	21-Jan-22	19-Jan-22	18-Jan-22	17-Jan-22	20-Jan-22	21-Feb-22	22-Feb-22	15-Mar-22	16-Mar-22
Sample Type	Rinsate	Rinsate	Rinsate	Rinsate	Rinsate	Rinsate	Rinsate	Rinsate	Rinsate	Rinsate	Rinsate

Chem_Group	ChemName	Units	EQL											
Alkalinity by PC Titrator	Carbonate Alkalinity as CaCO3	mg/l	1								<1	<1	<1	<1
	Bicarbonate Alkalinity as CaCO3	mg/l	1								<1	<1	<1	<1
Chlorinated HCs	1,2,3-trichlorobenzene	µg/L	5	<5	<5	<5					<5	<5	<5	<5
	1,2,4-trichlorobenzene	µg/L	2	<5	<5	<2					<5	<5	<5	<5
	1,2-dichlorobenzene	µg/L	2	<5	<5	<2					<5	<5	<5	<5
	1,3-dichlorobenzene	µg/L	2	<5	<5	<2					<5	<5	<5	<5
	1,4-dichlorobenzene	µg/L	2	<5	<5	<2					<5	<5	<5	<5
	Chlorobenzene	µg/L	5	<5	<5	<5					<5	<5	<5	<5
Explosives	1,3,5-Trinitrobenzene	mg/L	0.002			<0.002								
Inorganics	Alkalinity (Hydroxide) as CaCO3	mg/l	1								<1	<1	<1	<1
	Alkalinity (total) as CaCO3	mg/L	1								<1	<1	<1	<1
	Anions Total	meq/L	0.01								<0.01	<0.01	<0.01	<0.01
	Cations Total	meq/L	0.01								<0.01	<0.01	<0.01	<0.01
	Chloride	mg/L	1								<1	<1	<1	<1
	Fluoride	mg/L	0.1											
	Ionic Balance	%	0.01											
	Reactive Phosphorus as P	mg/L	0.01											
	Sodium (Filtered)	mg/L	1								<1	<1	<1	<1
	Sulfate as SO4 - Turbidimetric (Filtered)	mg/L	1								<1	<1	<1	<1
	Kjeldahl Nitrogen Total	mg/L	0.1	<0.1	<0.1	<0.1					<0.1	<0.1	<0.1	<0.1
	Nitrite (as N)	mg/L	0.01								<0.01	<0.01	<0.01	<0.01
	Nitrogen (Total)	µg/l	100	<100	<100	<100					<100	<100	<100	<100
Metals	Arsenic	µg/L	0.001			<1								
	Arsenic (Filtered)	µg/L	0.001	<1	<1						<1	<1	<1	<1
	Cadmium	µg/L	0.0001			<0.1								
	Cadmium (Filtered)	µg/L	0.0001	<0.1	<0.1						<0.1	<0.1	<0.1	<0.1
	Calcium (Filtered)	mg/L	1								<1	<1	<1	<1
	Chromium	µg/L	0.001			<1								
	Chromium (Filtered)	µg/L	0.001	<1	<1						<1	<1	<1	<1
	Copper	µg/L	0.001			<1								
	Copper (Filtered)	µg/L	0.001	<1	<1						<1	<1	<1	<1
	Iron (Filtered)	µg/L	0.05	<50	<50						<50	<50		<50
	Lead	µg/L	0.001			<1								
	Lead (Filtered)	µg/L	0.001	<1	<1						<1	<1	<1	<1
	Magnesium (Filtered)	mg/L	1								<1	<1	<1	<1
	Mercury	µg/L	0.0001			<0.1								
	Mercury (Filtered)	µg/L	0.0001	<0.1	<0.1						<0.1	<0.1	<0.1	<0.1
	Nickel	µg/L	0.001			<1								
	Nickel (Filtered)	µg/L	0.001	<1	<1						<1	<1	<1	<1
	Potassium (Filtered)	mg/L	1								<1	<1	<1	<1
	Zinc	µg/L	0.005			<5								
	Zinc (Filtered)	µg/L	0.005	<5	<5						<5	<5	<5	<5
	Aluminium (Filtered)	µg/L	0.01											<10
	Selenium (Filtered)	µg/L	0.01											<10
MNA	Ferrous Iron - Fe2+	mg/L	0.05										<0.05	
	Methane	mg/L	0.01											
	TDS	mg/L	10								<10	<10	<10	<10
	Ammonia as N	mg/L	0.01	**0.02**	<0.01	<0.01					<0.01	<0.01	<0.01	<0.01
	Nitrate (as N)	mg/l	0.01								<0.01	<0.01	<0.01	<0.01
Naphthalene	Naphthalene	µg/L	1	<5	<5	<5					<5	<5	<5	<5
Nitrite and Nitrate as N	Nitrite + Nitrate as N	mg/L	0.01	<0.01	<0.01	<0.01					<0.01	<0.01	<0.01	<0.01
PAH/Phenols (SIM)	Acenaphthene	µg/L	1	<1	<1	<2					<1	<1	<1	<1
	Acenaphthylene	µg/L	1	<1	<1	<2					<1	<1	<1	<1
	Anthracene	µg/L	1	<1	<1	<2					<1	<1	<1	<1
	Fluoranthene	µg/L	1	<1	<1	<2					<1	<1	<1	<1
	Fluorene	µg/L	1	<1	<1	<2					<1	<1	<1	<1
	Benz(a)anthracene	µg/L	1	<1	<1	<2					<1	<1	<1	<1
	Benzo(a)pyrene	µg/L	0.5	<0.5	<0.5	<2					<0.5	<0.5	<0.5	<0.5
	Benzo(a)pyrene TEQ (zero)	µg/L	0.5	<0.5	<0.5	<2					<0.5	<0.5	<0.5	<0.5
	Benzo(b+j)fluoranthene	µg/L	1	<1	<1	<1					<1	<1	<1	<1
	Benzo(g.h.i)perylene	µg/L	1	<1	<1	<2					<1	<1	<1	<1
	Benzo(k)fluoranthene	µg/L	1	<1	<1	<1					<1	<1	<1	<1
	Chrysene	µg/L	1	<1	<1	<2					<1	<1	<1	<1
	Dibenz(a.h)anthracene	µg/L	1	<1	<1	<2					<1	<1	<1	<1
	Indeno(1.2.3.cd)pyrene	µg/L	1	<1	<1	<2					<1	<1	<1	<1
	Phenanthrene	µg/L	1	<1	<1	<2					<1	<1	<1	<1
	Pyrene	µg/L	1	<1	<1	<2					<1	<1	<1	<1
	Sum of polycyclic aromatic hydrocarbons	µg/L	0.5	<0.5	<0.5	<2					<0.5	<0.5	<0.5	<0.5
PFAS	10:2 Fluorotelomer sulfonic acid (10:2 FTS)	µg/L	0.05			<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
	4:2 Fluorotelomer sulfonic acid (4:2 FTS)	µg/L	0.05			<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
	6:2 Fluorotelomer sulfonic acid (6:2 FTS)	µg/L	0.05			<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
	8:2 Fluorotelomer sulfonic acid (8:2 FTS)	µg/L	0.05			<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
	N-Ethyl perfluorooctane sulfonamide (EtFOSA)	µg/L	0.05			<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
	N-Ethyl perfluorooctane sulfonamidoacetic acid (Et	µg/L	0.02			<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
	N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE	µg/L	0.05			<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
	N-Methyl perfluorooctane sulfonamide (MeFOSA)	µg/L	0.05			<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
	N-Methyl perfluorooctane sulfonamidoacetic acid (M	µg/L	0.02			<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
	N-Methyl perfluorooctane sulfonamidoethanol (MeFOS	µg/L	0.05			<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
	Perfluorobutanoic acid (PFBA)	µg/L	0.1			<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
	Perfluoroheptane sulfonic acid (PFHpS)	µg/L	0.02			<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
	Perfluorooctane sulfonic acid (PFOS)	µg/L	0.01			<0.01	<0.01	<0.01	<0.01	<0.01	**0.13**	**0.12**	<0.01	<0.01
	Perfluoropentane sulfonic acid (PFPeS)	µg/L	0.02			<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
	Perfluoropentanoic acid (PFPeA)	µg/L	0.02			<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
	Perfluorooctanoic acid (PFOA)	µg/L	0.01			<0.01	<0.01	<0.01	<0.01	<0.01	**0.04**	**0.05**	<0.01	<0.01
	Perfluorotetradecanoic acid (PFTeDA)	µg/L	0.05			<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
	Perfluorotridecanoic acid (PFTrDA)	µg/L	0.02			<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
	Sum of PFAS	µg/L	0.01			<0.01	<0.01	<0.01	<0.01	<0.01	**0.17**	**0.17**	<0.01	<0.01
	Sum of PFAS (WA DER List)	µg/L	0.01			<0.01	<0.01	<0.01	<0.01	<0.01	**0.17**	**0.17**	<0.01	<0.01
	Sum of PFHxS and PFOS	µg/L	0.01			<0.01	<0.01	<0.01	<0.01	<0.01	**0.13**	**0.12**	<0.01	<0.01
Pesticides	4,4-DDE	µg/L	2			<2								
	a-BHC	µg/L	2			<2								
	Aldrin	µg/L	2			<2								
	Aldrin + Dieldrin	µg/L	4			<4								
	b-BHC	µg/L	2			<2								
	Chlorfenvinphos	µg/L	2			<2								
	Chlorpyrifos	µg/L	2			<2								
	Chlorpyrifos-methyl	µg/L	2			<2								
	d-BHC	µg/L	2			<2								
	DDD	µg/L	2			<2								
	DDT	µg/L	4			<4								
	DDT+DDE+DDD	µg/L	4			<4								
	Diazinon	µg/L	2			<2								
	Dichlorvos	µg/L	2			<2								
	Dieldrin	µg/L	2			<2								
	Dimethoate	µg/L	2			<2								
	Endosulfan I	µg/L	2			<2								
	Endosulfan II	µg/L	2			<2								
	Endosulfan sulphate	µg/L	2			<2								
	Endrin	µg/L	2			<2								
	Ethion	µg/L	2			<2								
	Fenthion	µg/L	2			<2								
	g-BHC (Lindane)	µg/L	2			<2								
	Heptachlor	µg/L	2			<2								
	Heptachlor epoxide	µg/L	2			<2								
	Hexachlorobenzene	µg/L	4			<4								
	Malathion	µg/L	2			<2								
	Pirimphos-ethyl	µg/L	2			<2								
	Prothiofos	µg/L	2			<2								

			Lab Report	ES2201979	ES2201979	ES2202047	ES2202047	ES2202047	ES2202047	ES2202047	ES2206020	ES2206020	ES2209170	ES2209368
			Field ID	RO1-220119	RO1-20-01-22	R01_220121	R01_220119	R01_220118	R01_220117	R01_220120	R01_20220221	R01_20220222	R01_20220315	R01_20220316
			Sampled_Date	19-Jan-22	20-Jan-22	21-Jan-22	19-Jan-22	18-Jan-22	17-Jan-22	20-Jan-22	21-Feb-22	22-Feb-22	15-Mar-22	16-Mar-22
			Sample Type	Rinsate	Rinsate	Rinsate	Rinsate	Rinsate	Rinsate	Rinsate	Rinsate	Rinsate	Rinsate	Rinsate
PFOS and PFOA	Perfluorobutanesulfonic acid (PFBS)	µg/L	0.02			<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
	Perfluorodecanesulfonic acid (PFDS)	µg/L	0.02			<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
	Perfluorodecanoic acid (PFDA)	µg/L	0.02			<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
	Perfluorohexanesulfonic acid (PFHxS)	µg/L	0.01			<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
	Perfluorododecanoic acid (PFDoA)	µg/L	0.02			<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
	Perfluoroheptanoic acid (PFHpA)	µg/L	0.02			<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
	Perfluorohexanoic acid (PFHxA)	µg/L	0.02			<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
	Perfluorononanoic acid (PFNA)	µg/L	0.02			<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
	Perfluorooctanesulfonamide (PFOSA)	µg/L	0.02			<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
	Perfluoroundecanoic acid (PFUnA)	µg/L	0.02			<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
SVOC	2,4,5-Trichlorophenol	mg/L	0.002			<0.002								
	2,4,6-Trichlorophenol	mg/L	0.002			<0.002								
	Pentachlorophenol	µg/L	4			<4								
	Phenol	µg/L	2			<2								
	o-Cresol	mg/L	0.002			<0.002								
	2.4-Dichlorophenol	µg/L	2			<2								
	2.4-Dimethylphenol	µg/L	2			<2								
	2.6-Dichlorophenol	µg/L	2			<2								
	3-Methylcholanthrene	µg/L	2			<2								
	2-Chlorophenol	µg/L	2			<2								
	2-Methylnaphthalene	µg/L	2			<2								
	2-Nitrophenol	µg/L	2			<2								
	3- & 4-Methylphenol	µg/L	2			<4								
	4-Chloro-3-methylphenol	µg/L	2			<2								
	Benzo(b+j) & Benzo(k)fluoranthene	µg/L	4			<4								
	N-Nitrosodiphenyl & Diphenylamine	µg/L	4			<4								
	Bis(2-ethylhexyl) phthalate	µg/L	10			<10								
	Butyl benzyl phthalate	µg/L	2			<2								
	Diethylphthalate	µg/L	2			<2								
	Dimethyl phthalate	µg/L	2			<2								
	Di-n-butyl phthalate	µg/L	2			<2								
	Di-n-octyl phthalate	µg/L	2			<2								
	1-naphthylamine	µg/L	2			<2								
	2-(acetylamino) fluorene	µg/L	2			<2								
	2,4-Dinitrotoluene	µg/L	4			<4								
	2,6-dinitrotoluene	µg/L	4			<4								
	2-chloronaphthalene	µg/L	2			<2								
	2-nitroaniline	µg/L	4			<4								
	2-Picoline	µg/L	2			<2								
	3,3-Dichlorobenzidine	µg/L	2			<2								
	3-nitroaniline	µg/L	4			<4								
	4-(dimethylamino) azobenzene	µg/L	2			<2								
	4-aminobiphenyl	µg/L	2			<2								
	4-bromophenyl phenyl ether	µg/L	2			<2								
	4-chloroaniline	µg/L	2			<2								
	4-chlorophenyl phenyl ether	µg/L	2			<2								
	4-nitroaniline	µg/L	2			<2								
	4-Nitroquinoline-N-oxide	µg/L	2			<2								
	5-nitro-o-toluidine	µg/L	2			<2								
	7,12-dimethylbenz(a)anthracene	µg/L	2			<2								
	Acetophenone	µg/L	2			<2								
	Aniline	µg/L	2			<2								
	Azobenzene	µg/L	2			<2								
	Bis(2-chloroethoxy) methane	µg/L	2			<2								
	Bis(2-chloroethyl)ether	µg/L	2			<2								
	Carbazole	µg/L	2			<2								
	Chlorobenzilate	µg/L	2			<2								
	Dibenzofuran	µg/L	2			<2								
	Hexachlorobutadiene	µg/L	2	<5	<5	<2					<5	<5	<5	<5
	Hexachlorocyclopentadiene	µg/L	10			<10								
	Hexachloroethane	µg/L	2			<2								
	Hexachloropropene	µg/L	2			<2								
	Isophorone	µg/L	2			<2								
	Methapyrilene	µg/L	2			<2								
	Nitrobenzene	µg/L	2			<2								
	N-nitrosodiethylamine	µg/L	2			<2								
	N-nitrosodi-n-butylamine	µg/L	2			<2								
	N-nitrosodi-n-propylamine	µg/L	2			<2								
	N-Nitrosomethylethylamine	µg/L	2			<2								
	N-nitrosomorpholine	µg/L	2			<2								
	N-nitrosopiperidine	µg/L	2			<2								
	N-nitrosopyrrolidine	µg/L	4			<4								
	Pentachlorobenzene	µg/L	2			<2								
	Pentachloronitrobenzene	µg/L	2			<2								
	Phenacetin	µg/L	2			<2								
	Pronamide	µg/L	2			<2								
Total Phosphorus as P	Total Phosphorus as P	mg/L	0.01	<0.01	<0.01	<0.01					<0.01	<0.01	<0.01	<0.01
TRH - Semivolatile Fraction	>C10 - C16 Fraction	µg/L	100	<100	<100	<100					<100	<100	<100	<100
	>C10 - C16 Fraction minus Naphthalene (F2)	µg/L	100	<100	<100	<100					<100	<100	<100	<100
	>C10 - C40 Fraction (sum)	µg/L	100	<100	<100	<100					<100	<100	<100	<100
	>C16 - C34 Fraction	µg/L	100	<100	<100	<100					<100	<100	<100	<100
	>C34 - C40 Fraction	µg/L	100	<100	<100	<100					<100	<100	<100	<100
	C10 - C14 Fraction	µg/L	50	<50	<50	<50					<50	<50	<50	<50
	C10 - C36 Fraction (sum)	µg/L	50	<50	<50	<50					<50	<50	<50	<50
	C15 - C28 Fraction	µg/L	100	<100	<100	<100					<100	<100	<100	<100
	C29 - C36 Fraction	µg/L	50	<50	<50	<50					<50	<50	<50	<50
TRH Volatiles/BTEX	Toluene	µg/L	2	<2	<2	<2					<2	<2	<2	<2
	Total Xylenes	µg/L	2	<2	<2	<2					<2	<2	<2	<2
	Benzene	µg/L	1	<1	<1	<1					<1	<1	<1	<1
	C6 - C10 Fraction	µg/L	20	<20	<20	<20					<20	<20	<20	<20
	C6 - C10 Fraction minus BTEX (F1)	µg/L	20	<20	<20	<20					<20	<20	<20	<20
	C6 - C9 Fraction	µg/L	20	<20	<20	<20					<20	<20	<20	<20
	Ethylbenzene	µg/L	2	<2	<2	<2					<2	<2	<2	<2
	meta- & para-Xylene	µg/L	2	<2	<2	<2					<2	<2	<2	<2
	ortho-Xylene	µg/L	2	<2	<2	<2					<2	<2	<2	<2
	Sum of BTEX	µg/L	1	<1	<1	<1					<1	<1	<1	<1
VOC	1,2,4-trimethylbenzene	µg/L	5	<5	<5	<5					<5	<5	<5	<5
	1,3,5-trimethylbenzene	µg/L	5	<5	<5	<5					<5	<5	<5	<5
	2-chlorotoluene	µg/L	5	<5	<5	<5					<5	<5	<5	<5
	4-chlorotoluene	µg/L	5	<5	<5	<5					<5	<5	<5	<5
	Bromobenzene	µg/L	5	<5	<5	<5					<5	<5	<5	<5
	Isopropylbenzene	µg/L	5	<5	<5	<5					<5	<5	<5	<5
	n-butylbenzene	µg/L	5	<5	<5	<5					<5	<5	<5	<5
	n-propylbenzene	µg/L	5	<5	<5	<5					<5	<5	<5	<5
	p-isopropyltoluene	µg/L	5	<5	<5	<5					<5	<5	<5	<5
	sec-butylbenzene	µg/L	5	<5	<5	<5					<5	<5	<5	<5
	Styrene	µg/L	5	<5	<5	<5					<5	<5	<5	<5
	tert-butylbenzene	µg/L	5	<5	<5	<5					<5	<5	<5	<5
	1,1,1,2-tetrachloroethane	µg/L	5	<5	<5	<5					<5	<5	<5	<5
	1,1,1-trichloroethane	µg/L	5	<5	<5	<5					<5	<5	<5	<5
	1,1,2,2-tetrachloroethane	µg/L	5	<5	<5	<5					<5	<5	<5	<5
	1,1,2-trichloroethane	µg/L	5	<5	<5	<5					<5	<5	<5	<5
	1,1-dichloroethane	µg/L	5	<5	<5	<5					<5	<5	<5	<5
	1,1-dichloroethene	µg/L	5	<5	<5	<5					<5	<5	<5	<5
	1,1-dichloropropene	µg/L	5	<5	<5	<5					<5	<5	<5	<5
	1,2,3-trichloropropane	µg/L	5	<5	<5	<5					<5	<5	<5	<5
	1,2-dibromo-3-chloropropane	µg/L	5	<5	<5	<5					<5	<5	<5	<5
	1,2-dibromoethane	µg/L	5	<5	<5	<5					<5	<5	<5	<5
	1,2-dichloroethane	µg/L	5	<5	<5	<5					<5	<5	<5	<5
	1,2-dichloropropane	µg/L	5	<5	<5	<5					<5	<5	<5	<5
	1,3-dichloropropane	µg/L	5	<5	<5	<5					<5	<5	<5	<5
	2,2-dichloropropane	µg/L	5	<5	<5	<5					<5	<5	<5	<5
	2-butanone (MEK)	µg/L	50	<50	<50	<50					<50	<50	<50	<50
	2-hexanone (MBK)	µg/L	50	<50	<50	<50					<50	<50	<50	<50

Table E5 - QAQC Results - Rinsate Blank Recoveries
Sydney Olympic Park DSI
Sydney Metro West CTP - 0628507

			Lab Report	ES2201979	ES2201979	ES2202047	ES2202047	ES2202047	ES2202047	ES2202047	ES2206020	ES2206020	ES2209170	ES2209368
			Field ID	RO1-220119	RO1-20-01-22	R01_220121	R01_220119	R01_220118	R01_220117	R01_220120	R01_20220221	R01_20220222	R01_20220315	R01_20220316
			Sampled_Date	19-Jan-22	20-Jan-22	21-Jan-22	19-Jan-22	18-Jan-22	17-Jan-22	20-Jan-22	21-Feb-22	22-Feb-22	15-Mar-22	16-Mar-22
			Sample Type	Rinsate	Rinsate	Rinsate	Rinsate	Rinsate	Rinsate	Rinsate	Rinsate	Rinsate	Rinsate	Rinsate
	4-methyl-2-pentanone (MIBK)	µg/L	50	<50	<50	<50					<50	<50	<50	<50
	Bromodichloromethane	µg/L	5	<5	<5	<5					<5	<5	<5	<5
	Bromoform	µg/L	5	<5	<5	<5					<5	<5	<5	<5
	Bromomethane	µg/L	50	<50	<50	<50					<50	<50	<50	<50
	Carbon disulfide	µg/L	5	<5	<5	<5					<5	<5	<5	<5
	Carbon tetrachloride	µg/L	5	<5	<5	<5					<5	<5	<5	<5
	Chlorodibromomethane	µg/L	5	<5	<5	<5					<5	<5	<5	<5
	Chloroethane	µg/L	50	<50	<50	<50					<50	<50	<50	<50
	Chloroform	µg/L	5	<5	<5	<5					<5	<5	<5	<5
	Chloromethane	µg/L	50	<50	<50	<50					<50	<50	<50	<50
	cis-1,2-dichloroethene	µg/L	5	<5	<5	<5					<5	<5	<5	<5
	cis-1,3-dichloropropene	µg/L	5	<5	<5	<5					<5	<5	<5	<5
	cis-1,4-Dichloro-2-butene	µg/L	5	<5	<5	<5					<5	<5	<5	<5
	Dibromomethane	µg/L	5	<5	<5	<5					<5	<5	<5	<5
	Dichlorodifluoromethane	µg/L	50	<50	<50	<50					<50	<50	<50	<50
	Iodomethane	µg/L	5	<5	<5	<5					<5	<5	<5	<5
	Pentachloroethane	µg/L	5	<5	<5	<5					<5	<5	<5	<5
	TCE	µg/L	5	<5	<5	<5					<5	<5	<5	<5
	Tetrachloroethene	µg/L	5	<5	<5	<5					<5	<5	<5	<5
	trans-1,2-dichloroethene	µg/L	5	<5	<5	<5					<5	<5	<5	<5
	trans-1,3-dichloropropene	µg/L	5	<5	<5	<5					<5	<5	<5	<5
	trans-1,4-Dichloro-2-butene	µg/L	5	<5	<5	<5					<5	<5	<5	<5
	Trichlorofluoromethane	µg/L	50	<50	<50	<50					<50	<50	<50	<50
	Vinyl acetate	µg/L	50	<50	<50	<50					<50	<50	<50	<50
	Vinyl chloride	µg/L	50	<50	<50	<50					<50	<50	<50	<50

Table E6a - QAQC Results - Trip Blank Recoveries - Soil
Sydney Olympic Park DSI
Sydney Metro West CTP - 0628507

Lab Report Number	ES2201683	ES2201683
Field ID	TB	TB
Sampled_Date/Time	17-Jan-22	17-Jan-22
Sample Type	Trip_B	Trip_B

Chem_Group	ChemName	Units	EQL		
Naphthalene	Naphthalene	mg/kg	0.5	<1	<1
TRH Volatiles/BTEX	Toluene	mg/kg	0.5	<0.5	<0.5
	Total Xylenes	mg/kg	0.5	<0.5	<0.5
	Benzene	mg/kg	0.2	<0.2	<0.2
	C6 - C10 Fraction	mg/kg	10	<10	<10
	C6 - C10 Fraction minus BTEX (F1)	mg/kg	10	<10	<10
	C6 - C9 Fraction	mg/kg	10	<10	<10
	Ethylbenzene	mg/kg	0.5	<0.5	<0.5
	meta- & para-Xylene	mg/kg	0.5	<0.5	<0.5
	ortho-Xylene	mg/kg	0.5	<0.5	<0.5
	Sum of BTEX	mg/kg	0.2	<0.2	<0.2

Trip Spike Recoveries (70% - 130% is acceptable)

SDG	Lab_Report	Matrix	Field_ID	Compound	Trip_Spike_Result	Trip_Spike_Control	Result_Units	Spike_Recovery_%	Acceptable
ALSE-Sydney 19-Jan-22	ES2201683	SOIL	TS 1	Benzene	<0.2	<0.2	mg/kg	100	Y
ALSE-Sydney 19-Jan-22	ES2201683	SOIL	TS 1	Ethylbenzene	2.7	2.9	mg/kg	93	Y
ALSE-Sydney 19-Jan-22	ES2201683	SOIL	TS 1	meta- & para-Xylene	14.6	14.8	mg/kg	99	Y
ALSE-Sydney 19-Jan-22	ES2201683	SOIL	TS 1	Naphthalene	<1	<1	mg/kg	100	Y
ALSE-Sydney 19-Jan-22	ES2201683	SOIL	TS 1	ortho-Xylene	5.8	6.3	mg/kg	92	Y
ALSE-Sydney 19-Jan-22	ES2201683	SOIL	TS 1	Sum of BTEX	39.8	41.5	mg/kg	96	Y
ALSE-Sydney 19-Jan-22	ES2201683	SOIL	TS 1	Toluene	16.7	17.5	mg/kg	95	Y
ALSE-Sydney 19-Jan-22	ES2201683	SOIL	TS 1	Total Xylenes	20.4	21.1	mg/kg	97	Y
ALSE-Sydney 19-Jan-22	ES2201683	SOIL	TS 7	Benzene	<0.2	<0.2	mg/kg	100	Y
ALSE-Sydney 19-Jan-22	ES2201683	SOIL	TS 7	Ethylbenzene	2	2.4	mg/kg	83	Y
ALSE-Sydney 19-Jan-22	ES2201683	SOIL	TS 7	meta- & para-Xylene	10.7	12.6	mg/kg	85	Y
ALSE-Sydney 19-Jan-22	ES2201683	SOIL	TS 7	Naphthalene	<1	<1	mg/kg	100	Y
ALSE-Sydney 19-Jan-22	ES2201683	SOIL	TS 7	ortho-Xylene	4.4	5.1	mg/kg	86	Y
ALSE-Sydney 19-Jan-22	ES2201683	SOIL	TS 7	Sum of BTEX	29.2	34.6	mg/kg	84	Y
ALSE-Sydney 19-Jan-22	ES2201683	SOIL	TS 7	Toluene	12.1	14.5	mg/kg	83	Y
ALSE-Sydney 19-Jan-22	ES2201683	SOIL	TS 7	Total Xylenes	15.1	17.7	mg/kg	85	Y
ALSE-Sydney 24-Jan-22	ES2202264	SOIL	TS14	C6 - C9 Fraction	70	80	mg/kg	88	Y
ALSE-Sydney 24-Jan-22	ES2202264	SOIL	TS14	C6 - C10 Fraction	86	98	mg/kg	88	Y
ALSE-Sydney 24-Jan-22	ES2202264	SOIL	TS14	C6 - C10 Fraction minus BTEX (F1)	39	45	mg/kg	87	Y
ALSE-Sydney 24-Jan-22	ES2202264	SOIL	TS14	Benzene	<0.2	<0.2	mg/kg	100	Y
ALSE-Sydney 24-Jan-22	ES2202264	SOIL	TS14	Ethylbenzene	3.2	3.7	mg/kg	86	Y
ALSE-Sydney 24-Jan-22	ES2202264	SOIL	TS14	meta- & para-Xylene	17.7	20.3	mg/kg	87	Y
ALSE-Sydney 24-Jan-22	ES2202264	SOIL	TS14	Naphthalene	<1	1	mg/kg	100	Y
ALSE-Sydney 24-Jan-22	ES2202264	SOIL	TS14	ortho-Xylene	7.2	8.2	mg/kg	88	Y
ALSE-Sydney 24-Jan-22	ES2202264	SOIL	TS14	Sum of BTEX	46.7	53.2	mg/kg	88	Y
ALSE-Sydney 24-Jan-22	ES2202264	SOIL	TS14	Toluene	18.6	21	mg/kg	89	Y
ALSE-Sydney 24-Jan-22	ES2202264	SOIL	TS14	Total Xylenes	24.9	28.5	mg/kg	87	Y
ALSE-Sydney 24-Jan-22	ES2202264	SOIL	TS15	C6 - C9 Fraction	47	55	mg/kg	85	Y
ALSE-Sydney 24-Jan-22	ES2202264	SOIL	TS15	C6 - C10 Fraction	55	64	mg/kg	86	Y
ALSE-Sydney 24-Jan-22	ES2202264	SOIL	TS15	C6 - C10 Fraction minus BTEX (F1)	17	21	mg/kg	81	Y
ALSE-Sydney 24-Jan-22	ES2202264	SOIL	TS15	Benzene	<0.2	<0.2	mg/kg	100	Y
ALSE-Sydney 24-Jan-22	ES2202264	SOIL	TS15	Ethylbenzene	2.7	3.1	mg/kg	87	Y
ALSE-Sydney 24-Jan-22	ES2202264	SOIL	TS15	meta- & para-Xylene	14.7	16.2	mg/kg	91	Y
ALSE-Sydney 24-Jan-22	ES2202264	SOIL	TS15	Naphthalene	<1	<1	mg/kg	100	Y
ALSE-Sydney 24-Jan-22	ES2202264	SOIL	TS15	ortho-Xylene	6.5	6.9	mg/kg	94	Y
ALSE-Sydney 24-Jan-22	ES2202264	SOIL	TS15	Sum of BTEX	38	43.2	mg/kg	88	Y
ALSE-Sydney 24-Jan-22	ES2202264	SOIL	TS15	Toluene	14.1	17	mg/kg	83	Y
ALSE-Sydney 24-Jan-22	ES2202264	SOIL	TS15	Total Xylenes	21.2	23.1	mg/kg	92	Y

Trip Blank Recoveries _Water

Lab Report	ES2201979	ES2202047	ES2206020	ES2209170	ES2209368	ES2201979
Field ID	Trip blank	TRIP BLANK	Trip blank x2	TB	TB	Trip Spike*
Sampled_Date	13-Jan-22	13-Jan-22	15-Feb-22	09-Mar-22	09-Mar-22	13-Jan-22
Sample Type	Trip_B	Trip_B	Trip_B	Trip_B	Trip_B	Trip_S

Chem_Group	ChemName	Units	EQL						
Naphthalene	Naphthalene	µg/L	1	<5	<5	<5	<5	<5	<5
TRH Volatiles/BTEX	Toluene	µg/L	2	<2	<2	<2	<2	<2	<2
	Total Xylenes	µg/L	2	<2	<2	<2	<2	<2	<2
	Benzene	µg/L	1	<1	<1	<1	<1	<1	<1
	C6 - C10 Fraction	µg/L	20	<20	<20	<20	<20	<20	-
	C6 - C10 Fraction minus BTEX (F1)	µg/L	20	<20	<20	<20	<20	<20	-
	C6 - C9 Fraction	µg/L	20	<20	<20	<20	<20	<20	-
	Ethylbenzene	µg/L	2	<2	<2	<2	<2	<2	<2
	meta- & para-Xylene	µg/L	2	<2	<2	<2	<2	<2	<2
	ortho-Xylene	µg/L	2	<2	<2	<2	<2	<2	<2
	Sum of BTEX	µg/L	1	<1	<1	<1	<1	<1	<1

Trip Spike Recoveries_Water

Lab_Report	ES2202047	Spiked	Recovery	ES2206020	Spiked	Recovery	ES2209170	Spiked	Recovery	ES2209368	Spiked	Recovery
Field_ID	TRIP SPIKE	Concentation		Trip spike x2	Concentation		TS	Concentation		TS	Concentation	
Sampled_Date	13-Jan-22			14-Feb-22			07-Mar-22			07-Mar-22		
Sample_Type	Trip_S			Trip_S			Trip_S			Trip_S		

Chem_Group	ChemName	Units	EQL												
Naphthalene	Naphthalene	µg/L	5	18	20	90%	17	20	85%	17	20	85%	17	20	85%
TRH Volatiles/BTEX	Toluene	µg/L	2	16	20	80%	18	20	90%	14	20	70%	16	20	80%
	Total Xylenes	µg/L	2	31	40	78%	35	40	88%	29	40	73%	29	40	73%
	Benzene	µg/L	1	16	20	80%	16	20	80%	16	20	80%	17	20	85%
	Ethylbenzene	µg/L	2	15	20	75%	17	20	85%	14	20	70%	14	20	70%
	meta- & para-Xylene	µg/L	2	15	20	75%	17	20	85%	14	20	70%	14	20	70%
	ortho-Xylene	µg/L	2	16	20	80%	18	20	90%	15	20	75%	15	20	75%
	Sum of BTEX	µg/L	1	78	100	78%	86	100	86%	73	100	73%	76	100	76%

Note: *Trip Spike sample dated 13/01/2022 was a mislabelled trip blank.

APPENDIX F LABORATORY CERTIFICATES

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IANZ # 1290

Sample Receipt Advice

Company name:	ERM Sydney
Contact name:	Jessica Lawrence
Project name:	SOP
Project ID:	628507
Turnaround time:	5 Day
Date/Time received	Jan 25, 2022 4:06 PM
Eurofins reference	858847

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.
X	Split sample sent to requested external lab.
X	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:

John Nguyen on phone : or by email: JohnNguyen@eurofins.com

Results will be delivered electronically via email to Jessica Lawrence - jessica.lawrence@erm.com.

Note: A copy of these results will also be delivered to the general ERM Sydney email address.

eurofins | Environment Testing

web: www.eurofins.com.au
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IANZ # 1290

Company Name: ERM Sydney
Address: Level 15, 309 Kent St
Sydney
NSW 2000

Project Name: SOP
Project ID: 628507

Order No.:
Report #: 858847
Phone: 02 8584 8888
Fax: 02 8584 8800

Received: Jan 25, 2022 4:06 PM
Due: Feb 2, 2022
Priority: 5 Day
Contact Name: Jessica Lawrence

Eurofins Analytical Services Manager : John Nguyen

Sample Detail						Moisture Set	Suite B10E:TRH/BTEXN/PAH/OCP/OPP/PCB/M8
Melbourne Laboratory - NATA # 1261 Site # 1254							
Sydney Laboratory - NATA # 1261 Site # 18217						X	X
Brisbane Laboratory - NATA # 1261 Site # 20794							
Mayfield Laboratory - NATA # 1261 Site # 25079							
Perth Laboratory - NATA # 2377 Site # 2370							
External Laboratory							
No	**Sample ID**	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**		
1	TRIP01_220117	Jan 17, 2022		Soil	S22-Ja35819	X	X
Test Counts						1	1

ERM Sydney
Level 15, 309 Kent St
Sydney
NSW 2000

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: **Nicholas Grbich**

Report **858847-S**
Project name SOP
Project ID 628507
Received Date Jan 25, 2022

Client Sample ID			**TRIP01_220117**
Sample Matrix			**Soil**
Eurofins Sample No.			**S22-Ja35819**
Date Sampled			**Jan 17, 2022**
Test/Reference	LOR	Unit	
Total Recoverable Hydrocarbons			
TRH C6-C9	20	mg/kg	< 20
TRH C10-C14	20	mg/kg	< 20
TRH C15-C28	50	mg/kg	< 50
TRH C29-C36	50	mg/kg	< 50
TRH C10-C36 (Total)	50	mg/kg	< 50
Naphthalene[N02]	0.5	mg/kg	< 0.5
TRH C6-C10	20	mg/kg	< 20
TRH C6-C10 less BTEX (F1)[N04]	20	mg/kg	< 20
TRH >C10-C16	50	mg/kg	< 50
TRH >C10-C16 less Naphthalene (F2)[N01]	50	mg/kg	< 50
TRH >C16-C34	100	mg/kg	< 100
TRH >C34-C40	100	mg/kg	< 100
TRH >C10-C40 (total)*	100	mg/kg	< 100
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	%	102
Polycyclic Aromatic Hydrocarbons			
Benzo(a)pyrene TEQ (lower bound) *	0.5	mg/kg	< 0.5
Benzo(a)pyrene TEQ (medium bound) *	0.5	mg/kg	0.6
Benzo(a)pyrene TEQ (upper bound) *	0.5	mg/kg	1.2
Acenaphthene	0.5	mg/kg	< 0.5
Acenaphthylene	0.5	mg/kg	< 0.5
Anthracene	0.5	mg/kg	< 0.5
Benz(a)anthracene	0.5	mg/kg	< 0.5
Benzo(a)pyrene	0.5	mg/kg	< 0.5
Benzo(b&j)fluoranthene[N07]	0.5	mg/kg	< 0.5
Benzo(g.h.i)perylene	0.5	mg/kg	< 0.5
Benzo(k)fluoranthene	0.5	mg/kg	< 0.5
Chrysene	0.5	mg/kg	< 0.5
Dibenz(a.h)anthracene	0.5	mg/kg	< 0.5

Client Sample ID			TRIP01_220117
Sample Matrix			**Soil**
Eurofins Sample No.			**S22-Ja35819**
Date Sampled			**Jan 17, 2022**
Test/Reference	LOR	Unit	
Polycyclic Aromatic Hydrocarbons			
Fluoranthene	0.5	mg/kg	< 0.5
Fluorene	0.5	mg/kg	< 0.5
Indeno(1.2.3-cd)pyrene	0.5	mg/kg	< 0.5
Naphthalene	0.5	mg/kg	< 0.5
Phenanthrene	0.5	mg/kg	< 0.5
Pyrene	0.5	mg/kg	< 0.5
Total PAH*	0.5	mg/kg	< 0.5
2-Fluorobiphenyl (surr.)	1	%	106
p-Terphenyl-d14 (surr.)	1	%	117
Organochlorine Pesticides			
Chlordanes - Total	0.1	mg/kg	< 0.1
4.4'-DDD	0.05	mg/kg	< 0.05
4.4'-DDE	0.05	mg/kg	< 0.05
4.4'-DDT	0.05	mg/kg	< 0.05
a-HCH	0.05	mg/kg	< 0.05
Aldrin	0.05	mg/kg	< 0.05
b-HCH	0.05	mg/kg	< 0.05
d-HCH	0.05	mg/kg	< 0.05
Dieldrin	0.05	mg/kg	< 0.05
Endosulfan I	0.05	mg/kg	< 0.05
Endosulfan II	0.05	mg/kg	< 0.05
Endosulfan sulphate	0.05	mg/kg	< 0.05
Endrin	0.05	mg/kg	< 0.05
Endrin aldehyde	0.05	mg/kg	< 0.05
Endrin ketone	0.05	mg/kg	< 0.05
g-HCH (Lindane)	0.05	mg/kg	< 0.05
Heptachlor	0.05	mg/kg	< 0.05
Heptachlor epoxide	0.05	mg/kg	< 0.05
Hexachlorobenzene	0.05	mg/kg	< 0.05
Methoxychlor	0.05	mg/kg	< 0.05
Toxaphene	0.5	mg/kg	< 0.5
Aldrin and Dieldrin (Total)*	0.05	mg/kg	< 0.05
DDT + DDE + DDD (Total)*	0.05	mg/kg	< 0.05
Vic EPA IWRG 621 OCP (Total)*	0.1	mg/kg	< 0.1
Vic EPA IWRG 621 Other OCP (Total)*	0.1	mg/kg	< 0.1
Dibutylchlorendate (surr.)	1	%	85
Tetrachloro-m-xylene (surr.)	1	%	91
Organophosphorus Pesticides			
Azinphos-methyl	0.2	mg/kg	< 0.2
Bolstar	0.2	mg/kg	< 0.2
Chlorfenvinphos	0.2	mg/kg	< 0.2
Chlorpyrifos	0.2	mg/kg	< 0.2
Chlorpyrifos-methyl	0.2	mg/kg	< 0.2
Coumaphos	2	mg/kg	< 2
Demeton-S	0.2	mg/kg	< 0.2
Demeton-O	0.2	mg/kg	< 0.2
Diazinon	0.2	mg/kg	< 0.2
Dichlorvos	0.2	mg/kg	< 0.2
Dimethoate	0.2	mg/kg	< 0.2

Client Sample ID			TRIP01_220117
Sample Matrix			**Soil**
Eurofins Sample No.			**S22-Ja35819**
Date Sampled			**Jan 17, 2022**
Test/Reference	LOR	Unit	
Organophosphorus Pesticides			
Disulfoton	0.2	mg/kg	< 0.2
EPN	0.2	mg/kg	< 0.2
Ethion	0.2	mg/kg	< 0.2
Ethoprop	0.2	mg/kg	< 0.2
Ethyl parathion	0.2	mg/kg	< 0.2
Fenitrothion	0.2	mg/kg	< 0.2
Fensulfothion	0.2	mg/kg	< 0.2
Fenthion	0.2	mg/kg	< 0.2
Malathion	0.2	mg/kg	< 0.2
Merphos	0.2	mg/kg	< 0.2
Methyl parathion	0.2	mg/kg	< 0.2
Mevinphos	0.2	mg/kg	< 0.2
Monocrotophos	2	mg/kg	< 2
Naled	0.2	mg/kg	< 0.2
Omethoate	2	mg/kg	< 2
Phorate	0.2	mg/kg	< 0.2
Pirimiphos-methyl	0.2	mg/kg	< 0.2
Pyrazophos	0.2	mg/kg	< 0.2
Ronnel	0.2	mg/kg	< 0.2
Terbufos	0.2	mg/kg	< 0.2
Tetrachlorvinphos	0.2	mg/kg	< 0.2
Tokuthion	0.2	mg/kg	< 0.2
Trichloronate	0.2	mg/kg	< 0.2
Triphenylphosphate (surr.)	1	%	93
Polychlorinated Biphenyls			
Aroclor-1016	0.1	mg/kg	< 0.1
Aroclor-1221	0.1	mg/kg	< 0.1
Aroclor-1232	0.1	mg/kg	< 0.1
Aroclor-1242	0.1	mg/kg	< 0.1
Aroclor-1248	0.1	mg/kg	< 0.1
Aroclor-1254	0.1	mg/kg	< 0.1
Aroclor-1260	0.1	mg/kg	< 0.1
Total PCB*	0.1	mg/kg	< 0.1
Dibutylchlorendate (surr.)	1	%	85
Tetrachloro-m-xylene (surr.)	1	%	91
Heavy Metals			
Arsenic	2	mg/kg	9.8
Cadmium	0.4	mg/kg	< 0.4
Chromium	5	mg/kg	8.6
Copper	5	mg/kg	31
Lead	5	mg/kg	12
Mercury	0.1	mg/kg	< 0.1
Nickel	5	mg/kg	< 5
Zinc	5	mg/kg	41
% Moisture	1	%	9.5

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	Sydney	Jan 31, 2022	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
Total Recoverable Hydrocarbons - 2013 NEPM Fractions	Sydney	Jan 31, 2022	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
Total Recoverable Hydrocarbons - 2013 NEPM Fractions	Sydney	Jan 31, 2022	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
BTEX	Sydney	Jan 31, 2022	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
Polycyclic Aromatic Hydrocarbons	Sydney	Jan 31, 2022	14 Days
- Method: LTM-ORG-2130 PAH and Phenols in Soil and Water			
Organochlorine Pesticides	Sydney	Jan 31, 2022	14 Days
- Method: LTM-ORG-2220 OCP & PCB in Soil and Water			
Organophosphorus Pesticides	Sydney	Jan 31, 2022	14 Days
- Method: LTM-ORG-2200 Organophosphorus Pesticides by GC-MS			
Polychlorinated Biphenyls	Sydney	Jan 31, 2022	28 Days
- Method: LTM-ORG-2220 OCP & PCB in Soil and Water			
Metals M8	Sydney	Jan 31, 2022	28 Days
- Method: LTM-MET-3040 Metals in Waters, Soils & Sediments by ICP-MS			
% Moisture	Sydney	Jan 31, 2022	14 Days
- Method: LTM-GEN-7080 Moisture			

Quality Control Results

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Method Blank							
Total Recoverable Hydrocarbons							
TRH C6-C9	mg/kg	< 20			20	Pass	
TRH C10-C14	mg/kg	< 20			20	Pass	
TRH C15-C28	mg/kg	< 50			50	Pass	
TRH C29-C36	mg/kg	< 50			50	Pass	
Naphthalene	mg/kg	< 0.5			0.5	Pass	
TRH C6-C10	mg/kg	< 20			20	Pass	
TRH >C10-C16	mg/kg	< 50			50	Pass	
TRH >C16-C34	mg/kg	< 100			100	Pass	
TRH >C34-C40	mg/kg	< 100			100	Pass	
Method Blank							
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							
Polycyclic Aromatic Hydrocarbons							
Acenaphthene	mg/kg	< 0.5			0.5	Pass	
Acenaphthylene	mg/kg	< 0.5			0.5	Pass	
Anthracene	mg/kg	< 0.5			0.5	Pass	
Benz(a)anthracene	mg/kg	< 0.5			0.5	Pass	
Benzo(a)pyrene	mg/kg	< 0.5			0.5	Pass	
Benzo(b&j)fluoranthene	mg/kg	< 0.5			0.5	Pass	
Benzo(g.h.i)perylene	mg/kg	< 0.5			0.5	Pass	
Benzo(k)fluoranthene	mg/kg	< 0.5			0.5	Pass	
Chrysene	mg/kg	< 0.5			0.5	Pass	
Dibenz(a.h)anthracene	mg/kg	< 0.5			0.5	Pass	
Fluoranthene	mg/kg	< 0.5			0.5	Pass	
Fluorene	mg/kg	< 0.5			0.5	Pass	
Indeno(1.2.3-cd)pyrene	mg/kg	< 0.5			0.5	Pass	
Naphthalene	mg/kg	< 0.5			0.5	Pass	
Phenanthrene	mg/kg	< 0.5			0.5	Pass	
Pyrene	mg/kg	< 0.5			0.5	Pass	
Method Blank							
Organochlorine Pesticides							
Chlordanes - Total	mg/kg	< 0.1			0.1	Pass	
4.4'-DDD	mg/kg	< 0.05			0.05	Pass	
4.4'-DDE	mg/kg	< 0.05			0.05	Pass	
4.4'-DDT	mg/kg	< 0.05			0.05	Pass	
a-HCH	mg/kg	< 0.05			0.05	Pass	
Aldrin	mg/kg	< 0.05			0.05	Pass	
b-HCH	mg/kg	< 0.05			0.05	Pass	
d-HCH	mg/kg	< 0.05			0.05	Pass	
Dieldrin	mg/kg	< 0.05			0.05	Pass	
Endosulfan I	mg/kg	< 0.05			0.05	Pass	
Endosulfan II	mg/kg	< 0.05			0.05	Pass	
Endosulfan sulphate	mg/kg	< 0.05			0.05	Pass	
Endrin	mg/kg	< 0.05			0.05	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
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	
Aroclor-1260	mg/kg	< 0.1			0.1	Pass	
Total PCB*	mg/kg	< 0.1			0.1	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Method Blank							
Heavy Metals							
Arsenic	mg/kg	< 2			2	Pass	
Cadmium	mg/kg	< 0.4			0.4	Pass	
Chromium	mg/kg	< 5			5	Pass	
Copper	mg/kg	< 5			5	Pass	
Lead	mg/kg	< 5			5	Pass	
Mercury	mg/kg	< 0.1			0.1	Pass	
Nickel	mg/kg	< 5			5	Pass	
Zinc	mg/kg	< 5			5	Pass	
LCS - % Recovery							
Total Recoverable Hydrocarbons							
TRH C6-C9	%	77			70-130	Pass	
TRH C10-C14	%	104			70-130	Pass	
Naphthalene	%	76			70-130	Pass	
TRH C6-C10	%	75			70-130	Pass	
TRH >C10-C16	%	102			70-130	Pass	
LCS - % Recovery							
BTEX							
Benzene	%	80			70-130	Pass	
Toluene	%	77			70-130	Pass	
Ethylbenzene	%	77			70-130	Pass	
m&p-Xylenes	%	77			70-130	Pass	
o-Xylene	%	78			70-130	Pass	
Xylenes - Total*	%	77			70-130	Pass	
LCS - % Recovery							
Polycyclic Aromatic Hydrocarbons							
Acenaphthene	%	98			70-130	Pass	
Acenaphthylene	%	101			70-130	Pass	
Anthracene	%	100			70-130	Pass	
Benz(a)anthracene	%	100			70-130	Pass	
Benzo(a)pyrene	%	99			70-130	Pass	
Benzo(b&j)fluoranthene	%	91			70-130	Pass	
Benzo(g.h.i)perylene	%	116			70-130	Pass	
Benzo(k)fluoranthene	%	100			70-130	Pass	
Chrysene	%	99			70-130	Pass	
Dibenz(a.h)anthracene	%	103			70-130	Pass	
Fluoranthene	%	95			70-130	Pass	
Fluorene	%	98			70-130	Pass	
Indeno(1.2.3-cd)pyrene	%	109			70-130	Pass	
Naphthalene	%	102			70-130	Pass	
Phenanthrene	%	101			70-130	Pass	
Pyrene	%	92			70-130	Pass	
LCS - % Recovery							
Organochlorine Pesticides							
Chlordanes - Total	%	87			70-130	Pass	
4.4'-DDD	%	88			70-130	Pass	
4.4'-DDE	%	89			70-130	Pass	
4.4'-DDT	%	94			70-130	Pass	
a-HCH	%	76			70-130	Pass	
Aldrin	%	78			70-130	Pass	
b-HCH	%	84			70-130	Pass	
d-HCH	%	96			70-130	Pass	
Dieldrin	%	80			70-130	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Endosulfan I	%	95			70-130	Pass	
Endosulfan II	%	83			70-130	Pass	
Endosulfan sulphate	%	91			70-130	Pass	
Endrin	%	89			70-130	Pass	
Endrin aldehyde	%	81			70-130	Pass	
Endrin ketone	%	101			70-130	Pass	
g-HCH (Lindane)	%	89			70-130	Pass	
Heptachlor	%	79			70-130	Pass	
Heptachlor epoxide	%	76			70-130	Pass	
Hexachlorobenzene	%	83			70-130	Pass	
Methoxychlor	%	85			70-130	Pass	
LCS - % Recovery							
Organophosphorus Pesticides							
Diazinon	%	93			70-130	Pass	
Dimethoate	%	99			70-130	Pass	
Ethion	%	104			70-130	Pass	
Fenitrothion	%	88			70-130	Pass	
Methyl parathion	%	103			70-130	Pass	
Mevinphos	%	104			70-130	Pass	
LCS - % Recovery							
Polychlorinated Biphenyls							
Aroclor-1016	%	83			70-130	Pass	
Aroclor-1260	%	92			70-130	Pass	
LCS - % Recovery							
Heavy Metals							
Arsenic	%	89			80-120	Pass	
Cadmium	%	89			80-120	Pass	
Chromium	%	89			80-120	Pass	
Copper	%	88			80-120	Pass	
Lead	%	89			80-120	Pass	
Mercury	%	89			80-120	Pass	
Nickel	%	90			80-120	Pass	
Zinc	%	87			80-120	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
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.
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:

John Nguyen	Analytical Services Manager
Andrew Sullivan	Senior Analyst-Organic (NSW)
John Nguyen	Senior Analyst-Metal (NSW)
Roopesh Rangarajan	Senior Analyst-Volatile (NSW)



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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eurofins | Environment Testing

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Company Name: ERM Sydney
Address: Level 15, 309 Kent St
Sydney
NSW 2000

Project Name: SOP
Project ID: 628507

Order No.:
Report #: 858994
Phone: 02 8584 8888
Fax: 02 8584 8800

Received: Jan 27, 2022 5:05 PM
Due: Feb 3, 2022
Priority: 5 Day
Contact Name: Nicholas Grbich

Eurofins Analytical Services Manager : John Nguyen

Sample Detail						Moisture Set	Eurofins Suite SVV: SVOC/VOC	Per- and Polyfluoroalkyl Substances (PFASs) - Short	Suite B10B:TRH/BTEXN/PAH/OCP/OPP/PCB/M8
Melbourne Laboratory - NATA # 1261 Site # 1254									
Sydney Laboratory - NATA # 1261 Site # 18217						X	X	X	X
Brisbane Laboratory - NATA # 1261 Site # 20794									
Mayfield Laboratory - NATA # 1261 Site # 25079									
Perth Laboratory - NATA # 2377 Site # 2370									
External Laboratory									
No	**Sample ID**	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**				
1	TRIP02_220119	Jan 19, 2022		Soil	S22-Ja37011	X	X		X
2	TRIP04_220119	Jan 19, 2022		Soil	S22-Ja37012	X		X	X
3	TRIP05_220120	Jan 20, 2022		Soil	S22-Ja37013	X	X	X	X
4	TRIP06_220121	Jan 21, 2022		Soil	S22-Ja37014	X		X	X
Test Counts						4	2	3	4

ERM Sydney
Level 15, 309 Kent St
Sydney
NSW 2000

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: **Nicholas Grbich**

Report **858994-S**
Project name SOP
Project ID 628507
Received Date Jan 27, 2022

Client Sample ID			**TRIP02_220119**	**TRIP04_220119**	**TRIP05_220120**	**TRIP06_220121**
Sample Matrix			**Soil**	**Soil**	**Soil**	**Soil**
Eurofins Sample No.			**S22-Ja37011**	**S22-Ja37012**	**S22-Ja37013**	**S22-Ja37014**
Date Sampled			**Jan 19, 2022**	**Jan 19, 2022**	**Jan 20, 2022**	**Jan 21, 2022**
Test/Reference	LOR	Unit				
Total Recoverable Hydrocarbons						
TRH C6-C9	20	mg/kg	< 20	< 20	< 20	< 20
TRH C10-C14	20	mg/kg	33	25	< 20	< 20
TRH C15-C28	50	mg/kg	62	52	< 50	< 50
TRH C29-C36	50	mg/kg	< 50	< 50	< 50	< 50
TRH C10-C36 (Total)	50	mg/kg	95	77	< 50	< 50
Naphthalene[N02]	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
TRH C6-C10	20	mg/kg	< 20	< 20	< 20	< 20
TRH C6-C10 less BTEX (F1)[N04]	20	mg/kg	< 20	< 20	< 20	< 20
TRH >C10-C16	50	mg/kg	< 50	< 50	< 50	< 50
TRH >C10-C16 less Naphthalene (F2)[N01]	50	mg/kg	< 50	< 50	< 50	< 50
TRH >C16-C34	100	mg/kg	< 100	< 100	< 100	< 100
TRH >C34-C40	100	mg/kg	< 100	< 100	< 100	< 100
TRH >C10-C40 (total)*	100	mg/kg	< 100	< 100	< 100	< 100
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	%	99	90	97	77
Volatile Organics						
1.1-Dichloroethane	0.5	mg/kg	< 0.5	-	< 0.5	-
1.1-Dichloroethene	0.5	mg/kg	< 0.5	-	< 0.5	-
1.1.1-Trichloroethane	0.5	mg/kg	< 0.5	-	< 0.5	-
1.1.1.2-Tetrachloroethane	0.5	mg/kg	< 0.5	-	< 0.5	-
1.1.2-Trichloroethane	0.5	mg/kg	< 0.5	-	< 0.5	-
1.1.2.2-Tetrachloroethane	0.5	mg/kg	< 0.5	-	< 0.5	-
1.2-Dibromoethane	0.5	mg/kg	< 0.5	-	< 0.5	-
1.2-Dichlorobenzene	0.5	mg/kg	< 0.5	-	< 0.5	-
1.2-Dichloroethane	0.5	mg/kg	< 0.5	-	< 0.5	-
1.2-Dichloropropane	0.5	mg/kg	< 0.5	-	< 0.5	-
1.2.3-Trichloropropane	0.5	mg/kg	< 0.5	-	< 0.5	-
1.2.4-Trimethylbenzene	0.5	mg/kg	< 0.5	-	< 0.5	-
1.3-Dichlorobenzene	0.5	mg/kg	< 0.5	-	< 0.5	-

Client Sample ID			TRIP02_220119	TRIP04_220119	TRIP05_220120	TRIP06_220121
Sample Matrix			**Soil**	**Soil**	**Soil**	**Soil**
Eurofins Sample No.			**S22-Ja37011**	**S22-Ja37012**	**S22-Ja37013**	**S22-Ja37014**
Date Sampled			**Jan 19, 2022**	**Jan 19, 2022**	**Jan 20, 2022**	**Jan 21, 2022**
Test/Reference	LOR	Unit				
Volatile Organics						
1.3-Dichloropropane	0.5	mg/kg	< 0.5	-	< 0.5	-
1.3.5-Trimethylbenzene	0.5	mg/kg	< 0.5	-	< 0.5	-
1.4-Dichlorobenzene	0.5	mg/kg	< 0.5	-	< 0.5	-
2-Butanone (MEK)	0.5	mg/kg	< 0.5	-	< 0.5	-
2-Propanone (Acetone)	0.5	mg/kg	< 0.5	-	< 0.5	-
4-Chlorotoluene	0.5	mg/kg	< 0.5	-	< 0.5	-
4-Methyl-2-pentanone (MIBK)	0.5	mg/kg	< 0.5	-	< 0.5	-
Allyl chloride	0.5	mg/kg	< 0.5	-	< 0.5	-
Benzene	0.1	mg/kg	< 0.1	-	< 0.1	-
Bromobenzene	0.5	mg/kg	< 0.5	-	< 0.5	-
Bromochloromethane	0.5	mg/kg	< 0.5	-	< 0.5	-
Bromodichloromethane	0.5	mg/kg	< 0.5	-	< 0.5	-
Bromoform	0.5	mg/kg	< 0.5	-	< 0.5	-
Bromomethane	0.5	mg/kg	< 0.5	-	< 0.5	-
Carbon disulfide	0.5	mg/kg	< 0.5	-	< 0.5	-
Carbon Tetrachloride	0.5	mg/kg	< 0.5	-	< 0.5	-
Chlorobenzene	0.5	mg/kg	< 0.5	-	< 0.5	-
Chloroethane	0.5	mg/kg	< 0.5	-	< 0.5	-
Chloroform	0.5	mg/kg	< 0.5	-	< 0.5	-
Chloromethane	0.5	mg/kg	< 0.5	-	< 0.5	-
cis-1.2-Dichloroethene	0.5	mg/kg	< 0.5	-	< 0.5	-
cis-1.3-Dichloropropene	0.5	mg/kg	< 0.5	-	< 0.5	-
Dibromochloromethane	0.5	mg/kg	< 0.5	-	< 0.5	-
Dibromomethane	0.5	mg/kg	< 0.5	-	< 0.5	-
Dichlorodifluoromethane	0.5	mg/kg	< 0.5	-	< 0.5	-
Ethylbenzene	0.1	mg/kg	< 0.1	-	< 0.1	-
Iodomethane	0.5	mg/kg	< 0.5	-	< 0.5	-
Isopropyl benzene (Cumene)	0.5	mg/kg	< 0.5	-	< 0.5	-
m&p-Xylenes	0.2	mg/kg	< 0.2	-	< 0.2	-
Methylene Chloride	0.5	mg/kg	< 0.5	-	< 0.5	-
o-Xylene	0.1	mg/kg	< 0.1	-	< 0.1	-
Styrene	0.5	mg/kg	< 0.5	-	< 0.5	-
Tetrachloroethene	0.5	mg/kg	< 0.5	-	< 0.5	-
Toluene	0.1	mg/kg	< 0.1	-	< 0.1	-
trans-1.2-Dichloroethene	0.5	mg/kg	< 0.5	-	< 0.5	-
trans-1.3-Dichloropropene	0.5	mg/kg	< 0.5	-	< 0.5	-
Trichloroethene	0.5	mg/kg	< 0.5	-	< 0.5	-
Trichlorofluoromethane	0.5	mg/kg	< 0.5	-	< 0.5	-
Vinyl chloride	0.5	mg/kg	< 0.5	-	< 0.5	-
Xylenes - Total*	0.3	mg/kg	< 0.3	-	< 0.3	-
Total MAH*	0.5	mg/kg	< 0.5	-	< 0.5	-
Vic EPA IWRG 621 CHC (Total)*	0.5	mg/kg	< 0.5	-	< 0.5	-
Vic EPA IWRG 621 Other CHC (Total)*	0.5	mg/kg	< 0.5	-	< 0.5	-
4-Bromofluorobenzene (surr.)	1	%	99	-	97	-
Toluene-d8 (surr.)	1	%	95	-	99	-

Client Sample ID			TRIP02_220119	TRIP04_220119	TRIP05_220120	TRIP06_220121
Sample Matrix			**Soil**	**Soil**	**Soil**	**Soil**
Eurofins Sample No.			**S22-Ja37011**	**S22-Ja37012**	**S22-Ja37013**	**S22-Ja37014**
Date Sampled			**Jan 19, 2022**	**Jan 19, 2022**	**Jan 20, 2022**	**Jan 21, 2022**
Test/Reference	LOR	Unit				
Polycyclic Aromatic Hydrocarbons						
Benzo(a)pyrene TEQ (lower bound) *	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene TEQ (medium bound) *	0.5	mg/kg	0.6	0.6	0.6	0.6
Benzo(a)pyrene TEQ (upper bound) *	0.5	mg/kg	1.2	1.2	1.2	1.2
Acenaphthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Acenaphthylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benz(a)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(b&j)fluoranthene[N07]	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(g.h.i)perylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(k)fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chrysene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Dibenz(a.h)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Fluorene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Indeno(1.2.3-cd)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Naphthalene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Phenanthrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Total PAH*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2-Fluorobiphenyl (surr.)	1	%	128	107	101	132
p-Terphenyl-d14 (surr.)	1	%	111	112	101	135
Organochlorine Pesticides						
Chlordanes - Total	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
4.4'-DDD	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
4.4'-DDE	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
4.4'-DDT	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
a-HCH	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Aldrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
b-HCH	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
d-HCH	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Dieldrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endosulfan I	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endosulfan II	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endosulfan sulphate	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endrin aldehyde	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endrin ketone	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
g-HCH (Lindane)	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Heptachlor	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Heptachlor epoxide	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Hexachlorobenzene	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Methoxychlor	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Toxaphene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Aldrin and Dieldrin (Total)*	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
DDT + DDE + DDD (Total)*	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Vic EPA IWRG 621 OCP (Total)*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Vic EPA IWRG 621 Other OCP (Total)*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Dibutylchlorendate (surr.)	1	%	98	85	91	137
Tetrachloro-m-xylene (surr.)	1	%	121	121	102	130

Client Sample ID			TRIP02_220119	TRIP04_220119	TRIP05_220120	TRIP06_220121
Sample Matrix			**Soil**	**Soil**	**Soil**	**Soil**
Eurofins Sample No.			**S22-Ja37011**	**S22-Ja37012**	**S22-Ja37013**	**S22-Ja37014**
Date Sampled			**Jan 19, 2022**	**Jan 19, 2022**	**Jan 20, 2022**	**Jan 21, 2022**
Test/Reference	LOR	Unit				
Organophosphorus Pesticides						
Azinphos-methyl	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Bolstar	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Chlorfenvinphos	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Chlorpyrifos	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Chlorpyrifos-methyl	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Coumaphos	2	mg/kg	< 2	< 2	< 2	< 2
Demeton-S	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Demeton-O	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Diazinon	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Dichlorvos	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Dimethoate	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Disulfoton	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
EPN	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Ethion	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Ethoprop	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Ethyl parathion	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Fenitrothion	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Fensulfothion	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Fenthion	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Malathion	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Merphos	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Methyl parathion	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Mevinphos	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Monocrotophos	2	mg/kg	< 2	< 2	< 2	< 2
Naled	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Omethoate	2	mg/kg	< 2	< 2	< 2	< 2
Phorate	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Pirimiphos-methyl	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Pyrazophos	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Ronnel	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Terbufos	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Tetrachlorvinphos	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Tokuthion	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Trichloronate	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Triphenylphosphate (surr.)	1	%	119	86	119	131
Polychlorinated Biphenyls						
Aroclor-1016	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Aroclor-1221	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Aroclor-1232	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Aroclor-1242	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Aroclor-1248	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Aroclor-1254	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Aroclor-1260	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Total PCB*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Dibutylchlorendate (surr.)	1	%	98	85	91	137
Tetrachloro-m-xylene (surr.)	1	%	121	121	102	130

Client Sample ID			TRIP02_220119	TRIP04_220119	TRIP05_220120	TRIP06_220121
Sample Matrix			**Soil**	**Soil**	**Soil**	**Soil**
Eurofins Sample No.			**S22-Ja37011**	**S22-Ja37012**	**S22-Ja37013**	**S22-Ja37014**
Date Sampled			**Jan 19, 2022**	**Jan 19, 2022**	**Jan 20, 2022**	**Jan 21, 2022**
Test/Reference	LOR	Unit				
Semivolatile Organics						
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	-
2-Methyl-4.6-dinitrophenol	5	mg/kg	< 5	-	< 5	-
1-Chloronaphthalene	0.5	mg/kg	< 0.5	-	< 0.5	-
1-Naphthylamine	0.5	mg/kg	< 1	-	< 1	-
1.2-Dichlorobenzene	0.5	mg/kg	< 0.5	-	< 0.5	-
1.2.3-Trichlorobenzene	0.5	mg/kg	< 0.5	-	< 0.5	-
1.2.3.4-Tetrachlorobenzene	0.5	mg/kg	< 0.5	-	< 0.5	-
1.2.3.5-Tetrachlorobenzene	0.5	mg/kg	< 0.5	-	< 0.5	-
1.2.4-Trichlorobenzene	0.5	mg/kg	< 0.5	-	< 0.5	-
1.2.4.5-Tetrachlorobenzene	0.5	mg/kg	< 0.5	-	< 0.5	-
1.3-Dichlorobenzene	0.5	mg/kg	< 0.5	-	< 0.5	-
1.3.5-Trichlorobenzene	0.5	mg/kg	< 0.5	-	< 0.5	-
1.4-Dichlorobenzene	0.5	mg/kg	< 0.5	-	< 0.5	-
2-Chloronaphthalene	0.5	mg/kg	< 0.5	-	< 0.5	-
2-Chlorophenol	0.5	mg/kg	< 0.5	-	< 0.5	-
2-Fluorobiphenyl (surr.)	1	%	128	-	101	-
2-Methylnaphthalene	0.5	mg/kg	1.2	-	< 0.5	-
2-Methylphenol (o-Cresol)	0.2	mg/kg	< 0.2	-	< 0.2	-
2-Naphthylamine	0.5	mg/kg	< 0.5	-	< 0.5	-
2-Nitroaniline	1	mg/kg	< 1	-	< 1	-
2-Nitrophenol	1	mg/kg	< 1	-	< 1	-
2-Picoline	0.5	mg/kg	< 0.5	-	< 0.5	-
2.3.4.6-Tetrachlorophenol	0.5	mg/kg	< 0.5	-	< 0.5	-
2.4-Dichlorophenol	0.5	mg/kg	< 0.5	-	< 0.5	-
2.4-Dimethylphenol	0.5	mg/kg	< 0.5	-	< 0.5	-
2.4-Dinitrophenol	5	mg/kg	< 5	-	< 5	-
2.4-Dinitrotoluene	0.5	mg/kg	< 0.5	-	< 0.5	-
2.4.5-Trichlorophenol	1	mg/kg	< 1	-	< 1	-
2.4.6-Tribromophenol (surr.)	1	%	69	-	78	-
2.4.6-Trichlorophenol	1	mg/kg	< 1	-	< 1	-
2.6-Dichlorophenol	0.5	mg/kg	< 0.5	-	< 0.5	-
2.6-Dinitrotoluene	1	mg/kg	< 1	-	< 1	-
3&4-Methylphenol (m&p-Cresol)	0.4	mg/kg	< 0.4	-	< 0.4	-
3-Methylcholanthrene	0.5	mg/kg	< 0.5	-	< 0.5	-
3.3'-Dichlorobenzidine	0.5	mg/kg	< 0.5	-	< 0.5	-
4-Aminobiphenyl	0.5	mg/kg	< 0.5	-	< 0.5	-
4-Bromophenyl phenyl ether	0.5	mg/kg	< 0.5	-	< 0.5	-
4-Chloro-3-methylphenol	1	mg/kg	< 1	-	< 1	-
4-Chlorophenyl phenyl ether	0.5	mg/kg	< 0.5	-	< 0.5	-
4-Nitrophenol	5	mg/kg	< 5	-	< 5	-
4.4'-DDD	0.5	mg/kg	< 0.5	-	< 0.5	-
4.4'-DDE	0.5	mg/kg	< 0.5	-	< 0.5	-
4.4'-DDT	1	mg/kg	< 1	-	< 1	-
7.12-Dimethylbenz(a)anthracene	0.5	mg/kg	< 1	-	< 1	-
a-HCH	0.5	mg/kg	< 0.5	-	< 0.5	-
Acenaphthene	0.5	mg/kg	< 0.5	-	< 0.5	-
Acenaphthylene	0.5	mg/kg	< 0.5	-	< 0.5	-

Client Sample ID			TRIP02_220119	TRIP04_220119	TRIP05_220120	TRIP06_220121
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			S22-Ja37011	S22-Ja37012	S22-Ja37013	S22-Ja37014
Date Sampled			Jan 19, 2022	Jan 19, 2022	Jan 20, 2022	Jan 21, 2022
Test/Reference	LOR	Unit				
Semivolatile Organics						
Acetophenone	0.5	mg/kg	< 0.5	-	< 0.5	-
Aldrin	0.5	mg/kg	< 0.5	-	< 0.5	-
Aniline	0.5	mg/kg	< 0.5	-	< 0.5	-
Anthracene	0.5	mg/kg	< 0.5	-	< 0.5	-
b-HCH	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	-
Benzyl chloride	0.5	mg/kg	< 0.5	-	< 0.5	-
Bis(2-chloroethoxy)methane	0.5	mg/kg	< 0.5	-	< 0.5	-
Bis(2-chloroisopropyl)ether	0.5	mg/kg	< 0.5	-	< 0.5	-
Bis(2-ethylhexyl)phthalate	5	mg/kg	< 5	-	< 5	-
Butyl benzyl phthalate	0.5	mg/kg	< 0.5	-	< 0.5	-
Chrysene	0.5	mg/kg	< 0.5	-	< 0.5	-
d-HCH	0.5	mg/kg	< 0.5	-	< 0.5	-
Di-n-butyl phthalate	0.5	mg/kg	< 0.5	-	< 0.5	-
Di-n-octyl phthalate	0.5	mg/kg	< 0.5	-	< 0.5	-
Dibenz(a.h)anthracene	0.5	mg/kg	< 0.5	-	< 0.5	-
Dibenz(a.j)acridine	0.5	mg/kg	< 0.5	-	< 0.5	-
Dibenzofuran	0.5	mg/kg	< 0.5	-	< 0.5	-
Dieldrin	0.5	mg/kg	< 0.5	-	< 0.5	-
Diethyl phthalate	0.5	mg/kg	< 0.5	-	< 0.5	-
Dimethyl phthalate	0.5	mg/kg	< 0.5	-	< 0.5	-
Dimethylaminoazobenzene	0.5	mg/kg	< 0.5	-	< 0.5	-
Diphenylamine	0.5	mg/kg	< 0.5	-	< 0.5	-
Endosulfan I	0.5	mg/kg	< 0.5	-	< 0.5	-
Endosulfan II	0.5	mg/kg	< 0.5	-	< 0.5	-
Endosulfan sulphate	0.5	mg/kg	< 0.5	-	< 0.5	-
Endrin	0.5	mg/kg	< 0.5	-	< 0.5	-
Endrin aldehyde	0.5	mg/kg	< 0.5	-	< 0.5	-
Endrin ketone	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	-
g-HCH (Lindane)	0.5	mg/kg	< 0.5	-	< 0.5	-
Heptachlor	0.5	mg/kg	< 0.5	-	< 0.5	-
Heptachlor epoxide	0.5	mg/kg	< 0.5	-	< 0.5	-
Hexachlorobenzene	0.5	mg/kg	< 0.5	-	< 0.5	-
Hexachlorobutadiene	0.5	mg/kg	< 0.5	-	< 0.5	-
Hexachlorocyclopentadiene	1	mg/kg	< 1	-	< 1	-
Hexachloroethane	0.5	mg/kg	< 0.5	-	< 0.5	-
Indeno(1.2.3-cd)pyrene	0.5	mg/kg	< 0.5	-	< 0.5	-
Methoxychlor	0.5	mg/kg	< 0.5	-	< 0.5	-
N-Nitrosodibutylamine	0.5	mg/kg	< 0.5	-	< 0.5	-
N-Nitrosodipropylamine	0.5	mg/kg	< 0.5	-	< 0.5	-
N-Nitrosopiperidine	0.5	mg/kg	< 0.5	-	< 0.5	-
Naphthalene	0.5	mg/kg	< 0.5	-	< 0.5	-
Nitrobenzene	0.5	mg/kg	< 0.5	-	< 0.5	-

Client Sample ID			TRIP02_220119	TRIP04_220119	TRIP05_220120	TRIP06_220121
Sample Matrix			**Soil**	**Soil**	**Soil**	**Soil**
Eurofins Sample No.			**S22-Ja37011**	**S22-Ja37012**	**S22-Ja37013**	**S22-Ja37014**
Date Sampled			**Jan 19, 2022**	**Jan 19, 2022**	**Jan 20, 2022**	**Jan 21, 2022**
Test/Reference	LOR	Unit				
Semivolatile Organics						
Nitrobenzene-d5 (surr.)	1	%	120	-	109	-
Pentachlorobenzene	0.5	mg/kg	< 0.5	-	< 0.5	-
Pentachloronitrobenzene	0.5	mg/kg	< 0.5	-	< 0.5	-
Pentachlorophenol	1	mg/kg	< 1	-	< 1	-
Phenanthrene	0.5	mg/kg	< 0.5	-	< 0.5	-
Phenol	0.5	mg/kg	< 0.5	-	< 0.5	-
Phenol-d6 (surr.)	1	%	134	-	117	-
Pronamide	0.5	mg/kg	< 0.5	-	< 0.5	-
Pyrene	0.5	mg/kg	< 0.5	-	< 0.5	-
Trifluralin	0.5	mg/kg	< 0.5	-	< 0.5	-
Heavy Metals						
Arsenic	2	mg/kg	7.0	9.1	11	7.9
Cadmium	0.4	mg/kg	0.4	< 0.4	< 0.4	< 0.4
Chromium	5	mg/kg	8.2	8.6	8.8	7.9
Copper	5	mg/kg	33	30	52	51
Lead	5	mg/kg	15	15	20	18
Mercury	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Nickel	5	mg/kg	23	23	38	31
Zinc	5	mg/kg	140	130	160	300
% Moisture	1	%	5.9	5.1	7.7	6.6
Per- and Polyfluoroalkyl Substances (PFASs) - Short						
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)[N11]	10	ug/kg	-	< 10	< 10	< 10
13C2-6:2 FTSA (surr.)	1	%	-	78	89	86
Perfluorohexanesulfonic acid (PFHxS)[N11]	5	ug/kg	-	< 5	< 5	< 5
Perfluorooctanesulfonic acid (PFOS)[N11]	5	ug/kg	-	< 5	< 5	< 5
18O2-PFHxS (surr.)	1	%	-	87	96	96
13C8-PFOS (surr.)	1	%	-	82	96	92
Perfluorooctanoic acid (PFOA)[N11]	5	ug/kg	-	< 5	< 5	< 5
13C8-PFOA (surr.)	1	%	-	89	98	94
Sum (PFHxS + PFOS)*	5	ug/kg	-	< 5	< 5	< 5
Sum of US EPA PFAS (PFOS + PFOA)*	5	ug/kg	-	< 5	< 5	< 5
Sum of enHealth PFAS (PFHxS + PFOS + PFOA)*	5	ug/kg	-	< 5	< 5	< 5

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	Sydney	Feb 01, 2022	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
Total Recoverable Hydrocarbons - 2013 NEPM Fractions	Sydney	Feb 01, 2022	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
Total Recoverable Hydrocarbons - 2013 NEPM Fractions	Sydney	Feb 01, 2022	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
BTEX	Sydney	Feb 01, 2022	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
Polycyclic Aromatic Hydrocarbons	Sydney	Feb 01, 2022	14 Days
- Method: LTM-ORG-2130 PAH and Phenols in Soil and Water			
Organochlorine Pesticides	Sydney	Feb 01, 2022	14 Days
- Method: LTM-ORG-2220 OCP & PCB in Soil and Water			
Organophosphorus Pesticides	Sydney	Feb 01, 2022	14 Days
- Method: LTM-ORG-2200 Organophosphorus Pesticides by GC-MS			
Polychlorinated Biphenyls	Sydney	Feb 01, 2022	28 Days
- Method: LTM-ORG-2220 OCP & PCB in Soil and Water			
Metals M8	Sydney	Feb 01, 2022	28 Days
- Method: LTM-MET-3040 Metals in Waters, Soils & Sediments by ICP-MS			
Volatile Organics	Sydney	Feb 01, 2022	7 Days
- Method: LTM-ORG-2150 VOCs in Soils Liquid and other Aqueous Matrices			
Semivolatile Organics	Sydney	Feb 01, 2022	14 Day
- Method: LTM-ORG-2190 SVOC in Water & Soil by GC-MS			
% Moisture	Sydney	Jan 31, 2022	14 Days
- Method: LTM-GEN-7080 Moisture			
Per- and Polyfluoroalkyl Substances (PFASs) - Short	Sydney	Feb 01, 2022	28 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			

Quality Control Results

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

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

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
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	
Aroclor-1260	mg/kg	< 0.1			0.1	Pass	
Total PCB*	mg/kg	< 0.1			0.1	Pass	
Method Blank							
Semivolatile Organics							
2-Methyl-4.6-dinitrophenol	mg/kg	< 5			5	Pass	
1-Chloronaphthalene	mg/kg	< 0.5			0.5	Pass	
1-Naphthylamine	mg/kg	< 0.5			0.5	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
1.2-Dichlorobenzene	mg/kg	< 0.5			0.5	Pass	
1.2.3-Trichlorobenzene	mg/kg	< 0.5			0.5	Pass	
1.2.3.4-Tetrachlorobenzene	mg/kg	< 0.5			0.5	Pass	
1.2.3.5-Tetrachlorobenzene	mg/kg	< 0.5			0.5	Pass	
1.2.4-Trichlorobenzene	mg/kg	< 0.5			0.5	Pass	
1.2.4.5-Tetrachlorobenzene	mg/kg	< 0.5			0.5	Pass	
1.3-Dichlorobenzene	mg/kg	< 0.5			0.5	Pass	
1.3.5-Trichlorobenzene	mg/kg	< 0.5			0.5	Pass	
1.4-Dichlorobenzene	mg/kg	< 0.5			0.5	Pass	
2-Chloronaphthalene	mg/kg	< 0.5			0.5	Pass	
2-Chlorophenol	mg/kg	< 0.5			0.5	Pass	
2-Methylnaphthalene	mg/kg	< 0.5			0.5	Pass	
2-Methylphenol (o-Cresol)	mg/kg	< 0.2			0.2	Pass	
2-Naphthylamine	mg/kg	< 0.5			0.5	Pass	
2-Nitroaniline	mg/kg	< 1			1	Pass	
2-Nitrophenol	mg/kg	< 1			1	Pass	
2-Picoline	mg/kg	< 0.5			0.5	Pass	
2.3.4.6-Tetrachlorophenol	mg/kg	< 0.5			0.5	Pass	
2.4-Dichlorophenol	mg/kg	< 0.5			0.5	Pass	
2.4-Dimethylphenol	mg/kg	< 0.5			0.5	Pass	
2.4-Dinitrophenol	mg/kg	< 5			5	Pass	
2.4-Dinitrotoluene	mg/kg	< 0.5			0.5	Pass	
2.4.5-Trichlorophenol	mg/kg	< 1			1	Pass	
2.4.6-Trichlorophenol	mg/kg	< 1			1	Pass	
2.6-Dichlorophenol	mg/kg	< 0.5			0.5	Pass	
2.6-Dinitrotoluene	mg/kg	< 1			1	Pass	
3&4-Methylphenol (m&p-Cresol)	mg/kg	< 0.4			0.4	Pass	
3-Methylcholanthrene	mg/kg	< 0.5			0.5	Pass	
3.3'-Dichlorobenzidine	mg/kg	< 0.5			0.5	Pass	
4-Aminobiphenyl	mg/kg	< 0.5			0.5	Pass	
4-Bromophenyl phenyl ether	mg/kg	< 0.5			0.5	Pass	
4-Chloro-3-methylphenol	mg/kg	< 1			1	Pass	
4-Chlorophenyl phenyl ether	mg/kg	< 0.5			0.5	Pass	
4-Nitrophenol	mg/kg	< 5			5	Pass	
4.4'-DDD	mg/kg	< 0.5			0.5	Pass	
4.4'-DDE	mg/kg	< 0.5			0.5	Pass	
4.4'-DDT	mg/kg	< 1			1	Pass	
7.12-Dimethylbenz(a)anthracene	mg/kg	< 0.5			0.5	Pass	
a-HCH	mg/kg	< 0.5			0.5	Pass	
Acetophenone	mg/kg	< 0.5			0.5	Pass	
Aldrin	mg/kg	< 0.5			0.5	Pass	
Aniline	mg/kg	< 0.5			0.5	Pass	
b-HCH	mg/kg	< 0.5			0.5	Pass	
Benzyl chloride	mg/kg	< 0.5			0.5	Pass	
Bis(2-chloroethoxy)methane	mg/kg	< 0.5			0.5	Pass	
Bis(2-chloroisopropyl)ether	mg/kg	< 0.5			0.5	Pass	
Bis(2-ethylhexyl)phthalate	mg/kg	< 5			5	Pass	
Butyl benzyl phthalate	mg/kg	< 0.5			0.5	Pass	
d-HCH	mg/kg	< 0.5			0.5	Pass	
Di-n-butyl phthalate	mg/kg	< 0.5			0.5	Pass	
Di-n-octyl phthalate	mg/kg	< 0.5			0.5	Pass	
Dibenz(a.j)acridine	mg/kg	< 0.5			0.5	Pass	
Dibenzofuran	mg/kg	< 0.5			0.5	Pass	
Dieldrin	mg/kg	< 0.5			0.5	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Diethyl phthalate	mg/kg	< 0.5			0.5	Pass	
Dimethyl phthalate	mg/kg	< 0.5			0.5	Pass	
Dimethylaminoazobenzene	mg/kg	< 0.5			0.5	Pass	
Diphenylamine	mg/kg	< 0.5			0.5	Pass	
Endosulfan I	mg/kg	< 0.5			0.5	Pass	
Endosulfan II	mg/kg	< 0.5			0.5	Pass	
Endosulfan sulphate	mg/kg	< 0.5			0.5	Pass	
Endrin	mg/kg	< 0.5			0.5	Pass	
Endrin aldehyde	mg/kg	< 0.5			0.5	Pass	
Endrin ketone	mg/kg	< 0.5			0.5	Pass	
g-HCH (Lindane)	mg/kg	< 0.5			0.5	Pass	
Heptachlor	mg/kg	< 0.5			0.5	Pass	
Heptachlor epoxide	mg/kg	< 0.5			0.5	Pass	
Hexachlorobenzene	mg/kg	< 0.5			0.5	Pass	
Hexachlorobutadiene	mg/kg	< 0.5			0.5	Pass	
Hexachlorocyclopentadiene	mg/kg	< 1			1	Pass	
Hexachloroethane	mg/kg	< 0.5			0.5	Pass	
Methoxychlor	mg/kg	< 0.5			0.5	Pass	
N-Nitrosodibutylamine	mg/kg	< 0.5			0.5	Pass	
N-Nitrosodipropylamine	mg/kg	< 0.5			0.5	Pass	
N-Nitrosopiperidine	mg/kg	< 0.5			0.5	Pass	
Nitrobenzene	mg/kg	< 0.5			0.5	Pass	
Pentachlorobenzene	mg/kg	< 0.5			0.5	Pass	
Pentachloronitrobenzene	mg/kg	< 0.5			0.5	Pass	
Pentachlorophenol	mg/kg	< 1			1	Pass	
Phenol	mg/kg	< 0.5			0.5	Pass	
Pronamide	mg/kg	< 0.5			0.5	Pass	
Trifluralin	mg/kg	< 0.5			0.5	Pass	
Method Blank							
Heavy Metals							
Arsenic	mg/kg	< 2			2	Pass	
Cadmium	mg/kg	< 0.4			0.4	Pass	
Chromium	mg/kg	< 5			5	Pass	
Copper	mg/kg	< 5			5	Pass	
Lead	mg/kg	< 5			5	Pass	
Mercury	mg/kg	< 0.1			0.1	Pass	
Nickel	mg/kg	< 5			5	Pass	
Zinc	mg/kg	< 5			5	Pass	
Method Blank							
Per- and Polyfluoroalkyl Substances (PFASs) - Short							
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)	ug/kg	< 10			10	Pass	
Perfluorohexanesulfonic acid (PFHxS)	ug/kg	< 5			5	Pass	
Perfluorooctanesulfonic acid (PFOS)	ug/kg	< 5			5	Pass	
Perfluorooctanoic acid (PFOA)	ug/kg	< 5			5	Pass	
Sum of US EPA PFAS (PFOS + PFOA)*	ug/kg	-			5	N/A	
LCS - % Recovery							
Total Recoverable Hydrocarbons							
TRH C6-C9	%	74			70-130	Pass	
TRH C10-C14	%	110			70-130	Pass	
Naphthalene	%	103			70-130	Pass	
TRH C6-C10	%	73			70-130	Pass	
TRH >C10-C16	%	109			70-130	Pass	
LCS - % Recovery							
BTEX							

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Benzene	%	85			70-130	Pass	
Toluene	%	87			70-130	Pass	
Ethylbenzene	%	78			70-130	Pass	
m&p-Xylenes	%	87			70-130	Pass	
o-Xylene	%	90			70-130	Pass	
Xylenes - Total*	%	88			70-130	Pass	
LCS - % Recovery							
Volatile Organics							
1.1-Dichloroethene	%	104			70-130	Pass	
1.1.1-Trichloroethane	%	101			70-130	Pass	
1.2-Dichlorobenzene	%	114			70-130	Pass	
1.2-Dichloroethane	%	112			70-130	Pass	
Trichloroethene	%	102			70-130	Pass	
LCS - % Recovery							
Polycyclic Aromatic Hydrocarbons							
Acenaphthene	%	104			70-130	Pass	
Acenaphthylene	%	99			70-130	Pass	
Anthracene	%	97			70-130	Pass	
Benz(a)anthracene	%	114			70-130	Pass	
Benzo(a)pyrene	%	117			70-130	Pass	
Benzo(b&j)fluoranthene	%	115			70-130	Pass	
Benzo(g.h.i)perylene	%	122			70-130	Pass	
Benzo(k)fluoranthene	%	110			70-130	Pass	
Chrysene	%	110			70-130	Pass	
Dibenz(a.h)anthracene	%	111			70-130	Pass	
Fluoranthene	%	111			70-130	Pass	
Fluorene	%	101			70-130	Pass	
Indeno(1.2.3-cd)pyrene	%	116			70-130	Pass	
Naphthalene	%	103			70-130	Pass	
Phenanthrene	%	101			70-130	Pass	
Pyrene	%	104			70-130	Pass	
LCS - % Recovery							
Organochlorine Pesticides							
Chlordanes - Total	%	85			70-130	Pass	
4.4'-DDD	%	73			70-130	Pass	
4.4'-DDE	%	91			70-130	Pass	
4.4'-DDT	%	101			70-130	Pass	
a-HCH	%	84			70-130	Pass	
Aldrin	%	78			70-130	Pass	
b-HCH	%	82			70-130	Pass	
d-HCH	%	93			70-130	Pass	
Dieldrin	%	81			70-130	Pass	
Endosulfan I	%	97			70-130	Pass	
Endosulfan II	%	91			70-130	Pass	
Endosulfan sulphate	%	86			70-130	Pass	
Endrin	%	91			70-130	Pass	
Endrin aldehyde	%	71			70-130	Pass	
Endrin ketone	%	89			70-130	Pass	
g-HCH (Lindane)	%	90			70-130	Pass	
Heptachlor	%	77			70-130	Pass	
Heptachlor epoxide	%	78			70-130	Pass	
Hexachlorobenzene	%	85			70-130	Pass	
Methoxychlor	%	90			70-130	Pass	
LCS - % Recovery							

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Organophosphorus Pesticides							
Diazinon	%	95			70-130	Pass	
Dimethoate	%	107			70-130	Pass	
Ethion	%	107			70-130	Pass	
Fenitrothion	%	80			70-130	Pass	
Methyl parathion	%	91			70-130	Pass	
Mevinphos	%	98			70-130	Pass	
LCS - % Recovery							
Polychlorinated Biphenyls							
Aroclor-1016	%	82			70-130	Pass	
Aroclor-1260	%	87			70-130	Pass	
LCS - % Recovery							
Semivolatile Organics							
2-Methyl-4.6-dinitrophenol	%	90			25-140	Pass	
1.2.4-Trichlorobenzene	%	83			70-130	Pass	
1.4-Dichlorobenzene	%	82			70-130	Pass	
2-Chlorophenol	%	97			25-140	Pass	
2-Methylphenol (o-Cresol)	%	100			25-140	Pass	
2-Nitrophenol	%	117			25-140	Pass	
2.4-Dichlorophenol	%	98			25-140	Pass	
2.4-Dimethylphenol	%	95			25-140	Pass	
2.4-Dinitrophenol	%	82			25-140	Pass	
2.4-Dinitrotoluene	%	108			70-130	Pass	
2.4.5-Trichlorophenol	%	95			25-140	Pass	
2.4.6-Trichlorophenol	%	86			25-140	Pass	
2.6-Dichlorophenol	%	96			25-140	Pass	
3&4-Methylphenol (m&p-Cresol)	%	102			25-140	Pass	
4-Chloro-3-methylphenol	%	99			25-140	Pass	
4-Nitrophenol	%	105			25-140	Pass	
Endrin aldehyde	%	76			70-130	Pass	
N-Nitrosodipropylamine	%	89			70-130	Pass	
Pentachlorophenol	%	70			25-140	Pass	
Phenol	%	102			25-140	Pass	
LCS - % Recovery							
Heavy Metals							
Arsenic	%	102			80-120	Pass	
Cadmium	%	106			80-120	Pass	
Chromium	%	106			80-120	Pass	
Copper	%	99			80-120	Pass	
Lead	%	104			80-120	Pass	
Mercury	%	100			80-120	Pass	
Nickel	%	100			80-120	Pass	
Zinc	%	89			80-120	Pass	
LCS - % Recovery							
Per- and Polyfluoroalkyl Substances (PFASs) - Short							
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)	%	99			50-150	Pass	
Perfluorohexanesulfonic acid (PFHxS)	%	104			50-150	Pass	
Perfluorooctanesulfonic acid (PFOS)	%	106			50-150	Pass	
Perfluorooctanoic acid (PFOA)	%	110			50-150	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
N01	F2 is determined by arithmetically subtracting the "naphthalene" value from the ">C10-C16" value. The naphthalene value used in this calculation is obtained from volatiles (Purge & Trap analysis).
N02	Where we have reported both volatile (P&T GCMS) and semivolatile (GCMS) naphthalene data, results may not be identical. Provided correct sample handling protocols have been followed, any observed differences in results are likely to be due to procedural differences within each methodology. Results determined by both techniques have passed all QAQC acceptance criteria, and are entirely technically valid.
N04	F1 is determined by arithmetically subtracting the "Total BTEX" value from the "C6-C10" value. The "Total BTEX" value is obtained by summing the concentrations of BTEX analytes. The "C6-C10" value is obtained by quantitating against a standard of mixed aromatic/aliphatic analytes.
N07	Please note:- These two PAH isomers closely co-elute using the most contemporary analytical methods and both the reported concentration (and the TEQ) apply specifically to the total of the two co-eluting PAHs
N11	Isotope dilution is used for calibration of each native compound for which an exact labelled analogue is available (Isotope Dilution Quantitation). The isotopically labelled analogues allow identification and recovery correction of the concentration of the associated native PFAS compounds.
Q08	The matrix spike recovery is outside of the recommended acceptance criteria. An acceptable recovery was obtained for the laboratory control sample indicating a sample matrix interference.
Q15	The RPD reported passes Eurofins Environment Testing's QC - Acceptance Criteria as defined in the Internal Quality Control Review and Glossary page of this report.

Authorised by:

John Nguyen	Analytical Services Manager
Andrew Sullivan	Senior Analyst-Organic (NSW)
Andrew Sullivan	Senior Analyst-PFAS (NSW)
John Nguyen	Senior Analyst-Metal (NSW)
Roopesh Rangarajan	Senior Analyst-Volatile (NSW)



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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eurofins | Environment Testing

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Company Name: ERM Sydney
Address: Level 15, 309 Kent St
Sydney
NSW 2000

Project Name: SOP
Project ID: 0628507

Order No.:
Report #: 859812
Phone: 02 8584 8888
Fax: 02 8584 8800

Received: Jan 31, 2022 5:44 PM
Due: Feb 3, 2022
Priority: 2 Day
Contact Name: Nicholas Grbich

Eurofins Analytical Services Manager : John Nguyen

Sample Detail						Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs) - Short	Suite B10B:TRH/BTEXN/PAH/OCP/OPP/PCB/M8
Melbourne Laboratory - NATA # 1261 Site # 1254								
Sydney Laboratory - NATA # 1261 Site # 18217						X	X	X
Brisbane Laboratory - NATA # 1261 Site # 20794								
Mayfield Laboratory - NATA # 1261 Site # 25079								
Perth Laboratory - NATA # 2377 Site # 2370								
External Laboratory								
No	**Sample ID**	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**			
1	TRIP07_220124	Jan 24, 2022		Soil	S22-Fe01783	X	X	X
Test Counts						1	1	1

ERM Sydney
Level 15, 309 Kent St
Sydney
NSW 2000

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: **Nicholas Grbich**

Report **859812-S**
Project name SOP
Project ID 0628507
Received Date Jan 31, 2022

Client Sample ID			**TRIP07_220124**
Sample Matrix			**Soil**
Eurofins Sample No.			**S22-Fe01783**
Date Sampled			**Jan 24, 2022**
Test/Reference	LOR	Unit	
Total Recoverable Hydrocarbons			
TRH C6-C9	20	mg/kg	< 20
TRH C10-C14	20	mg/kg	< 20
TRH C15-C28	50	mg/kg	< 50
TRH C29-C36	50	mg/kg	< 50
TRH C10-C36 (Total)	50	mg/kg	< 50
Naphthalene[N02]	0.5	mg/kg	< 0.5
TRH C6-C10	20	mg/kg	< 20
TRH C6-C10 less BTEX (F1)[N04]	20	mg/kg	< 20
TRH >C10-C16	50	mg/kg	< 50
TRH >C10-C16 less Naphthalene (F2)[N01]	50	mg/kg	< 50
TRH >C16-C34	100	mg/kg	< 100
TRH >C34-C40	100	mg/kg	< 100
TRH >C10-C40 (total)*	100	mg/kg	< 100
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	%	99
Polycyclic Aromatic Hydrocarbons			
Benzo(a)pyrene TEQ (lower bound) *	0.5	mg/kg	< 0.5
Benzo(a)pyrene TEQ (medium bound) *	0.5	mg/kg	0.6
Benzo(a)pyrene TEQ (upper bound) *	0.5	mg/kg	1.2
Acenaphthene	0.5	mg/kg	< 0.5
Acenaphthylene	0.5	mg/kg	< 0.5
Anthracene	0.5	mg/kg	< 0.5
Benz(a)anthracene	0.5	mg/kg	< 0.5
Benzo(a)pyrene	0.5	mg/kg	< 0.5
Benzo(b&j)fluoranthene[N07]	0.5	mg/kg	< 0.5
Benzo(g.h.i)perylene	0.5	mg/kg	< 0.5
Benzo(k)fluoranthene	0.5	mg/kg	< 0.5
Chrysene	0.5	mg/kg	< 0.5
Dibenz(a.h)anthracene	0.5	mg/kg	< 0.5

Client Sample ID			TRIP07_220124
Sample Matrix			**Soil**
Eurofins Sample No.			**S22-Fe01783**
Date Sampled			**Jan 24, 2022**
Test/Reference	LOR	Unit	
Polycyclic Aromatic Hydrocarbons			
Fluoranthene	0.5	mg/kg	< 0.5
Fluorene	0.5	mg/kg	< 0.5
Indeno(1.2.3-cd)pyrene	0.5	mg/kg	< 0.5
Naphthalene	0.5	mg/kg	< 0.5
Phenanthrene	0.5	mg/kg	< 0.5
Pyrene	0.5	mg/kg	< 0.5
Total PAH*	0.5	mg/kg	< 0.5
2-Fluorobiphenyl (surr.)	1	%	109
p-Terphenyl-d14 (surr.)	1	%	112
Organochlorine Pesticides			
Chlordanes - Total	0.1	mg/kg	< 0.1
4.4'-DDD	0.05	mg/kg	< 0.05
4.4'-DDE	0.05	mg/kg	< 0.05
4.4'-DDT	0.05	mg/kg	< 0.05
a-HCH	0.05	mg/kg	< 0.05
Aldrin	0.05	mg/kg	< 0.05
b-HCH	0.05	mg/kg	< 0.05
d-HCH	0.05	mg/kg	< 0.05
Dieldrin	0.05	mg/kg	< 0.05
Endosulfan I	0.05	mg/kg	< 0.05
Endosulfan II	0.05	mg/kg	< 0.05
Endosulfan sulphate	0.05	mg/kg	< 0.05
Endrin	0.05	mg/kg	< 0.05
Endrin aldehyde	0.05	mg/kg	< 0.05
Endrin ketone	0.05	mg/kg	< 0.05
g-HCH (Lindane)	0.05	mg/kg	< 0.05
Heptachlor	0.05	mg/kg	< 0.05
Heptachlor epoxide	0.05	mg/kg	< 0.05
Hexachlorobenzene	0.05	mg/kg	< 0.05
Methoxychlor	0.05	mg/kg	< 0.05
Toxaphene	0.5	mg/kg	< 0.5
Aldrin and Dieldrin (Total)*	0.05	mg/kg	< 0.05
DDT + DDE + DDD (Total)*	0.05	mg/kg	< 0.05
Vic EPA IWRG 621 OCP (Total)*	0.1	mg/kg	< 0.1
Vic EPA IWRG 621 Other OCP (Total)*	0.1	mg/kg	< 0.1
Dibutylchlorendate (surr.)	1	%	100
Tetrachloro-m-xylene (surr.)	1	%	117
Organophosphorus Pesticides			
Azinphos-methyl	0.2	mg/kg	< 0.2
Bolstar	0.2	mg/kg	< 0.2
Chlorfenvinphos	0.2	mg/kg	< 0.2
Chlorpyrifos	0.2	mg/kg	< 0.2
Chlorpyrifos-methyl	0.2	mg/kg	< 0.2
Coumaphos	2	mg/kg	< 2
Demeton-S	0.2	mg/kg	< 0.2
Demeton-O	0.2	mg/kg	< 0.2
Diazinon	0.2	mg/kg	< 0.2
Dichlorvos	0.2	mg/kg	< 0.2
Dimethoate	0.2	mg/kg	< 0.2

Client Sample ID			TRIP07_220124
Sample Matrix			**Soil**
Eurofins Sample No.			**S22-Fe01783**
Date Sampled			**Jan 24, 2022**
Test/Reference	LOR	Unit	
Organophosphorus Pesticides			
Disulfoton	0.2	mg/kg	< 0.2
EPN	0.2	mg/kg	< 0.2
Ethion	0.2	mg/kg	< 0.2
Ethoprop	0.2	mg/kg	< 0.2
Ethyl parathion	0.2	mg/kg	< 0.2
Fenitrothion	0.2	mg/kg	< 0.2
Fensulfothion	0.2	mg/kg	< 0.2
Fenthion	0.2	mg/kg	< 0.2
Malathion	0.2	mg/kg	< 0.2
Merphos	0.2	mg/kg	< 0.2
Methyl parathion	0.2	mg/kg	< 0.2
Mevinphos	0.2	mg/kg	< 0.2
Monocrotophos	2	mg/kg	< 2
Naled	0.2	mg/kg	< 0.2
Omethoate	2	mg/kg	< 2
Phorate	0.2	mg/kg	< 0.2
Pirimiphos-methyl	0.2	mg/kg	< 0.2
Pyrazophos	0.2	mg/kg	< 0.2
Ronnel	0.2	mg/kg	< 0.2
Terbufos	0.2	mg/kg	< 0.2
Tetrachlorvinphos	0.2	mg/kg	< 0.2
Tokuthion	0.2	mg/kg	< 0.2
Trichloronate	0.2	mg/kg	< 0.2
Triphenylphosphate (surr.)	1	%	115
Polychlorinated Biphenyls			
Aroclor-1016	0.1	mg/kg	< 0.1
Aroclor-1221	0.1	mg/kg	< 0.1
Aroclor-1232	0.1	mg/kg	< 0.1
Aroclor-1242	0.1	mg/kg	< 0.1
Aroclor-1248	0.1	mg/kg	< 0.1
Aroclor-1254	0.1	mg/kg	< 0.1
Aroclor-1260	0.1	mg/kg	< 0.1
Total PCB*	0.1	mg/kg	< 0.1
Dibutylchlorendate (surr.)	1	%	100
Tetrachloro-m-xylene (surr.)	1	%	117
Heavy Metals			
Arsenic	2	mg/kg	8.1
Cadmium	0.4	mg/kg	< 0.4
Chromium	5	mg/kg	6.6
Copper	5	mg/kg	31
Lead	5	mg/kg	17
Mercury	0.1	mg/kg	< 0.1
Nickel	5	mg/kg	5.9
Zinc	5	mg/kg	38
% Moisture	1	%	9.0

Client Sample ID			TRIP07_220124
Sample Matrix			**Soil**
Eurofins Sample No.			**S22-Fe01783**
Date Sampled			**Jan 24, 2022**
Test/Reference	LOR	Unit	
Per- and Polyfluoroalkyl Substances (PFASs) - Short			
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)[N11]	10	ug/kg	< 10
13C2-6:2 FTSA (surr.)	1	%	99
Perfluorohexanesulfonic acid (PFHxS)[N11]	5	ug/kg	< 5
Perfluorooctanesulfonic acid (PFOS)[N11]	5	ug/kg	< 5
18O2-PFHxS (surr.)	1	%	101
13C8-PFOS (surr.)	1	%	107
Perfluorooctanoic acid (PFOA)[N11]	5	ug/kg	< 5
13C8-PFOA (surr.)	1	%	103
Sum (PFHxS + PFOS)*	5	ug/kg	< 5
Sum of US EPA PFAS (PFOS + PFOA)*	5	ug/kg	< 5
Sum of enHealth PFAS (PFHxS + PFOS + PFOA)*	5	ug/kg	< 5

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	Sydney	Feb 02, 2022	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
Total Recoverable Hydrocarbons - 2013 NEPM Fractions	Sydney	Feb 02, 2022	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
Total Recoverable Hydrocarbons - 2013 NEPM Fractions	Sydney	Feb 02, 2022	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
BTEX	Sydney	Feb 02, 2022	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
Polycyclic Aromatic Hydrocarbons	Sydney	Feb 02, 2022	14 Days
- Method: LTM-ORG-2130 PAH and Phenols in Soil and Water			
Organochlorine Pesticides	Sydney	Feb 02, 2022	14 Days
- Method: LTM-ORG-2220 OCP & PCB in Soil and Water			
Organophosphorus Pesticides	Sydney	Feb 02, 2022	14 Days
- Method: LTM-ORG-2200 Organophosphorus Pesticides by GC-MS			
Polychlorinated Biphenyls	Sydney	Feb 02, 2022	28 Days
- Method: LTM-ORG-2220 OCP & PCB in Soil and Water			
Metals M8	Sydney	Feb 02, 2022	28 Days
- Method: LTM-MET-3040 Metals in Waters, Soils & Sediments by ICP-MS			
% Moisture	Sydney	Feb 02, 2022	14 Days
- Method: LTM-GEN-7080 Moisture			
Per- and Polyfluoroalkyl Substances (PFASs) - Short	Sydney	Feb 02, 2022	28 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			

eurofins | Environment Testing

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Project Name: SOP
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Received: Jan 31, 2022 5:44 PM
Due: Feb 3, 2022
Priority: 2 Day
Contact Name: Nicholas Grbich

Eurofins Analytical Services Manager : John Nguyen

Sample Detail						Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs) - Short	Suite B10B:TRH/BTEXN/PAH/OCP/OPP/PCB/M8
Melbourne Laboratory - NATA # 1261 Site # 1254								
Sydney Laboratory - NATA # 1261 Site # 18217						X	X	X
Brisbane Laboratory - NATA # 1261 Site # 20794								
Mayfield Laboratory - NATA # 1261 Site # 25079								
Perth Laboratory - NATA # 2377 Site # 2370								
External Laboratory								
No	**Sample ID**	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**			
1	TRIP07_220124	Jan 24, 2022		Soil	S22-Fe01783	X	X	X
Test Counts						1	1	1

Internal Quality Control Review and Glossary

General

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

Holding Times

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

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

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

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

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

Units

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

Terms

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

QC - Acceptance Criteria

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

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

Results <10 times the LOR: No Limit

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

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

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

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

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

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QC Data General Comments

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

Quality Control Results

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Method Blank							
Total Recoverable Hydrocarbons							
TRH C6-C9	mg/kg	< 20			20	Pass	
TRH C10-C14	mg/kg	< 20			20	Pass	
TRH C15-C28	mg/kg	< 50			50	Pass	
TRH C29-C36	mg/kg	< 50			50	Pass	
Naphthalene	mg/kg	< 0.5			0.5	Pass	
TRH C6-C10	mg/kg	< 20			20	Pass	
TRH >C10-C16	mg/kg	< 50			50	Pass	
TRH >C16-C34	mg/kg	< 100			100	Pass	
TRH >C34-C40	mg/kg	< 100			100	Pass	
Method Blank							
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							
Polycyclic Aromatic Hydrocarbons							
Acenaphthene	mg/kg	< 0.5			0.5	Pass	
Acenaphthylene	mg/kg	< 0.5			0.5	Pass	
Anthracene	mg/kg	< 0.5			0.5	Pass	
Benz(a)anthracene	mg/kg	< 0.5			0.5	Pass	
Benzo(a)pyrene	mg/kg	< 0.5			0.5	Pass	
Benzo(b&j)fluoranthene	mg/kg	< 0.5			0.5	Pass	
Benzo(g.h.i)perylene	mg/kg	< 0.5			0.5	Pass	
Benzo(k)fluoranthene	mg/kg	< 0.5			0.5	Pass	
Chrysene	mg/kg	< 0.5			0.5	Pass	
Dibenz(a.h)anthracene	mg/kg	< 0.5			0.5	Pass	
Fluoranthene	mg/kg	< 0.5			0.5	Pass	
Fluorene	mg/kg	< 0.5			0.5	Pass	
Indeno(1.2.3-cd)pyrene	mg/kg	< 0.5			0.5	Pass	
Naphthalene	mg/kg	< 0.5			0.5	Pass	
Phenanthrene	mg/kg	< 0.5			0.5	Pass	
Pyrene	mg/kg	< 0.5			0.5	Pass	
Method Blank							
Organochlorine Pesticides							
Chlordanes - Total	mg/kg	< 0.1			0.1	Pass	
4.4'-DDD	mg/kg	< 0.05			0.05	Pass	
4.4'-DDE	mg/kg	< 0.05			0.05	Pass	
4.4'-DDT	mg/kg	< 0.05			0.05	Pass	
a-HCH	mg/kg	< 0.05			0.05	Pass	
Aldrin	mg/kg	< 0.05			0.05	Pass	
b-HCH	mg/kg	< 0.05			0.05	Pass	
d-HCH	mg/kg	< 0.05			0.05	Pass	
Dieldrin	mg/kg	< 0.05			0.05	Pass	
Endosulfan I	mg/kg	< 0.05			0.05	Pass	
Endosulfan II	mg/kg	< 0.05			0.05	Pass	
Endosulfan sulphate	mg/kg	< 0.05			0.05	Pass	
Endrin	mg/kg	< 0.05			0.05	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
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	
Aroclor-1260	mg/kg	< 0.1			0.1	Pass	
Total PCB*	mg/kg	< 0.1			0.1	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Method Blank							
Heavy Metals							
Arsenic	mg/kg	< 2			2	Pass	
Cadmium	mg/kg	< 0.4			0.4	Pass	
Chromium	mg/kg	< 5			5	Pass	
Copper	mg/kg	< 5			5	Pass	
Lead	mg/kg	< 5			5	Pass	
Mercury	mg/kg	< 0.1			0.1	Pass	
Nickel	mg/kg	< 5			5	Pass	
Zinc	mg/kg	< 5			5	Pass	
Method Blank							
Per- and Polyfluoroalkyl Substances (PFASs) - Short							
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)	ug/kg	< 10			10	Pass	
Perfluorohexanesulfonic acid (PFHxS)	ug/kg	< 5			5	Pass	
Perfluorooctanesulfonic acid (PFOS)	ug/kg	< 5			5	Pass	
Perfluorooctanoic acid (PFOA)	ug/kg	< 5			5	Pass	
LCS - % Recovery							
Total Recoverable Hydrocarbons							
TRH C6-C9	%	80			70-130	Pass	
TRH C10-C14	%	81			70-130	Pass	
Naphthalene	%	123			70-130	Pass	
TRH C6-C10	%	74			70-130	Pass	
TRH >C10-C16	%	78			70-130	Pass	
LCS - % Recovery							
BTEX							
Benzene	%	97			70-130	Pass	
Toluene	%	120			70-130	Pass	
Ethylbenzene	%	115			70-130	Pass	
m&p-Xylenes	%	113			70-130	Pass	
o-Xylene	%	116			70-130	Pass	
Xylenes - Total*	%	114			70-130	Pass	
LCS - % Recovery							
Polycyclic Aromatic Hydrocarbons							
Acenaphthene	%	97			70-130	Pass	
Acenaphthylene	%	98			70-130	Pass	
Anthracene	%	86			70-130	Pass	
Benz(a)anthracene	%	102			70-130	Pass	
Benzo(a)pyrene	%	104			70-130	Pass	
Benzo(b&j)fluoranthene	%	98			70-130	Pass	
Benzo(g.h.i)perylene	%	107			70-130	Pass	
Benzo(k)fluoranthene	%	99			70-130	Pass	
Chrysene	%	100			70-130	Pass	
Dibenz(a.h)anthracene	%	100			70-130	Pass	
Fluoranthene	%	93			70-130	Pass	
Fluorene	%	96			70-130	Pass	
Indeno(1.2.3-cd)pyrene	%	106			70-130	Pass	
Naphthalene	%	97			70-130	Pass	
Phenanthrene	%	84			70-130	Pass	
Pyrene	%	94			70-130	Pass	
LCS - % Recovery							
Organochlorine Pesticides							
Chlordanes - Total	%	94			70-130	Pass	
4.4'-DDD	%	93			70-130	Pass	
4.4'-DDE	%	99			70-130	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
4.4'-DDT	%	115			70-130	Pass	
a-HCH	%	93			70-130	Pass	
Aldrin	%	82			70-130	Pass	
b-HCH	%	89			70-130	Pass	
d-HCH	%	99			70-130	Pass	
Dieldrin	%	93			70-130	Pass	
Endosulfan I	%	119			70-130	Pass	
Endosulfan II	%	97			70-130	Pass	
Endosulfan sulphate	%	90			70-130	Pass	
Endrin	%	104			70-130	Pass	
Endrin aldehyde	%	81			70-130	Pass	
Endrin ketone	%	94			70-130	Pass	
g-HCH (Lindane)	%	97			70-130	Pass	
Heptachlor	%	86			70-130	Pass	
Heptachlor epoxide	%	82			70-130	Pass	
Hexachlorobenzene	%	93			70-130	Pass	
Methoxychlor	%	102			70-130	Pass	
LCS - % Recovery							
Organophosphorus Pesticides							
Diazinon	%	79			70-130	Pass	
Dimethoate	%	86			70-130	Pass	
Ethion	%	92			70-130	Pass	
Fenitrothion	%	80			70-130	Pass	
Methyl parathion	%	81			70-130	Pass	
Mevinphos	%	82			70-130	Pass	
LCS - % Recovery							
Polychlorinated Biphenyls							
Aroclor-1016	%	90			70-130	Pass	
Aroclor-1260	%	99			70-130	Pass	
LCS - % Recovery							
Heavy Metals							
Arsenic	%	102			80-120	Pass	
Cadmium	%	101			80-120	Pass	
Chromium	%	105			80-120	Pass	
Copper	%	99			80-120	Pass	
Lead	%	105			80-120	Pass	
Mercury	%	93			80-120	Pass	
Nickel	%	104			80-120	Pass	
Zinc	%	104			80-120	Pass	
LCS - % Recovery							
Per- and Polyfluoroalkyl Substances (PFASs) - Short							
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)	%	107			50-150	Pass	
Perfluorohexanesulfonic acid (PFHxS)	%	104			50-150	Pass	
Perfluorooctanesulfonic acid (PFOS)	%	103			50-150	Pass	
Perfluorooctanoic acid (PFOA)	%	111			50-150	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Spike - % Recovery									
Total Recoverable Hydrocarbons				Result 1					
TRH C6-C9	S22-Ja35293	NCP	%	103			70-130	Pass	
TRH C10-C14	S22-Ja40514	NCP	%	92			70-130	Pass	
Naphthalene	S22-Ja35195	NCP	%	106			70-130	Pass	
TRH C6-C10	S22-Ja35293	NCP	%	99			70-130	Pass	
TRH >C10-C16	S22-Ja40514	NCP	%	87			70-130	Pass	
Spike - % Recovery									

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
BTEX				Result 1					
Benzene	S22-Ja35195	NCP	%	77			70-130	Pass	
Toluene	S22-Ja35195	NCP	%	83			70-130	Pass	
Ethylbenzene	S22-Ja35195	NCP	%	90			70-130	Pass	
m&p-Xylenes	S22-Ja35195	NCP	%	86			70-130	Pass	
o-Xylene	S22-Ja35195	NCP	%	88			70-130	Pass	
Xylenes - Total*	S22-Ja35195	NCP	%	87			70-130	Pass	
Spike - % Recovery									
Polycyclic Aromatic Hydrocarbons				Result 1					
Acenaphthene	S22-Ja35268	NCP	%	121			70-130	Pass	
Acenaphthylene	S22-Ja35268	NCP	%	119			70-130	Pass	
Anthracene	S22-Ja35268	NCP	%	104			70-130	Pass	
Benz(a)anthracene	S22-Ja35268	NCP	%	112			70-130	Pass	
Benzo(a)pyrene	S22-Ja35268	NCP	%	112			70-130	Pass	
Benzo(b&j)fluoranthene	S22-Ja35268	NCP	%	119			70-130	Pass	
Benzo(g.h.i)perylene	S22-Ja37012	NCP	%	79			70-130	Pass	
Benzo(k)fluoranthene	S22-Ja35268	NCP	%	121			70-130	Pass	
Chrysene	S22-Ja35268	NCP	%	119			70-130	Pass	
Dibenz(a.h)anthracene	S22-Ja35268	NCP	%	116			70-130	Pass	
Fluoranthene	S22-Ja35268	NCP	%	125			70-130	Pass	
Fluorene	S22-Ja35268	NCP	%	117			70-130	Pass	
Indeno(1.2.3-cd)pyrene	S22-Ja37012	NCP	%	79			70-130	Pass	
Naphthalene	S22-Ja35268	NCP	%	128			70-130	Pass	
Phenanthrene	S22-Ja35268	NCP	%	115			70-130	Pass	
Pyrene	S22-Ja35268	NCP	%	118			70-130	Pass	
Spike - % Recovery									
Organochlorine Pesticides				Result 1					
Chlordanes - Total	S22-Ja37012	NCP	%	87			70-130	Pass	
4.4'-DDD	S22-Ja37012	NCP	%	73			70-130	Pass	
4.4'-DDE	S22-Ja37012	NCP	%	93			70-130	Pass	
4.4'-DDT	S22-Ja37012	NCP	%	71			70-130	Pass	
a-HCH	S22-Ja37012	NCP	%	77			70-130	Pass	
Aldrin	S22-Ja37012	NCP	%	74			70-130	Pass	
b-HCH	S22-Ja37012	NCP	%	80			70-130	Pass	
d-HCH	S22-Ja37012	NCP	%	88			70-130	Pass	
Dieldrin	S22-Ja37012	NCP	%	79			70-130	Pass	
Endosulfan I	S22-Ja37012	NCP	%	94			70-130	Pass	
Endosulfan II	S22-Ja37012	NCP	%	84			70-130	Pass	
Endosulfan sulphate	S22-Ja37012	NCP	%	74			70-130	Pass	
Endrin	S22-Ja37012	NCP	%	78			70-130	Pass	
Endrin ketone	S22-Ja37012	NCP	%	81			70-130	Pass	
g-HCH (Lindane)	S22-Ja37012	NCP	%	87			70-130	Pass	
Heptachlor	S22-Ja37012	NCP	%	77			70-130	Pass	
Heptachlor epoxide	S22-Ja37012	NCP	%	76			70-130	Pass	
Hexachlorobenzene	S22-Ja37012	NCP	%	89			70-130	Pass	
Spike - % Recovery									
Organophosphorus Pesticides				Result 1					
Diazinon	S22-Ja35157	NCP	%	89			70-130	Pass	
Dimethoate	S22-Ja37012	NCP	%	118			70-130	Pass	
Ethion	S22-Ja37012	NCP	%	125			70-130	Pass	
Fenitrothion	S22-Ja37012	NCP	%	90			70-130	Pass	
Methyl parathion	S22-Ja37012	NCP	%	98			70-130	Pass	
Mevinphos	S22-Ja35157	NCP	%	122			70-130	Pass	
Spike - % Recovery									

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Polychlorinated Biphenyls				Result 1					
Aroclor-1016	W22-Ja30714	NCP	%	76			70-130	Pass	
Aroclor-1260	W22-Ja30714	NCP	%	87			70-130	Pass	
Spike - % Recovery									
Heavy Metals				Result 1					
Arsenic	S22-Fe01821	NCP	%	104			75-125	Pass	
Cadmium	S22-Fe01821	NCP	%	96			75-125	Pass	
Chromium	S22-Fe01821	NCP	%	104			75-125	Pass	
Copper	S22-Fe01821	NCP	%	97			75-125	Pass	
Lead	S22-Fe01821	NCP	%	100			75-125	Pass	
Mercury	S22-Fe01821	NCP	%	101			75-125	Pass	
Nickel	S22-Fe01821	NCP	%	100			75-125	Pass	
Zinc	S22-Ja35196	NCP	%	93			75-125	Pass	
Spike - % Recovery									
Per- and Polyfluoroalkyl Substances (PFASs) - Short				Result 1					
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)	S22-Ja36048	NCP	%	106			50-150	Pass	
Perfluorohexanesulfonic acid (PFHxS)	S22-Ja36048	NCP	%	103			50-150	Pass	
Perfluorooctanesulfonic acid (PFOS)	S22-Ja36048	NCP	%	104			50-150	Pass	
Perfluorooctanoic acid (PFOA)	S22-Ja36048	NCP	%	111			50-150	Pass	
Test	**Lab Sample ID**	**QA Source**	**Units**	**Result 1**			**Acceptance Limits**	**Pass Limits**	**Qualifying Code**
Duplicate									
Total Recoverable Hydrocarbons				Result 1	Result 2	RPD			
TRH C6-C9	S22-Fe01783	CP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH C10-C14	S22-Ja40512	NCP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH C15-C28	S22-Ja40512	NCP	mg/kg	< 50	< 50	<1	30%	Pass	
TRH C29-C36	S22-Ja40512	NCP	mg/kg	< 50	< 50	<1	30%	Pass	
Naphthalene	S22-Fe01783	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
TRH C6-C10	S22-Fe01783	CP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH >C10-C16	S22-Ja40512	NCP	mg/kg	< 50	< 50	<1	30%	Pass	
TRH >C16-C34	S22-Ja40512	NCP	mg/kg	< 100	< 100	<1	30%	Pass	
TRH >C34-C40	S22-Ja40512	NCP	mg/kg	< 100	< 100	<1	30%	Pass	
Duplicate									
BTEX				Result 1	Result 2	RPD			
Benzene	S22-Fe01783	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Toluene	S22-Fe01783	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Ethylbenzene	S22-Fe01783	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
m&p-Xylenes	S22-Fe01783	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
o-Xylene	S22-Fe01783	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Xylenes - Total*	S22-Fe01783	CP	mg/kg	< 0.3	< 0.3	<1	30%	Pass	
Duplicate									
Polycyclic Aromatic Hydrocarbons				Result 1	Result 2	RPD			
Acenaphthene	S22-Fe01783	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Acenaphthylene	S22-Fe01783	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Anthracene	S22-Fe01783	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benz(a)anthracene	S22-Fe01783	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(a)pyrene	S22-Fe01783	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(b&j)fluoranthene	S22-Fe01783	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(g.h.i)perylene	S22-Fe01783	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(k)fluoranthene	S22-Fe01783	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chrysene	S22-Fe01783	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dibenz(a.h)anthracene	S22-Fe01783	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	

Duplicate									
Polycyclic Aromatic Hydrocarbons				Result 1	Result 2	RPD			
Fluoranthene	S22-Fe01783	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Fluorene	S22-Fe01783	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Indeno(1.2.3-cd)pyrene	S22-Fe01783	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Naphthalene	S22-Fe01783	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Phenanthrene	S22-Fe01783	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Pyrene	S22-Fe01783	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
Organochlorine Pesticides				Result 1	Result 2	RPD			
Chlordanes - Total	S22-Fe01783	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
4.4'-DDD	S22-Fe01783	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
4.4'-DDE	S22-Fe01783	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
4.4'-DDT	S22-Fe01783	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
a-HCH	S22-Fe01783	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Aldrin	S22-Fe01783	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
b-HCH	S22-Fe01783	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
d-HCH	S22-Fe01783	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Dieldrin	S22-Fe01783	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan I	S22-Fe01783	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan II	S22-Fe01783	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan sulphate	S22-Fe01783	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin	S22-Fe01783	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin aldehyde	S22-Fe01783	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin ketone	S22-Fe01783	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
g-HCH (Lindane)	S22-Fe01783	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Heptachlor	S22-Fe01783	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Heptachlor epoxide	S22-Fe01783	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Hexachlorobenzene	S22-Fe01783	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Methoxychlor	S22-Fe01783	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Toxaphene	S22-Fe01783	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
Organophosphorus Pesticides				Result 1	Result 2	RPD			
Azinphos-methyl	S22-Fe01783	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Bolstar	S22-Fe01783	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Chlorfenvinphos	S22-Fe01783	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Chlorpyrifos	S22-Fe01783	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Chlorpyrifos-methyl	S22-Fe01783	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Coumaphos	S22-Fe01783	CP	mg/kg	< 2	< 2	<1	30%	Pass	
Demeton-S	S22-Fe01783	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Demeton-O	S22-Fe01783	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Diazinon	S22-Fe01783	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Dichlorvos	S22-Fe01783	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Dimethoate	S22-Fe01783	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Disulfoton	S22-Fe01783	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
EPN	S22-Fe01783	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Ethion	S22-Fe01783	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Ethoprop	S22-Fe01783	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Ethyl parathion	S22-Fe01783	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Fenitrothion	S22-Fe01783	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Fensulfothion	S22-Fe01783	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Fenthion	S22-Fe01783	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Malathion	S22-Fe01783	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Merphos	S22-Fe01783	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Methyl parathion	S22-Fe01783	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Mevinphos	S22-Fe01783	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	

Duplicate									
Organophosphorus Pesticides				Result 1	Result 2	RPD			
Monocrotophos	S22-Fe01783	CP	mg/kg	< 2	< 2	<1	30%	Pass	
Naled	S22-Fe01783	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Omethoate	S22-Fe01783	CP	mg/kg	< 2	< 2	<1	30%	Pass	
Phorate	S22-Fe01783	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Pirimiphos-methyl	S22-Fe01783	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Pyrazophos	S22-Fe01783	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Ronnel	S22-Fe01783	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Terbufos	S22-Fe01783	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Tetrachlorvinphos	S22-Fe01783	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Tokuthion	S22-Fe01783	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Trichloronate	S22-Fe01783	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Duplicate									
Polychlorinated Biphenyls				Result 1	Result 2	RPD			
Aroclor-1016	S22-Fe01783	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Aroclor-1221	S22-Fe01783	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Aroclor-1232	S22-Fe01783	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Aroclor-1242	S22-Fe01783	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Aroclor-1248	S22-Fe01783	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Aroclor-1254	S22-Fe01783	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Aroclor-1260	S22-Fe01783	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Total PCB*	S22-Fe01783	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Duplicate									
Heavy Metals				Result 1	Result 2	RPD			
Arsenic	S22-Fe01833	NCP	mg/kg	8.5	9.9	15	30%	Pass	
Cadmium	S22-Fe01833	NCP	mg/kg	< 0.4	< 0.4	<1	30%	Pass	
Chromium	S22-Fe01833	NCP	mg/kg	14	16	9.0	30%	Pass	
Copper	S22-Fe01833	NCP	mg/kg	26	27	5.0	30%	Pass	
Lead	S22-Fe01833	NCP	mg/kg	13	16	18	30%	Pass	
Mercury	S22-Fe01833	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Nickel	S22-Fe01833	NCP	mg/kg	10	12	18	30%	Pass	
Zinc	S22-Fe01833	NCP	mg/kg	55	67	20	30%	Pass	
Duplicate									
				Result 1	Result 2	RPD			
% Moisture	S22-Fe01783	CP	%	9.0	7.4	20	30%	Pass	
Duplicate									
Per- and Polyfluoroalkyl Substances (PFASs) - Short				Result 1	Result 2	RPD			
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)	S22-Fe01783	CP	ug/kg	< 10	< 10	<1	30%	Pass	
Perfluorohexanesulfonic acid (PFHxS)	S22-Fe01783	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorooctanesulfonic acid (PFOS)	S22-Fe01783	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorooctanoic acid (PFOA)	S22-Fe01783	CP	ug/kg	< 5	< 5	<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	Yes
Samples received within HoldingTime	Yes
Some samples have been subcontracted	No

Qualifier Codes/Comments

Code	Description
N01	F2 is determined by arithmetically subtracting the "naphthalene" value from the ">C10-C16" value. The naphthalene value used in this calculation is obtained from volatiles (Purge & Trap analysis).
N02	Where we have reported both volatile (P&T GCMS) and semivolatile (GCMS) naphthalene data, results may not be identical. Provided correct sample handling protocols have been followed, any observed differences in results are likely to be due to procedural differences within each methodology. Results determined by both techniques have passed all QAQC acceptance criteria, and are entirely technically valid.
N04	F1 is determined by arithmetically subtracting the "Total BTEX" value from the "C6-C10" value. The "Total BTEX" value is obtained by summing the concentrations of BTEX analytes. The "C6-C10" value is obtained by quantitating against a standard of mixed aromatic/aliphatic analytes.
N07	Please note:- These two PAH isomers closely co-elute using the most contemporary analytical methods and both the reported concentration (and the TEQ) apply specifically to the total of the two co-eluting PAHs
N11	Isotope dilution is used for calibration of each native compound for which an exact labelled analogue is available (Isotope Dilution Quantitation). The isotopically labelled analogues allow identification and recovery correction of the concentration of the associated native PFAS compounds.

Authorised by:

John Nguyen	Analytical Services Manager
Andrew Sullivan	Senior Analyst-Organic (NSW)
Andrew Sullivan	Senior Analyst-PFAS (NSW)
John Nguyen	Senior Analyst-Metal (NSW)
Roopesh Rangarajan	Senior Analyst-Volatile (NSW)



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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ALS Environmental

CERTIFICATE OF ANALYSIS

Work Order	: **ES2201561**	Page	: 1 of 14
Client	: **ENVIRONMENTAL RESOURCES MANAGEMENT (ERM)**	Laboratory	: Environmental Division Sydney
Contact	: NICHOLAS GRBICH	Contact	: Customer Services ES
Address	: LEVEL 1 45 WATT STREET NEWCASTLE NSW 2300	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
Telephone	: ----	Telephone	: +61-2-8784 8555
Project	: 0628507	Date Samples Received	: 18-Jan-2022 18:35
Order number	: ----	Date Analysis Commenced	: 19-Jan-2022
C-O-C number	: ----	Issue Date	: 25-Jan-2022 17:41
Sampler	: Taj Morrison		
Site	: ----		
Quote number	: EN/114		
No. of samples received	: 8		
No. of samples analysed	: 8		

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

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

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results
- Surrogate Control Limits

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

Signatories

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

Signatories	*Position*	*Accreditation Category*
Ankit Joshi	Inorganic Chemist	Sydney Inorganics, Smithfield, NSW
Edwandy Fadjar	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.
- 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.
- TDS by method EA-015 may bias high for various samples due to the presence of fine particulate matter, which may pass through the prescribed GF/C paper.
- EK057G: It has been noted that Nitrite is greater than NOx on sample 1, however this difference is within the limits of experimental variation.
- It has been noted that Nitrite is greater than NOx, however this difference is within the limits of experimental variation.
- 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.
- Sodium Adsorption Ratio (where reported): Where results for Na, Ca or Mg are <LOR, a concentration at half the reported LOR is incorporated into the SAR calculation. This represents a conservative approach for Na relative to the assumption that <LOR = zero concentration and a conservative approach for Ca & Mg relative to the assumption that <LOR is equivalent to the LOR concentration.

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)			Sample ID	SMW_BH038	SMW_BH035_S	SMW_BH051	SMW_BH035	R01_2201117
			Sampling date / time	17-Jan-2022 00:00	18-Jan-2022 00:00	18-Jan-2022 00:00	18-Jan-2022 00:00	17-Jan-2022 00:00
Compound	CAS Number	LOR	Unit	ES2201561-001	ES2201561-002	ES2201561-003	ES2201561-004	ES2201561-005
				Result	Result	Result	Result	Result
EA015: Total Dissolved Solids dried at 180 ± 5 °C								
Total Dissolved Solids @180°C	----	10	mg/L	**2430**	**4260**	**4100**	**11600**	----
ED037P: Alkalinity by PC Titrator								
Hydroxide Alkalinity as CaCO3	DMO-210-001	1	mg/L	**163**	<1	<1	<1	----
Carbonate Alkalinity as CaCO3	3812-32-6	1	mg/L	**46**	<1	<1	<1	----
Bicarbonate Alkalinity as CaCO3	71-52-3	1	mg/L	<1	**131**	**149**	**568**	----
Total Alkalinity as CaCO3	----	1	mg/L	**208**	**131**	**149**	**568**	----
ED041G: Sulfate (Turbidimetric) as SO4 2- by DA								
Sulfate as SO4 - Turbidimetric	14808-79-8	1	mg/L	**291**	**500**	**421**	**10**	----
ED045G: Chloride by Discrete Analyser								
Chloride	16887-00-6	1	mg/L	**836**	**1070**	**1630**	**5610**	----
ED093F: Dissolved Major Cations								
Calcium	7440-70-2	1	mg/L	**272**	**63**	**24**	**509**	----
Magnesium	7439-95-4	1	mg/L	<1	**58**	**85**	**364**	----
Sodium	7440-23-5	1	mg/L	**514**	**814**	**1130**	**2600**	----
Potassium	7440-09-7	1	mg/L	**10**	**9**	**18**	**45**	----
EG020F: Dissolved Metals by ICP-MS								
Arsenic	7440-38-2	0.001	mg/L	<0.001	<0.001	<0.001	<0.001	----
Cadmium	7440-43-9	0.0001	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	----
Chromium	7440-47-3	0.001	mg/L	**0.014**	<0.001	<0.001	<0.001	----
Copper	7440-50-8	0.001	mg/L	<0.001	**0.001**	**0.002**	**0.004**	----
Nickel	7440-02-0	0.001	mg/L	<0.001	**0.105**	**0.080**	**0.026**	----
Lead	7439-92-1	0.001	mg/L	<0.001	<0.001	<0.001	<0.001	----
Zinc	7440-66-6	0.005	mg/L	<0.005	**0.456**	**0.164**	**0.030**	----
Iron	7439-89-6	0.05	mg/L	<0.05	**4.80**	**0.53**	**0.34**	----
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
Iron	7439-89-6	0.05	mg/L	----	----	----	----	<0.05
EG035F: Dissolved Mercury by FIMS								

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)			Sample ID	SMW_BH038	SMW_BH035_S	SMW_BH051	SMW_BH035	R01_2201117
			Sampling date / time	17-Jan-2022 00:00	18-Jan-2022 00:00	18-Jan-2022 00:00	18-Jan-2022 00:00	17-Jan-2022 00:00
Compound	CAS Number	LOR	Unit	ES2201561-001	ES2201561-002	ES2201561-003	ES2201561-004	ES2201561-005
				Result	Result	Result	Result	Result
EG035F: Dissolved Mercury by FIMS - Continued								
Mercury	7439-97-6	0.0001	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	----
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.0001	mg/L	----	----	----	----	<0.0001
EK055G: Ammonia as N by Discrete Analyser								
Ammonia as N	7664-41-7	0.01	mg/L	**0.61**	**0.18**	**0.19**	**5.59**	**0.01**
EK057G: Nitrite as N by Discrete Analyser								
Nitrite as N	14797-65-0	0.01	mg/L	**1.01**	<0.01	<0.01	<0.01	----
EK058G: Nitrate as N by Discrete Analyser								
Nitrate as N	14797-55-8	0.01	mg/L	<0.01	**0.06**	**0.06**	**0.08**	----
EK059G: Nitrite plus Nitrate as N (NOx) by Discrete Analyser								
Nitrite + Nitrate as N	----	0.01	mg/L	**1.00**	**0.06**	**0.06**	**0.08**	**0.03**
EK061G: Total Kjeldahl Nitrogen By Discrete Analyser								
Total Kjeldahl Nitrogen as N	----	0.1	mg/L	**0.9**	**17.1**	**0.7**	**8.2**	<0.1
EK062G: Total Nitrogen as N (TKN + NOx) by Discrete Analyser								
^ Total Nitrogen as N	----	0.1	mg/L	**1.9**	**17.2**	**0.8**	**8.3**	<0.1
EK067G: Total Phosphorus as P by Discrete Analyser								
Total Phosphorus as P	----	0.01	mg/L	**0.01**	**15.0**	**0.14**	**0.64**	<0.01
EN055: Ionic Balance								
ø Total Anions	----	0.01	meq/L	**33.8**	**43.2**	**57.7**	**170**	----
ø Total Cations	----	0.01	meq/L	**36.2**	**43.6**	**57.8**	**170**	----
ø Ionic Balance	----	0.01	%	**3.41**	**0.40**	**0.07**	**0.06**	----
EP074A: Monocyclic Aromatic Hydrocarbons								
Styrene	100-42-5	5	µg/L	<5	<5	<5	<5	<5
Isopropylbenzene	98-82-8	5	µg/L	<5	<5	<5	<5	<5
n-Propylbenzene	103-65-1	5	µg/L	<5	<5	<5	<5	<5
1.3.5-Trimethylbenzene	108-67-8	5	µg/L	<5	<5	<5	<5	<5
sec-Butylbenzene	135-98-8	5	µg/L	<5	<5	<5	<5	<5
1.2.4-Trimethylbenzene	95-63-6	5	µg/L	<5	<5	<5	<5	<5
tert-Butylbenzene	98-06-6	5	µg/L	<5	<5	<5	<5	<5
p-Isopropyltoluene	99-87-6	5	µg/L	<5	<5	<5	<5	<5
n-Butylbenzene	104-51-8	5	µg/L	<5	<5	<5	<5	<5
EP074B: Oxygenated Compounds								
Vinyl Acetate	108-05-4	50	µg/L	<50	<50	<50	<50	<50

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)			Sample ID	SMW_BH038	SMW_BH035_S	SMW_BH051	SMW_BH035	R01_2201117
			Sampling date / time	17-Jan-2022 00:00	18-Jan-2022 00:00	18-Jan-2022 00:00	18-Jan-2022 00:00	17-Jan-2022 00:00
Compound	CAS Number	LOR	Unit	ES2201561-001	ES2201561-002	ES2201561-003	ES2201561-004	ES2201561-005
				Result	Result	Result	Result	Result
EP074B: Oxygenated Compounds - Continued								
2-Butanone (MEK)	78-93-3	50	µg/L	<50	<50	<50	<50	<50
4-Methyl-2-pentanone (MIBK)	108-10-1	50	µg/L	<50	<50	<50	<50	<50
2-Hexanone (MBK)	591-78-6	50	µg/L	<50	<50	<50	<50	<50
EP074C: Sulfonated Compounds								
Carbon disulfide	75-15-0	5	µg/L	<5	<5	<5	<5	<5
EP074D: Fumigants								
2.2-Dichloropropane	594-20-7	5	µg/L	<5	<5	<5	<5	<5
1.2-Dichloropropane	78-87-5	5	µg/L	<5	<5	<5	<5	<5
cis-1.3-Dichloropropylene	10061-01-5	5	µg/L	<5	<5	<5	<5	<5
trans-1.3-Dichloropropylene	10061-02-6	5	µg/L	<5	<5	<5	<5	<5
1.2-Dibromoethane (EDB)	106-93-4	5	µg/L	<5	<5	<5	<5	<5
EP074E: Halogenated Aliphatic Compounds								
Dichlorodifluoromethane	75-71-8	50	µg/L	<50	<50	<50	<50	<50
Chloromethane	74-87-3	50	µg/L	<50	<50	<50	<50	<50
Vinyl chloride	75-01-4	50	µg/L	<50	<50	<50	<50	<50
Bromomethane	74-83-9	50	µg/L	<50	<50	<50	<50	<50
Chloroethane	75-00-3	50	µg/L	<50	<50	<50	<50	<50
Trichlorofluoromethane	75-69-4	50	µg/L	<50	<50	<50	<50	<50
1.1-Dichloroethene	75-35-4	5	µg/L	<5	<5	<5	<5	<5
Iodomethane	74-88-4	5	µg/L	<5	<5	<5	<5	<5
trans-1.2-Dichloroethene	156-60-5	5	µg/L	<5	<5	<5	<5	<5
1.1-Dichloroethane	75-34-3	5	µg/L	<5	<5	<5	<5	<5
cis-1.2-Dichloroethene	156-59-2	5	µg/L	<5	<5	<5	<5	<5
1.1.1-Trichloroethane	71-55-6	5	µg/L	<5	<5	<5	<5	<5
1.1-Dichloropropylene	563-58-6	5	µg/L	<5	<5	<5	<5	<5
Carbon Tetrachloride	56-23-5	5	µg/L	<5	<5	<5	<5	<5
1.2-Dichloroethane	107-06-2	5	µg/L	<5	<5	<5	<5	<5
Trichloroethene	79-01-6	5	µg/L	<5	<5	<5	<5	<5
Dibromomethane	74-95-3	5	µg/L	<5	<5	<5	<5	<5
1.1.2-Trichloroethane	79-00-5	5	µg/L	<5	<5	<5	<5	<5
1.3-Dichloropropane	142-28-9	5	µg/L	<5	<5	<5	<5	<5
Tetrachloroethene	127-18-4	5	µg/L	<5	<5	<5	<5	<5
1.1.1.2-Tetrachloroethane	630-20-6	5	µg/L	<5	<5	<5	<5	<5
trans-1.4-Dichloro-2-butene	110-57-6	5	µg/L	<5	<5	<5	<5	<5

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	SMW_BH038	SMW_BH035_S	SMW_BH051	SMW_BH035	R01_2201117
				Sampling date / time	17-Jan-2022 00:00	18-Jan-2022 00:00	18-Jan-2022 00:00	18-Jan-2022 00:00	17-Jan-2022 00:00
Compound	CAS Number	LOR	Unit		ES2201561-001	ES2201561-002	ES2201561-003	ES2201561-004	ES2201561-005
					Result	Result	Result	Result	Result
EP074E: Halogenated Aliphatic Compounds - Continued									
cis-1.4-Dichloro-2-butene	1476-11-5	5	µg/L		<5	<5	<5	<5	<5
1.1.2.2-Tetrachloroethane	79-34-5	5	µg/L		<5	<5	<5	<5	<5
1.2.3-Trichloropropane	96-18-4	5	µg/L		<5	<5	<5	<5	<5
Pentachloroethane	76-01-7	5	µg/L		<5	<5	<5	<5	<5
1.2-Dibromo-3-chloropropane	96-12-8	5	µg/L		<5	<5	<5	<5	<5
Hexachlorobutadiene	87-68-3	5	µg/L		<5	<5	<5	<5	<5
EP074F: Halogenated Aromatic Compounds									
Chlorobenzene	108-90-7	5	µg/L		<5	<5	<5	<5	<5
Bromobenzene	108-86-1	5	µg/L		<5	<5	<5	<5	<5
2-Chlorotoluene	95-49-8	5	µg/L		<5	<5	<5	<5	<5
4-Chlorotoluene	106-43-4	5	µg/L		<5	<5	<5	<5	<5
1.3-Dichlorobenzene	541-73-1	5	µg/L		<5	<5	<5	<5	<5
1.4-Dichlorobenzene	106-46-7	5	µg/L		<5	<5	<5	<5	<5
1.2-Dichlorobenzene	95-50-1	5	µg/L		<5	<5	<5	<5	<5
1.2.4-Trichlorobenzene	120-82-1	5	µg/L		<5	<5	<5	<5	<5
1.2.3-Trichlorobenzene	87-61-6	5	µg/L		<5	<5	<5	<5	<5
EP074G: Trihalomethanes									
Chloroform	67-66-3	5	µg/L		<5	<5	<5	<5	<5
Bromodichloromethane	75-27-4	5	µg/L		<5	<5	<5	<5	<5
Dibromochloromethane	124-48-1	5	µg/L		<5	<5	<5	<5	<5
Bromoform	75-25-2	5	µg/L		<5	<5	<5	<5	<5
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

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)			Sample ID	SMW_BH038	SMW_BH035_S	SMW_BH051	SMW_BH035	R01_2201117
			Sampling date / time	17-Jan-2022 00:00	18-Jan-2022 00:00	18-Jan-2022 00:00	18-Jan-2022 00:00	17-Jan-2022 00:00
Compound	CAS Number	LOR	Unit	ES2201561-001	ES2201561-002	ES2201561-003	ES2201561-004	ES2201561-005
				Result	Result	Result	Result	Result
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued								
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
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
EP074S: VOC Surrogates								
1.2-Dichloroethane-D4	17060-07-0	5	%	**99.6**	**105**	**107**	**116**	**99.6**
Toluene-D8	2037-26-5	5	%	**113**	**123**	**123**	**129**	**119**

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)			Sample ID	SMW_BH038	SMW_BH035_S	SMW_BH051	SMW_BH035	R01_2201117
			Sampling date / time	17-Jan-2022 00:00	18-Jan-2022 00:00	18-Jan-2022 00:00	18-Jan-2022 00:00	17-Jan-2022 00:00
Compound	CAS Number	LOR	Unit	ES2201561-001	ES2201561-002	ES2201561-003	ES2201561-004	ES2201561-005
				Result	Result	Result	Result	Result
EP074S: VOC Surrogates - Continued								
4-Bromofluorobenzene	460-00-4	5	%	104	111	109	113	105
EP075(SIM)S: Phenolic Compound Surrogates								
Phenol-d6	13127-88-3	1.0	%	17.4	20.0	18.2	18.3	17.9
2-Chlorophenol-D4	93951-73-6	1.0	%	30.0	48.9	46.4	44.3	37.9
2.4.6-Tribromophenol	118-79-6	1.0	%	36.1	74.6	85.2	70.6	71.6
EP075(SIM)T: PAH Surrogates								
2-Fluorobiphenyl	321-60-8	1.0	%	56.6	70.8	67.1	67.2	56.3
Anthracene-d10	1719-06-8	1.0	%	73.1	93.8	88.9	84.9	75.3
4-Terphenyl-d14	1718-51-0	1.0	%	72.6	88.3	81.7	80.2	75.4
EP080S: TPH(V)/BTEX Surrogates								
1.2-Dichloroethane-D4	17060-07-0	2	%	99.2	102	104	113	97.2
Toluene-D8	2037-26-5	2	%	113	117	116	122	113
4-Bromofluorobenzene	460-00-4	2	%	116	114	111	118	107

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)			Sample ID	R01_2201118	Trip blank	Trip spike	----	----
			Sampling date / time	18-Jan-2022 00:00	13-Jan-2022 00:00	13-Jan-2022 00:00	----	----
Compound	CAS Number	LOR	Unit	ES2201561-006	ES2201561-007	ES2201561-008	--------	--------
				Result	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	----	----	----	----
Iron	7439-89-6	0.05	mg/L	<0.05	----	----	----	----
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.0001	mg/L	<0.0001	----	----	----	----
EK055G: Ammonia as N by Discrete Analyser								
Ammonia as N	7664-41-7	0.01	mg/L	<0.01	----	----	----	----
EK059G: Nitrite plus Nitrate as N (NOx) by Discrete Analyser								
Nitrite + Nitrate as N	----	0.01	mg/L	**0.03**	----	----	----	----
EK061G: Total Kjeldahl Nitrogen By Discrete Analyser								
Total Kjeldahl Nitrogen as N	----	0.1	mg/L	<0.1	----	----	----	----
EK062G: Total Nitrogen as N (TKN + NOx) by Discrete Analyser								
^ Total Nitrogen as N	----	0.1	mg/L	<0.1	----	----	----	----
EK067G: Total Phosphorus as P by Discrete Analyser								
Total Phosphorus as P	----	0.01	mg/L	<0.01	----	----	----	----
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								
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	----	----	----	----

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)			Sample ID	R01_2201118	Trip blank	Trip spike	----	----
			Sampling date / time	18-Jan-2022 00:00	13-Jan-2022 00:00	13-Jan-2022 00:00	----	----
Compound	CAS Number	LOR	Unit	ES2201561-006	ES2201561-007	ES2201561-008	--------	--------
				Result	Result	Result	----	----
EP074B: Oxygenated Compounds - Continued								
2-Hexanone (MBK)	591-78-6	50	µg/L	<50	----	----	----	----
EP074C: Sulfonated Compounds								
Carbon disulfide	75-15-0	5	µg/L	<5	----	----	----	----
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	----	----	----	----
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	----	----	----	----

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)			Sample ID	R01_2201118	Trip blank	Trip spike	----	----
			Sampling date / time	18-Jan-2022 00:00	13-Jan-2022 00:00	13-Jan-2022 00:00	----	----
Compound	CAS Number	LOR	Unit	ES2201561-006	ES2201561-007	ES2201561-008	--------	--------
				Result	Result	Result	----	----
EP074E: Halogenated Aliphatic Compounds - Continued								
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	----	----	----	----
Hexachlorobutadiene	87-68-3	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	----	----	----	----
1.3-Dichlorobenzene	541-73-1	5	µg/L	<5	----	----	----	----
1.4-Dichlorobenzene	106-46-7	5	µg/L	<5	----	----	----	----
1.2-Dichlorobenzene	95-50-1	5	µg/L	<5	----	----	----	----
1.2.4-Trichlorobenzene	120-82-1	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)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	----	----	----	----
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	----	----	----	----

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	R01_2201118	Trip blank	Trip spike	----	----
				Sampling date / time	18-Jan-2022 00:00	13-Jan-2022 00:00	13-Jan-2022 00:00	----	----
Compound	CAS Number	LOR	Unit		ES2201561-006	ES2201561-007	ES2201561-008	--------	--------
					Result	Result	Result	----	----
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued									
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	<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	<20	----	----	----
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	20	µg/L		<20	<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	<1	17	----	----
Toluene	108-88-3	2	µg/L		<2	<2	18	----	----
Ethylbenzene	100-41-4	2	µg/L		<2	<2	17	----	----
meta- & para-Xylene	108-38-3 106-42-3	2	µg/L		<2	<2	18	----	----
ortho-Xylene	95-47-6	2	µg/L		<2	<2	18	----	----
^ Total Xylenes	----	2	µg/L		<2	<2	36	----	----
^ Sum of BTEX	----	1	µg/L		<1	<1	88	----	----
Naphthalene	91-20-3	5	µg/L		<5	<5	19	----	----
EP074S: VOC Surrogates									
1.2-Dichloroethane-D4	17060-07-0	5	%		98.5	----	----	----	----
Toluene-D8	2037-26-5	5	%		115	----	----	----	----
4-Bromofluorobenzene	460-00-4	5	%		100	----	----	----	----
EP075(SIM)S: Phenolic Compound Surrogates									

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	R01_2201118	Trip blank	Trip spike	----	----
				Sampling date / time	18-Jan-2022 00:00	13-Jan-2022 00:00	13-Jan-2022 00:00	----	----
Compound	CAS Number	LOR	Unit		ES2201561-006	ES2201561-007	ES2201561-008	--------	--------
					Result	Result	Result	----	----
EP075(SIM)S: Phenolic Compound Surrogates - Continued									
Phenol-d6	13127-88-3	1.0	%		16.8	----	----	----	----
2-Chlorophenol-D4	93951-73-6	1.0	%		44.1	----	----	----	----
2.4.6-Tribromophenol	118-79-6	1.0	%		73.6	----	----	----	----
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	1.0	%		65.0	----	----	----	----
Anthracene-d10	1719-06-8	1.0	%		77.0	----	----	----	----
4-Terphenyl-d14	1718-51-0	1.0	%		79.1	----	----	----	----
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	2	%		95.6	101	99.4	----	----
Toluene-D8	2037-26-5	2	%		109	109	110	----	----
4-Bromofluorobenzene	460-00-4	2	%		106	109	110	----	----

Surrogate Control Limits

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

ALS Environmental

QUALITY CONTROL REPORT

Work Order	: **ES2201561**	Page	: 1 of 15
Client	: **ENVIRONMENTAL RESOURCES MANAGEMENT (ERM)**	Laboratory	: Environmental Division Sydney
Contact	: NICHOLAS GRBICH	Contact	: Customer Services ES
Address	: LEVEL 1 45 WATT STREET NEWCASTLE NSW 2300	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
Telephone	: ----	Telephone	: +61-2-8784 8555
Project	: 0628507	Date Samples Received	: 18-Jan-2022
Order number	: ----	Date Analysis Commenced	: 19-Jan-2022
C-O-C number	: ----	Issue Date	: 25-Jan-2022
Sampler	: Taj Morrison		
Site	: ----		
Quote number	: EN/114		
No. of samples received	: 8		
No. of samples analysed	: 8		

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

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

This Quality Control Report contains the following information:

- Laboratory Duplicate (DUP) Report; Relative Percentage Difference (RPD) and Acceptance Limits
- Method Blank (MB) and Laboratory Control Spike (LCS) Report; Recovery and Acceptance Limits
- Matrix Spike (MS) Report; Recovery and Acceptance Limits

Signatories

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

Signatories	*Position*	*Accreditation Category*
Ankit Joshi	Inorganic Chemist	Sydney Inorganics, Smithfield, NSW
Edwandy Fadjar	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.

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**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Acceptable RPD (%)
EA015: Total Dissolved Solids dried at 180 ± 5 °C (QC Lot: 4131022)									
ES2201509-006	Anonymous	EA015H: Total Dissolved Solids @180°C	----	10	mg/L	5360	5290	1.4	0% - 20%
ES2201571-002	Anonymous	EA015H: Total Dissolved Solids @180°C	----	10	mg/L	272	267	1.7	0% - 20%
ED037P: Alkalinity by PC Titrator (QC Lot: 4127665)									
ES2201561-004	SMW_BH035	ED037-P: Hydroxide Alkalinity as CaCO3	DMO-210-001	1	mg/L	<1	<1	0.0	No Limit
		ED037-P: Carbonate Alkalinity as CaCO3	3812-32-6	1	mg/L	<1	<1	0.0	No Limit
		ED037-P: Bicarbonate Alkalinity as CaCO3	71-52-3	1	mg/L	568	571	0.4	0% - 20%
		ED037-P: Total Alkalinity as CaCO3	----	1	mg/L	568	571	0.4	0% - 20%
ES2201571-001	Anonymous	ED037-P: Hydroxide Alkalinity as CaCO3	DMO-210-001	1	mg/L	<1	<1	0.0	No Limit
		ED037-P: Carbonate Alkalinity as CaCO3	3812-32-6	1	mg/L	<1	<1	0.0	No Limit
		ED037-P: Bicarbonate Alkalinity as CaCO3	71-52-3	1	mg/L	59	61	2.5	0% - 20%
		ED037-P: Total Alkalinity as CaCO3	----	1	mg/L	59	61	2.5	0% - 20%
ED041G: Sulfate (Turbidimetric) as SO4 2- by DA (QC Lot: 4127908)									
ES2201473-001	Anonymous	ED041G: Sulfate as SO4 - Turbidimetric	14808-79-8	1	mg/L	309	291	5.9	0% - 20%
ED045G: Chloride by Discrete Analyser (QC Lot: 4127909)									
ES2201473-001	Anonymous	ED045G: Chloride	16887-00-6	1	mg/L	1360	1360	0.4	0% - 20%
ED093F: Dissolved Major Cations (QC Lot: 4131173)									
ES2201656-001	Anonymous	ED093F: Calcium	7440-70-2	1	mg/L	84	83	0.0	0% - 20%
		ED093F: Magnesium	7439-95-4	1	mg/L	6	6	0.0	No Limit
		ED093F: Sodium	7440-23-5	1	mg/L	13	13	0.0	0% - 50%
		ED093F: Potassium	7440-09-7	1	mg/L	2	2	0.0	No Limit
ES2201561-001	SMW_BH038	ED093F: Calcium	7440-70-2	1	mg/L	272	282	3.6	0% - 20%
		ED093F: Magnesium	7439-95-4	1	mg/L	<1	<1	0.0	No Limit
		ED093F: Sodium	7440-23-5	1	mg/L	514	532	3.4	0% - 20%

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 (%)*
ED093F: Dissolved Major Cations (QC Lot: 4131173) - continued									
ES2201561-001	SMW_BH038	ED093F: Potassium	7440-09-7	1	mg/L	10	11	0.0	0% - 50%
EG020F: Dissolved Metals by ICP-MS (QC Lot: 4131172)									
ES2201561-001	SMW_BH038	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	0.014	0.015	7.0	0% - 50%
		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	<0.001	<0.001	0.0	No Limit
		EG020A-F: Zinc	7440-66-6	0.005	mg/L	<0.005	<0.005	0.0	No Limit
		EG020A-F: Iron	7439-89-6	0.05	mg/L	<0.05	<0.05	0.0	No Limit
ES2201651-001	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	<0.001	<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	0.010	0.011	0.0	0% - 50%
		EG020A-F: Zinc	7440-66-6	0.005	mg/L	<0.005	<0.005	0.0	No Limit
		EG020A-F: Iron	7439-89-6	0.05	mg/L	<0.05	<0.05	0.0	No Limit
EG020T: Total Metals by ICP-MS (QC Lot: 4131587)									
ES2201666-001	Anonymous	EG020A-T: Cadmium	7440-43-9	0.0001	mg/L	0.0002	0.0002	0.0	No Limit
		EG020A-T: Arsenic	7440-38-2	0.001	mg/L	<0.001	<0.001	0.0	No Limit
		EG020A-T: Chromium	7440-47-3	0.001	mg/L	<0.001	<0.001	0.0	No Limit
		EG020A-T: Copper	7440-50-8	0.001	mg/L	0.001	0.001	0.0	No Limit
		EG020A-T: Lead	7439-92-1	0.001	mg/L	<0.001	<0.001	0.0	No Limit
		EG020A-T: Nickel	7440-02-0	0.001	mg/L	0.047	0.047	0.0	0% - 20%
		EG020A-T: Zinc	7440-66-6	0.005	mg/L	0.100	0.101	1.2	0% - 50%
		EG020A-T: Iron	7439-89-6	0.05	mg/L	1.02	1.06	3.7	0% - 20%
ES2201462-001	Anonymous	EG020A-T: Cadmium	7440-43-9	0.0001	mg/L	<1.0 µg/L	<0.0010	0.0	No Limit
		EG020A-T: Arsenic	7440-38-2	0.001	mg/L	<10 µg/L	<0.010	0.0	No Limit
		EG020A-T: Chromium	7440-47-3	0.001	mg/L	<10 µg/L	<0.010	0.0	No Limit
		EG020A-T: Copper	7440-50-8	0.001	mg/L	<10 µg/L	<0.010	0.0	No Limit
		EG020A-T: Lead	7439-92-1	0.001	mg/L	<10 µg/L	<0.010	0.0	No Limit
		EG020A-T: Nickel	7440-02-0	0.001	mg/L	<10 µg/L	<0.010	0.0	No Limit
		EG020A-T: Zinc	7440-66-6	0.005	mg/L	<50 µg/L	<0.050	0.0	No Limit
		EG020A-T: Iron	7439-89-6	0.05	mg/L	270 µg/L	0.31	12.7	No Limit
EG035F: Dissolved Mercury by FIMS (QC Lot: 4131174)									
ES2201561-002	SMW_BH035_S	EG035F: Mercury	7439-97-6	0.0001	mg/L	<0.0001	<0.0001	0.0	No Limit
ES2201651-006	Anonymous	EG035F: Mercury	7439-97-6	0.0001	mg/L	<0.0001	<0.0001	0.0	No Limit
EG035T: Total Recoverable Mercury by FIMS (QC Lot: 4131495)									

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 (%)*
EG035T: Total Recoverable Mercury by FIMS (QC Lot: 4131495) - continued									
ES2201501-001	Anonymous	EG035T: Mercury	7439-97-6	0.0001	mg/L	<0.0001	<0.0001	0.0	No Limit
ES2201754-006	Anonymous	EG035T: Mercury	7439-97-6	0.0001	mg/L	<0.0001	<0.0001	0.0	No Limit
EK055G: Ammonia as N by Discrete Analyser (QC Lot: 4131079)									
ES2201349-001	Anonymous	EK055G: Ammonia as N	7664-41-7	0.01	mg/L	2.08	2.20	5.6	0% - 20%
ES2200809-001	Anonymous	EK055G: Ammonia as N	7664-41-7	0.01	mg/L	0.20	0.20	0.0	0% - 20%
EK055G: Ammonia as N by Discrete Analyser (QC Lot: 4131081)									
ES2201561-004	SMW_BH035	EK055G: Ammonia as N	7664-41-7	0.01	mg/L	5.59	5.71	2.2	0% - 20%
EK057G: Nitrite as N by Discrete Analyser (QC Lot: 4127910)									
EW2200153-007	Anonymous	EK057G: Nitrite as N	14797-65-0	0.01	mg/L	<0.01	<0.01	0.0	No Limit
ES2201473-001	Anonymous	EK057G: Nitrite as N	14797-65-0	0.01	mg/L	<0.01	<0.01	0.0	No Limit
EK059G: Nitrite plus Nitrate as N (NOx) by Discrete Analyser (QC Lot: 4131078)									
ES2201367-002	Anonymous	EK059G: Nitrite + Nitrate as N	----	0.01	mg/L	0.04	0.03	0.0	No Limit
ES2200809-001	Anonymous	EK059G: Nitrite + Nitrate as N	----	0.01	mg/L	0.60	0.56	7.7	0% - 20%
EK059G: Nitrite plus Nitrate as N (NOx) by Discrete Analyser (QC Lot: 4131080)									
ES2201648-001	Anonymous	EK059G: Nitrite + Nitrate as N	----	0.01	mg/L	0.01	<0.01	0.0	No Limit
ES2201561-004	SMW_BH035	EK059G: Nitrite + Nitrate as N	----	0.01	mg/L	0.08	0.12	31.7	0% - 50%
EK061G: Total Kjeldahl Nitrogen By Discrete Analyser (QC Lot: 4131085)									
ES2201561-001	SMW_BH038	EK061G: Total Kjeldahl Nitrogen as N	----	0.1	mg/L	0.9	0.9	0.0	No Limit
ES2201644-002	Anonymous	EK061G: Total Kjeldahl Nitrogen as N	----	0.1	mg/L	0.2	0.2	0.0	No Limit
EK067G: Total Phosphorus as P by Discrete Analyser (QC Lot: 4131084)									
ES2201561-001	SMW_BH038	EK067G: Total Phosphorus as P	----	0.01	mg/L	0.01	<0.01	0.0	No Limit
ES2201644-002	Anonymous	EK067G: Total Phosphorus as P	----	0.01	mg/L	0.02	0.01	0.0	No Limit
EP074A: Monocyclic Aromatic Hydrocarbons (QC Lot: 4127162)									
ES2201394-001	Anonymous	EP074: Styrene	100-42-5	5	µg/L	<5	<5	0.0	No Limit
		EP074: Isopropylbenzene	98-82-8	5	µg/L	<5	<5	0.0	No Limit
		EP074: n-Propylbenzene	103-65-1	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.3.5-Trimethylbenzene	108-67-8	5	µg/L	<5	<5	0.0	No Limit
		EP074: sec-Butylbenzene	135-98-8	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.2.4-Trimethylbenzene	95-63-6	5	µg/L	<5	<5	0.0	No Limit
		EP074: tert-Butylbenzene	98-06-6	5	µg/L	<5	<5	0.0	No Limit
		EP074: p-Isopropyltoluene	99-87-6	5	µg/L	<5	<5	0.0	No Limit
		EP074: n-Butylbenzene	104-51-8	5	µg/L	<5	<5	0.0	No Limit
ES2201561-004	SMW_BH035	EP074: Styrene	100-42-5	5	µg/L	<5	<5	0.0	No Limit
		EP074: Isopropylbenzene	98-82-8	5	µg/L	<5	<5	0.0	No Limit
		EP074: n-Propylbenzene	103-65-1	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.3.5-Trimethylbenzene	108-67-8	5	µg/L	<5	<5	0.0	No Limit
		EP074: sec-Butylbenzene	135-98-8	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.2.4-Trimethylbenzene	95-63-6	5	µg/L	<5	<5	0.0	No Limit
		EP074: tert-Butylbenzene	98-06-6	5	µg/L	<5	<5	0.0	No Limit

Sub-Matrix: **WATER**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Acceptable RPD (%)*
EP074A: Monocyclic Aromatic Hydrocarbons (QC Lot: 4127162) - continued									
ES2201561-004	SMW_BH035	EP074: p-Isopropyltoluene	99-87-6	5	µg/L	<5	<5	0.0	No Limit
		EP074: n-Butylbenzene	104-51-8	5	µg/L	<5	<5	0.0	No Limit
EP074B: Oxygenated Compounds (QC Lot: 4127162)									
ES2201394-001	Anonymous	EP074: Vinyl Acetate	108-05-4	50	µg/L	<50	<50	0.0	No Limit
		EP074: 2-Butanone (MEK)	78-93-3	50	µg/L	<50	<50	0.0	No Limit
		EP074: 4-Methyl-2-pentanone (MIBK)	108-10-1	50	µg/L	<50	<50	0.0	No Limit
		EP074: 2-Hexanone (MBK)	591-78-6	50	µg/L	<50	<50	0.0	No Limit
ES2201561-004	SMW_BH035	EP074: Vinyl Acetate	108-05-4	50	µg/L	<50	<50	0.0	No Limit
		EP074: 2-Butanone (MEK)	78-93-3	50	µg/L	<50	<50	0.0	No Limit
		EP074: 4-Methyl-2-pentanone (MIBK)	108-10-1	50	µg/L	<50	<50	0.0	No Limit
		EP074: 2-Hexanone (MBK)	591-78-6	50	µg/L	<50	<50	0.0	No Limit
EP074C: Sulfonated Compounds (QC Lot: 4127162)									
ES2201394-001	Anonymous	EP074: Carbon disulfide	75-15-0	5	µg/L	<5	<5	0.0	No Limit
ES2201561-004	SMW_BH035	EP074: Carbon disulfide	75-15-0	5	µg/L	<5	<5	0.0	No Limit
EP074D: Fumigants (QC Lot: 4127162)									
ES2201394-001	Anonymous	EP074: 2.2-Dichloropropane	594-20-7	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.2-Dichloropropane	78-87-5	5	µg/L	<5	<5	0.0	No Limit
		EP074: cis-1.3-Dichloropropylene	10061-01-5	5	µg/L	<5	<5	0.0	No Limit
		EP074: trans-1.3-Dichloropropylene	10061-02-6	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.2-Dibromoethane (EDB)	106-93-4	5	µg/L	<5	<5	0.0	No Limit
ES2201561-004	SMW_BH035	EP074: 2.2-Dichloropropane	594-20-7	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.2-Dichloropropane	78-87-5	5	µg/L	<5	<5	0.0	No Limit
		EP074: cis-1.3-Dichloropropylene	10061-01-5	5	µg/L	<5	<5	0.0	No Limit
		EP074: trans-1.3-Dichloropropylene	10061-02-6	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.2-Dibromoethane (EDB)	106-93-4	5	µg/L	<5	<5	0.0	No Limit
EP074E: Halogenated Aliphatic Compounds (QC Lot: 4127162)									
ES2201394-001	Anonymous	EP074: 1.1-Dichloroethene	75-35-4	5	µg/L	<5	<5	0.0	No Limit
		EP074: Iodomethane	74-88-4	5	µg/L	<5	<5	0.0	No Limit
		EP074: trans-1.2-Dichloroethene	156-60-5	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.1-Dichloroethane	75-34-3	5	µg/L	<5	<5	0.0	No Limit
		EP074: cis-1.2-Dichloroethene	156-59-2	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.1.1-Trichloroethane	71-55-6	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.1-Dichloropropylene	563-58-6	5	µg/L	<5	<5	0.0	No Limit
		EP074: Carbon Tetrachloride	56-23-5	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.2-Dichloroethane	107-06-2	5	µg/L	<5	<5	0.0	No Limit
		EP074: Trichloroethene	79-01-6	5	µg/L	<5	<5	0.0	No Limit
		EP074: Dibromomethane	74-95-3	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.1.2-Trichloroethane	79-00-5	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.3-Dichloropropane	142-28-9	5	µg/L	<5	<5	0.0	No Limit

Sub-Matrix: **WATER**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Acceptable RPD (%)*
EP074E: Halogenated Aliphatic Compounds (QC Lot: 4127162) - continued									
ES2201394-001	Anonymous	EP074: Tetrachloroethene	127-18-4	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.1.1.2-Tetrachloroethane	630-20-6	5	µg/L	<5	<5	0.0	No Limit
		EP074: trans-1.4-Dichloro-2-butene	110-57-6	5	µg/L	<5	<5	0.0	No Limit
		EP074: cis-1.4-Dichloro-2-butene	1476-11-5	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.1.2.2-Tetrachloroethane	79-34-5	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.2.3-Trichloropropane	96-18-4	5	µg/L	<5	<5	0.0	No Limit
		EP074: Pentachloroethane	76-01-7	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.2-Dibromo-3-chloropropane	96-12-8	5	µg/L	<5	<5	0.0	No Limit
		EP074: Hexachlorobutadiene	87-68-3	5	µg/L	<5	<5	0.0	No Limit
		EP074: Dichlorodifluoromethane	75-71-8	50	µg/L	<50	<50	0.0	No Limit
		EP074: Chloromethane	74-87-3	50	µg/L	<50	<50	0.0	No Limit
		EP074: Vinyl chloride	75-01-4	50	µg/L	<50	<50	0.0	No Limit
		EP074: Bromomethane	74-83-9	50	µg/L	<50	<50	0.0	No Limit
		EP074: Chloroethane	75-00-3	50	µg/L	<50	<50	0.0	No Limit
		EP074: Trichlorofluoromethane	75-69-4	50	µg/L	<50	<50	0.0	No Limit
ES2201561-004	SMW_BH035	EP074: 1.1-Dichloroethene	75-35-4	5	µg/L	<5	<5	0.0	No Limit
		EP074: Iodomethane	74-88-4	5	µg/L	<5	<5	0.0	No Limit
		EP074: trans-1.2-Dichloroethene	156-60-5	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.1-Dichloroethane	75-34-3	5	µg/L	<5	<5	0.0	No Limit
		EP074: cis-1.2-Dichloroethene	156-59-2	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.1.1-Trichloroethane	71-55-6	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.1-Dichloropropylene	563-58-6	5	µg/L	<5	<5	0.0	No Limit
		EP074: Carbon Tetrachloride	56-23-5	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.2-Dichloroethane	107-06-2	5	µg/L	<5	<5	0.0	No Limit
		EP074: Trichloroethene	79-01-6	5	µg/L	<5	<5	0.0	No Limit
		EP074: Dibromomethane	74-95-3	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.1.2-Trichloroethane	79-00-5	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.3-Dichloropropane	142-28-9	5	µg/L	<5	<5	0.0	No Limit
		EP074: Tetrachloroethene	127-18-4	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.1.1.2-Tetrachloroethane	630-20-6	5	µg/L	<5	<5	0.0	No Limit
		EP074: trans-1.4-Dichloro-2-butene	110-57-6	5	µg/L	<5	<5	0.0	No Limit
		EP074: cis-1.4-Dichloro-2-butene	1476-11-5	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.1.2.2-Tetrachloroethane	79-34-5	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.2.3-Trichloropropane	96-18-4	5	µg/L	<5	<5	0.0	No Limit
		EP074: Pentachloroethane	76-01-7	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.2-Dibromo-3-chloropropane	96-12-8	5	µg/L	<5	<5	0.0	No Limit
		EP074: Hexachlorobutadiene	87-68-3	5	µg/L	<5	<5	0.0	No Limit
		EP074: Dichlorodifluoromethane	75-71-8	50	µg/L	<50	<50	0.0	No Limit
		EP074: Chloromethane	74-87-3	50	µg/L	<50	<50	0.0	No Limit
		EP074: Vinyl chloride	75-01-4	50	µg/L	<50	<50	0.0	No Limit

Sub-Matrix: **WATER**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Acceptable RPD (%)*
EP074E: Halogenated Aliphatic Compounds (QC Lot: 4127162) - continued									
ES2201561-004	SMW_BH035	EP074: Bromomethane	74-83-9	50	µg/L	<50	<50	0.0	No Limit
		EP074: Chloroethane	75-00-3	50	µg/L	<50	<50	0.0	No Limit
		EP074: Trichlorofluoromethane	75-69-4	50	µg/L	<50	<50	0.0	No Limit
EP074F: Halogenated Aromatic Compounds (QC Lot: 4127162)									
ES2201394-001	Anonymous	EP074: Chlorobenzene	108-90-7	5	µg/L	<5	<5	0.0	No Limit
		EP074: Bromobenzene	108-86-1	5	µg/L	<5	<5	0.0	No Limit
		EP074: 2-Chlorotoluene	95-49-8	5	µg/L	<5	<5	0.0	No Limit
		EP074: 4-Chlorotoluene	106-43-4	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.3-Dichlorobenzene	541-73-1	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.4-Dichlorobenzene	106-46-7	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.2-Dichlorobenzene	95-50-1	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.2.4-Trichlorobenzene	120-82-1	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.2.3-Trichlorobenzene	87-61-6	5	µg/L	<5	<5	0.0	No Limit
ES2201561-004	SMW_BH035	EP074: Chlorobenzene	108-90-7	5	µg/L	<5	<5	0.0	No Limit
		EP074: Bromobenzene	108-86-1	5	µg/L	<5	<5	0.0	No Limit
		EP074: 2-Chlorotoluene	95-49-8	5	µg/L	<5	<5	0.0	No Limit
		EP074: 4-Chlorotoluene	106-43-4	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.3-Dichlorobenzene	541-73-1	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.4-Dichlorobenzene	106-46-7	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.2-Dichlorobenzene	95-50-1	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.2.4-Trichlorobenzene	120-82-1	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.2.3-Trichlorobenzene	87-61-6	5	µg/L	<5	<5	0.0	No Limit
EP074G: Trihalomethanes (QC Lot: 4127162)									
ES2201394-001	Anonymous	EP074: Chloroform	67-66-3	5	µg/L	<5	<5	0.0	No Limit
		EP074: Bromodichloromethane	75-27-4	5	µg/L	<5	<5	0.0	No Limit
		EP074: Dibromochloromethane	124-48-1	5	µg/L	<5	<5	0.0	No Limit
		EP074: Bromoform	75-25-2	5	µg/L	<5	<5	0.0	No Limit
ES2201561-004	SMW_BH035	EP074: Chloroform	67-66-3	5	µg/L	<5	<5	0.0	No Limit
		EP074: Bromodichloromethane	75-27-4	5	µg/L	<5	<5	0.0	No Limit
		EP074: Dibromochloromethane	124-48-1	5	µg/L	<5	<5	0.0	No Limit
		EP074: Bromoform	75-25-2	5	µg/L	<5	<5	0.0	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 4127161)									
ES2201394-001	Anonymous	EP080: C6 - C9 Fraction	----	20	µg/L	<20	<20	0.0	No Limit
ES2201561-004	SMW_BH035	EP080: C6 - C9 Fraction	----	20	µg/L	<20	<20	0.0	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 4127161)									
ES2201394-001	Anonymous	EP080: C6 - C10 Fraction	C6_C10	20	µg/L	<20	<20	0.0	No Limit
ES2201561-004	SMW_BH035	EP080: C6 - C10 Fraction	C6_C10	20	µg/L	<20	<20	0.0	No Limit
EP080: BTEXN (QC Lot: 4127161)									
ES2201394-001	Anonymous	EP080: Benzene	71-43-2	1	µg/L	<1	<1	0.0	No Limit

Sub-Matrix: **WATER**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Acceptable RPD (%)*
EP080: BTEXN (QC Lot: 4127161) - continued									
ES2201394-001	Anonymous	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	108-38-3 106-42-3	2	µg/L	<2	<2	0.0	No Limit
		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
ES2201561-004	SMW_BH035	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	108-38-3 106-42-3	2	µg/L	<2	<2	0.0	No Limit
		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

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: **WATER**

				Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Acceptable Limits (%)	
Method: Compound	CAS Number	LOR	Unit	Result	Concentration	LCS	Low	High
EA015: Total Dissolved Solids dried at 180 ± 5 °C (QCLot: 4131022)								
EA015H: Total Dissolved Solids @180°C	----	10	mg/L	<10	2000 mg/L	102	87.0	109
				<10	293 mg/L	122	75.2	126
				<10	2835 mg/L	99.8	83.0	124
ED037P: Alkalinity by PC Titrator (QCLot: 4127665)								
ED037-P: Total Alkalinity as CaCO3	----	----	mg/L	----	200 mg/L	86.0	81.0	111
				----	50 mg/L	98.6	80.0	120
ED041G: Sulfate (Turbidimetric) as SO4 2- by DA (QCLot: 4127908)								
ED041G: Sulfate as SO4 - Turbidimetric	14808-79-8	1	mg/L	<1	25 mg/L	99.8	82.0	122
				<1	500 mg/L	87.1	82.0	122
ED045G: Chloride by Discrete Analyser (QCLot: 4127909)								
ED045G: Chloride	16887-00-6	1	mg/L	<1	50 mg/L	101	80.9	127
				<1	1000 mg/L	97.0	80.9	127
ED093F: Dissolved Major Cations (QCLot: 4131173)								
ED093F: Calcium	7440-70-2	1	mg/L	<1	50 mg/L	89.9	80.0	114
ED093F: Magnesium	7439-95-4	1	mg/L	<1	50 mg/L	101	90.0	116
ED093F: Sodium	7440-23-5	1	mg/L	<1	50 mg/L	100	82.0	120
ED093F: Potassium	7440-09-7	1	mg/L	<1	50 mg/L	100	85.0	113
EG020F: Dissolved Metals by ICP-MS (QCLot: 4131172)								
EG020A-F: Arsenic	7440-38-2	0.001	mg/L	<0.001	0.1 mg/L	90.3	85.0	114
EG020A-F: Cadmium	7440-43-9	0.0001	mg/L	<0.0001	0.1 mg/L	89.2	84.0	110
EG020A-F: Chromium	7440-47-3	0.001	mg/L	<0.001	0.1 mg/L	86.6	85.0	111
EG020A-F: Copper	7440-50-8	0.001	mg/L	<0.001	0.1 mg/L	89.0	81.0	111
EG020A-F: Lead	7439-92-1	0.001	mg/L	<0.001	0.1 mg/L	88.5	83.0	111
EG020A-F: Nickel	7440-02-0	0.001	mg/L	<0.001	0.1 mg/L	90.4	82.0	112
EG020A-F: Zinc	7440-66-6	0.005	mg/L	<0.005	0.1 mg/L	93.6	81.0	117
EG020A-F: Iron	7439-89-6	0.05	mg/L	<0.05	0.5 mg/L	88.4	82.0	112
EG020T: Total Metals by ICP-MS (QCLot: 4131587)								
EG020A-T: Arsenic	7440-38-2	0.001	mg/L	<0.001	0.1 mg/L	101	82.0	114
EG020A-T: Cadmium	7440-43-9	0.0001	mg/L	<0.0001	0.1 mg/L	98.4	84.0	112
EG020A-T: Chromium	7440-47-3	0.001	mg/L	<0.001	0.1 mg/L	94.4	86.0	116
EG020A-T: Copper	7440-50-8	0.001	mg/L	<0.001	0.1 mg/L	97.2	83.0	118
EG020A-T: Lead	7439-92-1	0.001	mg/L	<0.001	0.1 mg/L	95.0	85.0	115
EG020A-T: Nickel	7440-02-0	0.001	mg/L	<0.001	0.1 mg/L	97.1	84.0	116
EG020A-T: Zinc	7440-66-6	0.005	mg/L	<0.005	0.1 mg/L	98.3	79.0	117

Sub-Matrix: **WATER**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Acceptable Limits (%)	
				Result	Concentration	LCS	Low	High
EG020T: Total Metals by ICP-MS (QCLot: 4131587) - continued								
EG020A-T: Iron	7439-89-6	0.05	mg/L	<0.05	0.5 mg/L	97.2	85.0	117
EG035F: Dissolved Mercury by FIMS (QCLot: 4131174)								
EG035F: Mercury	7439-97-6	0.0001	mg/L	<0.0001	0.01 mg/L	96.6	83.0	105
EG035T: Total Recoverable Mercury by FIMS (QCLot: 4131495)								
EG035T: Mercury	7439-97-6	0.0001	mg/L	<0.0001	0.01 mg/L	98.1	77.0	111
EK055G: Ammonia as N by Discrete Analyser (QCLot: 4131079)								
EK055G: Ammonia as N	7664-41-7	0.01	mg/L	<0.01	1 mg/L	99.6	90.0	114
EK055G: Ammonia as N by Discrete Analyser (QCLot: 4131081)								
EK055G: Ammonia as N	7664-41-7	0.01	mg/L	<0.01	1 mg/L	102	90.0	114
EK057G: Nitrite as N by Discrete Analyser (QCLot: 4127910)								
EK057G: Nitrite as N	14797-65-0	0.01	mg/L	<0.01	0.5 mg/L	102	82.0	114
EK059G: Nitrite plus Nitrate as N (NOx) by Discrete Analyser (QCLot: 4131078)								
EK059G: Nitrite + Nitrate as N	----	0.01	mg/L	<0.01	0.5 mg/L	102	91.0	113
EK059G: Nitrite plus Nitrate as N (NOx) by Discrete Analyser (QCLot: 4131080)								
EK059G: Nitrite + Nitrate as N	----	0.01	mg/L	<0.01	0.5 mg/L	102	91.0	113
EK061G: Total Kjeldahl Nitrogen By Discrete Analyser (QCLot: 4131085)								
EK061G: Total Kjeldahl Nitrogen as N	----	0.1	mg/L	<0.1	10 mg/L	89.8	69.0	101
				<0.1	1 mg/L	104	70.0	118
				<0.1	5 mg/L	101	70.0	130
EK067G: Total Phosphorus as P by Discrete Analyser (QCLot: 4131084)								
EK067G: Total Phosphorus as P	----	0.01	mg/L	<0.01	4.42 mg/L	97.3	71.0	101
				<0.01	0.442 mg/L	107	72.0	108
				<0.01	1 mg/L	109	70.0	130
EP074A: Monocyclic Aromatic Hydrocarbons (QCLot: 4127162)								
EP074: Styrene	100-42-5	5	µg/L	<5	10 µg/L	94.4	73.0	119
EP074: Isopropylbenzene	98-82-8	5	µg/L	<5	10 µg/L	99.2	76.0	118
EP074: n-Propylbenzene	103-65-1	5	µg/L	<5	10 µg/L	98.1	69.0	119
EP074: 1.3.5-Trimethylbenzene	108-67-8	5	µg/L	<5	10 µg/L	97.6	74.0	116
EP074: sec-Butylbenzene	135-98-8	5	µg/L	<5	10 µg/L	99.0	73.0	119
EP074: 1.2.4-Trimethylbenzene	95-63-6	5	µg/L	<5	10 µg/L	98.0	74.0	116
EP074: tert-Butylbenzene	98-06-6	5	µg/L	<5	10 µg/L	98.7	72.0	116
EP074: p-Isopropyltoluene	99-87-6	5	µg/L	<5	10 µg/L	102	71.0	119
EP074: n-Butylbenzene	104-51-8	5	µg/L	<5	10 µg/L	102	65.0	123
EP074B: Oxygenated Compounds (QCLot: 4127162)								
EP074: Vinyl Acetate	108-05-4	50	µg/L	<50	100 µg/L	100	61.4	134
EP074: 2-Butanone (MEK)	78-93-3	50	µg/L	<50	100 µg/L	82.0	73.6	130
EP074: 4-Methyl-2-pentanone (MIBK)	108-10-1	50	µg/L	<50	100 µg/L	86.7	66.0	132

Sub-Matrix: **WATER**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Acceptable Limits (%)	
				Result	Concentration	LCS	Low	High
EP074B: Oxygenated Compounds (QCLot: 4127162) - continued								
EP074: 2-Hexanone (MBK)	591-78-6	50	µg/L	<50	100 µg/L	72.8	65.0	137
EP074C: Sulfonated Compounds (QCLot: 4127162)								
EP074: Carbon disulfide	75-15-0	5	µg/L	<5	10 µg/L	94.9	72.8	127
EP074D: Fumigants (QCLot: 4127162)								
EP074: 2.2-Dichloropropane	594-20-7	5	µg/L	<5	10 µg/L	100	68.0	122
EP074: 1.2-Dichloropropane	78-87-5	5	µg/L	<5	10 µg/L	97.5	76.0	118
EP074: cis-1.3-Dichloropropylene	10061-01-5	5	µg/L	<5	10 µg/L	96.4	62.0	120
EP074: trans-1.3-Dichloropropylene	10061-02-6	5	µg/L	<5	10 µg/L	93.0	60.0	114
EP074: 1.2-Dibromoethane (EDB)	106-93-4	5	µg/L	<5	10 µg/L	99.2	69.0	117
EP074E: Halogenated Aliphatic Compounds (QCLot: 4127162)								
EP074: Dichlorodifluoromethane	75-71-8	50	µg/L	<50	100 µg/L	81.8	60.6	138
EP074: Chloromethane	74-87-3	50	µg/L	<50	100 µg/L	90.9	67.4	130
EP074: Vinyl chloride	75-01-4	50	µg/L	<50	100 µg/L	92.9	69.4	129
EP074: Bromomethane	74-83-9	50	µg/L	<50	100 µg/L	91.7	56.0	140
EP074: Chloroethane	75-00-3	50	µg/L	<50	100 µg/L	92.4	61.0	139
EP074: Trichlorofluoromethane	75-69-4	50	µg/L	<50	100 µg/L	95.8	69.0	131
EP074: 1.1-Dichloroethene	75-35-4	5	µg/L	<5	10 µg/L	95.6	70.0	124
EP074: Iodomethane	74-88-4	5	µg/L	<5	10 µg/L	86.8	70.2	128
EP074: trans-1.2-Dichloroethene	156-60-5	5	µg/L	<5	10 µg/L	95.2	74.0	118
EP074: 1.1-Dichloroethane	75-34-3	5	µg/L	<5	10 µg/L	96.5	74.0	120
EP074: cis-1.2-Dichloroethene	156-59-2	5	µg/L	<5	10 µg/L	98.8	77.0	119
EP074: 1.1.1-Trichloroethane	71-55-6	5	µg/L	<5	10 µg/L	98.2	67.0	119
EP074: 1.1-Dichloropropylene	563-58-6	5	µg/L	<5	10 µg/L	94.2	73.0	119
EP074: Carbon Tetrachloride	56-23-5	5	µg/L	<5	10 µg/L	96.2	62.0	120
EP074: 1.2-Dichloroethane	107-06-2	5	µg/L	<5	10 µg/L	98.8	73.0	123
EP074: Trichloroethene	79-01-6	5	µg/L	<5	10 µg/L	95.6	76.0	118
EP074: Dibromomethane	74-95-3	5	µg/L	<5	10 µg/L	100	73.0	119
EP074: 1.1.2-Trichloroethane	79-00-5	5	µg/L	<5	10 µg/L	110	72.0	126
EP074: 1.3-Dichloropropane	142-28-9	5	µg/L	<5	10 µg/L	105	71.0	129
EP074: Tetrachloroethene	127-18-4	5	µg/L	<5	10 µg/L	90.4	72.0	124
EP074: 1.1.1.2-Tetrachloroethane	630-20-6	5	µg/L	<5	10 µg/L	98.6	66.0	114
EP074: trans-1.4-Dichloro-2-butene	110-57-6	5	µg/L	<5	10 µg/L	94.4	60.0	120
EP074: cis-1.4-Dichloro-2-butene	1476-11-5	5	µg/L	<5	10 µg/L	97.8	70.6	128
EP074: 1.1.2.2-Tetrachloroethane	79-34-5	5	µg/L	<5	10 µg/L	104	70.0	124
EP074: 1.2.3-Trichloropropane	96-18-4	5	µg/L	<5	10 µg/L	111	74.0	126
EP074: Pentachloroethane	76-01-7	5	µg/L	<5	10 µg/L	121	71.8	126
EP074: 1.2-Dibromo-3-chloropropane	96-12-8	5	µg/L	<5	10 µg/L	86.4	66.4	136
EP074: Hexachlorobutadiene	87-68-3	5	µg/L	<5	10 µg/L	107	58.0	130

Sub-Matrix: **WATER**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Acceptable Limits (%)	
				Result	Concentration	LCS	Low	High
EP074F: Halogenated Aromatic Compounds (QCLot: 4127162)								
EP074: Chlorobenzene	108-90-7	5	µg/L	<5	10 µg/L	103	79.0	117
EP074: Bromobenzene	108-86-1	5	µg/L	<5	10 µg/L	102	76.0	116
EP074: 2-Chlorotoluene	95-49-8	5	µg/L	<5	10 µg/L	98.2	73.0	119
EP074: 4-Chlorotoluene	106-43-4	5	µg/L	<5	10 µg/L	100.0	73.0	119
EP074: 1.3-Dichlorobenzene	541-73-1	5	µg/L	<5	10 µg/L	102	75.0	117
EP074: 1.4-Dichlorobenzene	106-46-7	5	µg/L	<5	10 µg/L	104	74.0	118
EP074: 1.2-Dichlorobenzene	95-50-1	5	µg/L	<5	10 µg/L	102	75.0	117
EP074: 1.2.4-Trichlorobenzene	120-82-1	5	µg/L	<5	10 µg/L	100	61.0	125
EP074: 1.2.3-Trichlorobenzene	87-61-6	5	µg/L	<5	10 µg/L	102	67.0	123
EP074G: Trihalomethanes (QCLot: 4127162)								
EP074: Chloroform	67-66-3	5	µg/L	<5	10 µg/L	101	72.0	120
EP074: Bromodichloromethane	75-27-4	5	µg/L	<5	10 µg/L	95.4	64.0	118
EP074: Dibromochloromethane	124-48-1	5	µg/L	<5	10 µg/L	99.5	65.0	115
EP074: Bromoform	75-25-2	5	µg/L	<5	10 µg/L	96.0	73.5	126
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 4126933)								
EP075(SIM): Naphthalene	91-20-3	1	µg/L	<1.0	5 µg/L	76.8	50.0	94.0
EP075(SIM): Acenaphthylene	208-96-8	1	µg/L	<1.0	5 µg/L	68.2	63.6	114
EP075(SIM): Acenaphthene	83-32-9	1	µg/L	<1.0	5 µg/L	76.5	62.2	113
EP075(SIM): Fluorene	86-73-7	1	µg/L	<1.0	5 µg/L	86.8	63.9	115
EP075(SIM): Phenanthrene	85-01-8	1	µg/L	<1.0	5 µg/L	86.7	62.6	116
EP075(SIM): Anthracene	120-12-7	1	µg/L	<1.0	5 µg/L	81.8	64.3	116
EP075(SIM): Fluoranthene	206-44-0	1	µg/L	<1.0	5 µg/L	89.0	63.6	118
EP075(SIM): Pyrene	129-00-0	1	µg/L	<1.0	5 µg/L	93.2	63.1	118
EP075(SIM): Benz(a)anthracene	56-55-3	1	µg/L	<1.0	5 µg/L	68.1	64.1	117
EP075(SIM): Chrysene	218-01-9	1	µg/L	<1.0	5 µg/L	77.9	62.5	116
EP075(SIM): Benzo(b+j)fluoranthene	205-99-2 205-82-3	1	µg/L	<1.0	5 µg/L	66.9	61.7	119
EP075(SIM): Benzo(k)fluoranthene	207-08-9	1	µg/L	<1.0	5 µg/L	74.0	63.0	115
EP075(SIM): Benzo(a)pyrene	50-32-8	0.5	µg/L	<0.5	5 µg/L	73.4	63.3	117
EP075(SIM): Indeno(1.2.3.cd)pyrene	193-39-5	1	µg/L	<1.0	5 µg/L	68.9	59.9	118
EP075(SIM): Dibenz(a.h)anthracene	53-70-3	1	µg/L	<1.0	5 µg/L	72.6	61.2	117
EP075(SIM): Benzo(g.h.i)perylene	191-24-2	1	µg/L	<1.0	5 µg/L	68.5	59.1	118
EP080/071: Total Petroleum Hydrocarbons (QCLot: 4126932)								
EP071: C10 - C14 Fraction	----	50	µg/L	<50	400 µg/L	67.3	55.8	112
EP071: C15 - C28 Fraction	----	100	µg/L	<100	600 µg/L	86.0	71.6	113
EP071: C29 - C36 Fraction	----	50	µg/L	<50	400 µg/L	114	56.0	121
EP080/071: Total Petroleum Hydrocarbons (QCLot: 4127161)								
EP080: C6 - C9 Fraction	----	20	µg/L	<20	260 µg/L	89.4	75.0	127

Sub-Matrix: **WATER**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report: Result	Laboratory Control Spike (LCS) Report: Spike Concentration	Spike Recovery (%): LCS	Acceptable Limits (%): Low	Acceptable Limits (%): High
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 4126932)								
EP071: >C10 - C16 Fraction	----	100	µg/L	<100	500 µg/L	72.1	57.9	119
EP071: >C16 - C34 Fraction	----	100	µg/L	<100	700 µg/L	97.1	62.5	110
EP071: >C34 - C40 Fraction	----	100	µg/L	<100	300 µg/L	89.8	61.5	121
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 4127161)								
EP080: C6 - C10 Fraction	C6_C10	20	µg/L	<20	310 µg/L	91.8	75.0	127
EP080: BTEXN (QCLot: 4127161)								
EP080: Benzene	71-43-2	1	µg/L	<1	10 µg/L	89.2	70.0	122
EP080: Toluene	108-88-3	2	µg/L	<2	10 µg/L	90.4	69.0	123
EP080: Ethylbenzene	100-41-4	2	µg/L	<2	10 µg/L	91.2	70.0	120
EP080: meta- & para-Xylene	108-38-3 106-42-3	2	µg/L	<2	10 µg/L	90.8	69.0	121
EP080: ortho-Xylene	95-47-6	2	µg/L	<2	10 µg/L	95.2	72.0	122
EP080: Naphthalene	91-20-3	5	µg/L	<5	10 µg/L	91.2	70.0	120

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: **WATER**

Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Matrix Spike (MS) Report: Spike Concentration	SpikeRecovery(%): MS	Acceptable Limits (%): Low	Acceptable Limits (%): High
ED041G: Sulfate (Turbidimetric) as SO4 2- by DA (QCLot: 4127908)							
ES2201473-001	Anonymous	ED041G: Sulfate as SO4 - Turbidimetric	14808-79-8	10 mg/L	# Not Determined	70.0	130
ED045G: Chloride by Discrete Analyser (QCLot: 4127909)							
ES2201473-001	Anonymous	ED045G: Chloride	16887-00-6	50 mg/L	# Not Determined	70.0	130
EG020F: Dissolved Metals by ICP-MS (QCLot: 4131172)							
ES2201551-002	Anonymous	EG020A-F: Arsenic	7440-38-2	1 mg/L	85.8	70.0	130
		EG020A-F: Cadmium	7440-43-9	0.25 mg/L	86.6	70.0	130
		EG020A-F: Chromium	7440-47-3	1 mg/L	85.0	70.0	130
		EG020A-F: Copper	7440-50-8	1 mg/L	87.4	70.0	130
		EG020A-F: Lead	7439-92-1	1 mg/L	84.0	70.0	130
		EG020A-F: Nickel	7440-02-0	1 mg/L	87.2	70.0	130
		EG020A-F: Zinc	7440-66-6	1 mg/L	87.4	70.0	130
EG020T: Total Metals by ICP-MS (QCLot: 4131587)							
ES2201462-002	Anonymous	EG020A-T: Arsenic	7440-38-2	1 mg/L	120	70.0	130
		EG020A-T: Cadmium	7440-43-9	0.25 mg/L	99.7	70.0	130

Sub-Matrix: **WATER**

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Acceptable Limits (%)	
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Concentration	MS	Low	High
EG020T: Total Metals by ICP-MS (QCLot: 4131587) - continued							
ES2201462-002	Anonymous	EG020A-T: Chromium	7440-47-3	1 mg/L	97.4	70.0	130
		EG020A-T: Copper	7440-50-8	1 mg/L	110	70.0	130
		EG020A-T: Lead	7439-92-1	1 mg/L	98.9	70.0	130
		EG020A-T: Nickel	7440-02-0	1 mg/L	109	70.0	130
		EG020A-T: Zinc	7440-66-6	1 mg/L	107	70.0	130
EG035F: Dissolved Mercury by FIMS (QCLot: 4131174)							
ES2201561-001	SMW_BH038	EG035F: Mercury	7439-97-6	0.01 mg/L	86.6	70.0	130
EG035T: Total Recoverable Mercury by FIMS (QCLot: 4131495)							
ES2201501-002	Anonymous	EG035T: Mercury	7439-97-6	0.01 mg/L	97.8	70.0	130
EK055G: Ammonia as N by Discrete Analyser (QCLot: 4131079)							
ES2200809-001	Anonymous	EK055G: Ammonia as N	7664-41-7	1 mg/L	97.4	70.0	130
EK055G: Ammonia as N by Discrete Analyser (QCLot: 4131081)							
ES2201561-004	SMW_BH035	EK055G: Ammonia as N	7664-41-7	1 mg/L	# Not Determined	70.0	130
EK057G: Nitrite as N by Discrete Analyser (QCLot: 4127910)							
ES2201473-001	Anonymous	EK057G: Nitrite as N	14797-65-0	0.5 mg/L	123	70.0	130
EK059G: Nitrite plus Nitrate as N (NOx) by Discrete Analyser (QCLot: 4131078)							
ES2200809-001	Anonymous	EK059G: Nitrite + Nitrate as N	----	0.5 mg/L	108	70.0	130
EK059G: Nitrite plus Nitrate as N (NOx) by Discrete Analyser (QCLot: 4131080)							
ES2201561-004	SMW_BH035	EK059G: Nitrite + Nitrate as N	----	0.5 mg/L	92.6	70.0	130
EK061G: Total Kjeldahl Nitrogen By Discrete Analyser (QCLot: 4131085)							
ES2201561-002	SMW_BH035_S	EK061G: Total Kjeldahl Nitrogen as N	----	50 mg/L	100	70.0	130
EK067G: Total Phosphorus as P by Discrete Analyser (QCLot: 4131084)							
ES2201561-002	SMW_BH035_S	EK067G: Total Phosphorus as P	----	1 mg/L	# Not Determined	70.0	130
EP074E: Halogenated Aliphatic Compounds (QCLot: 4127162)							
ES2201394-001	Anonymous	EP074: 1.1-Dichloroethene	75-35-4	25 µg/L	95.7	70.0	130
		EP074: Trichloroethene	79-01-6	25 µg/L	95.4	70.0	130
EP074F: Halogenated Aromatic Compounds (QCLot: 4127162)							
ES2201394-001	Anonymous	EP074: Chlorobenzene	108-90-7	25 µg/L	109	70.0	130
EP080/071: Total Petroleum Hydrocarbons (QCLot: 4127161)							
ES2201394-001	Anonymous	EP080: C6 - C9 Fraction	----	325 µg/L	104	70.0	130
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 4127161)							
ES2201394-001	Anonymous	EP080: C6 - C10 Fraction	C6_C10	375 µg/L	105	70.0	130

Sub-Matrix: **WATER**

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Acceptable Limits (%)	
Laboratory sample ID	*Sample ID*	*Method: Compound*	*CAS Number*	*Concentration*	*MS*	*Low*	*High*
EP080: BTEXN (QCLot: 4127161)							
ES2201394-001	Anonymous	EP080: Benzene	71-43-2	25 µg/L	99.1	70.0	130
		EP080: Toluene	108-88-3	25 µg/L	102	70.0	130
		EP080: Ethylbenzene	100-41-4	25 µg/L	103	70.0	130
		EP080: meta- & para-Xylene	108-38-3 106-42-3	25 µg/L	104	70.0	130
		EP080: ortho-Xylene	95-47-6	25 µg/L	103	70.0	130
		EP080: Naphthalene	91-20-3	25 µg/L	93.3	70.0	130

ALS Environmental

QA/QC Compliance Assessment to assist with Quality Review

Work Order	: **ES2201561**	Page	: 1 of 11
Client	: **ENVIRONMENTAL RESOURCES MANAGEMENT (ERM)**	Laboratory	: Environmental Division Sydney
Contact	: NICHOLAS GRBICH	Telephone	: +61-2-8784 8555
Project	: 0628507	Date Samples Received	: 18-Jan-2022
Site	: ----	Issue Date	: 25-Jan-2022
Sampler	: Taj Morrison	No. of samples received	: 8
Order number	: ----	No. of samples analysed	: 8

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

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

Summary of Outliers

Outliers : Quality Control Samples

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

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

Outliers : Analysis Holding Time Compliance

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

Outliers : Frequency of Quality Control Samples

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

Outliers : Quality Control Samples

Duplicates, Method Blanks, Laboratory Control Samples and Matrix Spikes

Matrix: **WATER**

Compound Group Name	Laboratory Sample ID	Client Sample ID	Analyte	CAS Number	Data	Limits	Comment
Matrix Spike (MS) Recoveries							
ED041G: Sulfate (Turbidimetric) as SO4 2- by DA	ES2201473--001	Anonymous	**Sulfate as SO4 - Turbidimetric**	14808-79-8	Not Determined	----	**MS recovery not determined, background level greater than or equal to 4x spike level.**
ED045G: Chloride by Discrete Analyser	ES2201473--001	Anonymous	**Chloride**	16887-00-6	Not Determined	----	**MS recovery not determined, background level greater than or equal to 4x spike level.**
EK055G: Ammonia as N by Discrete Analyser	ES2201561--004	SMW_BH035	**Ammonia as N**	7664-41-7	Not Determined	----	**MS recovery not determined, background level greater than or equal to 4x spike level.**
EK067G: Total Phosphorus as P by Discrete Analyser	ES2201561--002	SMW_BH035_S	**Total Phosphorus as P**	----	Not Determined	----	**MS recovery not determined, background level greater than or equal to 4x spike level.**

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	13	0.00	10.00	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	0	14	0.00	10.00	NEPM 2013 B3 & ALS QC Standard
Matrix Spikes (MS)					
PAH/Phenols (GC/MS - SIM)	0	13	0.00	5.00	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	0	14	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*

Matrix: **WATER**

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

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EA015: Total Dissolved Solids dried at 180 ± 5 °C							
Clear Plastic Bottle - Natural (EA015H)							
SMW_BH038	**17-Jan-2022**	**----**	----	----	**20-Jan-2022**	24-Jan-2022	✓
Clear Plastic Bottle - Natural (EA015H)							
SMW_BH035_S, SMW_BH051, SMW_BH035	**18-Jan-2022**	**----**	----	----	**20-Jan-2022**	25-Jan-2022	✓
ED037P: Alkalinity by PC Titrator							
Clear Plastic Bottle - Natural (ED037-P)							
SMW_BH038	**17-Jan-2022**	**----**	----	----	**19-Jan-2022**	31-Jan-2022	✓
Clear Plastic Bottle - Natural (ED037-P)							
SMW_BH035_S, SMW_BH051, SMW_BH035	**18-Jan-2022**	**----**	----	----	**19-Jan-2022**	01-Feb-2022	✓
ED041G: Sulfate (Turbidimetric) as SO4 2- by DA							
Clear Plastic Bottle - Natural (ED041G)							
SMW_BH038	**17-Jan-2022**	**----**	----	----	**19-Jan-2022**	14-Feb-2022	✓
Clear Plastic Bottle - Natural (ED041G)							
SMW_BH035_S, SMW_BH051, SMW_BH035	**18-Jan-2022**	**----**	----	----	**19-Jan-2022**	15-Feb-2022	✓
ED045G: Chloride by Discrete Analyser							
Clear Plastic Bottle - Natural (ED045G)							
SMW_BH038	**17-Jan-2022**	**----**	----	----	**19-Jan-2022**	14-Feb-2022	✓
Clear Plastic Bottle - Natural (ED045G)							
SMW_BH035_S, SMW_BH051, SMW_BH035	**18-Jan-2022**	**----**	----	----	**19-Jan-2022**	15-Feb-2022	✓
ED093F: Dissolved Major Cations							
Clear Plastic Bottle - Nitric Acid; Filtered (ED093F)							
SMW_BH038	**17-Jan-2022**	**----**	----	----	**21-Jan-2022**	14-Feb-2022	✓
Clear Plastic Bottle - Nitric Acid; Filtered (ED093F)							
SMW_BH035_S, SMW_BH051, SMW_BH035	**18-Jan-2022**	**----**	----	----	**21-Jan-2022**	15-Feb-2022	✓
EG020F: Dissolved Metals by ICP-MS							
Clear Plastic Bottle - Nitric Acid; Filtered (EG020A-F)							
SMW_BH038	**17-Jan-2022**	**----**	----	----	**21-Jan-2022**	16-Jul-2022	✓
Clear Plastic Bottle - Nitric Acid; Filtered (EG020A-F)							
SMW_BH035_S, SMW_BH051, SMW_BH035	**18-Jan-2022**	**----**	----	----	**21-Jan-2022**	17-Jul-2022	✓
EG020T: Total Metals by ICP-MS							
Clear Plastic Bottle - Nitric Acid; Unfiltered (EG020A-T)							
R01_2201117	**17-Jan-2022**	**21-Jan-2022**	16-Jul-2022	✓	**21-Jan-2022**	16-Jul-2022	✓
Clear Plastic Bottle - Nitric Acid; Unfiltered (EG020A-T)							
R01_2201118	**18-Jan-2022**	**21-Jan-2022**	17-Jul-2022	✓	**21-Jan-2022**	17-Jul-2022	✓

Matrix: **WATER**

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

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EG035F: Dissolved Mercury by FIMS							
Clear Plastic Bottle - Nitric Acid; Filtered (EG035F)							
SMW_BH038	**17-Jan-2022**	**----**	----	----	**24-Jan-2022**	14-Feb-2022	✓
Clear Plastic Bottle - Nitric Acid; Filtered (EG035F)							
SMW_BH035_S, SMW_BH051, SMW_BH035	**18-Jan-2022**	**----**	----	----	**24-Jan-2022**	15-Feb-2022	✓
EG035T: Total Recoverable Mercury by FIMS							
Clear Plastic Bottle - Nitric Acid; Unfiltered (EG035T)							
R01_2201117	**17-Jan-2022**	**----**	----	----	**21-Jan-2022**	14-Feb-2022	✓
Clear Plastic Bottle - Nitric Acid; Unfiltered (EG035T)							
R01_2201118	**18-Jan-2022**	**----**	----	----	**21-Jan-2022**	15-Feb-2022	✓
EK055G: Ammonia as N by Discrete Analyser							
Clear Plastic Bottle - Sulfuric Acid (EK055G)							
SMW_BH038, R01_2201117	**17-Jan-2022**	**----**	----	----	**21-Jan-2022**	14-Feb-2022	✓
Clear Plastic Bottle - Sulfuric Acid (EK055G)							
SMW_BH035_S, SMW_BH051, SMW_BH035, R01_2201118	**18-Jan-2022**	**----**	----	----	**21-Jan-2022**	15-Feb-2022	✓
EK057G: Nitrite as N by Discrete Analyser							
Clear Plastic Bottle - Natural (EK057G)							
SMW_BH038	**17-Jan-2022**	**----**	----	----	**19-Jan-2022**	19-Jan-2022	✓
Clear Plastic Bottle - Natural (EK057G)							
SMW_BH035_S, SMW_BH051, SMW_BH035	**18-Jan-2022**	**----**	----	----	**19-Jan-2022**	20-Jan-2022	✓
EK059G: Nitrite plus Nitrate as N (NOx) by Discrete Analyser							
Clear Plastic Bottle - Sulfuric Acid (EK059G)							
SMW_BH038, R01_2201117	**17-Jan-2022**	**----**	----	----	**21-Jan-2022**	14-Feb-2022	✓
Clear Plastic Bottle - Sulfuric Acid (EK059G)							
SMW_BH035_S, SMW_BH051, SMW_BH035, R01_2201118	**18-Jan-2022**	**----**	----	----	**21-Jan-2022**	15-Feb-2022	✓
EK061G: Total Kjeldahl Nitrogen By Discrete Analyser							
Clear Plastic Bottle - Sulfuric Acid (EK061G)							
SMW_BH038, R01_2201117	**17-Jan-2022**	**21-Jan-2022**	14-Feb-2022	✓	**21-Jan-2022**	14-Feb-2022	✓
Clear Plastic Bottle - Sulfuric Acid (EK061G)							
SMW_BH035_S, SMW_BH051, SMW_BH035, R01_2201118	**18-Jan-2022**	**21-Jan-2022**	15-Feb-2022	✓	**21-Jan-2022**	15-Feb-2022	✓
EK067G: Total Phosphorus as P by Discrete Analyser							
Clear Plastic Bottle - Sulfuric Acid (EK067G)							
SMW_BH038, R01_2201117	**17-Jan-2022**	**21-Jan-2022**	14-Feb-2022	✓	**21-Jan-2022**	14-Feb-2022	✓
Clear Plastic Bottle - Sulfuric Acid (EK067G)							
SMW_BH035_S, SMW_BH051, SMW_BH035, R01_2201118	**18-Jan-2022**	**21-Jan-2022**	15-Feb-2022	✓	**21-Jan-2022**	15-Feb-2022	✓

Matrix: **WATER**

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

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP074A: Monocyclic Aromatic Hydrocarbons							
Amber VOC Vial - Sulfuric Acid (EP074)							
SMW_BH038, R01_2201117	**17-Jan-2022**	**21-Jan-2022**	31-Jan-2022	✓	**21-Jan-2022**	31-Jan-2022	✓
Amber VOC Vial - Sulfuric Acid (EP074)							
SMW_BH035_S, SMW_BH051, SMW_BH035, R01_2201118	**18-Jan-2022**	**21-Jan-2022**	01-Feb-2022	✓	**21-Jan-2022**	01-Feb-2022	✓
EP074B: Oxygenated Compounds							
Amber VOC Vial - Sulfuric Acid (EP074)							
SMW_BH038, R01_2201117	**17-Jan-2022**	**21-Jan-2022**	31-Jan-2022	✓	**21-Jan-2022**	31-Jan-2022	✓
Amber VOC Vial - Sulfuric Acid (EP074)							
SMW_BH035_S, SMW_BH051, SMW_BH035, R01_2201118	**18-Jan-2022**	**21-Jan-2022**	01-Feb-2022	✓	**21-Jan-2022**	01-Feb-2022	✓
EP074C: Sulfonated Compounds							
Amber VOC Vial - Sulfuric Acid (EP074)							
SMW_BH038, R01_2201117	**17-Jan-2022**	**21-Jan-2022**	31-Jan-2022	✓	**21-Jan-2022**	31-Jan-2022	✓
Amber VOC Vial - Sulfuric Acid (EP074)							
SMW_BH035_S, SMW_BH051, SMW_BH035, R01_2201118	**18-Jan-2022**	**21-Jan-2022**	01-Feb-2022	✓	**21-Jan-2022**	01-Feb-2022	✓
EP074D: Fumigants							
Amber VOC Vial - Sulfuric Acid (EP074)							
SMW_BH038, R01_2201117	**17-Jan-2022**	**21-Jan-2022**	31-Jan-2022	✓	**21-Jan-2022**	31-Jan-2022	✓
Amber VOC Vial - Sulfuric Acid (EP074)							
SMW_BH035_S, SMW_BH051, SMW_BH035, R01_2201118	**18-Jan-2022**	**21-Jan-2022**	01-Feb-2022	✓	**21-Jan-2022**	01-Feb-2022	✓
EP074E: Halogenated Aliphatic Compounds							
Amber VOC Vial - Sulfuric Acid (EP074)							
SMW_BH038, R01_2201117	**17-Jan-2022**	**21-Jan-2022**	31-Jan-2022	✓	**21-Jan-2022**	31-Jan-2022	✓
Amber VOC Vial - Sulfuric Acid (EP074)							
SMW_BH035_S, SMW_BH051, SMW_BH035, R01_2201118	**18-Jan-2022**	**21-Jan-2022**	01-Feb-2022	✓	**21-Jan-2022**	01-Feb-2022	✓
EP074F: Halogenated Aromatic Compounds							
Amber VOC Vial - Sulfuric Acid (EP074)							
SMW_BH038, R01_2201117	**17-Jan-2022**	**21-Jan-2022**	31-Jan-2022	✓	**21-Jan-2022**	31-Jan-2022	✓
Amber VOC Vial - Sulfuric Acid (EP074)							
SMW_BH035_S, SMW_BH051, SMW_BH035, R01_2201118	**18-Jan-2022**	**21-Jan-2022**	01-Feb-2022	✓	**21-Jan-2022**	01-Feb-2022	✓
EP074G: Trihalomethanes							
Amber VOC Vial - Sulfuric Acid (EP074)							
SMW_BH038, R01_2201117	**17-Jan-2022**	**21-Jan-2022**	31-Jan-2022	✓	**21-Jan-2022**	31-Jan-2022	✓
Amber VOC Vial - Sulfuric Acid (EP074)							
SMW_BH035_S, SMW_BH051, SMW_BH035, R01_2201118	**18-Jan-2022**	**21-Jan-2022**	01-Feb-2022	✓	**21-Jan-2022**	01-Feb-2022	✓

Matrix: **WATER**

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

Method / Container / Client Sample ID(s)		Sample Date	Extraction / Preparation			Analysis		
			Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons								
Amber Glass Bottle - Unpreserved (EP075(SIM))								
SMW_BH038,	R01_2201117	**17-Jan-2022**	**21-Jan-2022**	24-Jan-2022	✓	**24-Jan-2022**	02-Mar-2022	✓
Amber Glass Bottle - Unpreserved (EP075(SIM))								
SMW_BH035_S,	SMW_BH051,	**18-Jan-2022**	**21-Jan-2022**	25-Jan-2022	✓	**24-Jan-2022**	02-Mar-2022	✓
SMW_BH035,	R01_2201118							
EP080/071: Total Petroleum Hydrocarbons								
Amber Glass Bottle - Unpreserved (EP071)								
SMW_BH038,	R01_2201117	**17-Jan-2022**	**21-Jan-2022**	24-Jan-2022	✓	**24-Jan-2022**	02-Mar-2022	✓
Amber Glass Bottle - Unpreserved (EP071)								
SMW_BH035_S,	SMW_BH051,	**18-Jan-2022**	**21-Jan-2022**	25-Jan-2022	✓	**24-Jan-2022**	02-Mar-2022	✓
SMW_BH035,	R01_2201118							
Amber VOC Vial - Sulfuric Acid (EP080)								
Trip blank		**13-Jan-2022**	**21-Jan-2022**	27-Jan-2022	✓	**21-Jan-2022**	27-Jan-2022	✓
Amber VOC Vial - Sulfuric Acid (EP080)								
SMW_BH038,	R01_2201117	**17-Jan-2022**	**21-Jan-2022**	31-Jan-2022	✓	**21-Jan-2022**	31-Jan-2022	✓
Amber VOC Vial - Sulfuric Acid (EP080)								
SMW_BH035_S,	SMW_BH051,	**18-Jan-2022**	**21-Jan-2022**	01-Feb-2022	✓	**21-Jan-2022**	01-Feb-2022	✓
SMW_BH035,	R01_2201118							
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions								
Amber Glass Bottle - Unpreserved (EP071)								
SMW_BH038,	R01_2201117	**17-Jan-2022**	**21-Jan-2022**	24-Jan-2022	✓	**24-Jan-2022**	02-Mar-2022	✓
Amber Glass Bottle - Unpreserved (EP071)								
SMW_BH035_S,	SMW_BH051,	**18-Jan-2022**	**21-Jan-2022**	25-Jan-2022	✓	**24-Jan-2022**	02-Mar-2022	✓
SMW_BH035,	R01_2201118							
Amber VOC Vial - Sulfuric Acid (EP080)								
Trip blank		**13-Jan-2022**	**21-Jan-2022**	27-Jan-2022	✓	**21-Jan-2022**	27-Jan-2022	✓
Amber VOC Vial - Sulfuric Acid (EP080)								
SMW_BH038,	R01_2201117	**17-Jan-2022**	**21-Jan-2022**	31-Jan-2022	✓	**21-Jan-2022**	31-Jan-2022	✓
Amber VOC Vial - Sulfuric Acid (EP080)								
SMW_BH035_S,	SMW_BH051,	**18-Jan-2022**	**21-Jan-2022**	01-Feb-2022	✓	**21-Jan-2022**	01-Feb-2022	✓
SMW_BH035,	R01_2201118							
EP080: BTEXN								
Amber VOC Vial - Sulfuric Acid (EP080)								
Trip blank,	Trip spike	**13-Jan-2022**	**21-Jan-2022**	27-Jan-2022	✓	**21-Jan-2022**	27-Jan-2022	✓
Amber VOC Vial - Sulfuric Acid (EP080)								
SMW_BH038,	R01_2201117	**17-Jan-2022**	**21-Jan-2022**	31-Jan-2022	✓	**21-Jan-2022**	31-Jan-2022	✓
Amber VOC Vial - Sulfuric Acid (EP080)								
SMW_BH035_S,	SMW_BH051,	**18-Jan-2022**	**21-Jan-2022**	01-Feb-2022	✓	**21-Jan-2022**	01-Feb-2022	✓
SMW_BH035,	R01_2201118							

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)							
Alkalinity by PC Titrator	ED037-P	2	15	**13.33**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Ammonia as N by Discrete analyser	EK055G	3	24	**12.50**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Chloride by Discrete Analyser	ED045G	1	7	**14.29**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Dissolved Mercury by FIMS	EG035F	2	18	**11.11**	**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
Major Cations - Dissolved	ED093F	2	19	**10.53**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Nitrite and Nitrate as N (NOx) by Discrete Analyser	EK059G	4	35	**11.43**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Nitrite as N by Discrete Analyser	EK057G	2	20	**10.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
PAH/Phenols (GC/MS - SIM)	EP075(SIM)	0	13	**0.00**	**10.00**	×	NEPM 2013 B3 & ALS QC Standard
Sulfate (Turbidimetric) as SO4 2- by Discrete Analyser	ED041G	1	7	**14.29**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Dissolved Solids (High Level)	EA015H	2	20	**10.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Kjeldahl Nitrogen as N By Discrete Analyser	EK061G	2	17	**11.76**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	2	20	**10.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-MS - Suite A	EG020A-T	2	18	**11.11**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Phosphorus as P By Discrete Analyser	EK067G	2	12	**16.67**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	0	14	**0.00**	**10.00**	×	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	2	18	**11.11**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Volatile Organic Compounds	EP074	2	14	**14.29**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Laboratory Control Samples (LCS)							
Alkalinity by PC Titrator	ED037-P	2	15	**13.33**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Ammonia as N by Discrete analyser	EK055G	2	24	**8.33**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Chloride by Discrete Analyser	ED045G	2	7	**28.57**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Dissolved Mercury by FIMS	EG035F	1	18	**5.56**	**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
Major Cations - Dissolved	ED093F	1	19	**5.26**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Nitrite and Nitrate as N (NOx) by Discrete Analyser	EK059G	2	35	**5.71**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Nitrite as N by Discrete Analyser	EK057G	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
PAH/Phenols (GC/MS - SIM)	EP075(SIM)	1	13	**7.69**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Sulfate (Turbidimetric) as SO4 2- by Discrete Analyser	ED041G	2	7	**28.57**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Dissolved Solids (High Level)	EA015H	3	20	**15.00**	**15.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Kjeldahl Nitrogen as N By Discrete Analyser	EK061G	3	17	**17.65**	**15.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-MS - Suite A	EG020A-T	1	18	**5.56**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Phosphorus as P By Discrete Analyser	EK067G	3	12	**25.00**	**15.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	1	14	**7.14**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	1	18	**5.56**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard

Matrix: **WATER**

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

Quality Control Sample Type		Count		Rate (%)			Quality Control Specification
Analytical Methods	*Method*	*QC*	*Regular*	***Actual***	***Expected***	*Evaluation*	
Laboratory Control Samples (LCS) - Continued							
Volatile Organic Compounds	EP074	1	14	**7.14**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Method Blanks (MB)							
Ammonia as N by Discrete analyser	EK055G	2	24	**8.33**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Chloride by Discrete Analyser	ED045G	1	7	**14.29**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Dissolved Mercury by FIMS	EG035F	1	18	**5.56**	**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
Major Cations - Dissolved	ED093F	1	19	**5.26**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Nitrite and Nitrate as N (NOx) by Discrete Analyser	EK059G	2	35	**5.71**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Nitrite as N by Discrete Analyser	EK057G	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
PAH/Phenols (GC/MS - SIM)	EP075(SIM)	1	13	**7.69**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Sulfate (Turbidimetric) as SO4 2- by Discrete Analyser	ED041G	1	7	**14.29**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Dissolved Solids (High Level)	EA015H	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Kjeldahl Nitrogen as N By Discrete Analyser	EK061G	1	17	**5.88**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-MS - Suite A	EG020A-T	1	18	**5.56**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Phosphorus as P By Discrete Analyser	EK067G	1	12	**8.33**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	1	14	**7.14**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	1	18	**5.56**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Volatile Organic Compounds	EP074	1	14	**7.14**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Matrix Spikes (MS)							
Ammonia as N by Discrete analyser	EK055G	2	24	**8.33**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Chloride by Discrete Analyser	ED045G	1	7	**14.29**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Dissolved Mercury by FIMS	EG035F	1	18	**5.56**	**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
Nitrite and Nitrate as N (NOx) by Discrete Analyser	EK059G	2	35	**5.71**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Nitrite as N by Discrete Analyser	EK057G	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
PAH/Phenols (GC/MS - SIM)	EP075(SIM)	0	13	**0.00**	**5.00**	×	NEPM 2013 B3 & ALS QC Standard
Sulfate (Turbidimetric) as SO4 2- by Discrete Analyser	ED041G	1	7	**14.29**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Kjeldahl Nitrogen as N By Discrete Analyser	EK061G	1	17	**5.88**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-MS - Suite A	EG020A-T	1	18	**5.56**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Phosphorus as P By Discrete Analyser	EK067G	1	12	**8.33**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	0	14	**0.00**	**5.00**	×	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	1	18	**5.56**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Volatile Organic Compounds	EP074	1	14	**7.14**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard

Brief Method Summaries

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

Analytical Methods	Method	Matrix	Method Descriptions
Total Dissolved Solids (High Level)	EA015H	WATER	In house: Referenced to APHA 2540C. A gravimetric procedure that determines the amount of `filterable` residue in an aqueous sample. A well-mixed sample is filtered through a glass fibre filter (1.2um). The filtrate is evaporated to dryness and dried to constant weight at 180+/-5C. This method is compliant with NEPM Schedule B(3)
Alkalinity by PC Titrator	ED037-P	WATER	In house: Referenced to APHA 2320 B This procedure determines alkalinity by automated measurement (e.g. PC Titrate) on a settled supernatant aliquot of the sample using pH 4.5 for indicating the total alkalinity end-point. This method is compliant with NEPM Schedule B(3)
Sulfate (Turbidimetric) as SO4 2- by Discrete Analyser	ED041G	WATER	In house: Referenced to APHA 4500-SO4. Dissolved sulfate is determined in a 0.45um filtered sample. Sulfate ions are converted to a barium sulfate suspension in an acetic acid medium with barium chloride. Light absorbance of the BaSO4 suspension is measured by a photometer and the SO4-2 concentration is determined by comparison of the reading with a standard curve. This method is compliant with NEPM Schedule B(3)
Chloride by Discrete Analyser	ED045G	WATER	In house: Referenced to APHA 4500 Cl - G.The thiocyanate ion is liberated from mercuric thiocyanate through sequestration of mercury by the chloride ion to form non-ionised mercuric chloride.in the presence of ferric ions the librated thiocynate forms highly-coloured ferric thiocynate which is measured at 480 nm APHA seal method 2 017-1-L
Major Cations - Dissolved	ED093F	WATER	In house: Referenced to APHA 3120 and 3125; USEPA SW 846 - 6010 and 6020; Cations are determined by either ICP-AES or ICP-MS techniques. This method is compliant with NEPM Schedule B(3) Sodium Adsorption Ratio is calculated from Ca, Mg and Na which determined by ALS in house method QWI-EN/ED093F. This method is compliant with NEPM Schedule B(3) Hardness parameters are calculated based on APHA 2340 B. This method is compliant with NEPM Schedule B(3)
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.
Total Metals by ICP-MS - Suite A	EG020A-T	WATER	In house: Referenced to APHA 3125; USEPA SW846 - 6020, ALS QWI-EN/EG020. 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 (SnCl2)(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 SnCl2 which is then purged into a heated quartz cell. Quantification is by comparing absorbance against a calibration curve. This method is compliant with NEPM Schedule B(3).

Analytical Methods	Method	Matrix	Method Descriptions
Total Mercury by FIMS	EG035T	WATER	In house: Referenced to APHA 3112 Hg - B (Flow-injection (SnCl2)(Cold Vapour generation) AAS) FIM-AAS is an automated flameless atomic absorption technique. A bromate/bromide reagent is used to oxidise any organic mercury compounds in the unfiltered sample. The ionic mercury is reduced online to atomic mercury vapour by SnCl2 which is then purged into a heated quartz cell. Quantification is by comparing absorbance against a calibration curve. This method is compliant with NEPM Schedule B(3).
Ammonia as N by Discrete analyser	EK055G	WATER	In house: Referenced to APHA 4500-NH3 G Ammonia is determined by direct colorimetry by Discrete Analyser. This method is compliant with NEPM Schedule B(3)
Nitrite as N by Discrete Analyser	EK057G	WATER	In house: Referenced to APHA 4500-NO2- B. Nitrite is determined by direct colourimetry by Discrete Analyser. This method is compliant with NEPM Schedule B(3)
Nitrate as N by Discrete Analyser	EK058G	WATER	In house: Referenced to APHA 4500-NO3- F. Nitrate is reduced to nitrite by way of a chemical reduction followed by quantification by Discrete Analyser. Nitrite is determined seperately by direct colourimetry and result for Nitrate calculated as the difference between the two results. This method is compliant with NEPM Schedule B(3)
Nitrite and Nitrate as N (NOx) by Discrete Analyser	EK059G	WATER	In house: Referenced to APHA 4500-NO3- F. Combined oxidised Nitrogen (NO2+NO3) is determined by Chemical Reduction and direct colourimetry by Discrete Analyser. This method is compliant with NEPM Schedule B(3)
Total Kjeldahl Nitrogen as N By Discrete Analyser	EK061G	WATER	In house: Referenced to APHA 4500-Norg D (In house). An aliquot of sample is digested using a high temperature Kjeldahl digestion to convert nitrogenous compounds to ammonia. Ammonia is determined colorimetrically by discrete analyser. This method is compliant with NEPM Schedule B(3)
Total Nitrogen as N (TKN + Nox) By Discrete Analyser	EK062G	WATER	In house: Referenced to APHA 4500-Norg / 4500-NO3-. This method is compliant with NEPM Schedule B(3)
Total Phosphorus as P By Discrete Analyser	EK067G	WATER	In house: Referenced to APHA 4500-P H, Jirka et al, Zhang et al. This procedure involves sulphuric acid digestion of a sample aliquot to break phosphorus down to orthophosphate. The orthophosphate reacts with ammonium molybdate and antimony potassium tartrate to form a complex which is then reduced and its concentration measured at 880nm using discrete analyser. This method is compliant with NEPM Schedule B(3)
Ionic Balance by PCT DA and Turbi SO4 DA	* EN055 - PG	WATER	In house: Referenced to APHA 1030F. 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)
Volatile Organic Compounds	EP074	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. This method is compliant with 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

Preparation Methods	Method	Matrix	Method Descriptions
TKN/TP Digestion	EK061/EK067	WATER	In house: Referenced to APHA 4500 Norg - D; APHA 4500 P - H. This method is compliant with NEPM Schedule B(3)
Digestion for Total Recoverable Metals	EN25	WATER	In house: Referenced to USEPA SW846-3005. Method 3005 is a Nitric/Hydrochloric acid digestion procedure used to prepare surface and ground water samples for analysis by ICPAES or ICPMS. This method is compliant with NEPM Schedule B(3)
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.

CHAIN OF CUSTODY

ALS Laboratory: please tick →

☐ADELAIDE 21 Burma Road Pooraka SA 5095 Ph: 08 8359 0890 E: adelaide@alsglobal.com

☐BRISBANE 32 Shand Street Stafford QLD 4053 Ph: 07 3243 7222 E: samples.brisbane@alsglobal.com

☐GLADSTONE 46 Callemondah Drive Clinton QLD 4680 Ph: 07 7471 5600 E: gladstone@alsglobal.com

☐MACKAY 78 Harbour Road Mackay QLD 4740 Ph: 07 4944 0177 E: mackay@alsglobal.com

☐MELBOURNE 2-4 Westall Road Springvale VIC 3171 Ph: 03 8549 9600 E: samples.melbourne@alsglobal.com

☐MUDGEE 27 Sydney Road Mudgee NSW 2850 Ph: 02 6372 6735 E: mudgee.mail@alsglobal.com

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☐WOLLONGONG 99 Kenny Street Wollongong NSW 2500 Ph: 02 4225 3125 E: portkembla@alsglobal.com

CLIENT: ERM	TURNAROUND REQUIREMENTS: ☑ Standard TAT (List due date):	FOR LABORATORY USE ONLY (Circle)	
OFFICE: Newcastle	(Standard TAT may be longer for some tests e.g. Ultra Trace Organics) ☐ Non Standard or urgent TAT (List due date):	Custody Seal Intact?	Yes / No / (N/A)
PROJECT: 0628507	ALS QUOTE NO.:	Free ice / frozen ice bricks present upon receipt?	Yes / No / N/A
ORDER NUMBER:	COC SEQUENCE NUMBER (Circle) COC: 1 2 3 4 5 6 7 OF: 1 2 3 4 5 6 7	Random Sample Temperature on Receipt:	°C
PROJECT MANAGER: Nicholas Grbich CONTACT PH: 0415 833 925		Other comment: 2.6	
SAMPLER: Taj Manson SAMPLER MOBILE: 0467 295 082	RELINQUISHED BY: Taj Manson	RECEIVED BY: [illegible]	RELINQUISHED BY:	RECEIVED BY:
COC emailed to ALS? (YES / (NO) EDD FORMAT (or default):	DATE/TIME: 18/01/22	DATE/TIME: 18/1/22 1835	DATE/TIME:	DATE/TIME:
Email Reports to (will default to PM if no other addresses are listed): PM				
Email Invoice to (will default to PM if no other addresses are listed): PM				

COMMENTS/SPECIAL HANDLING/STORAGE OR DISPOSAL:

ALS USE	SAMPLE DETAILS MATRIX: SOLID (S) WATER (W)			CONTAINER INFORMATION		ANALYSIS REQUIRED including SUITES (NB. Suite Codes must be listed to attract suite price) Where Metals are required, specify Total (unfiltered bottle required) or Dissolved (field filtered bottle required).								Additional Information
LAB ID	SAMPLE ID	DATE / TIME	MATRIX	TYPE & PRESERVATIVE (refer to codes below)	TOTAL CONTAINERS	TRH & BTEX N	PAHS	VOC's	Heavy Metals (suite of 11) plus iron	Phenols	Major anions & cations	TDS	Ammonia, nitrate, total nitrogen, total phosphorus	Comments on likely contaminant levels, dilutions, or samples requiring specific QC analysis etc.
1	SMW-BH038	17/01/22	W		6	X	X	X	X		X	X	X	
2	SMW_BH035_S	18/01/22	W		6	X	X	X	X		X	X	X	
3	SMW-BH051	18/01/22	W		6	X	X	X	X		X	X	X	
4	SMW-BH035	18/01/22	W		6	X	X	X	X		X	X	X	
5	R01-[illegible]220117	17/01/22	W		5	X	X	X	X				X	
6	R01-220118	18/01/22	W		5	X	X	X	X				X	
7	Trip blank & Tripspike	18/01/22	W		2	X								
				TOTAL										

Environmental Division Sydney
Work Order Reference
ES2201561

HT

Telephone : +61-2-8784 8555

Water Container Codes: P = Unpreserved Plastic; N = Nitric Preserved Plastic; ORC = Nitric Preserved ORC; SH = Sodium Hydroxide/Cd Preserved; S = Sodium Hydroxide Preserved Plastic; AG = A
V = VOA Vial HCl Preserved; VB = VOA Vial Sodium Bisulphate Preserved; VS = VOA Vial Sulfuric Preserved; AV = Airfreight Unpreserved Vial SG = Sulfuric Preserved Amber Glass; H = HCl preserve
Z = Zinc Acetate Preserved Bottle; E = EDTA Preserved Bottles; ST = Sterile Bottle; ASS = Plastic Bag for Acid Sulphate Soils; B = Unpreserved Bag.

C
ric Preserved Plastic; F = Formaldehyde Preserved Glass;

ALS Environmental

CERTIFICATE OF ANALYSIS

Work Order	: **ES2201683**	Page	: 1 of 87
Client	: **ENVIRONMENTAL RESOURCES MANAGEMENT (ERM)**	Laboratory	: Environmental Division Sydney
Contact	: MS JESSICA LAWRENCE	Contact	: Customer Services ES
Address	: LEVEL 15 309 KENT STREET SYDNEY NSW AUSTRALIA 2000	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
Telephone	: +61 02 8584 8888	Telephone	: +61-2-8784 8555
Project	: 0628507 SOP	Date Samples Received	: 19-Jan-2022 14:40
Order number	: ----	Date Analysis Commenced	: 24-Jan-2022
C-O-C number	: ----	Issue Date	: 01-Feb-2022 15:23
Sampler	: Ant R		
Site	: ----		
Quote number	: EN/114		
No. of samples received	: 36		
No. of samples analysed	: 36		

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

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

This 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.

Signatories	*Position*	*Accreditation Category*
Alana Smylie	Asbestos Identifier	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.
- 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.
- 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-dichlorothene, trans-1,2-dichlorothene, 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 Zinc on sample ES2201943 # 002. Confirmed by redigestion and reanalysis.
- EP080: The trip spike and its control have been analysed for volatile TPH and BTEXN only. The trip spike and control were prepared in the lab using reagent grade sand spiked with petrol. The spike was dispatched from the lab and the control retained.
- 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	TS 1	TB	SOP_BH103_0.2_220117	SOP_BH103_1.0_220117	SOP_BH104_1.0_220117
			Sampling date / time	14-Jan-2022 00:00	17-Jan-2022 00:00	17-Jan-2022 00:00	17-Jan-2022 00:00	17-Jan-2022 00:00
Compound	CAS Number	LOR	Unit	ES2201683-001	ES2201683-002	ES2201683-003	ES2201683-004	ES2201683-005
				Result	Result	Result	Result	Result
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	----	1.0	%	----	----	8.0	8.7	9.0
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	----	----	175	----	352
APPROVED IDENTIFIER:	----	-	--	----	----	A. SMYLIE	----	A. SMYLIE
EG005(ED093)T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	----	----	<5	10	10
Cadmium	7440-43-9	1	mg/kg	----	----	<1	<1	<1
Chromium	7440-47-3	2	mg/kg	----	----	<2	6	7
Copper	7440-50-8	5	mg/kg	----	----	27	26	32
Lead	7439-92-1	5	mg/kg	----	----	5	17	17
Nickel	7440-02-0	2	mg/kg	----	----	<2	4	9
Zinc	7440-66-6	5	mg/kg	----	----	6	34	72
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
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

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	TS 1	TB	SOP_BH103_0.2_220117	SOP_BH103_1.0_220117	SOP_BH104_1.0_220117
				Sampling date / time	14-Jan-2022 00:00	17-Jan-2022 00:00	17-Jan-2022 00:00	17-Jan-2022 00:00	17-Jan-2022 00:00
Compound	CAS Number	LOR	Unit		ES2201683-001	ES2201683-002	ES2201683-003	ES2201683-004	ES2201683-005
					Result	Result	Result	Result	Result
EP068A: Organochlorine Pesticides (OC) - Continued									
Dieldrin	60-57-1	0.05	mg/kg		----	----	<0.05	<0.05	<0.05
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
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

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	TS 1	TB	SOP_BH103_0.2_220117	SOP_BH103_1.0_220117	SOP_BH104_1.0_220117
			Sampling date / time	14-Jan-2022 00:00	17-Jan-2022 00:00	17-Jan-2022 00:00	17-Jan-2022 00:00	17-Jan-2022 00:00
Compound	CAS Number	LOR	Unit	ES2201683-001	ES2201683-002	ES2201683-003	ES2201683-004	ES2201683-005
				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**)

Compound	CAS Number	LOR	Unit	Sample ID	TS 1	TB	SOP_BH103_0.2_220117	SOP_BH103_1.0_220117	SOP_BH104_1.0_220117
				Sampling date / time	14-Jan-2022 00:00	17-Jan-2022 00:00	17-Jan-2022 00:00	17-Jan-2022 00:00	17-Jan-2022 00:00
					ES2201683-001	ES2201683-002	ES2201683-003	ES2201683-004	ES2201683-005
					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)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

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	TS 1	TB	SOP_BH103_0.2_220117	SOP_BH103_1.0_220117	SOP_BH104_1.0_220117
				Sampling date / time	14-Jan-2022 00:00	17-Jan-2022 00:00	17-Jan-2022 00:00	17-Jan-2022 00:00	17-Jan-2022 00:00
Compound	CAS Number	LOR	Unit		ES2201683-001	ES2201683-002	ES2201683-003	ES2201683-004	ES2201683-005
					Result	Result	Result	Result	Result
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued									
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**
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg		----	----	**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
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

Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

Compound	CAS Number	LOR	Unit	Sample ID	TS 1	TB	SOP_BH103_0.2_220117	SOP_BH103_1.0_220117	SOP_BH104_1.0_220117
				Sampling date / time	14-Jan-2022 00:00	17-Jan-2022 00:00	17-Jan-2022 00:00	17-Jan-2022 00:00	17-Jan-2022 00:00
					ES2201683-001	ES2201683-002	ES2201683-003	ES2201683-004	ES2201683-005
					Result	Result	Result	Result	Result
EP075B: Polynuclear Aromatic Hydrocarbons - Continued									
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
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

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	TS 1	TB	SOP_BH103_0.2_220117	SOP_BH103_1.0_220117	SOP_BH104_1.0_220117
			Sampling date / time	14-Jan-2022 00:00	17-Jan-2022 00:00	17-Jan-2022 00:00	17-Jan-2022 00:00	17-Jan-2022 00:00
Compound	CAS Number	LOR	Unit	ES2201683-001	ES2201683-002	ES2201683-003	ES2201683-004	ES2201683-005
				Result	Result	Result	Result	Result
EP075D: Nitrosamines - Continued								
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								
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

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	TS 1	TB	SOP_BH103_0.2_220117	SOP_BH103_1.0_220117	SOP_BH104_1.0_220117
			Sampling date / time	14-Jan-2022 00:00	17-Jan-2022 00:00	17-Jan-2022 00:00	17-Jan-2022 00:00	17-Jan-2022 00:00
Compound	CAS Number	LOR	Unit	ES2201683-001	ES2201683-002	ES2201683-003	ES2201683-004	ES2201683-005
				Result	Result	Result	Result	Result
EP075G: Chlorinated Hydrocarbons - Continued								
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
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

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	TS 1	TB	SOP_BH103_0.2_220117	SOP_BH103_1.0_220117	SOP_BH104_1.0_220117
				Sampling date / time	14-Jan-2022 00:00	17-Jan-2022 00:00	17-Jan-2022 00:00	17-Jan-2022 00:00	17-Jan-2022 00:00
Compound	CAS Number	LOR	Unit		ES2201683-001	ES2201683-002	ES2201683-003	ES2201683-004	ES2201683-005
					Result	Result	Result	Result	Result
EP075J: Organophosphorus Pesticides - Continued									
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
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	<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
>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	<0.2	<0.2
Toluene	108-88-3	0.5	mg/kg		**16.7**	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	100-41-4	0.5	mg/kg		**2.7**	<0.5	<0.5	<0.5	<0.5
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg		**14.6**	<0.5	<0.5	<0.5	<0.5
ortho-Xylene	95-47-6	0.5	mg/kg		**5.8**	<0.5	<0.5	<0.5	<0.5
^ Sum of BTEX	----	0.2	mg/kg		**39.8**	<0.2	<0.2	<0.2	<0.2
^ Total Xylenes	----	0.5	mg/kg		**20.4**	<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

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	TS 1	TB	SOP_BH103_0.2_220117	SOP_BH103_1.0_220117	SOP_BH104_1.0_220117
			Sampling date / time	14-Jan-2022 00:00	17-Jan-2022 00:00	17-Jan-2022 00:00	17-Jan-2022 00:00	17-Jan-2022 00:00
Compound	CAS Number	LOR	Unit	ES2201683-001	ES2201683-002	ES2201683-003	ES2201683-004	ES2201683-005
				Result	Result	Result	Result	Result
EP231A: Perfluoroalkyl Sulfonic Acids - Continued								
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
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**	**120**	**118**
EP068S: Organochlorine Pesticide Surrogate								
Dibromo-DDE	21655-73-2	0.05	%	----	----	**80.2**	**108**	**107**
EP068T: Organophosphorus Pesticide Surrogate								
DEF	78-48-8	0.05	%	----	----	**70.5**	**96.4**	**92.3**
EP074S: VOC Surrogates								
1.2-Dichloroethane-D4	17060-07-0	0.5	%	----	----	**95.3**	----	**82.6**
Toluene-D8	2037-26-5	0.5	%	----	----	**92.2**	----	**90.5**
4-Bromofluorobenzene	460-00-4	0.5	%	----	----	**102**	----	**91.8**
EP075(SIM)S: Phenolic Compound Surrogates								

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	TS 1	TB	SOP_BH103_0.2_220117	SOP_BH103_1.0_220117	SOP_BH104_1.0_220117
				Sampling date / time	14-Jan-2022 00:00	17-Jan-2022 00:00	17-Jan-2022 00:00	17-Jan-2022 00:00	17-Jan-2022 00:00
Compound	CAS Number	LOR	Unit		ES2201683-001	ES2201683-002	ES2201683-003	ES2201683-004	ES2201683-005
					Result	Result	Result	Result	Result
EP075(SIM)S: Phenolic Compound Surrogates - Continued									
Phenol-d6	13127-88-3	0.5	%		----	----	94.0	95.7	94.9
2-Chlorophenol-D4	93951-73-6	0.5	%		----	----	94.2	98.3	96.9
2.4.6-Tribromophenol	118-79-6	0.5	%		----	----	71.8	87.9	83.4
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	0.5	%		----	----	100.0	105	103
Anthracene-d10	1719-06-8	0.5	%		----	----	111	115	114
4-Terphenyl-d14	1718-51-0	0.5	%		----	----	95.2	97.6	99.7
EP075S: Acid Extractable Surrogates									
2-Fluorophenol	367-12-4	0.5	%		----	----	90.5	----	101
Phenol-d6	13127-88-3	0.5	%		----	----	91.7	----	98.4
2-Chlorophenol-D4	93951-73-6	0.5	%		----	----	87.7	----	99.7
2.4.6-Tribromophenol	118-79-6	0.5	%		----	----	46.6	----	78.3
EP075T: Base/Neutral Extractable Surrogates									
Nitrobenzene-D5	4165-60-0	0.5	%		----	----	92.7	----	96.1
1.2-Dichlorobenzene-D4	2199-69-1	0.5	%		----	----	90.0	----	93.7
2-Fluorobiphenyl	321-60-8	0.5	%		----	----	98.1	----	104
Anthracene-d10	1719-06-8	0.5	%		----	----	113	----	121
4-Terphenyl-d14	1718-51-0	0.5	%		----	----	95.3	----	104
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	0.2	%		87.5	89.0	97.4	95.3	83.6
Toluene-D8	2037-26-5	0.2	%		95.9	90.4	96.8	90.5	94.9
4-Bromofluorobenzene	460-00-4	0.2	%		93.7	86.1	108	96.8	96.7
EP231S: PFAS Surrogate									
13C4-PFOS	----	0.0002	%		----	----	104	----	106
13C8-PFOA	----	0.0002	%		----	----	108	----	114

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	SOP_BH104_2.0_220117	SOP_BH105_0.2_220117	SOP_BH105_2.0_220117	SOP_BH106_0.2_220117	SOP_BH106_1.0_220117
			Sampling date / time	17-Jan-2022 00:00	17-Jan-2022 00:00	17-Jan-2022 00:00	17-Jan-2022 00:00	17-Jan-2022 00:00
Compound	CAS Number	LOR	Unit	ES2201683-006	ES2201683-007	ES2201683-008	ES2201683-009	ES2201683-010
				Result	Result	Result	Result	Result
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	----	1.0	%	11.0	9.9	10.8	12.2	9.4
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	----	228	----	397	----
APPROVED IDENTIFIER:	----	-	--	----	A. SMYLIE	----	A. SMYLIE	----
EG005(ED093)T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	8	6	6	11	7
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	<1	<1
Chromium	7440-47-3	2	mg/kg	6	7	7	21	4
Copper	7440-50-8	5	mg/kg	37	99	52	21	18
Lead	7439-92-1	5	mg/kg	20	11	17	28	10
Nickel	7440-02-0	2	mg/kg	24	12	36	10	<2
Zinc	7440-66-6	5	mg/kg	120	33	137	27	15
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	<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	<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

Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH104_2.0_220117	SOP_BH105_0.2_220117	SOP_BH105_2.0_220117	SOP_BH106_0.2_220117	SOP_BH106_1.0_220117
				Sampling date / time	17-Jan-2022 00:00	17-Jan-2022 00:00	17-Jan-2022 00:00	17-Jan-2022 00:00	17-Jan-2022 00:00
					ES2201683-006	ES2201683-007	ES2201683-008	ES2201683-009	ES2201683-010
					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

Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH104_2.0_220117	SOP_BH105_0.2_220117	SOP_BH105_2.0_220117	SOP_BH106_0.2_220117	SOP_BH106_1.0_220117
				Sampling date / time	17-Jan-2022 00:00	17-Jan-2022 00:00	17-Jan-2022 00:00	17-Jan-2022 00:00	17-Jan-2022 00:00
					ES2201683-006	ES2201683-007	ES2201683-008	ES2201683-009	ES2201683-010
					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**)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH104_2.0_220117	SOP_BH105_0.2_220117	SOP_BH105_2.0_220117	SOP_BH106_0.2_220117	SOP_BH106_1.0_220117
				Sampling date / time	17-Jan-2022 00:00	17-Jan-2022 00:00	17-Jan-2022 00:00	17-Jan-2022 00:00	17-Jan-2022 00:00
					ES2201683-006	ES2201683-007	ES2201683-008	ES2201683-009	ES2201683-010
					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)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		<0.5	<0.5	<0.5	<0.5	<0.5
Anthracene	120-12-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5

Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH104_2.0_220117	SOP_BH105_0.2_220117	SOP_BH105_2.0_220117	SOP_BH106_0.2_220117	SOP_BH106_1.0_220117
				Sampling date / time	17-Jan-2022 00:00	17-Jan-2022 00:00	17-Jan-2022 00:00	17-Jan-2022 00:00	17-Jan-2022 00:00
					ES2201683-006	ES2201683-007	ES2201683-008	ES2201683-009	ES2201683-010
					Result	Result	Result	Result	Result
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued									
Fluoranthene	206-44-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Pyrene	129-00-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benz(a)anthracene	56-55-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Chrysene	218-01-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg		<0.5	<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		<0.5	<0.5	<0.5	<0.5	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ **Sum of polycyclic aromatic hydrocarbons**	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ **Benzo(a)pyrene TEQ (zero)**	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ **Benzo(a)pyrene TEQ (half LOR)**	----	0.5	mg/kg		**0.6**	**0.6**	**0.6**	**0.6**	**0.6**
^ **Benzo(a)pyrene TEQ (LOR)**	----	0.5	mg/kg		**1.2**	**1.2**	**1.2**	**1.2**	**1.2**
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	----

Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH104_2.0_220117	SOP_BH105_0.2_220117	SOP_BH105_2.0_220117	SOP_BH106_0.2_220117	SOP_BH106_1.0_220117
				Sampling date / time	17-Jan-2022 00:00	17-Jan-2022 00:00	17-Jan-2022 00:00	17-Jan-2022 00:00	17-Jan-2022 00:00
					ES2201683-006	ES2201683-007	ES2201683-008	ES2201683-009	ES2201683-010
					Result	Result	Result	Result	Result
EP075B: Polynuclear Aromatic Hydrocarbons - Continued									
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	----
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	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	SOP_BH104_2.0_2201 17	SOP_BH105_0.2_2201 17	SOP_BH105_2.0_2201 17	SOP_BH106_0.2_2201 17	SOP_BH106_1.0_2201 17
				Sampling date / time	17-Jan-2022 00:00	17-Jan-2022 00:00	17-Jan-2022 00:00	17-Jan-2022 00:00	17-Jan-2022 00:00
Compound	CAS Number	LOR	Unit		ES2201683-006	ES2201683-007	ES2201683-008	ES2201683-009	ES2201683-010
					Result	Result	Result	Result	Result
EP075D: Nitrosamines - Continued									
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									
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	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	SOP_BH104_2.0_220117	SOP_BH105_0.2_220117	SOP_BH105_2.0_220117	SOP_BH106_0.2_220117	SOP_BH106_1.0_220117
				Sampling date / time	17-Jan-2022 00:00	17-Jan-2022 00:00	17-Jan-2022 00:00	17-Jan-2022 00:00	17-Jan-2022 00:00
Compound	CAS Number	LOR	Unit		ES2201683-006	ES2201683-007	ES2201683-008	ES2201683-009	ES2201683-010
					Result	Result	Result	Result	Result
EP075G: Chlorinated Hydrocarbons - Continued									
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	----
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	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	SOP_BH104_2.0_2201 17	SOP_BH105_0.2_2201 17	SOP_BH105_2.0_2201 17	SOP_BH106_0.2_2201 17	SOP_BH106_1.0_2201 17
				Sampling date / time	17-Jan-2022 00:00	17-Jan-2022 00:00	17-Jan-2022 00:00	17-Jan-2022 00:00	17-Jan-2022 00:00
Compound	CAS Number	LOR	Unit		ES2201683-006	ES2201683-007	ES2201683-008	ES2201683-009	ES2201683-010
					Result	Result	Result	Result	Result
EP075J: Organophosphorus Pesticides - Continued									
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	<100	<100	<100	<100
C29 - C36 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
^ C10 - C36 Fraction (sum)	----	50	mg/kg		<50	<50	<50	<50	<50
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
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		<100	<100	<100	<100	<100
>C34 - C40 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
^ >C10 - C40 Fraction (sum)	----	50	mg/kg		<50	<50	<50	<50	<50
^ >C10 - C16 Fraction minus Naphthalene (F2)	----	50	mg/kg		<50	<50	<50	<50	<50
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**	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	SOP_BH104_2.0_220117	SOP_BH105_0.2_220117	SOP_BH105_2.0_220117	SOP_BH106_0.2_220117	SOP_BH106_1.0_220117
				Sampling date / time	17-Jan-2022 00:00	17-Jan-2022 00:00	17-Jan-2022 00:00	17-Jan-2022 00:00	17-Jan-2022 00:00
Compound	CAS Number	LOR	Unit		ES2201683-006	ES2201683-007	ES2201683-008	ES2201683-009	ES2201683-010
					Result	Result	Result	Result	Result
EP231A: Perfluoroalkyl Sulfonic Acids - Continued									
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.0002	mg/kg		----	----	----	<0.0002	----
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.0002	mg/kg		----	----	----	**0.0003**	----
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		----	----	----	**0.0003**	----
Sum of PFAS (WA DER List)	----	0.0002	mg/kg		----	----	----	**0.0005**	----
EP066S: PCB Surrogate									
Decachlorobiphenyl	2051-24-3	0.1	%		**115**	**115**	**114**	**78.1**	**108**
EP068S: Organochlorine Pesticide Surrogate									
Dibromo-DDE	21655-73-2	0.05	%		**79.6**	**73.6**	**74.1**	**78.3**	**71.5**
EP068T: Organophosphorus Pesticide Surrogate									
DEF	78-48-8	0.05	%		**85.6**	**93.0**	**71.9**	**73.0**	**83.9**
EP074S: VOC Surrogates									
1.2-Dichloroethane-D4	17060-07-0	0.5	%		----	**93.9**	----	**90.0**	----
Toluene-D8	2037-26-5	0.5	%		----	**93.8**	----	**91.2**	----
4-Bromofluorobenzene	460-00-4	0.5	%		----	**100**	----	**88.8**	----
EP075(SIM)S: Phenolic Compound Surrogates									

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	SOP_BH104_2.0_2201 17	SOP_BH105_0.2_2201 17	SOP_BH105_2.0_2201 17	SOP_BH106_0.2_2201 17	SOP_BH106_1.0_2201 17
				Sampling date / time	17-Jan-2022 00:00	17-Jan-2022 00:00	17-Jan-2022 00:00	17-Jan-2022 00:00	17-Jan-2022 00:00
Compound	CAS Number	LOR	Unit		ES2201683-006	ES2201683-007	ES2201683-008	ES2201683-009	ES2201683-010
					Result	Result	Result	Result	Result
EP075(SIM)S: Phenolic Compound Surrogates - Continued									
Phenol-d6	13127-88-3	0.5	%		103	97.6	95.3	96.0	102
2-Chlorophenol-D4	93951-73-6	0.5	%		104	97.8	95.7	96.1	101
2.4.6-Tribromophenol	118-79-6	0.5	%		86.9	79.7	77.0	77.8	81.6
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	0.5	%		110	104	101	102	106
Anthracene-d10	1719-06-8	0.5	%		122	115	112	112	118
4-Terphenyl-d14	1718-51-0	0.5	%		105	98.9	98.0	97.8	103
EP075S: Acid Extractable Surrogates									
2-Fluorophenol	367-12-4	0.5	%		----	109	----	112	----
Phenol-d6	13127-88-3	0.5	%		----	97.4	----	95.1	----
2-Chlorophenol-D4	93951-73-6	0.5	%		----	103	----	101	----
2.4.6-Tribromophenol	118-79-6	0.5	%		----	92.0	----	93.8	----
EP075T: Base/Neutral Extractable Surrogates									
Nitrobenzene-D5	4165-60-0	0.5	%		----	92.8	----	89.8	----
1.2-Dichlorobenzene-D4	2199-69-1	0.5	%		----	89.6	----	88.8	----
2-Fluorobiphenyl	321-60-8	0.5	%		----	104	----	101	----
Anthracene-d10	1719-06-8	0.5	%		----	116	----	112	----
4-Terphenyl-d14	1718-51-0	0.5	%		----	95.5	----	93.4	----
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	0.2	%		116	96.2	92.5	81.5	98.4
Toluene-D8	2037-26-5	0.2	%		108	98.4	88.8	95.6	94.9
4-Bromofluorobenzene	460-00-4	0.2	%		113	105	91.5	94.2	99.7
EP231S: PFAS Surrogate									
13C4-PFOS	----	0.0002	%		----	----	----	106	----
13C8-PFOA	----	0.0002	%		----	----	----	108	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	SOP_BH110_0.2_220117	SOP_BH110_1.3_220118	SOP_BH111_1.0_220118	SOP_BH111_3.0_220118	SOP_BH112_1.0_220118
			Sampling date / time	17-Jan-2022 00:00	18-Jan-2022 00:00	18-Jan-2022 00:00	18-Jan-2022 00:00	18-Jan-2022 00:00
Compound	CAS Number	LOR	Unit	ES2201683-011	ES2201683-012	ES2201683-013	ES2201683-014	ES2201683-015
				Result	Result	Result	Result	Result
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	----	1.0	%	3.2	7.4	27.0	11.6	23.5
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	300	----	542	----	534
APPROVED IDENTIFIER:	----	-	--	A. SMYLIE	----	A. SMYLIE	----	A. SMYLIE
EG005(ED093)T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	<5	6	9	7	12
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	<1	<1
Chromium	7440-47-3	2	mg/kg	6	4	18	8	15
Copper	7440-50-8	5	mg/kg	39	24	18	22	19
Lead	7439-92-1	5	mg/kg	<5	10	30	20	18
Nickel	7440-02-0	2	mg/kg	57	4	2	4	3
Zinc	7440-66-6	5	mg/kg	25	14	6	21	10
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	<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	<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

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	SOP_BH110_0.2_220117	SOP_BH110_1.3_220118	SOP_BH111_1.0_220118	SOP_BH111_3.0_220118	SOP_BH112_1.0_220118
			Sampling date / time	17-Jan-2022 00:00	18-Jan-2022 00:00	18-Jan-2022 00:00	18-Jan-2022 00:00	18-Jan-2022 00:00
Compound	CAS Number	LOR	Unit	ES2201683-011	ES2201683-012	ES2201683-013	ES2201683-014	ES2201683-015
				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

Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH110_0.2_220117	SOP_BH110_1.3_220118	SOP_BH111_1.0_220118	SOP_BH111_3.0_220118	SOP_BH112_1.0_220118
				Sampling date / time	17-Jan-2022 00:00	18-Jan-2022 00:00	18-Jan-2022 00:00	18-Jan-2022 00:00	18-Jan-2022 00:00
					ES2201683-011	ES2201683-012	ES2201683-013	ES2201683-014	ES2201683-015
					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	SOP_BH110_0.2_220117	SOP_BH110_1.3_220118	SOP_BH111_1.0_220118	SOP_BH111_3.0_220118	SOP_BH112_1.0_220118
				Sampling date / time	17-Jan-2022 00:00	18-Jan-2022 00:00	18-Jan-2022 00:00	18-Jan-2022 00:00	18-Jan-2022 00:00
Compound	CAS Number	LOR	Unit		ES2201683-011	ES2201683-012	ES2201683-013	ES2201683-014	ES2201683-015
					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)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		<0.5	<0.5	<0.5	<0.5	<0.5
Anthracene	120-12-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	SOP_BH110_0.2_220117	SOP_BH110_1.3_220118	SOP_BH111_1.0_220118	SOP_BH111_3.0_220118	SOP_BH112_1.0_220118
				Sampling date / time	17-Jan-2022 00:00	18-Jan-2022 00:00	18-Jan-2022 00:00	18-Jan-2022 00:00	18-Jan-2022 00:00
Compound	CAS Number	LOR	Unit		ES2201683-011	ES2201683-012	ES2201683-013	ES2201683-014	ES2201683-015
					Result	Result	Result	Result	Result
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued									
Fluoranthene	206-44-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Pyrene	129-00-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benz(a)anthracene	56-55-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Chrysene	218-01-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg		<0.5	<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		<0.5	<0.5	<0.5	<0.5	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg		**0.6**	**0.6**	**0.6**	**0.6**	**0.6**
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg		**1.2**	**1.2**	**1.2**	**1.2**	**1.2**
EP075A: 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	0.5	mg/kg		<0.5	----	<0.5	----	<0.5
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	1	mg/kg		<1	----	<1	----	<1
EP075B: Polynuclear Aromatic Hydrocarbons									
Naphthalene	91-20-3	0.5	mg/kg		<0.5	----	<0.5	----	<0.5
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
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

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	SOP_BH110_0.2_220117	SOP_BH110_1.3_220118	SOP_BH111_1.0_220118	SOP_BH111_3.0_220118	SOP_BH112_1.0_220118
			Sampling date / time	17-Jan-2022 00:00	18-Jan-2022 00:00	18-Jan-2022 00:00	18-Jan-2022 00:00	18-Jan-2022 00:00
Compound	CAS Number	LOR	Unit	ES2201683-011	ES2201683-012	ES2201683-013	ES2201683-014	ES2201683-015
				Result	Result	Result	Result	Result
EP075B: Polynuclear Aromatic Hydrocarbons - Continued								
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
N-2-Fluorenyl Acetamide	53-96-3	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) & Benzo(k)fluoranthene	205-99-2 207-08-9	1	mg/kg	<1	----	<1	----	<1
7.12-Dimethylbenz(a)anthracene	57-97-6	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
3-Methylcholanthrene	56-49-5	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 PAHs	----	0.5	mg/kg	<0.5	----	<0.5	----	<0.5
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg	<0.5	----	<0.5	----	<0.5
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg	**0.6**	----	**0.6**	----	**0.6**
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg	**1.2**	----	**1.2**	----	**1.2**
EP075C: Phthalate Esters								
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

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	SOP_BH110_0.2_220117	SOP_BH110_1.3_220118	SOP_BH111_1.0_220118	SOP_BH111_3.0_220118	SOP_BH112_1.0_220118
				Sampling date / time	17-Jan-2022 00:00	18-Jan-2022 00:00	18-Jan-2022 00:00	18-Jan-2022 00:00	18-Jan-2022 00:00
Compound	CAS Number	LOR	Unit		ES2201683-011	ES2201683-012	ES2201683-013	ES2201683-014	ES2201683-015
					Result	Result	Result	Result	Result
EP075D: Nitrosamines - Continued									
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
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

Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH110_0.2_220117	SOP_BH110_1.3_220118	SOP_BH111_1.0_220118	SOP_BH111_3.0_220118	SOP_BH112_1.0_220118
				Sampling date / time	17-Jan-2022 00:00	18-Jan-2022 00:00	18-Jan-2022 00:00	18-Jan-2022 00:00	18-Jan-2022 00:00
					ES2201683-011	ES2201683-012	ES2201683-013	ES2201683-014	ES2201683-015
					Result	Result	Result	Result	Result
EP075G: Chlorinated Hydrocarbons - Continued									
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
EP075I: Organochlorine Pesticides									
alpha-BHC	319-84-6	0.5	mg/kg		<0.5	----	<0.5	----	<0.5
beta-BHC	319-85-7	0.5	mg/kg		<0.5	----	<0.5	----	<0.5
gamma-BHC	58-89-9	0.5	mg/kg		<0.5	----	<0.5	----	<0.5
delta-BHC	319-86-8	0.5	mg/kg		<0.5	----	<0.5	----	<0.5
Heptachlor	76-44-8	0.5	mg/kg		<0.5	----	<0.5	----	<0.5
Aldrin	309-00-2	0.5	mg/kg		<0.5	----	<0.5	----	<0.5
Heptachlor epoxide	1024-57-3	0.5	mg/kg		<0.5	----	<0.5	----	<0.5
alpha-Endosulfan	959-98-8	0.5	mg/kg		<0.5	----	<0.5	----	<0.5
4.4`-DDE	72-55-9	0.5	mg/kg		<0.5	----	<0.5	----	<0.5
Dieldrin	60-57-1	0.5	mg/kg		<0.5	----	<0.5	----	<0.5
Endrin	72-20-8	0.5	mg/kg		<0.5	----	<0.5	----	<0.5
beta-Endosulfan	33213-65-9	0.5	mg/kg		<0.5	----	<0.5	----	<0.5
4.4`-DDD	72-54-8	0.5	mg/kg		<0.5	----	<0.5	----	<0.5
Endosulfan sulfate	1031-07-8	0.5	mg/kg		<0.5	----	<0.5	----	<0.5
4.4`-DDT	50-29-3	1.0	mg/kg		<1.0	----	<1.0	----	<1.0
EP075J: Organophosphorus Pesticides									
Dichlorvos	62-73-7	0.5	mg/kg		<0.5	----	<0.5	----	<0.5
Dimethoate	60-51-5	0.5	mg/kg		<0.5	----	<0.5	----	<0.5
Diazinon	333-41-5	0.5	mg/kg		<0.5	----	<0.5	----	<0.5
Chlorpyrifos-methyl	5598-13-0	0.5	mg/kg		<0.5	----	<0.5	----	<0.5
Malathion	121-75-5	0.5	mg/kg		<0.5	----	<0.5	----	<0.5

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	SOP_BH110_0.2_220117	SOP_BH110_1.3_220118	SOP_BH111_1.0_220118	SOP_BH111_3.0_220118	SOP_BH112_1.0_220118
				Sampling date / time	17-Jan-2022 00:00	18-Jan-2022 00:00	18-Jan-2022 00:00	18-Jan-2022 00:00	18-Jan-2022 00:00
Compound	CAS Number	LOR	Unit		ES2201683-011	ES2201683-012	ES2201683-013	ES2201683-014	ES2201683-015
					Result	Result	Result	Result	Result
EP075J: Organophosphorus Pesticides - Continued									
Fenthion	55-38-9	0.5	mg/kg		<0.5	----	<0.5	----	<0.5
Chlorpyrifos	2921-88-2	0.5	mg/kg		<0.5	----	<0.5	----	<0.5
Pirimphos-ethyl	23505-41-1	0.5	mg/kg		<0.5	----	<0.5	----	<0.5
Chlorfenvinphos	470-90-6	0.5	mg/kg		<0.5	----	<0.5	----	<0.5
Prothiofos	34643-46-4	0.5	mg/kg		<0.5	----	<0.5	----	<0.5
Ethion	563-12-2	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	<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		**120**	<100	<100	<100	<100
^ C10 - C36 Fraction (sum)	----	50	mg/kg		**120**	<50	<50	<50	<50
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		**100**	<100	<100	<100	<100
>C34 - C40 Fraction	----	100	mg/kg		**120**	<100	<100	<100	<100
^ >C10 - C40 Fraction (sum)	----	50	mg/kg		**220**	<50	<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		**0.0005**	----	<0.0002	<0.0002	<0.0002

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	SOP_BH110_0.2_220117	SOP_BH110_1.3_220118	SOP_BH111_1.0_220118	SOP_BH111_3.0_220118	SOP_BH112_1.0_220118
				Sampling date / time	17-Jan-2022 00:00	18-Jan-2022 00:00	18-Jan-2022 00:00	18-Jan-2022 00:00	18-Jan-2022 00:00
Compound	CAS Number	LOR	Unit		ES2201683-011	ES2201683-012	ES2201683-013	ES2201683-014	ES2201683-015
					Result	Result	Result	Result	Result
EP231A: Perfluoroalkyl Sulfonic Acids - Continued									
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.0002	mg/kg		<0.0002	----	<0.0002	<0.0002	<0.0002
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.0002	mg/kg		<0.0002	----	<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	<0.001
Perfluoropentanoic acid (PFPeA)	2706-90-3	0.0002	mg/kg		<0.0002	----	<0.0002	<0.0002	<0.0002
Perfluorohexanoic acid (PFHxA)	307-24-4	0.0002	mg/kg		<0.0002	----	<0.0002	<0.0002	<0.0002
Perfluoroheptanoic acid (PFHpA)	375-85-9	0.0002	mg/kg		<0.0002	----	<0.0002	<0.0002	<0.0002
Perfluorooctanoic acid (PFOA)	335-67-1	0.0002	mg/kg		<0.0002	----	<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	<0.0005
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.0005	mg/kg		<0.0005	----	<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	<0.0005
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.0005	mg/kg		<0.0005	----	<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	<0.0002
Sum of PFAS (WA DER List)	----	0.0002	mg/kg		**0.0005**	----	<0.0002	<0.0002	<0.0002
EP066S: PCB Surrogate									
Decachlorobiphenyl	2051-24-3	0.1	%		**71.5**	**104**	**93.3**	**124**	**77.9**
EP068S: Organochlorine Pesticide Surrogate									
Dibromo-DDE	21655-73-2	0.05	%		**66.6**	**68.3**	**70.1**	**71.9**	**72.6**
EP068T: Organophosphorus Pesticide Surrogate									
DEF	78-48-8	0.05	%		**75.3**	**74.0**	**83.3**	**85.2**	**76.1**
EP074S: VOC Surrogates									
1.2-Dichloroethane-D4	17060-07-0	0.5	%		**104**	----	**84.0**	----	**83.7**
Toluene-D8	2037-26-5	0.5	%		**104**	----	**93.9**	----	**99.6**
4-Bromofluorobenzene	460-00-4	0.5	%		**108**	----	**90.3**	----	**93.6**
EP075(SIM)S: Phenolic Compound Surrogates									

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	SOP_BH110_0.2_2201 17	SOP_BH110_1.3_2201 18	SOP_BH111_1.0_2201 18	SOP_BH111_3.0_2201 18	SOP_BH112_1.0_2201 18
				Sampling date / time	17-Jan-2022 00:00	18-Jan-2022 00:00	18-Jan-2022 00:00	18-Jan-2022 00:00	18-Jan-2022 00:00
Compound	CAS Number	LOR	Unit		ES2201683-011	ES2201683-012	ES2201683-013	ES2201683-014	ES2201683-015
					Result	Result	Result	Result	Result
EP075(SIM)S: Phenolic Compound Surrogates - Continued									
Phenol-d6	13127-88-3	0.5	%		90.4	99.3	96.1	99.5	98.8
2-Chlorophenol-D4	93951-73-6	0.5	%		90.5	100	96.8	99.4	99.0
2.4.6-Tribromophenol	118-79-6	0.5	%		75.7	82.7	77.7	76.4	79.0
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	0.5	%		99.4	106	103	106	105
Anthracene-d10	1719-06-8	0.5	%		112	116	115	116	116
4-Terphenyl-d14	1718-51-0	0.5	%		95.6	102	100	103	103
EP075S: Acid Extractable Surrogates									
2-Fluorophenol	367-12-4	0.5	%		102	----	108	----	116
Phenol-d6	13127-88-3	0.5	%		90.6	----	92.6	----	99.8
2-Chlorophenol-D4	93951-73-6	0.5	%		94.9	----	99.0	----	105
2.4.6-Tribromophenol	118-79-6	0.5	%		84.6	----	89.6	----	100
EP075T: Base/Neutral Extractable Surrogates									
Nitrobenzene-D5	4165-60-0	0.5	%		87.5	----	87.7	----	94.6
1.2-Dichlorobenzene-D4	2199-69-1	0.5	%		83.2	----	85.6	----	92.9
2-Fluorobiphenyl	321-60-8	0.5	%		94.6	----	98.0	----	103
Anthracene-d10	1719-06-8	0.5	%		111	----	114	----	115
4-Terphenyl-d14	1718-51-0	0.5	%		91.1	----	95.2	----	96.3
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	0.2	%		107	88.3	81.8	86.3	80.6
Toluene-D8	2037-26-5	0.2	%		109	92.2	89.2	89.8	94.6
4-Bromofluorobenzene	460-00-4	0.2	%		114	86.5	94.7	85.8	98.6
EP231S: PFAS Surrogate									
13C4-PFOS	----	0.0002	%		107	----	103	97.5	115
13C8-PFOA	----	0.0002	%		110	----	108	113	108

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	SOP_BH112_5.0_220118	SOP_BH113_0.1_220118	TS 7	TB	SOP_BH113_0.3_220118
			Sampling date / time	18-Jan-2022 00:00	18-Jan-2022 00:00	14-Jan-2022 00:00	17-Jan-2022 00:00	18-Jan-2022 00:00
Compound	CAS Number	LOR	Unit	ES2201683-016	ES2201683-017	ES2201683-018	ES2201683-019	ES2201683-021
				Result	Result	Result	Result	Result
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	----	1.0	%	8.8	3.9	----	----	19.1
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	----	172	----	----	129
APPROVED IDENTIFIER:	----	-	--	----	A. SMYLIE	----	----	A. SMYLIE
EG005(ED093)T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	15	<5	----	----	7
Cadmium	7440-43-9	1	mg/kg	<1	<1	----	----	<1
Chromium	7440-47-3	2	mg/kg	8	10	----	----	14
Copper	7440-50-8	5	mg/kg	59	73	----	----	10
Lead	7439-92-1	5	mg/kg	12	<5	----	----	11
Nickel	7440-02-0	2	mg/kg	25	131	----	----	2
Zinc	7440-66-6	5	mg/kg	149	43	----	----	<5
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
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

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	SOP_BH112_5.0_220118	SOP_BH113_0.1_220118	TS 7	TB	SOP_BH113_0.3_220118
			Sampling date / time	18-Jan-2022 00:00	18-Jan-2022 00:00	14-Jan-2022 00:00	17-Jan-2022 00:00	18-Jan-2022 00:00
Compound	CAS Number	LOR	Unit	ES2201683-016	ES2201683-017	ES2201683-018	ES2201683-019	ES2201683-021
				Result	Result	Result	Result	Result
EP068A: Organochlorine Pesticides (OC) - Continued								
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
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

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	SOP_BH112_5.0_220118	SOP_BH113_0.1_220118	TS 7	TB	SOP_BH113_0.3_220118
			Sampling date / time	18-Jan-2022 00:00	18-Jan-2022 00:00	14-Jan-2022 00:00	17-Jan-2022 00:00	18-Jan-2022 00:00
Compound	CAS Number	LOR	Unit	ES2201683-016	ES2201683-017	ES2201683-018	ES2201683-019	ES2201683-021
				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	SOP_BH112_5.0_220118	SOP_BH113_0.1_220118	TS 7	TB	SOP_BH113_0.3_220118
			Sampling date / time	18-Jan-2022 00:00	18-Jan-2022 00:00	14-Jan-2022 00:00	17-Jan-2022 00:00	18-Jan-2022 00:00
Compound	CAS Number	LOR	Unit	ES2201683-016	ES2201683-017	ES2201683-018	ES2201683-019	ES2201683-021
				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)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

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	SOP_BH112_5.0_220118	SOP_BH113_0.1_220118	TS 7	TB	SOP_BH113_0.3_220118
				Sampling date / time	18-Jan-2022 00:00	18-Jan-2022 00:00	14-Jan-2022 00:00	17-Jan-2022 00:00	18-Jan-2022 00:00
Compound	CAS Number	LOR	Unit		ES2201683-016	ES2201683-017	ES2201683-018	ES2201683-019	ES2201683-021
					Result	Result	Result	Result	Result
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued									
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**
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg		**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
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

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	SOP_BH112_5.0_220118	SOP_BH113_0.1_220118	TS 7	TB	SOP_BH113_0.3_220118
			Sampling date / time	18-Jan-2022 00:00	18-Jan-2022 00:00	14-Jan-2022 00:00	17-Jan-2022 00:00	18-Jan-2022 00:00
Compound	CAS Number	LOR	Unit	ES2201683-016	ES2201683-017	ES2201683-018	ES2201683-019	ES2201683-021
				Result	Result	Result	Result	Result
EP075B: Polynuclear Aromatic Hydrocarbons - Continued								
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
Benz(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-Dimethylbenz(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
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

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	SOP_BH112_5.0_220118	SOP_BH113_0.1_220118	TS 7	TB	SOP_BH113_0.3_220118
			Sampling date / time	18-Jan-2022 00:00	18-Jan-2022 00:00	14-Jan-2022 00:00	17-Jan-2022 00:00	18-Jan-2022 00:00
Compound	CAS Number	LOR	Unit	ES2201683-016	ES2201683-017	ES2201683-018	ES2201683-019	ES2201683-021
				Result	Result	Result	Result	Result
EP075D: Nitrosamines - Continued								
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								
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

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	SOP_BH112_5.0_220118	SOP_BH113_0.1_220118	TS 7	TB	SOP_BH113_0.3_220118
			Sampling date / time	18-Jan-2022 00:00	18-Jan-2022 00:00	14-Jan-2022 00:00	17-Jan-2022 00:00	18-Jan-2022 00:00
Compound	CAS Number	LOR	Unit	ES2201683-016	ES2201683-017	ES2201683-018	ES2201683-019	ES2201683-021
				Result	Result	Result	Result	Result
EP075G: Chlorinated Hydrocarbons - Continued								
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
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

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	SOP_BH112_5.0_220118	SOP_BH113_0.1_220118	TS 7	TB	SOP_BH113_0.3_220118
			Sampling date / time	18-Jan-2022 00:00	18-Jan-2022 00:00	14-Jan-2022 00:00	17-Jan-2022 00:00	18-Jan-2022 00:00
Compound	CAS Number	LOR	Unit	ES2201683-016	ES2201683-017	ES2201683-018	ES2201683-019	ES2201683-021
				Result	Result	Result	Result	Result
EP075J: Organophosphorus Pesticides - Continued								
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
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	<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
>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	<0.2	<0.2
Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	**12.1**	<0.5	<0.5
Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	**2.0**	<0.5	<0.5
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	**10.7**	<0.5	<0.5
ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	**4.4**	<0.5	<0.5
^ Sum of BTEX	----	0.2	mg/kg	<0.2	<0.2	**29.2**	<0.2	<0.2
^ Total Xylenes	----	0.5	mg/kg	<0.5	<0.5	**15.1**	<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

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	SOP_BH112_5.0_220118	SOP_BH113_0.1_220118	TS 7	TB	SOP_BH113_0.3_220118
			Sampling date / time	18-Jan-2022 00:00	18-Jan-2022 00:00	14-Jan-2022 00:00	17-Jan-2022 00:00	18-Jan-2022 00:00
Compound	CAS Number	LOR	Unit	ES2201683-016	ES2201683-017	ES2201683-018	ES2201683-019	ES2201683-021
				Result	Result	Result	Result	Result
EP231A: Perfluoroalkyl Sulfonic Acids - Continued								
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
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	%	**109**	**82.1**	----	----	**93.2**
EP068S: Organochlorine Pesticide Surrogate								
Dibromo-DDE	21655-73-2	0.05	%	**79.8**	**76.7**	----	----	**75.8**
EP068T: Organophosphorus Pesticide Surrogate								
DEF	78-48-8	0.05	%	**88.4**	**84.6**	----	----	**88.3**
EP074S: VOC Surrogates								
1.2-Dichloroethane-D4	17060-07-0	0.5	%	----	----	----	----	**85.7**
Toluene-D8	2037-26-5	0.5	%	----	----	----	----	**99.5**
4-Bromofluorobenzene	460-00-4	0.5	%	----	----	----	----	**92.5**
EP075(SIM)S: Phenolic Compound Surrogates								

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	SOP_BH112_5.0_220118	SOP_BH113_0.1_220118	TS 7	TB	SOP_BH113_0.3_220118
				Sampling date / time	18-Jan-2022 00:00	18-Jan-2022 00:00	14-Jan-2022 00:00	17-Jan-2022 00:00	18-Jan-2022 00:00
Compound	CAS Number	LOR	Unit		ES2201683-016	ES2201683-017	ES2201683-018	ES2201683-019	ES2201683-021
					Result	Result	Result	Result	Result
EP075(SIM)S: Phenolic Compound Surrogates - Continued									
Phenol-d6	13127-88-3	0.5	%		95.0	91.4	----	----	95.9
2-Chlorophenol-D4	93951-73-6	0.5	%		95.0	99.3	----	----	96.3
2.4.6-Tribromophenol	118-79-6	0.5	%		70.9	87.7	----	----	70.6
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	0.5	%		101	109	----	----	103
Anthracene-d10	1719-06-8	0.5	%		111	106	----	----	114
4-Terphenyl-d14	1718-51-0	0.5	%		97.6	107	----	----	100
EP075S: Acid Extractable Surrogates									
2-Fluorophenol	367-12-4	0.5	%		----	----	----	----	118
Phenol-d6	13127-88-3	0.5	%		----	----	----	----	106
2-Chlorophenol-D4	93951-73-6	0.5	%		----	----	----	----	105
2.4.6-Tribromophenol	118-79-6	0.5	%		----	----	----	----	88.7
EP075T: Base/Neutral Extractable Surrogates									
Nitrobenzene-D5	4165-60-0	0.5	%		----	----	----	----	91.3
1.2-Dichlorobenzene-D4	2199-69-1	0.5	%		----	----	----	----	92.0
2-Fluorobiphenyl	321-60-8	0.5	%		----	----	----	----	103
Anthracene-d10	1719-06-8	0.5	%		----	----	----	----	113
4-Terphenyl-d14	1718-51-0	0.5	%		----	----	----	----	96.2
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	0.2	%		95.2	94.2	87.6	92.0	83.3
Toluene-D8	2037-26-5	0.2	%		97.7	97.2	92.5	97.6	94.9
4-Bromofluorobenzene	460-00-4	0.2	%		91.3	90.7	89.6	94.4	98.7
EP231S: PFAS Surrogate									
13C4-PFOS	----	0.0002	%		106	----	----	----	114
13C8-PFOA	----	0.0002	%		109	----	----	----	114

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	SOP_BH114_0.3_220118	SOP_BH114_2._220118	SOP_BH115_0.1_220118	SOP_BH115_2._220118	SOP_BH116_0.2_220117
			Sampling date / time	18-Jan-2022 00:00	18-Jan-2022 00:00	18-Jan-2022 00:00	18-Jan-2022 00:00	17-Jan-2022 00:00
Compound	CAS Number	LOR	Unit	ES2201683-022	ES2201683-023	ES2201683-024	ES2201683-025	ES2201683-026
				Result	Result	Result	Result	Result
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	----	1.0	%	17.9	7.6	3.4	7.5	3.8
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	453	----	732	----	347
APPROVED IDENTIFIER:	----	-	--	A. SMYLIE	----	A. SMYLIE	----	A. SMYLIE
EG005(ED093)T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	7	7	<5	<5	<5
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	<1	<1
Chromium	7440-47-3	2	mg/kg	12	6	10	4	9
Copper	7440-50-8	5	mg/kg	10	49	81	39	34
Lead	7439-92-1	5	mg/kg	14	15	<5	20	6
Nickel	7440-02-0	2	mg/kg	<2	7	138	4	67
Zinc	7440-66-6	5	mg/kg	<5	40	45	26	29
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	<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	<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

Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH114_0.3_220118	SOP_BH114_2._220118	SOP_BH115_0.1_220118	SOP_BH115_2._220118	SOP_BH116_0.2_220117
				Sampling date / time	18-Jan-2022 00:00	18-Jan-2022 00:00	18-Jan-2022 00:00	18-Jan-2022 00:00	17-Jan-2022 00:00
					ES2201683-022	ES2201683-023	ES2201683-024	ES2201683-025	ES2201683-026
					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

Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH114_0.3_220118	SOP_BH114_2._220118	SOP_BH115_0.1_220118	SOP_BH115_2._220118	SOP_BH116_0.2_220117
				Sampling date / time	18-Jan-2022 00:00	18-Jan-2022 00:00	18-Jan-2022 00:00	18-Jan-2022 00:00	17-Jan-2022 00:00
					ES2201683-022	ES2201683-023	ES2201683-024	ES2201683-025	ES2201683-026
					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**)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH114_0.3_220118	SOP_BH114_2._220118	SOP_BH115_0.1_220118	SOP_BH115_2._220118	SOP_BH116_0.2_220117
				Sampling date / time	18-Jan-2022 00:00	18-Jan-2022 00:00	18-Jan-2022 00:00	18-Jan-2022 00:00	17-Jan-2022 00:00
					ES2201683-022	ES2201683-023	ES2201683-024	ES2201683-025	ES2201683-026
					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)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		<0.5	<0.5	<0.5	<0.5	<0.5
Anthracene	120-12-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	SOP_BH114_0.3_220118	SOP_BH114_2._220118	SOP_BH115_0.1_220118	SOP_BH115_2._220118	SOP_BH116_0.2_220117
				Sampling date / time	18-Jan-2022 00:00	18-Jan-2022 00:00	18-Jan-2022 00:00	18-Jan-2022 00:00	17-Jan-2022 00:00
Compound	CAS Number	LOR	Unit		ES2201683-022	ES2201683-023	ES2201683-024	ES2201683-025	ES2201683-026
					Result	Result	Result	Result	Result
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued									
Fluoranthene	206-44-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Pyrene	129-00-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benz(a)anthracene	56-55-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Chrysene	218-01-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg		<0.5	<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		<0.5	<0.5	<0.5	<0.5	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg		**0.6**	**0.6**	**0.6**	**0.6**	**0.6**
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg		**1.2**	**1.2**	**1.2**	**1.2**	**1.2**
EP075A: 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	0.5	mg/kg		<0.5	----	<0.5	----	<0.5
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	1	mg/kg		<1	----	<1	----	<1
EP075B: Polynuclear Aromatic Hydrocarbons									
Naphthalene	91-20-3	0.5	mg/kg		<0.5	----	<0.5	----	<0.5
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
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

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	SOP_BH114_0.3_220118	SOP_BH114_2._220118	SOP_BH115_0.1_220118	SOP_BH115_2._220118	SOP_BH116_0.2_220117
				Sampling date / time	18-Jan-2022 00:00	18-Jan-2022 00:00	18-Jan-2022 00:00	18-Jan-2022 00:00	17-Jan-2022 00:00
Compound	CAS Number	LOR	Unit		ES2201683-022	ES2201683-023	ES2201683-024	ES2201683-025	ES2201683-026
					Result	Result	Result	Result	Result
EP075B: Polynuclear Aromatic Hydrocarbons - Continued									
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
N-2-Fluorenyl Acetamide	53-96-3	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) & Benzo(k)fluoranthene	205-99-2 207-08-9	1	mg/kg		<1	----	<1	----	<1
7.12-Dimethylbenz(a)anthracene	57-97-6	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
3-Methylcholanthrene	56-49-5	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 PAHs	----	0.5	mg/kg		<0.5	----	<0.5	----	<0.5
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg		<0.5	----	<0.5	----	<0.5
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg		**0.6**	----	**0.6**	----	**0.6**
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg		**1.2**	----	**1.2**	----	**1.2**
EP075C: Phthalate Esters									
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

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	SOP_BH114_0.3_220118	SOP_BH114_2._220118	SOP_BH115_0.1_220118	SOP_BH115_2._220118	SOP_BH116_0.2_220117
				Sampling date / time	18-Jan-2022 00:00	18-Jan-2022 00:00	18-Jan-2022 00:00	18-Jan-2022 00:00	17-Jan-2022 00:00
Compound	CAS Number	LOR	Unit		ES2201683-022	ES2201683-023	ES2201683-024	ES2201683-025	ES2201683-026
					Result	Result	Result	Result	Result
EP075D: Nitrosamines - Continued									
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
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

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	SOP_BH114_0.3_220118	SOP_BH114_2._220118	SOP_BH115_0.1_220118	SOP_BH115_2._220118	SOP_BH116_0.2_220117
				Sampling date / time	18-Jan-2022 00:00	18-Jan-2022 00:00	18-Jan-2022 00:00	18-Jan-2022 00:00	17-Jan-2022 00:00
Compound	CAS Number	LOR	Unit		ES2201683-022	ES2201683-023	ES2201683-024	ES2201683-025	ES2201683-026
					Result	Result	Result	Result	Result
EP075G: Chlorinated Hydrocarbons - Continued									
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
EP075I: Organochlorine Pesticides									
alpha-BHC	319-84-6	0.5	mg/kg		<0.5	----	<0.5	----	<0.5
beta-BHC	319-85-7	0.5	mg/kg		<0.5	----	<0.5	----	<0.5
gamma-BHC	58-89-9	0.5	mg/kg		<0.5	----	<0.5	----	<0.5
delta-BHC	319-86-8	0.5	mg/kg		<0.5	----	<0.5	----	<0.5
Heptachlor	76-44-8	0.5	mg/kg		<0.5	----	<0.5	----	<0.5
Aldrin	309-00-2	0.5	mg/kg		<0.5	----	<0.5	----	<0.5
Heptachlor epoxide	1024-57-3	0.5	mg/kg		<0.5	----	<0.5	----	<0.5
alpha-Endosulfan	959-98-8	0.5	mg/kg		<0.5	----	<0.5	----	<0.5
4.4`-DDE	72-55-9	0.5	mg/kg		<0.5	----	<0.5	----	<0.5
Dieldrin	60-57-1	0.5	mg/kg		<0.5	----	<0.5	----	<0.5
Endrin	72-20-8	0.5	mg/kg		<0.5	----	<0.5	----	<0.5
beta-Endosulfan	33213-65-9	0.5	mg/kg		<0.5	----	<0.5	----	<0.5
4.4`-DDD	72-54-8	0.5	mg/kg		<0.5	----	<0.5	----	<0.5
Endosulfan sulfate	1031-07-8	0.5	mg/kg		<0.5	----	<0.5	----	<0.5
4.4`-DDT	50-29-3	1.0	mg/kg		<1.0	----	<1.0	----	<1.0
EP075J: Organophosphorus Pesticides									
Dichlorvos	62-73-7	0.5	mg/kg		<0.5	----	<0.5	----	<0.5
Dimethoate	60-51-5	0.5	mg/kg		<0.5	----	<0.5	----	<0.5
Diazinon	333-41-5	0.5	mg/kg		<0.5	----	<0.5	----	<0.5
Chlorpyrifos-methyl	5598-13-0	0.5	mg/kg		<0.5	----	<0.5	----	<0.5
Malathion	121-75-5	0.5	mg/kg		<0.5	----	<0.5	----	<0.5

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	SOP_BH114_0.3_220118	SOP_BH114_2._220118	SOP_BH115_0.1_220118	SOP_BH115_2._220118	SOP_BH116_0.2_220117
				Sampling date / time	18-Jan-2022 00:00	18-Jan-2022 00:00	18-Jan-2022 00:00	18-Jan-2022 00:00	17-Jan-2022 00:00
Compound	CAS Number	LOR	Unit		ES2201683-022	ES2201683-023	ES2201683-024	ES2201683-025	ES2201683-026
					Result	Result	Result	Result	Result
EP075J: Organophosphorus Pesticides - Continued									
Fenthion	55-38-9	0.5	mg/kg		<0.5	----	<0.5	----	<0.5
Chlorpyrifos	2921-88-2	0.5	mg/kg		<0.5	----	<0.5	----	<0.5
Pirimphos-ethyl	23505-41-1	0.5	mg/kg		<0.5	----	<0.5	----	<0.5
Chlorfenvinphos	470-90-6	0.5	mg/kg		<0.5	----	<0.5	----	<0.5
Prothiofos	34643-46-4	0.5	mg/kg		<0.5	----	<0.5	----	<0.5
Ethion	563-12-2	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	<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	<50	<50
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		<100	<100	<100	<100	<100
>C34 - C40 Fraction	----	100	mg/kg		<100	<100	<100	<100	**100**
^ >C10 - C40 Fraction (sum)	----	50	mg/kg		<50	<50	<50	<50	**100**
^ >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	----	----	----	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	SOP_BH114_0.3_220118	SOP_BH114_2._220118	SOP_BH115_0.1_220118	SOP_BH115_2._220118	SOP_BH116_0.2_220117
				Sampling date / time	18-Jan-2022 00:00	18-Jan-2022 00:00	18-Jan-2022 00:00	18-Jan-2022 00:00	17-Jan-2022 00:00
Compound	CAS Number	LOR	Unit		ES2201683-022	ES2201683-023	ES2201683-024	ES2201683-025	ES2201683-026
					Result	Result	Result	Result	Result
EP231A: Perfluoroalkyl Sulfonic Acids - Continued									
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	----	----	----	----
EP066S: PCB Surrogate									
Decachlorobiphenyl	2051-24-3	0.1	%		**100**	**78.7**	**88.8**	**101**	**85.8**
EP068S: Organochlorine Pesticide Surrogate									
Dibromo-DDE	21655-73-2	0.05	%		**75.2**	**74.6**	**72.8**	**81.1**	**73.0**
EP068T: Organophosphorus Pesticide Surrogate									
DEF	78-48-8	0.05	%		**89.8**	**71.5**	**76.9**	**76.3**	**82.5**
EP074S: VOC Surrogates									
1.2-Dichloroethane-D4	17060-07-0	0.5	%		**84.5**	----	**96.1**	----	**93.6**
Toluene-D8	2037-26-5	0.5	%		**97.8**	----	**107**	----	**100**
4-Bromofluorobenzene	460-00-4	0.5	%		**92.2**	----	**94.0**	----	**101**
EP075(SIM)S: Phenolic Compound Surrogates									

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	SOP_BH114_0.3_220118	SOP_BH114_2._220118	SOP_BH115_0.1_220118	SOP_BH115_2._220118	SOP_BH116_0.2_220117
				Sampling date / time	18-Jan-2022 00:00	18-Jan-2022 00:00	18-Jan-2022 00:00	18-Jan-2022 00:00	17-Jan-2022 00:00
Compound	CAS Number	LOR	Unit		ES2201683-022	ES2201683-023	ES2201683-024	ES2201683-025	ES2201683-026
					Result	Result	Result	Result	Result
EP075(SIM)S: Phenolic Compound Surrogates - Continued									
Phenol-d6	13127-88-3	0.5	%		96.4	85.1	96.0	93.6	95.1
2-Chlorophenol-D4	93951-73-6	0.5	%		96.8	88.5	97.2	100	95.8
2.4.6-Tribromophenol	118-79-6	0.5	%		70.1	85.0	70.6	92.5	69.7
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	0.5	%		103	98.8	103	110	101
Anthracene-d10	1719-06-8	0.5	%		115	100	115	107	113
4-Terphenyl-d14	1718-51-0	0.5	%		102	102	101	109	98.1
EP075S: Acid Extractable Surrogates									
2-Fluorophenol	367-12-4	0.5	%		114	----	103	----	110
Phenol-d6	13127-88-3	0.5	%		100	----	101	----	100
2-Chlorophenol-D4	93951-73-6	0.5	%		104	----	101	----	106
2.4.6-Tribromophenol	118-79-6	0.5	%		87.0	----	60.0	----	83.4
EP075T: Base/Neutral Extractable Surrogates									
Nitrobenzene-D5	4165-60-0	0.5	%		92.0	----	93.9	----	92.6
1.2-Dichlorobenzene-D4	2199-69-1	0.5	%		89.3	----	91.2	----	90.7
2-Fluorobiphenyl	321-60-8	0.5	%		102	----	104	----	101
Anthracene-d10	1719-06-8	0.5	%		115	----	117	----	114
4-Terphenyl-d14	1718-51-0	0.5	%		95.6	----	94.2	----	93.2
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	0.2	%		82.2	91.4	92.8	95.1	95.6
Toluene-D8	2037-26-5	0.2	%		92.6	89.7	102	97.5	106
4-Bromofluorobenzene	460-00-4	0.2	%		96.2	82.8	101	89.5	106
EP231S: PFAS Surrogate									
13C4-PFOS	----	0.0002	%		109	----	----	----	----
13C8-PFOA	----	0.0002	%		109	----	----	----	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	SOP_BH116_2.0_220117	SOP_BH117_0.2_220117	SOP_BH117_3.0_220118	SOP_BH119_0.2_220117	SOP_BH119_1.0_220117
			Sampling date / time	17-Jan-2022 00:00	17-Jan-2022 00:00	18-Jan-2022 00:00	17-Jan-2022 00:00	17-Jan-2022 00:00
Compound	CAS Number	LOR	Unit	ES2201683-027	ES2201683-028	ES2201683-029	ES2201683-030	ES2201683-031
				Result	Result	Result	Result	Result
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	----	1.0	%	12.8	6.7	9.6	1.8	14.2
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	----	407	----	532	----
APPROVED IDENTIFIER:	----	-	--	----	A. SMYLIE	----	A. SMYLIE	----
EG005(ED093)T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	6	<5	10	<5	<5
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	<1	<1
Chromium	7440-47-3	2	mg/kg	4	7	7	8	2
Copper	7440-50-8	5	mg/kg	19	49	45	52	11
Lead	7439-92-1	5	mg/kg	13	<5	21	<5	8
Nickel	7440-02-0	2	mg/kg	2	76	6	99	<2
Zinc	7440-66-6	5	mg/kg	14	30	40	34	7
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	<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	<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

Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH116_2.0_220117	SOP_BH117_0.2_220117	SOP_BH117_3.0_220118	SOP_BH119_0.2_220117	SOP_BH119_1.0_220117
				Sampling date / time	17-Jan-2022 00:00	17-Jan-2022 00:00	18-Jan-2022 00:00	17-Jan-2022 00:00	17-Jan-2022 00:00
					ES2201683-027	ES2201683-028	ES2201683-029	ES2201683-030	ES2201683-031
					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

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	SOP_BH116_2.0_220117	SOP_BH117_0.2_220117	SOP_BH117_3.0_220118	SOP_BH119_0.2_220117	SOP_BH119_1.0_220117
				Sampling date / time	17-Jan-2022 00:00	17-Jan-2022 00:00	18-Jan-2022 00:00	17-Jan-2022 00:00	17-Jan-2022 00:00
Compound	CAS Number	LOR	Unit		ES2201683-027	ES2201683-028	ES2201683-029	ES2201683-030	ES2201683-031
					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**)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH116_2.0_220117	SOP_BH117_0.2_220117	SOP_BH117_3.0_220118	SOP_BH119_0.2_220117	SOP_BH119_1.0_220117
				Sampling date / time	17-Jan-2022 00:00	17-Jan-2022 00:00	18-Jan-2022 00:00	17-Jan-2022 00:00	17-Jan-2022 00:00
					ES2201683-027	ES2201683-028	ES2201683-029	ES2201683-030	ES2201683-031
					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)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		<0.5	<0.5	<0.5	<0.5	<0.5
Anthracene	120-12-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5

Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH116_2.0_220117	SOP_BH117_0.2_220117	SOP_BH117_3.0_220118	SOP_BH119_0.2_220117	SOP_BH119_1.0_220117
				Sampling date / time	17-Jan-2022 00:00	17-Jan-2022 00:00	18-Jan-2022 00:00	17-Jan-2022 00:00	17-Jan-2022 00:00
					ES2201683-027	ES2201683-028	ES2201683-029	ES2201683-030	ES2201683-031
					Result	Result	Result	Result	Result
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued									
Fluoranthene	206-44-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Pyrene	129-00-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benz(a)anthracene	56-55-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Chrysene	218-01-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg		<0.5	<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		<0.5	<0.5	<0.5	<0.5	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ **Sum of polycyclic aromatic hydrocarbons**	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ **Benzo(a)pyrene TEQ (zero)**	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ **Benzo(a)pyrene TEQ (half LOR)**	----	0.5	mg/kg		**0.6**	**0.6**	**0.6**	**0.6**	**0.6**
^ **Benzo(a)pyrene TEQ (LOR)**	----	0.5	mg/kg		**1.2**	**1.2**	**1.2**	**1.2**	**1.2**
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

Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH116_2.0_220117	SOP_BH117_0.2_220117	SOP_BH117_3.0_220118	SOP_BH119_0.2_220117	SOP_BH119_1.0_220117
				Sampling date / time	17-Jan-2022 00:00	17-Jan-2022 00:00	18-Jan-2022 00:00	17-Jan-2022 00:00	17-Jan-2022 00:00
					ES2201683-027	ES2201683-028	ES2201683-029	ES2201683-030	ES2201683-031
					Result	Result	Result	Result	Result
EP075B: Polynuclear Aromatic Hydrocarbons - Continued									
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
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

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	SOP_BH116_2.0_220117	SOP_BH117_0.2_220117	SOP_BH117_3.0_220118	SOP_BH119_0.2_220117	SOP_BH119_1.0_220117
				Sampling date / time	17-Jan-2022 00:00	17-Jan-2022 00:00	18-Jan-2022 00:00	17-Jan-2022 00:00	17-Jan-2022 00:00
Compound	CAS Number	LOR	Unit		ES2201683-027	ES2201683-028	ES2201683-029	ES2201683-030	ES2201683-031
					Result	Result	Result	Result	Result
EP075D: Nitrosamines - Continued									
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									
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

Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH116_2.0_220117	SOP_BH117_0.2_220117	SOP_BH117_3.0_220118	SOP_BH119_0.2_220117	SOP_BH119_1.0_220117
				Sampling date / time	17-Jan-2022 00:00	17-Jan-2022 00:00	18-Jan-2022 00:00	17-Jan-2022 00:00	17-Jan-2022 00:00
					ES2201683-027	ES2201683-028	ES2201683-029	ES2201683-030	ES2201683-031
					Result	Result	Result	Result	Result
EP075G: Chlorinated Hydrocarbons - Continued									
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
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

Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH116_2.0_220117	SOP_BH117_0.2_220117	SOP_BH117_3.0_220118	SOP_BH119_0.2_220117	SOP_BH119_1.0_220117
				Sampling date / time	17-Jan-2022 00:00	17-Jan-2022 00:00	18-Jan-2022 00:00	17-Jan-2022 00:00	17-Jan-2022 00:00
					ES2201683-027	ES2201683-028	ES2201683-029	ES2201683-030	ES2201683-031
					Result	Result	Result	Result	Result
EP075J: Organophosphorus Pesticides - Continued									
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	<100	<100	<100	<100
C29 - C36 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
^ **C10 - C36 Fraction (sum)**	----	50	mg/kg		<50	<50	<50	<50	<50
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
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		<100	<100	<100	<100	<100
>C34 - C40 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
^ **>C10 - C40 Fraction (sum)**	----	50	mg/kg		<50	<50	<50	<50	<50
^ **>C10 - C16 Fraction minus Naphthalene (F2)**	----	50	mg/kg		<50	<50	<50	<50	<50
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

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	SOP_BH116_2.0_220117	SOP_BH117_0.2_220117	SOP_BH117_3.0_220118	SOP_BH119_0.2_220117	SOP_BH119_1.0_220117
				Sampling date / time	17-Jan-2022 00:00	17-Jan-2022 00:00	18-Jan-2022 00:00	17-Jan-2022 00:00	17-Jan-2022 00:00
Compound	CAS Number	LOR	Unit		ES2201683-027	ES2201683-028	ES2201683-029	ES2201683-030	ES2201683-031
					Result	Result	Result	Result	Result
EP231A: Perfluoroalkyl Sulfonic Acids - Continued									
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
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	%		**95.3**	**96.4**	**99.7**	**99.9**	**89.3**
EP068S: Organochlorine Pesticide Surrogate									
Dibromo-DDE	21655-73-2	0.05	%		**67.7**	**70.5**	**62.8**	**66.1**	**82.0**
EP068T: Organophosphorus Pesticide Surrogate									
DEF	78-48-8	0.05	%		**71.7**	**78.4**	**64.2**	**64.6**	**82.9**
EP074S: VOC Surrogates									
1.2-Dichloroethane-D4	17060-07-0	0.5	%		----	**97.3**	----	----	**83.5**
Toluene-D8	2037-26-5	0.5	%		----	**111**	----	----	**92.0**
4-Bromofluorobenzene	460-00-4	0.5	%		----	**106**	----	----	**94.9**
EP075(SIM)S: Phenolic Compound Surrogates									

Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH116_2.0_220117	SOP_BH117_0.2_220117	SOP_BH117_3.0_220118	SOP_BH119_0.2_220117	SOP_BH119_1.0_220117
				Sampling date / time	17-Jan-2022 00:00	17-Jan-2022 00:00	18-Jan-2022 00:00	17-Jan-2022 00:00	17-Jan-2022 00:00
					ES2201683-027	ES2201683-028	ES2201683-029	ES2201683-030	ES2201683-031
					Result	Result	Result	Result	Result
EP075(SIM)S: Phenolic Compound Surrogates - Continued									
Phenol-d6	13127-88-3	0.5	%		**93.4**	**91.6**	**93.6**	**92.7**	**92.6**
2-Chlorophenol-D4	93951-73-6	0.5	%		**100**	**92.2**	**99.3**	**99.3**	**92.7**
2.4.6-Tribromophenol	118-79-6	0.5	%		**91.5**	**66.7**	**88.0**	**83.5**	**71.9**
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	0.5	%		**108**	**97.3**	**109**	**109**	**97.7**
Anthracene-d10	1719-06-8	0.5	%		**106**	**109**	**106**	**107**	**111**
4-Terphenyl-d14	1718-51-0	0.5	%		**109**	**93.5**	**107**	**106**	**97.6**
EP075S: Acid Extractable Surrogates									
2-Fluorophenol	367-12-4	0.5	%		**----**	**110**	**----**	**----**	**102**
Phenol-d6	13127-88-3	0.5	%		**----**	**99.3**	**----**	**----**	**96.2**
2-Chlorophenol-D4	93951-73-6	0.5	%		**----**	**103**	**----**	**----**	**95.7**
2.4.6-Tribromophenol	118-79-6	0.5	%		**----**	**73.8**	**----**	**----**	**71.3**
EP075T: Base/Neutral Extractable Surrogates									
Nitrobenzene-D5	4165-60-0	0.5	%		**----**	**93.3**	**----**	**----**	**86.8**
1.2-Dichlorobenzene-D4	2199-69-1	0.5	%		**----**	**92.0**	**----**	**----**	**89.2**
2-Fluorobiphenyl	321-60-8	0.5	%		**----**	**103**	**----**	**----**	**96.8**
Anthracene-d10	1719-06-8	0.5	%		**----**	**117**	**----**	**----**	**114**
4-Terphenyl-d14	1718-51-0	0.5	%		**----**	**93.4**	**----**	**----**	**90.5**
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	0.2	%		**86.6**	**99.4**	**91.9**	**77.8**	**85.8**
Toluene-D8	2037-26-5	0.2	%		**87.2**	**117**	**95.3**	**80.5**	**96.5**
4-Bromofluorobenzene	460-00-4	0.2	%		**82.6**	**112**	**87.6**	**73.4**	**101**
EP231S: PFAS Surrogate									
13C4-PFOS	----	0.0002	%		**----**	**----**	**----**	**110**	**114**
13C8-PFOA	----	0.0002	%		**----**	**----**	**----**	**110**	**108**

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	SOP_BH119_3.0_220117	DUP01_220117	Trip Spike Control 1	Trip Spike Control 7	----
			Sampling date / time	17-Jan-2022 00:00	17-Jan-2022 00:00	14-Jan-2022 00:00	14-Jan-2022 00:00	----
Compound	CAS Number	LOR	Unit	ES2201683-032	ES2201683-033	ES2201683-036	ES2201683-037	--------
				Result	Result	Result	Result	----
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	----	1.0	%	**9.2**	**7.4**	----	----	----
EG005(ED093)T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	**7**	**10**	----	----	----
Cadmium	7440-43-9	1	mg/kg	<1	<1	----	----	----
Chromium	7440-47-3	2	mg/kg	**7**	**7**	----	----	----
Copper	7440-50-8	5	mg/kg	**58**	**29**	----	----	----
Lead	7439-92-1	5	mg/kg	**14**	**13**	----	----	----
Nickel	7440-02-0	2	mg/kg	**32**	**4**	----	----	----
Zinc	7440-66-6	5	mg/kg	**154**	**38**	----	----	----
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	----	----	----
EP066: Polychlorinated Biphenyls (PCB)								
Total Polychlorinated biphenyls	----	0.1	mg/kg	<0.1	<0.1	----	----	----
EP068A: Organochlorine Pesticides (OC)								
alpha-BHC	319-84-6	0.05	mg/kg	<0.05	<0.05	----	----	----
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	<0.05	----	----	----
beta-BHC	319-85-7	0.05	mg/kg	<0.05	<0.05	----	----	----
gamma-BHC	58-89-9	0.05	mg/kg	<0.05	<0.05	----	----	----
delta-BHC	319-86-8	0.05	mg/kg	<0.05	<0.05	----	----	----
Heptachlor	76-44-8	0.05	mg/kg	<0.05	<0.05	----	----	----
Aldrin	309-00-2	0.05	mg/kg	<0.05	<0.05	----	----	----
Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	<0.05	----	----	----
^ Total Chlordane (sum)	----	0.05	mg/kg	<0.05	<0.05	----	----	----
trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	<0.05	----	----	----
alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	<0.05	----	----	----
cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	<0.05	----	----	----
Dieldrin	60-57-1	0.05	mg/kg	<0.05	<0.05	----	----	----
4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	----	----	----
Endrin	72-20-8	0.05	mg/kg	<0.05	<0.05	----	----	----
beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	<0.05	----	----	----
^ Endosulfan (sum)	115-29-7	0.05	mg/kg	<0.05	<0.05	----	----	----
4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	<0.05	----	----	----
Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	<0.05	----	----	----
Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	<0.05	----	----	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	SOP_BH119_3.0_220117	DUP01_220117	Trip Spike Control 1	Trip Spike Control 7	----
			Sampling date / time	17-Jan-2022 00:00	17-Jan-2022 00:00	14-Jan-2022 00:00	14-Jan-2022 00:00	----
Compound	CAS Number	LOR	Unit	ES2201683-032	ES2201683-033	ES2201683-036	ES2201683-037	--------
				Result	Result	Result	Result	----
EP068A: Organochlorine Pesticides (OC) - Continued								
4.4`-DDT	50-29-3	0.2	mg/kg	<0.2	<0.2	----	----	----
Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	<0.05	----	----	----
Methoxychlor	72-43-5	0.2	mg/kg	<0.2	<0.2	----	----	----
^ Sum of Aldrin + Dieldrin	309-00-2/60-57-1	0.05	mg/kg	<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	----	----	----
EP068B: Organophosphorus Pesticides (OP)								
Dichlorvos	62-73-7	0.05	mg/kg	<0.05	<0.05	----	----	----
Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	<0.05	----	----	----
Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	<0.2	----	----	----
Dimethoate	60-51-5	0.05	mg/kg	<0.05	<0.05	----	----	----
Diazinon	333-41-5	0.05	mg/kg	<0.05	<0.05	----	----	----
Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	<0.05	----	----	----
Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	<0.2	----	----	----
Malathion	121-75-5	0.05	mg/kg	<0.05	<0.05	----	----	----
Fenthion	55-38-9	0.05	mg/kg	<0.05	<0.05	----	----	----
Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	<0.05	----	----	----
Parathion	56-38-2	0.2	mg/kg	<0.2	<0.2	----	----	----
Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	<0.05	----	----	----
Chlorfenvinphos	470-90-6	0.05	mg/kg	<0.05	<0.05	----	----	----
Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	<0.05	----	----	----
Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	<0.05	----	----	----
Prothiofos	34643-46-4	0.05	mg/kg	<0.05	<0.05	----	----	----
Ethion	563-12-2	0.05	mg/kg	<0.05	<0.05	----	----	----
Carbophenothion	786-19-6	0.05	mg/kg	<0.05	<0.05	----	----	----
Azinphos Methyl	86-50-0	0.05	mg/kg	<0.05	<0.05	----	----	----
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons								
Naphthalene	91-20-3	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	----	----	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	SOP_BH119_3.0_220117	DUP01_220117	Trip Spike Control 1	Trip Spike Control 7	----
			Sampling date / time	17-Jan-2022 00:00	17-Jan-2022 00:00	14-Jan-2022 00:00	14-Jan-2022 00:00	----
Compound	CAS Number	LOR	Unit	ES2201683-032	ES2201683-033	ES2201683-036	ES2201683-037	--------
				Result	Result	Result	Result	----
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued								
Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	----	----	----
Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	----	----	----
Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	----	----	----
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	<0.5	----	----	----
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	<0.5	----	----	----
Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	<0.5	----	----	----
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	<0.5	----	----	----
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.5	----	----	----
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	<0.5	----	----	----
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg	<0.5	<0.5	----	----	----
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg	<0.5	<0.5	----	----	----
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg	**0.6**	**0.6**	----	----	----
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg	**1.2**	**1.2**	----	----	----
EP080/071: Total Petroleum Hydrocarbons								
C6 - C9 Fraction	----	10	mg/kg	<10	<10	----	----	----
C10 - C14 Fraction	----	50	mg/kg	<50	<50	----	----	----
C15 - C28 Fraction	----	100	mg/kg	<100	<100	----	----	----
C29 - C36 Fraction	----	100	mg/kg	<100	<100	----	----	----
^ C10 - C36 Fraction (sum)	----	50	mg/kg	<50	<50	----	----	----
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions								
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	<0.2	<0.2	----
Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	**17.5**	**14.5**	----
Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	**2.9**	**2.4**	----
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	**14.8**	**12.6**	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	SOP_BH119_3.0_220117	DUP01_220117	Trip Spike Control 1	Trip Spike Control 7	----
			Sampling date / time	17-Jan-2022 00:00	17-Jan-2022 00:00	14-Jan-2022 00:00	14-Jan-2022 00:00	----
Compound	CAS Number	LOR	Unit	ES2201683-032	ES2201683-033	ES2201683-036	ES2201683-037	--------
				Result	Result	Result	Result	----
EP080: BTEXN - Continued								
ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	**6.3**	**5.1**	----
^ Sum of BTEX	----	0.2	mg/kg	<0.2	<0.2	**41.5**	**34.6**	----
^ Total Xylenes	----	0.5	mg/kg	<0.5	<0.5	**21.1**	**17.7**	----
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	----	----	----	----
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	----	----	----	----
EP066S: PCB Surrogate								
Decachlorobiphenyl	2051-24-3	0.1	%	**121**	**128**	----	----	----
EP068S: Organochlorine Pesticide Surrogate								
Dibromo-DDE	21655-73-2	0.05	%	**63.3**	**75.1**	----	----	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	SOP_BH119_3.0_220117	DUP01_220117	Trip Spike Control 1	Trip Spike Control 7	----
			Sampling date / time	17-Jan-2022 00:00	17-Jan-2022 00:00	14-Jan-2022 00:00	14-Jan-2022 00:00	----
Compound	CAS Number	LOR	Unit	ES2201683-032	ES2201683-033	ES2201683-036	ES2201683-037	--------
				Result	Result	Result	Result	----
EP068T: Organophosphorus Pesticide Surrogate								
DEF	78-48-8	0.05	%	82.3	62.6	----	----	----
EP075(SIM)S: Phenolic Compound Surrogates								
Phenol-d6	13127-88-3	0.5	%	90.6	94.0	----	----	----
2-Chlorophenol-D4	93951-73-6	0.5	%	94.6	102	----	----	----
2.4.6-Tribromophenol	118-79-6	0.5	%	86.8	90.7	----	----	----
EP075(SIM)T: PAH Surrogates								
2-Fluorobiphenyl	321-60-8	0.5	%	106	111	----	----	----
Anthracene-d10	1719-06-8	0.5	%	103	105	----	----	----
4-Terphenyl-d14	1718-51-0	0.5	%	105	108	----	----	----
EP080S: TPH(V)/BTEX Surrogates								
1.2-Dichloroethane-D4	17060-07-0	0.2	%	95.1	104	102	93.6	----
Toluene-D8	2037-26-5	0.2	%	96.4	107	106	95.4	----
4-Bromofluorobenzene	460-00-4	0.2	%	87.0	99.8	101	92.4	----
EP231S: PFAS Surrogate								
13C4-PFOS	----	0.0002	%	110	----	----	----	----
13C8-PFOA	----	0.0002	%	106	----	----	----	----

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)			Sample ID	RIN01_220117	RIN02_220118	----	----	----
			Sampling date / time	17-Jan-2022 00:00	18-Jan-2022 00:00	----	----	----
Compound	CAS Number	LOR	Unit	ES2201683-020	ES2201683-035	--------	--------	--------
				Result	Result	----	----	----
EG020T: Total 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	<0.001	<0.001	----	----	----
Lead	7439-92-1	0.001	mg/L	<0.001	<0.001	----	----	----
Zinc	7440-66-6	0.005	mg/L	<0.005	<0.005	----	----	----
EG035T: Total Recoverable 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	RIN01_220117	RIN02_220118	----	----	----
			Sampling date / time	17-Jan-2022 00:00	18-Jan-2022 00:00	----	----	----
Compound	CAS Number	LOR	Unit	ES2201683-020	ES2201683-035	--------	--------	--------
				Result	Result	----	----	----
EP068A: Organochlorine Pesticides (OC) - Continued								
^ Sum of DDD + DDE + DDT	72-54-8/72-55-9/50-2	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	----	----	----
EP074A: Monocyclic Aromatic Hydrocarbons								
Styrene	100-42-5	5	µg/L	<5	<5	----	----	----
Isopropylbenzene	98-82-8	5	µg/L	<5	<5	----	----	----
n-Propylbenzene	103-65-1	5	µg/L	<5	<5	----	----	----
1.3.5-Trimethylbenzene	108-67-8	5	µg/L	<5	<5	----	----	----
sec-Butylbenzene	135-98-8	5	µg/L	<5	<5	----	----	----
1.2.4-Trimethylbenzene	95-63-6	5	µg/L	<5	<5	----	----	----
tert-Butylbenzene	98-06-6	5	µg/L	<5	<5	----	----	----
p-Isopropyltoluene	99-87-6	5	µg/L	<5	<5	----	----	----
n-Butylbenzene	104-51-8	5	µg/L	<5	<5	----	----	----
EP074B: Oxygenated Compounds								

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)			Sample ID	RIN01_220117	RIN02_220118	----	----	----
			Sampling date / time	17-Jan-2022 00:00	18-Jan-2022 00:00	----	----	----
Compound	CAS Number	LOR	Unit	ES2201683-020	ES2201683-035	--------	--------	--------
				Result	Result	----	----	----
EP074B: Oxygenated Compounds - Continued								
Vinyl Acetate	108-05-4	50	µg/L	<50	<50	----	----	----
2-Butanone (MEK)	78-93-3	50	µg/L	<50	<50	----	----	----
4-Methyl-2-pentanone (MIBK)	108-10-1	50	µg/L	<50	<50	----	----	----
2-Hexanone (MBK)	591-78-6	50	µg/L	<50	<50	----	----	----
EP074C: Sulfonated Compounds								
Carbon disulfide	75-15-0	5	µg/L	<5	<5	----	----	----
EP074D: Fumigants								
2.2-Dichloropropane	594-20-7	5	µg/L	<5	<5	----	----	----
1.2-Dichloropropane	78-87-5	5	µg/L	<5	<5	----	----	----
cis-1.3-Dichloropropylene	10061-01-5	5	µg/L	<5	<5	----	----	----
trans-1.3-Dichloropropylene	10061-02-6	5	µg/L	<5	<5	----	----	----
1.2-Dibromoethane (EDB)	106-93-4	5	µg/L	<5	<5	----	----	----
EP074E: Halogenated Aliphatic Compounds								
Dichlorodifluoromethane	75-71-8	50	µg/L	<50	<50	----	----	----
Chloromethane	74-87-3	50	µg/L	<50	<50	----	----	----
Vinyl chloride	75-01-4	50	µg/L	<50	<50	----	----	----
Bromomethane	74-83-9	50	µg/L	<50	<50	----	----	----
Chloroethane	75-00-3	50	µg/L	<50	<50	----	----	----
Trichlorofluoromethane	75-69-4	50	µg/L	<50	<50	----	----	----
1.1-Dichloroethene	75-35-4	5	µg/L	<5	<5	----	----	----
Iodomethane	74-88-4	5	µg/L	<5	<5	----	----	----
trans-1.2-Dichloroethene	156-60-5	5	µg/L	<5	<5	----	----	----
1.1-Dichloroethane	75-34-3	5	µg/L	<5	<5	----	----	----
cis-1.2-Dichloroethene	156-59-2	5	µg/L	<5	<5	----	----	----
1.1.1-Trichloroethane	71-55-6	5	µg/L	<5	<5	----	----	----
1.1-Dichloropropylene	563-58-6	5	µg/L	<5	<5	----	----	----
Carbon Tetrachloride	56-23-5	5	µg/L	<5	<5	----	----	----
1.2-Dichloroethane	107-06-2	5	µg/L	<5	<5	----	----	----
Trichloroethene	79-01-6	5	µg/L	<5	<5	----	----	----
Dibromomethane	74-95-3	5	µg/L	<5	<5	----	----	----
1.1.2-Trichloroethane	79-00-5	5	µg/L	<5	<5	----	----	----
1.3-Dichloropropane	142-28-9	5	µg/L	<5	<5	----	----	----
Tetrachloroethene	127-18-4	5	µg/L	<5	<5	----	----	----
1.1.1.2-Tetrachloroethane	630-20-6	5	µg/L	<5	<5	----	----	----

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)			Sample ID	RIN01_220117	RIN02_220118	----	----	----
			Sampling date / time	17-Jan-2022 00:00	18-Jan-2022 00:00	----	----	----
Compound	CAS Number	LOR	Unit	ES2201683-020	ES2201683-035	--------	--------	--------
				Result	Result	----	----	----
EP074E: Halogenated Aliphatic Compounds - Continued								
trans-1.4-Dichloro-2-butene	110-57-6	5	µg/L	<5	<5	----	----	----
cis-1.4-Dichloro-2-butene	1476-11-5	5	µg/L	<5	<5	----	----	----
1.1.2.2-Tetrachloroethane	79-34-5	5	µg/L	<5	<5	----	----	----
1.2.3-Trichloropropane	96-18-4	5	µg/L	<5	<5	----	----	----
Pentachloroethane	76-01-7	5	µg/L	<5	<5	----	----	----
1.2-Dibromo-3-chloropropane	96-12-8	5	µg/L	<5	<5	----	----	----
EP074F: Halogenated Aromatic Compounds								
Chlorobenzene	108-90-7	5	µg/L	<5	<5	----	----	----
Bromobenzene	108-86-1	5	µg/L	<5	<5	----	----	----
2-Chlorotoluene	95-49-8	5	µg/L	<5	<5	----	----	----
4-Chlorotoluene	106-43-4	5	µg/L	<5	<5	----	----	----
1.2.3-Trichlorobenzene	87-61-6	5	µg/L	<5	<5	----	----	----
EP074G: Trihalomethanes								
Chloroform	67-66-3	5	µg/L	<5	<5	----	----	----
Bromodichloromethane	75-27-4	5	µg/L	<5	<5	----	----	----
Dibromochloromethane	124-48-1	5	µg/L	<5	<5	----	----	----
Bromoform	75-25-2	5	µg/L	<5	<5	----	----	----
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	----	----	----

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)			Sample ID	RIN01_220117	RIN02_220118	----	----	----
			Sampling date / time	17-Jan-2022 00:00	18-Jan-2022 00:00	----	----	----
Compound	CAS Number	LOR	Unit	ES2201683-020	ES2201683-035	--------	--------	--------
				Result	Result	----	----	----
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued								
^ 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	----	----	----
EP075A: Phenolic Compounds								
Phenol	108-95-2	2	µg/L	<2	<2	----	----	----
2-Chlorophenol	95-57-8	2	µg/L	<2	<2	----	----	----
2-Methylphenol	95-48-7	2	µg/L	<2	<2	----	----	----
3- & 4-Methylphenol	1319-77-3	4	µg/L	<4	<4	----	----	----
2-Nitrophenol	88-75-5	2	µg/L	<2	<2	----	----	----
2.4-Dimethylphenol	105-67-9	2	µg/L	<2	<2	----	----	----
2.4-Dichlorophenol	120-83-2	2	µg/L	<2	<2	----	----	----
2.6-Dichlorophenol	87-65-0	2	µg/L	<2	<2	----	----	----
4-Chloro-3-methylphenol	59-50-7	2	µg/L	<2	<2	----	----	----
2.4.6-Trichlorophenol	88-06-2	2	µg/L	<2	<2	----	----	----
2.4.5-Trichlorophenol	95-95-4	2	µg/L	<2	<2	----	----	----
Pentachlorophenol	87-86-5	4	µg/L	<4	<4	----	----	----
EP075B: Polynuclear Aromatic Hydrocarbons								
Naphthalene	91-20-3	2	µg/L	<2	<2	----	----	----
2-Methylnaphthalene	91-57-6	2	µg/L	<2	<2	----	----	----
2-Chloronaphthalene	91-58-7	2	µg/L	<2	<2	----	----	----
Acenaphthylene	208-96-8	2	µg/L	<2	<2	----	----	----
Acenaphthene	83-32-9	2	µg/L	<2	<2	----	----	----
Fluorene	86-73-7	2	µg/L	<2	<2	----	----	----
Phenanthrene	85-01-8	2	µg/L	<2	<2	----	----	----
Anthracene	120-12-7	2	µg/L	<2	<2	----	----	----
Fluoranthene	206-44-0	2	µg/L	<2	<2	----	----	----
Pyrene	129-00-0	2	µg/L	<2	<2	----	----	----
N-2-Fluorenyl Acetamide	53-96-3	2	µg/L	<2	<2	----	----	----
Benz(a)anthracene	56-55-3	2	µg/L	<2	<2	----	----	----
Chrysene	218-01-9	2	µg/L	<2	<2	----	----	----
Benzo(b+j) & Benzo(k)fluoranthene	205-99-2 207-08-9	4	µg/L	<4	<4	----	----	----
7.12-Dimethylbenz(a)anthracene	57-97-6	2	µg/L	<2	<2	----	----	----
Benzo(a)pyrene	50-32-8	2	µg/L	<2	<2	----	----	----
3-Methylcholanthrene	56-49-5	2	µg/L	<2	<2	----	----	----
Indeno(1.2.3.cd)pyrene	193-39-5	2	µg/L	<2	<2	----	----	----

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)			Sample ID	RIN01_220117	RIN02_220118	----	----	----
			Sampling date / time	17-Jan-2022 00:00	18-Jan-2022 00:00	----	----	----
Compound	CAS Number	LOR	Unit	ES2201683-020	ES2201683-035	--------	--------	--------
				Result	Result	----	----	----
EP075B: Polynuclear Aromatic Hydrocarbons - Continued								
Dibenz(a.h)anthracene	53-70-3	2	µg/L	<2	<2	----	----	----
Benzo(g.h.i)perylene	191-24-2	2	µg/L	<2	<2	----	----	----
^ Sum of PAHs	----	2	µg/L	<2	<2	----	----	----
^ Benzo(a)pyrene TEQ (zero)	----	2	µg/L	<2	<2	----	----	----
EP075C: Phthalate Esters								
Dimethyl phthalate	131-11-3	2	µg/L	<2	<2	----	----	----
Diethyl phthalate	84-66-2	2	µg/L	<2	<2	----	----	----
Di-n-butyl phthalate	84-74-2	2	µg/L	<2	<2	----	----	----
Butyl benzyl phthalate	85-68-7	2	µg/L	<2	<2	----	----	----
bis(2-ethylhexyl) phthalate	117-81-7	10	µg/L	<10	<10	----	----	----
Di-n-octylphthalate	117-84-0	2	µg/L	<2	<2	----	----	----
EP075D: Nitrosamines								
N-Nitrosomethylethylamine	10595-95-6	2	µg/L	<2	<2	----	----	----
N-Nitrosodiethylamine	55-18-5	2	µg/L	<2	<2	----	----	----
N-Nitrosopyrrolidine	930-55-2	4	µg/L	<4	<4	----	----	----
N-Nitrosomorpholine	59-89-2	2	µg/L	<2	<2	----	----	----
N-Nitrosodi-n-propylamine	621-64-7	2	µg/L	<2	<2	----	----	----
N-Nitrosopiperidine	100-75-4	2	µg/L	<2	<2	----	----	----
N-Nitrosodibutylamine	924-16-3	2	µg/L	<2	<2	----	----	----
N-Nitrosodiphenyl & Diphenylamine	86-30-6 122-39-4	4	µg/L	<4	<4	----	----	----
Methapyrilene	91-80-5	2	µg/L	<2	<2	----	----	----
EP075E: Nitroaromatics and Ketones								
2-Picoline	109-06-8	2	µg/L	<2	<2	----	----	----
Acetophenone	98-86-2	2	µg/L	<2	<2	----	----	----
Nitrobenzene	98-95-3	2	µg/L	<2	<2	----	----	----
Isophorone	78-59-1	2	µg/L	<2	<2	----	----	----
2.6-Dinitrotoluene	606-20-2	4	µg/L	<4	<4	----	----	----
2.4-Dinitrotoluene	121-14-2	4	µg/L	<4	<4	----	----	----
1-Naphthylamine	134-32-7	2	µg/L	<2	<2	----	----	----
4-Nitroquinoline-N-oxide	56-57-5	2	µg/L	<2	<2	----	----	----
5-Nitro-o-toluidine	99-55-8	2	µg/L	<2	<2	----	----	----
Azobenzene	103-33-3	2	µg/L	<2	<2	----	----	----
1.3.5-Trinitrobenzene	99-35-4	2	µg/L	<2	<2	----	----	----

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)			Sample ID	RIN01_220117	RIN02_220118	----	----	----
			Sampling date / time	17-Jan-2022 00:00	18-Jan-2022 00:00	----	----	----
Compound	CAS Number	LOR	Unit	ES2201683-020	ES2201683-035	--------	--------	--------
				Result	Result	----	----	----
EP075E: Nitroaromatics and Ketones - Continued								
Phenacetin	62-44-2	2	µg/L	<2	<2	----	----	----
4-Aminobiphenyl	92-67-1	2	µg/L	<2	<2	----	----	----
Pentachloronitrobenzene	82-68-8	2	µg/L	<2	<2	----	----	----
Pronamide	23950-58-5	2	µg/L	<2	<2	----	----	----
Dimethylaminoazobenzene	60-11-7	2	µg/L	<2	<2	----	----	----
Chlorobenzilate	510-15-6	2	µg/L	<2	<2	----	----	----
EP075F: Haloethers								
Bis(2-chloroethyl) ether	111-44-4	2	µg/L	<2	<2	----	----	----
Bis(2-chloroethoxy) methane	111-91-1	2	µg/L	<2	<2	----	----	----
4-Chlorophenyl phenyl ether	7005-72-3	2	µg/L	<2	<2	----	----	----
4-Bromophenyl phenyl ether	101-55-3	2	µg/L	<2	<2	----	----	----
EP075G: Chlorinated Hydrocarbons								
1.3-Dichlorobenzene	541-73-1	2	µg/L	<2	<2	----	----	----
1.4-Dichlorobenzene	106-46-7	2	µg/L	<2	<2	----	----	----
1.2-Dichlorobenzene	95-50-1	2	µg/L	<2	<2	----	----	----
Hexachloroethane	67-72-1	2	µg/L	<2	<2	----	----	----
1.2.4-Trichlorobenzene	120-82-1	2	µg/L	<2	<2	----	----	----
Hexachloropropylene	1888-71-7	2	µg/L	<2	<2	----	----	----
Hexachlorobutadiene	87-68-3	2	µg/L	<2	<2	----	----	----
Hexachlorocyclopentadiene	77-47-4	10	µg/L	<10	<10	----	----	----
Pentachlorobenzene	608-93-5	2	µg/L	<2	<2	----	----	----
Hexachlorobenzene (HCB)	118-74-1	4	µg/L	<4	<4	----	----	----
EP075H: Anilines and Benzidines								
Aniline	62-53-3	2	µg/L	<2	<2	----	----	----
4-Chloroaniline	106-47-8	2	µg/L	<2	<2	----	----	----
2-Nitroaniline	88-74-4	4	µg/L	<4	<4	----	----	----
3-Nitroaniline	99-09-2	4	µg/L	<4	<4	----	----	----
Dibenzofuran	132-64-9	2	µg/L	<2	<2	----	----	----
4-Nitroaniline	100-01-6	2	µg/L	<2	<2	----	----	----
Carbazole	86-74-8	2	µg/L	<2	<2	----	----	----
3.3`-Dichlorobenzidine	91-94-1	2	µg/L	<2	<2	----	----	----
EP075I: Organochlorine Pesticides								
alpha-BHC	319-84-6	2	µg/L	<2	<2	----	----	----
beta-BHC	319-85-7	2	µg/L	<2	<2	----	----	----

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)			Sample ID	RIN01_220117	RIN02_220118	----	----	----
			Sampling date / time	17-Jan-2022 00:00	18-Jan-2022 00:00	----	----	----
Compound	CAS Number	LOR	Unit	ES2201683-020	ES2201683-035	--------	--------	--------
				Result	Result	----	----	----
EP075I: Organochlorine Pesticides - Continued								
gamma-BHC	58-89-9	2	µg/L	<2	<2	----	----	----
delta-BHC	319-86-8	2	µg/L	<2	<2	----	----	----
Heptachlor	76-44-8	2	µg/L	<2	<2	----	----	----
Aldrin	309-00-2	2	µg/L	<2	<2	----	----	----
Heptachlor epoxide	1024-57-3	2	µg/L	<2	<2	----	----	----
alpha-Endosulfan	959-98-8	2	µg/L	<2	<2	----	----	----
4.4`-DDE	72-55-9	2	µg/L	<2	<2	----	----	----
Dieldrin	60-57-1	2	µg/L	<2	<2	----	----	----
Endrin	72-20-8	2	µg/L	<2	<2	----	----	----
beta-Endosulfan	33213-65-9	2	µg/L	<2	<2	----	----	----
4.4`-DDD	72-54-8	2	µg/L	<2	<2	----	----	----
Endosulfan sulfate	1031-07-8	2	µg/L	<2	<2	----	----	----
4.4`-DDT	50-29-3	4	µg/L	<4	<4	----	----	----
^ Sum of Aldrin + Dieldrin	309-00-2/60-57-1	4	µg/L	<4	<4	----	----	----
^ Sum of DDD + DDE + DDT	72-54-8/72-55-9/50-2	4	µg/L	<4	<4	----	----	----
EP075J: Organophosphorus Pesticides								
Dichlorvos	62-73-7	2	µg/L	<2	<2	----	----	----
Dimethoate	60-51-5	2	µg/L	<2	<2	----	----	----
Diazinon	333-41-5	2	µg/L	<2	<2	----	----	----
Chlorpyrifos-methyl	5598-13-0	2	µg/L	<2	<2	----	----	----
Malathion	121-75-5	2	µg/L	<2	<2	----	----	----
Fenthion	55-38-9	2	µg/L	<2	<2	----	----	----
Chlorpyrifos	2921-88-2	2	µg/L	<2	<2	----	----	----
Pirimphos-ethyl	23505-41-1	2	µg/L	<2	<2	----	----	----
Chlorfenvinphos	470-90-6	2	µg/L	<2	<2	----	----	----
Prothiofos	34643-46-4	2	µg/L	<2	<2	----	----	----
Ethion	563-12-2	2	µg/L	<2	<2	----	----	----
EP080/071: Total Petroleum Hydrocarbons								
C6 - C9 Fraction	----	20	µg/L	<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	----	----	----

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	RIN01_220117	RIN02_220118	----	----	----
				Sampling date / time	17-Jan-2022 00:00	18-Jan-2022 00:00	----	----	----
Compound	CAS Number	LOR	Unit		ES2201683-020	ES2201683-035	--------	--------	--------
					Result	Result	----	----	----
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
C6 - C10 Fraction	C6_C10	20	µg/L		<20	<20	----	----	----
^ **C6 - C10 Fraction minus BTEX (F1)**	C6_C10-BTEX	20	µg/L		<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	----	----	----
^ **>C10 - C16 Fraction minus Naphthalene (F2)**	----	100	µg/L		<100	<100	----	----	----
EP080: BTEXN									
Benzene	71-43-2	1	µg/L		<1	<1	----	----	----
Toluene	108-88-3	2	µg/L		<2	<2	----	----	----
Ethylbenzene	100-41-4	2	µg/L		<2	<2	----	----	----
meta- & para-Xylene	108-38-3 106-42-3	2	µg/L		<2	<2	----	----	----
ortho-Xylene	95-47-6	2	µg/L		<2	<2	----	----	----
^ **Total Xylenes**	----	2	µg/L		<2	<2	----	----	----
^ **Sum of BTEX**	----	1	µg/L		<1	<1	----	----	----
Naphthalene	91-20-3	5	µg/L		<5	<5	----	----	----
EP231A: Perfluoroalkyl Sulfonic Acids									
Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L		<0.02	<0.02	----	----	----
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L		<0.01	<0.01	----	----	----
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L		<0.01	<0.01	----	----	----
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	----	----	----
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	----	----	----

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)			Sample ID	RIN01_220117	RIN02_220118	----	----	----
			Sampling date / time	17-Jan-2022 00:00	18-Jan-2022 00:00	----	----	----
Compound	CAS Number	LOR	Unit	ES2201683-020	ES2201683-035	--------	--------	--------
				Result	Result	----	----	----
EP231D: (n:2) Fluorotelomer Sulfonic Acids - Continued								
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 PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L	<0.01	<0.01	----	----	----
Sum of PFAS (WA DER List)	----	0.01	µg/L	<0.01	<0.01	----	----	----
EP066S: PCB Surrogate								
Decachlorobiphenyl	2051-24-3	1	%	**76.6**	**78.0**	----	----	----
EP068S: Organochlorine Pesticide Surrogate								
Dibromo-DDE	21655-73-2	0.5	%	**75.8**	**70.4**	----	----	----
EP068T: Organophosphorus Pesticide Surrogate								
DEF	78-48-8	0.5	%	**83.3**	**81.2**	----	----	----
EP074S: VOC Surrogates								
1.2-Dichloroethane-D4	17060-07-0	5	%	**108**	**111**	----	----	----
Toluene-D8	2037-26-5	5	%	**104**	**108**	----	----	----
4-Bromofluorobenzene	460-00-4	5	%	**107**	**106**	----	----	----
EP075(SIM)S: Phenolic Compound Surrogates								
Phenol-d6	13127-88-3	1.0	%	**20.8**	**21.2**	----	----	----
2-Chlorophenol-D4	93951-73-6	1.0	%	**51.4**	**55.5**	----	----	----
2.4.6-Tribromophenol	118-79-6	1.0	%	**38.0**	**38.2**	----	----	----
EP075(SIM)T: PAH Surrogates								
2-Fluorobiphenyl	321-60-8	1.0	%	**72.6**	**73.2**	----	----	----
Anthracene-d10	1719-06-8	1.0	%	**95.7**	**91.2**	----	----	----
4-Terphenyl-d14	1718-51-0	1.0	%	**89.2**	**85.1**	----	----	----
EP075S: Acid Extractable Surrogates								
2-Fluorophenol	367-12-4	2	%	**40.7**	**45.2**	----	----	----
Phenol-d6	13127-88-3	2	%	**30.0**	**31.1**	----	----	----
2-Chlorophenol-D4	93951-73-6	2	%	**59.7**	**63.6**	----	----	----
2.4.6-Tribromophenol	118-79-6	2	%	**59.9**	**64.4**	----	----	----
EP075T: Base/Neutral Extractable Surrogates								

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)			Sample ID	RIN01_220117	RIN02_220118	----	----	----
			Sampling date / time	17-Jan-2022 00:00	18-Jan-2022 00:00	----	----	----
Compound	CAS Number	LOR	Unit	ES2201683-020	ES2201683-035	--------	--------	--------
				Result	Result	----	----	----
EP075T: Base/Neutral Extractable Surrogates - Continued								
Nitrobenzene-D5	4165-60-0	2	%	61.8	61.9	----	----	----
1.2-Dichlorobenzene-D4	2199-69-1	2	%	57.5	57.8	----	----	----
2-Fluorobiphenyl	321-60-8	2	%	63.3	65.6	----	----	----
Anthracene-d10	1719-06-8	2	%	97.7	89.1	----	----	----
4-Terphenyl-d14	1718-51-0	2	%	85.9	77.9	----	----	----
EP080S: TPH(V)/BTEX Surrogates								
1.2-Dichloroethane-D4	17060-07-0	2	%	108	110	----	----	----
Toluene-D8	2037-26-5	2	%	98.4	102	----	----	----
4-Bromofluorobenzene	460-00-4	2	%	105	104	----	----	----
EP231S: PFAS Surrogate								
13C4-PFOS	----	0.02	%	107	96.8	----	----	----
13C8-PFOA	----	0.02	%	98.2	93.3	----	----	----

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	SOP_BH103_0.2_220117 - 17-Jan-2022 00:00	Soil sample.
EA200: Description	SOP_BH104_1.0_220117 - 17-Jan-2022 00:00	Soil sample.
EA200: Description	SOP_BH105_0.2_220117 - 17-Jan-2022 00:00	Soil sample.
EA200: Description	SOP_BH106_0.2_220117 - 17-Jan-2022 00:00	Soil sample.
EA200: Description	SOP_BH110_0.2_220117 - 17-Jan-2022 00:00	Soil sample.
EA200: Description	SOP_BH111_1.0_220118 - 18-Jan-2022 00:00	Soil sample.
EA200: Description	SOP_BH112_1.0_220118 - 18-Jan-2022 00:00	Soil sample.
EA200: Description	SOP_BH113_0.1_220118 - 18-Jan-2022 00:00	Soil sample.
EA200: Description	SOP_BH113_0.3_220118 - 18-Jan-2022 00:00	Soil sample.
EA200: Description	SOP_BH114_0.3_220118 - 18-Jan-2022 00:00	Soil sample.
EA200: Description	SOP_BH115_0.1_220118 - 18-Jan-2022 00:00	Soil sample.
EA200: Description	SOP_BH116_0.2_220117 - 17-Jan-2022 00:00	Soil sample.
EA200: Description	SOP_BH117_0.2_220117 - 17-Jan-2022 00:00	Soil sample.
EA200: Description	SOP_BH119_0.2_220117 - 17-Jan-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
EP231S: PFAS Surrogate			
13C4-PFOS	----	60	120
13C8-PFOA	----	60	120

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

ALS Environmental

QUALITY CONTROL REPORT

Work Order	: **ES2201683**	Page	: 1 of 52
Client	: **ENVIRONMENTAL RESOURCES MANAGEMENT (ERM)**	Laboratory	: Environmental Division Sydney
Contact	: MS JESSICA LAWRENCE	Contact	: Customer Services ES
Address	: LEVEL 15 309 KENT STREET SYDNEY NSW AUSTRALIA 2000	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
Telephone	: +61 02 8584 8888	Telephone	: +61-2-8784 8555
Project	: 0628507 SOP	Date Samples Received	: 19-Jan-2022
Order number	: ----	Date Analysis Commenced	: 24-Jan-2022
C-O-C number	: ----	Issue Date	: 01-Feb-2022
Sampler	: Ant R		
Site	: ----		
Quote number	: EN/114		
No. of samples received	: 36		
No. of samples analysed	: 36		

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

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

This Quality Control Report contains the following information:

- Laboratory Duplicate (DUP) Report; Relative Percentage Difference (RPD) and Acceptance Limits
- Method Blank (MB) and Laboratory Control Spike (LCS) Report; Recovery and Acceptance Limits
- Matrix Spike (MS) Report; Recovery and Acceptance Limits

Signatories

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

Signatories	*Position*	*Accreditation Category*
Alana Smylie	Asbestos Identifier	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.

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: 4137376)									
ES2201683-003	SOP_BH103_0.2_220117	EG005T: Cadmium	7440-43-9	1	mg/kg	<1	<1	0.0	No Limit
		EG005T: Chromium	7440-47-3	2	mg/kg	<2	2	0.0	No Limit
		EG005T: Nickel	7440-02-0	2	mg/kg	<2	<2	0.0	No Limit
		EG005T: Arsenic	7440-38-2	5	mg/kg	<5	<5	0.0	No Limit
		EG005T: Copper	7440-50-8	5	mg/kg	27	31	12.6	No Limit
		EG005T: Lead	7439-92-1	5	mg/kg	5	6	0.0	No Limit
		EG005T: Zinc	7440-66-6	5	mg/kg	6	8	24.0	No Limit
ES2201683-013	SOP_BH111_1.0_220118	EG005T: Cadmium	7440-43-9	1	mg/kg	<1	<1	0.0	No Limit
		EG005T: Chromium	7440-47-3	2	mg/kg	18	19	5.8	No Limit
		EG005T: Nickel	7440-02-0	2	mg/kg	2	<2	0.0	No Limit
		EG005T: Arsenic	7440-38-2	5	mg/kg	9	10	0.0	No Limit
		EG005T: Copper	7440-50-8	5	mg/kg	18	18	0.0	No Limit
		EG005T: Lead	7439-92-1	5	mg/kg	30	32	8.5	No Limit
		EG005T: Zinc	7440-66-6	5	mg/kg	6	5	0.0	No Limit
EG005(ED093)T: Total Metals by ICP-AES (QC Lot: 4137378)									
ES2201683-026	SOP_BH116_0.2_220117	EG005T: Cadmium	7440-43-9	1	mg/kg	<1	<1	0.0	No Limit
		EG005T: Chromium	7440-47-3	2	mg/kg	9	8	13.5	No Limit
		EG005T: Nickel	7440-02-0	2	mg/kg	67	68	1.7	0% - 20%
		EG005T: Arsenic	7440-38-2	5	mg/kg	<5	<5	0.0	No Limit
		EG005T: Copper	7440-50-8	5	mg/kg	34	32	7.7	No Limit
		EG005T: Lead	7439-92-1	5	mg/kg	6	6	0.0	No Limit
		EG005T: Zinc	7440-66-6	5	mg/kg	29	26	12.1	No Limit
ES2201943-002	Anonymous	EG005T: Cadmium	7440-43-9	1	mg/kg	2	2	0.0	No Limit
		EG005T: Chromium	7440-47-3	2	mg/kg	64	62	2.7	0% - 20%

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Acceptable RPD (%)*
EG005(ED093)T: Total Metals by ICP-AES (QC Lot: 4137378) - continued									
ES2201943-002	Anonymous	EG005T: Nickel	7440-02-0	2	mg/kg	32	30	7.7	0% - 50%
		EG005T: Arsenic	7440-38-2	5	mg/kg	6	<5	21.0	No Limit
		EG005T: Copper	7440-50-8	5	mg/kg	95	89	7.0	0% - 50%
		EG005T: Lead	7439-92-1	5	mg/kg	87	101	14.5	0% - 20%
		EG005T: Zinc	7440-66-6	5	mg/kg	314	# 519	49.4	0% - 20%
EA055: Moisture Content (Dried @ 105-110°C) (QC Lot: 4137387)									
ES2201683-005	SOP_BH104_1.0_220117	EA055: Moisture Content	----	0.1	%	9.0	10.8	18.0	0% - 50%
ES2201683-016	SOP_BH112_5.0_220118	EA055: Moisture Content	----	0.1	%	8.8	8.6	1.5	No Limit
EA055: Moisture Content (Dried @ 105-110°C) (QC Lot: 4137388)									
ES2201683-028	SOP_BH117_0.2_220117	EA055: Moisture Content	----	0.1	%	6.7	6.7	0.0	No Limit
ES2202037-002	Anonymous	EA055: Moisture Content	----	0.1	%	3.3	3.0	9.5	0% - 20%
EG035T: Total Recoverable Mercury by FIMS (QC Lot: 4137377)									
ES2201683-003	SOP_BH103_0.2_220117	EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	0.0	No Limit
ES2201683-013	SOP_BH111_1.0_220118	EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	0.0	No Limit
EG035T: Total Recoverable Mercury by FIMS (QC Lot: 4137379)									
ES2201683-026	SOP_BH116_0.2_220117	EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	0.0	No Limit
ES2201943-002	Anonymous	EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	0.0	No Limit
EP066: Polychlorinated Biphenyls (PCB) (QC Lot: 4135395)									
ES2201683-003	SOP_BH103_0.2_220117	EP066: Total Polychlorinated biphenyls	----	0.1	mg/kg	<0.1	<0.1	0.0	No Limit
ES2201683-013	SOP_BH111_1.0_220118	EP066: Total Polychlorinated biphenyls	----	0.1	mg/kg	<0.1	<0.1	0.0	No Limit
EP066: Polychlorinated Biphenyls (PCB) (QC Lot: 4135405)									
ES2201683-017	SOP_BH113_0.1_220118	EP066: Total Polychlorinated biphenyls	----	0.1	mg/kg	<0.1	<0.1	0.0	No Limit
EP068A: Organochlorine Pesticides (OC) (QC Lot: 4135394)									
ES2201683-003	SOP_BH103_0.2_220117	EP068: alpha-BHC	319-84-6	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: beta-BHC	319-85-7	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: gamma-BHC	58-89-9	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: delta-BHC	319-86-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Heptachlor	76-44-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Aldrin	309-00-2	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Dieldrin	60-57-1	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: 4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Endrin	72-20-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: 4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Acceptable RPD (%)*
EP068A: Organochlorine Pesticides (OC) (QC Lot: 4135394) - continued									
ES2201683-003	SOP_BH103_0.2_220117	EP068: Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: 4.4`-DDT	50-29-3	0.2	mg/kg	<0.2	<0.2	0.0	No Limit
		EP068: Methoxychlor	72-43-5	0.2	mg/kg	<0.2	<0.2	0.0	No Limit
ES2201683-013	SOP_BH111_1.0_220118	EP068: alpha-BHC	319-84-6	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: beta-BHC	319-85-7	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: gamma-BHC	58-89-9	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: delta-BHC	319-86-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Heptachlor	76-44-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Aldrin	309-00-2	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Dieldrin	60-57-1	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: 4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Endrin	72-20-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: 4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: 4.4`-DDT	50-29-3	0.2	mg/kg	<0.2	<0.2	0.0	No Limit
		EP068: Methoxychlor	72-43-5	0.2	mg/kg	<0.2	<0.2	0.0	No Limit
EP068A: Organochlorine Pesticides (OC) (QC Lot: 4135404)									
ES2201683-017	SOP_BH113_0.1_220118	EP068: alpha-BHC	319-84-6	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: beta-BHC	319-85-7	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: gamma-BHC	58-89-9	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: delta-BHC	319-86-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Heptachlor	76-44-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Aldrin	309-00-2	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Dieldrin	60-57-1	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: 4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	0.0	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Acceptable RPD (%)*
EP068A: Organochlorine Pesticides (OC) (QC Lot: 4135404) - continued									
ES2201683-017	SOP_BH113_0.1_220118	EP068: Endrin	72-20-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: 4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: 4.4`-DDT	50-29-3	0.2	mg/kg	<0.2	<0.2	0.0	No Limit
		EP068: Methoxychlor	72-43-5	0.2	mg/kg	<0.2	<0.2	0.0	No Limit
EP068B: Organophosphorus Pesticides (OP) (QC Lot: 4135394)									
ES2201683-003	SOP_BH103_0.2_220117	EP068: Dichlorvos	62-73-7	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Dimethoate	60-51-5	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Diazinon	333-41-5	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Malathion	121-75-5	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Fenthion	55-38-9	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Chlorfenvinphos	470-90-6	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Prothiofos	34643-46-4	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Ethion	563-12-2	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Carbophenothion	786-19-6	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Azinphos Methyl	86-50-0	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	<0.2	0.0	No Limit
		EP068: Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	<0.2	0.0	No Limit
		EP068: Parathion	56-38-2	0.2	mg/kg	<0.2	<0.2	0.0	No Limit
ES2201683-013	SOP_BH111_1.0_220118	EP068: Dichlorvos	62-73-7	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Dimethoate	60-51-5	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Diazinon	333-41-5	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Malathion	121-75-5	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Fenthion	55-38-9	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Chlorfenvinphos	470-90-6	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	<0.05	0.0	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Acceptable RPD (%)*
EP068B: Organophosphorus Pesticides (OP) (QC Lot: 4135394) - continued									
ES2201683-013	SOP_BH111_1.0_220118	EP068: Prothiofos	34643-46-4	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Ethion	563-12-2	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Carbophenothion	786-19-6	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Azinphos Methyl	86-50-0	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	<0.2	0.0	No Limit
		EP068: Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	<0.2	0.0	No Limit
		EP068: Parathion	56-38-2	0.2	mg/kg	<0.2	<0.2	0.0	No Limit
EP068B: Organophosphorus Pesticides (OP) (QC Lot: 4135404)									
ES2201683-017	SOP_BH113_0.1_220118	EP068: Dichlorvos	62-73-7	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Dimethoate	60-51-5	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Diazinon	333-41-5	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Malathion	121-75-5	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Fenthion	55-38-9	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Chlorfenvinphos	470-90-6	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Prothiofos	34643-46-4	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Ethion	563-12-2	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Carbophenothion	786-19-6	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Azinphos Methyl	86-50-0	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	<0.2	0.0	No Limit
		EP068: Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	<0.2	0.0	No Limit
		EP068: Parathion	56-38-2	0.2	mg/kg	<0.2	<0.2	0.0	No Limit
EP074A: Monocyclic Aromatic Hydrocarbons (QC Lot: 4135434)									
ES2201683-003	SOP_BH103_0.2_220117	EP074: Styrene	100-42-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: Isopropylbenzene	98-82-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: n-Propylbenzene	103-65-1	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: 1.3.5-Trimethylbenzene	108-67-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: sec-Butylbenzene	135-98-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: 1.2.4-Trimethylbenzene	95-63-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: tert-Butylbenzene	98-06-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: p-Isopropyltoluene	99-87-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: n-Butylbenzene	104-51-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
EP074A: Monocyclic Aromatic Hydrocarbons (QC Lot: 4135484)									
ES2201683-013	SOP_BH111_1.0_220118	EP074: Styrene	100-42-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: Isopropylbenzene	98-82-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit

Sub-Matrix: **SOIL**

Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Laboratory Duplicate (DUP) Report					
				LOR	Unit	Original Result	Duplicate Result	RPD (%)	Acceptable RPD (%)
EP074A: Monocyclic Aromatic Hydrocarbons (QC Lot: 4135484) - continued									
ES2201683-013	SOP_BH111_1.0_220118	EP074: n-Propylbenzene	103-65-1	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: 1.3.5-Trimethylbenzene	108-67-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: sec-Butylbenzene	135-98-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: 1.2.4-Trimethylbenzene	95-63-6	0.5	mg/kg	<0.5	1.1	75.1	No Limit
		EP074: tert-Butylbenzene	98-06-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: p-Isopropyltoluene	99-87-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: n-Butylbenzene	104-51-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
EP074B: Oxygenated Compounds (QC Lot: 4135434)									
ES2201683-003	SOP_BH103_0.2_220117	EP074: Vinyl Acetate	108-05-4	5	mg/kg	<5	<5	0.0	No Limit
		EP074: 2-Butanone (MEK)	78-93-3	5	mg/kg	<5	<5	0.0	No Limit
		EP074: 4-Methyl-2-pentanone (MIBK)	108-10-1	5	mg/kg	<5	<5	0.0	No Limit
		EP074: 2-Hexanone (MBK)	591-78-6	5	mg/kg	<5	<5	0.0	No Limit
EP074B: Oxygenated Compounds (QC Lot: 4135484)									
ES2201683-013	SOP_BH111_1.0_220118	EP074: Vinyl Acetate	108-05-4	5	mg/kg	<5	<5	0.0	No Limit
		EP074: 2-Butanone (MEK)	78-93-3	5	mg/kg	<5	<5	0.0	No Limit
		EP074: 4-Methyl-2-pentanone (MIBK)	108-10-1	5	mg/kg	<5	<5	0.0	No Limit
		EP074: 2-Hexanone (MBK)	591-78-6	5	mg/kg	<5	<5	0.0	No Limit
EP074C: Sulfonated Compounds (QC Lot: 4135434)									
ES2201683-003	SOP_BH103_0.2_220117	EP074: Carbon disulfide	75-15-0	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
EP074C: Sulfonated Compounds (QC Lot: 4135484)									
ES2201683-013	SOP_BH111_1.0_220118	EP074: Carbon disulfide	75-15-0	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
EP074D: Fumigants (QC Lot: 4135434)									
ES2201683-003	SOP_BH103_0.2_220117	EP074: 2.2-Dichloropropane	594-20-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: 1.2-Dichloropropane	78-87-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: cis-1.3-Dichloropropylene	10061-01-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: trans-1.3-Dichloropropylene	10061-02-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: 1.2-Dibromoethane (EDB)	106-93-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
EP074D: Fumigants (QC Lot: 4135484)									
ES2201683-013	SOP_BH111_1.0_220118	EP074: 2.2-Dichloropropane	594-20-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: 1.2-Dichloropropane	78-87-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: cis-1.3-Dichloropropylene	10061-01-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: trans-1.3-Dichloropropylene	10061-02-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: 1.2-Dibromoethane (EDB)	106-93-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
EP074E: Halogenated Aliphatic Compounds (QC Lot: 4135434)									
ES2201683-003	SOP_BH103_0.2_220117	EP074: 1.1-Dichloroethene	75-35-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: Iodomethane	74-88-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: trans-1.2-Dichloroethene	156-60-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: 1.1-Dichloroethane	75-34-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: cis-1.2-Dichloroethene	156-59-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Acceptable RPD (%)*
EP074E: Halogenated Aliphatic Compounds (QC Lot: 4135434) - continued									
ES2201683-003	SOP_BH103_0.2_220117	EP074: 1.1.1-Trichloroethane	71-55-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: 1.1-Dichloropropylene	563-58-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: Carbon Tetrachloride	56-23-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: 1.2-Dichloroethane	107-06-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: Trichloroethene	79-01-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: Dibromomethane	74-95-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: 1.1.2-Trichloroethane	79-00-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: 1.3-Dichloropropane	142-28-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: Tetrachloroethene	127-18-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: 1.1.1.2-Tetrachloroethane	630-20-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: trans-1.4-Dichloro-2-butene	110-57-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: cis-1.4-Dichloro-2-butene	1476-11-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: 1.1.2.2-Tetrachloroethane	79-34-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: 1.2.3-Trichloropropane	96-18-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: Pentachloroethane	76-01-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: 1.2-Dibromo-3-chloropropane	96-12-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: Dichlorodifluoromethane	75-71-8	5	mg/kg	<5	<5	0.0	No Limit
		EP074: Chloromethane	74-87-3	5	mg/kg	<5	<5	0.0	No Limit
		EP074: Vinyl chloride	75-01-4	5	mg/kg	<5	<5	0.0	No Limit
		EP074: Bromomethane	74-83-9	5	mg/kg	<5	<5	0.0	No Limit
		EP074: Chloroethane	75-00-3	5	mg/kg	<5	<5	0.0	No Limit
		EP074: Trichlorofluoromethane	75-69-4	5	mg/kg	<5	<5	0.0	No Limit
EP074E: Halogenated Aliphatic Compounds (QC Lot: 4135484)									
ES2201683-013	SOP_BH111_1.0_220118	EP074: 1.1-Dichloroethene	75-35-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: Iodomethane	74-88-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: trans-1.2-Dichloroethene	156-60-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: 1.1-Dichloroethane	75-34-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: cis-1.2-Dichloroethene	156-59-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: 1.1.1-Trichloroethane	71-55-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: 1.1-Dichloropropylene	563-58-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: Carbon Tetrachloride	56-23-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: 1.2-Dichloroethane	107-06-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: Trichloroethene	79-01-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: Dibromomethane	74-95-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: 1.1.2-Trichloroethane	79-00-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: 1.3-Dichloropropane	142-28-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: Tetrachloroethene	127-18-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: 1.1.1.2-Tetrachloroethane	630-20-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: trans-1.4-Dichloro-2-butene	110-57-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: cis-1.4-Dichloro-2-butene	1476-11-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Acceptable RPD (%)*
EP074E: Halogenated Aliphatic Compounds (QC Lot: 4135484) - continued									
ES2201683-013	SOP_BH111_1.0_220118	EP074: 1.1.2.2-Tetrachloroethane	79-34-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: 1.2.3-Trichloropropane	96-18-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: Pentachloroethane	76-01-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: 1.2-Dibromo-3-chloropropane	96-12-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: Dichlorodifluoromethane	75-71-8	5	mg/kg	<5	<5	0.0	No Limit
		EP074: Chloromethane	74-87-3	5	mg/kg	<5	<5	0.0	No Limit
		EP074: Vinyl chloride	75-01-4	5	mg/kg	<5	<5	0.0	No Limit
		EP074: Bromomethane	74-83-9	5	mg/kg	<5	<5	0.0	No Limit
		EP074: Chloroethane	75-00-3	5	mg/kg	<5	<5	0.0	No Limit
		EP074: Trichlorofluoromethane	75-69-4	5	mg/kg	<5	<5	0.0	No Limit
EP074F: Halogenated Aromatic Compounds (QC Lot: 4135434)									
ES2201683-003	SOP_BH103_0.2_220117	EP074: Chlorobenzene	108-90-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: Bromobenzene	108-86-1	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: 2-Chlorotoluene	95-49-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: 4-Chlorotoluene	106-43-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: 1.2.3-Trichlorobenzene	87-61-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
EP074F: Halogenated Aromatic Compounds (QC Lot: 4135484)									
ES2201683-013	SOP_BH111_1.0_220118	EP074: Chlorobenzene	108-90-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: Bromobenzene	108-86-1	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: 2-Chlorotoluene	95-49-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: 4-Chlorotoluene	106-43-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: 1.2.3-Trichlorobenzene	87-61-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
EP074G: Trihalomethanes (QC Lot: 4135434)									
ES2201683-003	SOP_BH103_0.2_220117	EP074: Chloroform	67-66-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: Bromodichloromethane	75-27-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: Dibromochloromethane	124-48-1	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: Bromoform	75-25-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
EP074G: Trihalomethanes (QC Lot: 4135484)									
ES2201683-013	SOP_BH111_1.0_220118	EP074: Chloroform	67-66-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: Bromodichloromethane	75-27-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: Dibromochloromethane	124-48-1	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: Bromoform	75-25-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QC Lot: 4135393)									
ES2201683-003	SOP_BH103_0.2_220117	EP075(SIM): Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Phenanthrene	85-01-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Acceptable RPD (%)*
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QC Lot: 4135393) - continued									
ES2201683-003	SOP_BH103_0.2_220117	EP075(SIM): Fluoranthene	206-44-0	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
ES2201683-013	SOP_BH111_1.0_220118	EP075(SIM): Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Phenanthrene	85-01-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Fluoranthene	206-44-0	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QC Lot: 4135403)									
ES2201683-017	SOP_BH113_0.1_220118	EP075(SIM): Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Phenanthrene	85-01-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit

Sub-Matrix: **SOIL**

Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Laboratory Duplicate (DUP) Report					
				LOR	Unit	Original Result	Duplicate Result	RPD (%)	Acceptable RPD (%)
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QC Lot: 4135403) - continued									
ES2201683-017	SOP_BH113_0.1_220118	EP075(SIM): Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Fluoranthene	206-44-0	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
EP075A: Phenolic Compounds (QC Lot: 4135396)									
ES2201683-003	SOP_BH103_0.2_220117	EP075: Phenol	108-95-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 2-Chlorophenol	95-57-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 2-Methylphenol	95-48-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 3- & 4-Methylphenol	1319-77-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 2-Nitrophenol	88-75-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 2.4-Dimethylphenol	105-67-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 2.4-Dichlorophenol	120-83-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 2.6-Dichlorophenol	87-65-0	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 4-Chloro-3-methylphenol	59-50-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 2.4.6-Trichlorophenol	88-06-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 2.4.5-Trichlorophenol	95-95-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Pentachlorophenol	87-86-5	1	mg/kg	<1	<1	0.0	No Limit
ES2201683-013	SOP_BH111_1.0_220118	EP075: Phenol	108-95-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 2-Chlorophenol	95-57-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 2-Methylphenol	95-48-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 3- & 4-Methylphenol	1319-77-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 2-Nitrophenol	88-75-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 2.4-Dimethylphenol	105-67-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 2.4-Dichlorophenol	120-83-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 2.6-Dichlorophenol	87-65-0	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 4-Chloro-3-methylphenol	59-50-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 2.4.6-Trichlorophenol	88-06-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 2.4.5-Trichlorophenol	95-95-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Pentachlorophenol	87-86-5	1	mg/kg	<1	<1	0.0	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Acceptable RPD (%)*
EP075B: Polynuclear Aromatic Hydrocarbons (QC Lot: 4135396)									
ES2201683-003	SOP_BH103_0.2_220117	EP075: Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 2-Methylnaphthalene	91-57-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 2-Chloronaphthalene	91-58-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Phenanthrene	85-01-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Fluoranthene	206-44-0	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: N-2-Fluorenyl Acetamide	53-96-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 7.12-Dimethylbenz(a)anthracene	57-97-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 3-Methylcholanthrene	56-49-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Benzo(b+j) & Benzo(k)fluoranthene	205-99-2 207-08-9	1	mg/kg	<1	<1	0.0	No Limit
ES2201683-013	SOP_BH111_1.0_220118	EP075: Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 2-Methylnaphthalene	91-57-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 2-Chloronaphthalene	91-58-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Phenanthrene	85-01-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Fluoranthene	206-44-0	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: N-2-Fluorenyl Acetamide	53-96-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 7.12-Dimethylbenz(a)anthracene	57-97-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 3-Methylcholanthrene	56-49-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Acceptable RPD (%)*
EP075B: Polynuclear Aromatic Hydrocarbons (QC Lot: 4135396) - continued									
ES2201683-013	SOP_BH111_1.0_220118	EP075: Benzo(b+j) & Benzo(k)fluoranthene	205-99-2 207-08-9	1	mg/kg	<1	<1	0.0	No Limit
EP075C: Phthalate Esters (QC Lot: 4135396)									
ES2201683-003	SOP_BH103_0.2_220117	EP075: Dimethyl phthalate	131-11-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Diethyl phthalate	84-66-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Di-n-butyl phthalate	84-74-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Butyl benzyl phthalate	85-68-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Di-n-octylphthalate	117-84-0	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
ES2201683-013	SOP_BH111_1.0_220118	EP075: Dimethyl phthalate	131-11-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Diethyl phthalate	84-66-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Di-n-butyl phthalate	84-74-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Butyl benzyl phthalate	85-68-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Di-n-octylphthalate	117-84-0	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
EP075D: Nitrosamines (QC Lot: 4135396)									
ES2201683-003	SOP_BH103_0.2_220117	EP075: N-Nitrosomethylethylamine	10595-95-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: N-Nitrosodiethylamine	55-18-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: N-Nitrosopyrrolidine	930-55-2	0.5	mg/kg	<1.0	<1.0	0.0	No Limit
		EP075: N-Nitrosomorpholine	59-89-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: N-Nitrosodi-n-propylamine	621-64-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: N-Nitrosopiperidine	100-75-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: N-Nitrosodibutylamine	924-16-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: N-Nitrosodiphenyl & Diphenylamine	86-30-6 122-39-4	0.5	mg/kg	<1.0	<1.0	0.0	No Limit
		EP075: Methapyrilene	91-80-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
ES2201683-013	SOP_BH111_1.0_220118	EP075: N-Nitrosomethylethylamine	10595-95-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: N-Nitrosodiethylamine	55-18-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: N-Nitrosopyrrolidine	930-55-2	0.5	mg/kg	<1.0	<1.0	0.0	No Limit
		EP075: N-Nitrosomorpholine	59-89-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: N-Nitrosodi-n-propylamine	621-64-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: N-Nitrosopiperidine	100-75-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: N-Nitrosodibutylamine	924-16-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: N-Nitrosodiphenyl & Diphenylamine	86-30-6 122-39-4	0.5	mg/kg	<1.0	<1.0	0.0	No Limit
		EP075: Methapyrilene	91-80-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
EP075E: Nitroaromatics and Ketones (QC Lot: 4135396)									
ES2201683-003	SOP_BH103_0.2_220117	EP075: 2-Picoline	109-06-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Acetophenone	98-86-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Nitrobenzene	98-95-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Isophorone	78-59-1	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 2.6-Dinitrotoluene	606-20-2	0.5	mg/kg	<1.0	<1.0	0.0	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Acceptable RPD (%)*
EP075E: Nitroaromatics and Ketones (QC Lot: 4135396) - continued									
ES2201683-003	SOP_BH103_0.2_220117	EP075: 2.4-Dinitrotoluene	121-14-2	0.5	mg/kg	<1.0	<1.0	0.0	No Limit
		EP075: 1-Naphthylamine	134-32-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 4-Nitroquinoline-N-oxide	56-57-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 5-Nitro-o-toluidine	99-55-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 1.3.5-Trinitrobenzene	99-35-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Phenacetin	62-44-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 4-Aminobiphenyl	92-67-1	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Pentachloronitrobenzene	82-68-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Pronamide	23950-58-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Dimethylaminoazobenzene	60-11-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Chlorobenzilate	510-15-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Azobenzene	103-33-3	1	mg/kg	<1	<1	0.0	No Limit
ES2201683-013	SOP_BH111_1.0_220118	EP075: 2-Picoline	109-06-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Acetophenone	98-86-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Nitrobenzene	98-95-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Isophorone	78-59-1	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 2.6-Dinitrotoluene	606-20-2	0.5	mg/kg	<1.0	<1.0	0.0	No Limit
		EP075: 2.4-Dinitrotoluene	121-14-2	0.5	mg/kg	<1.0	<1.0	0.0	No Limit
		EP075: 1-Naphthylamine	134-32-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 4-Nitroquinoline-N-oxide	56-57-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 5-Nitro-o-toluidine	99-55-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 1.3.5-Trinitrobenzene	99-35-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Phenacetin	62-44-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 4-Aminobiphenyl	92-67-1	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Pentachloronitrobenzene	82-68-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Pronamide	23950-58-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Dimethylaminoazobenzene	60-11-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Chlorobenzilate	510-15-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Azobenzene	103-33-3	1	mg/kg	<1	<1	0.0	No Limit
EP075F: Haloethers (QC Lot: 4135396)									
ES2201683-003	SOP_BH103_0.2_220117	EP075: Bis(2-chloroethyl) ether	111-44-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Bis(2-chloroethoxy) methane	111-91-1	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 4-Chlorophenyl phenyl ether	7005-72-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 4-Bromophenyl phenyl ether	101-55-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
ES2201683-013	SOP_BH111_1.0_220118	EP075: Bis(2-chloroethyl) ether	111-44-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Bis(2-chloroethoxy) methane	111-91-1	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 4-Chlorophenyl phenyl ether	7005-72-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 4-Bromophenyl phenyl ether	101-55-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
EP075G: Chlorinated Hydrocarbons (QC Lot: 4135396)									
ES2201683-003	SOP_BH103_0.2_220117	EP075: 1.3-Dichlorobenzene	541-73-1	0.5	mg/kg	<0.5	<0.5	0.0	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Acceptable RPD (%)*
EP075G: Chlorinated Hydrocarbons (QC Lot: 4135396) - continued									
ES2201683-003	SOP_BH103_0.2_220117	EP075: 1.4-Dichlorobenzene	106-46-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 1.2-Dichlorobenzene	95-50-1	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Hexachloroethane	67-72-1	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 1.2.4-Trichlorobenzene	120-82-1	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Hexachloropropylene	1888-71-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Hexachlorobutadiene	87-68-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Pentachlorobenzene	608-93-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Hexachlorobenzene (HCB)	118-74-1	0.5	mg/kg	<1.0	<1.0	0.0	No Limit
		EP075: Hexachlorocyclopentadiene	77-47-4	2.5	mg/kg	<2.5	<2.5	0.0	No Limit
ES2201683-013	SOP_BH111_1.0_220118	EP075: 1.3-Dichlorobenzene	541-73-1	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 1.4-Dichlorobenzene	106-46-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 1.2-Dichlorobenzene	95-50-1	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Hexachloroethane	67-72-1	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 1.2.4-Trichlorobenzene	120-82-1	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Hexachloropropylene	1888-71-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Hexachlorobutadiene	87-68-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Pentachlorobenzene	608-93-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Hexachlorobenzene (HCB)	118-74-1	0.5	mg/kg	<1.0	<1.0	0.0	No Limit
		EP075: Hexachlorocyclopentadiene	77-47-4	2.5	mg/kg	<2.5	<2.5	0.0	No Limit
EP075H: Anilines and Benzidines (QC Lot: 4135396)									
ES2201683-003	SOP_BH103_0.2_220117	EP075: Aniline	62-53-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 4-Chloroaniline	106-47-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 2-Nitroaniline	88-74-4	0.5	mg/kg	<1.0	<1.0	0.0	No Limit
		EP075: 3-Nitroaniline	99-09-2	0.5	mg/kg	<1.0	<1.0	0.0	No Limit
		EP075: Dibenzofuran	132-64-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 4-Nitroaniline	100-01-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Carbazole	86-74-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 3.3`-Dichlorobenzidine	91-94-1	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
ES2201683-013	SOP_BH111_1.0_220118	EP075: Aniline	62-53-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 4-Chloroaniline	106-47-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 2-Nitroaniline	88-74-4	0.5	mg/kg	<1.0	<1.0	0.0	No Limit
		EP075: 3-Nitroaniline	99-09-2	0.5	mg/kg	<1.0	<1.0	0.0	No Limit
		EP075: Dibenzofuran	132-64-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 4-Nitroaniline	100-01-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Carbazole	86-74-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 3.3`-Dichlorobenzidine	91-94-1	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
EP075I: Organochlorine Pesticides (QC Lot: 4135396)									
ES2201683-003	SOP_BH103_0.2_220117	EP075: alpha-BHC	319-84-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: beta-BHC	319-85-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: gamma-BHC	58-89-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Acceptable RPD (%)*
EP075I: Organochlorine Pesticides (QC Lot: 4135396) - continued									
ES2201683-003	SOP_BH103_0.2_220117	EP075: delta-BHC	319-86-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Heptachlor	76-44-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Aldrin	309-00-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Heptachlor epoxide	1024-57-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: alpha-Endosulfan	959-98-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 4.4`-DDE	72-55-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Dieldrin	60-57-1	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Endrin	72-20-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: beta-Endosulfan	33213-65-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 4.4`-DDD	72-54-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Endosulfan sulfate	1031-07-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 4.4`-DDT	50-29-3	0.5	mg/kg	<1.0	<1.0	0.0	No Limit
ES2201683-013	SOP_BH111_1.0_220118	EP075: alpha-BHC	319-84-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: beta-BHC	319-85-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: gamma-BHC	58-89-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: delta-BHC	319-86-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Heptachlor	76-44-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Aldrin	309-00-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Heptachlor epoxide	1024-57-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: alpha-Endosulfan	959-98-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 4.4`-DDE	72-55-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Dieldrin	60-57-1	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Endrin	72-20-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: beta-Endosulfan	33213-65-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 4.4`-DDD	72-54-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Endosulfan sulfate	1031-07-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 4.4`-DDT	50-29-3	0.5	mg/kg	<1.0	<1.0	0.0	No Limit
EP075J: Organophosphorus Pesticides (QC Lot: 4135396)									
ES2201683-003	SOP_BH103_0.2_220117	EP075: Dichlorvos	62-73-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Dimethoate	60-51-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Diazinon	333-41-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Chlorpyrifos-methyl	5598-13-0	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Malathion	121-75-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Fenthion	55-38-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Chlorpyrifos	2921-88-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Pirimphos-ethyl	23505-41-1	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Chlorfenvinphos	470-90-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Prothiofos	34643-46-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Ethion	563-12-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
ES2201683-013	SOP_BH111_1.0_220118	EP075: Dichlorvos	62-73-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Acceptable RPD (%)*
EP075J: Organophosphorus Pesticides (QC Lot: 4135396) - continued									
ES2201683-013	SOP_BH111_1.0_220118	EP075: Dimethoate	60-51-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Diazinon	333-41-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Chlorpyrifos-methyl	5598-13-0	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Malathion	121-75-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Fenthion	55-38-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Chlorpyrifos	2921-88-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Pirimphos-ethyl	23505-41-1	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Chlorfenvinphos	470-90-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Prothiofos	34643-46-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Ethion	563-12-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 4135392)									
ES2201683-003	SOP_BH103_0.2_220117	EP071: C15 - C28 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071: C29 - C36 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071: C10 - C14 Fraction	----	50	mg/kg	<50	<50	0.0	No Limit
ES2201683-013	SOP_BH111_1.0_220118	EP071: C15 - C28 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071: C29 - C36 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071: C10 - C14 Fraction	----	50	mg/kg	<50	<50	0.0	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 4135402)									
ES2201683-017	SOP_BH113_0.1_220118	EP071: C15 - C28 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071: C29 - C36 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071: C10 - C14 Fraction	----	50	mg/kg	<50	<50	0.0	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 4135433)									
ES2201683-003	SOP_BH103_0.2_220117	EP080: C6 - C9 Fraction	----	10	mg/kg	<10	<10	0.0	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 4135481)									
ES2201683-004	SOP_BH103_1.0_220117	EP080: C6 - C9 Fraction	----	10	mg/kg	<10	<10	0.0	No Limit
ES2201919-048	Anonymous	EP080: C6 - C9 Fraction	----	10	mg/kg	<10	<10	0.0	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 4135483)									
ES2201683-013	SOP_BH111_1.0_220118	EP080: C6 - C9 Fraction	----	10	mg/kg	<10	<10	0.0	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 4135519)									
ES2201683-012	SOP_BH110_1.3_220118	EP080: C6 - C9 Fraction	----	10	mg/kg	<10	<10	0.0	No Limit
ES2201683-027	SOP_BH116_2.0_220117	EP080: C6 - C9 Fraction	----	10	mg/kg	<10	<10	0.0	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 4135392)									
ES2201683-003	SOP_BH103_0.2_220117	EP071: >C16 - C34 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071: >C34 - C40 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071: >C10 - C16 Fraction	----	50	mg/kg	<50	<50	0.0	No Limit
ES2201683-013	SOP_BH111_1.0_220118	EP071: >C16 - C34 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071: >C34 - C40 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071: >C10 - C16 Fraction	----	50	mg/kg	<50	<50	0.0	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 4135402)									

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Acceptable RPD (%)*
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 4135402) - continued									
ES2201683-017	SOP_BH113_0.1_220118	EP071: >C16 - C34 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071: >C34 - C40 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071: >C10 - C16 Fraction	----	50	mg/kg	<50	<50	0.0	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 4135433)									
ES2201683-003	SOP_BH103_0.2_220117	EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	<10	0.0	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 4135481)									
ES2201683-004	SOP_BH103_1.0_220117	EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	<10	0.0	No Limit
ES2201919-048	Anonymous	EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	<10	0.0	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 4135483)									
ES2201683-013	SOP_BH111_1.0_220118	EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	<10	0.0	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 4135519)									
ES2201683-012	SOP_BH110_1.3_220118	EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	<10	0.0	No Limit
ES2201683-027	SOP_BH116_2.0_220117	EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	<10	0.0	No Limit
EP080: BTEXN (QC Lot: 4135433)									
ES2201683-003	SOP_BH103_0.2_220117	EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	0.0	No Limit
		EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: Naphthalene	91-20-3	1	mg/kg	<1	<1	0.0	No Limit
EP080: BTEXN (QC Lot: 4135481)									
ES2201683-004	SOP_BH103_1.0_220117	EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	0.0	No Limit
		EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: Naphthalene	91-20-3	1	mg/kg	<1	<1	0.0	No Limit
ES2201919-048	Anonymous	EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	0.0	No Limit
		EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: Naphthalene	91-20-3	1	mg/kg	<1	<1	0.0	No Limit
EP080: BTEXN (QC Lot: 4135483)									
ES2201683-013	SOP_BH111_1.0_220118	EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	0.0	No Limit
		EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Acceptable RPD (%)*
EP080: BTEXN (QC Lot: 4135483) - continued									
ES2201683-013	SOP_BH111_1.0_220118	EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: Naphthalene	91-20-3	1	mg/kg	<1	<1	0.0	No Limit
EP080: BTEXN (QC Lot: 4135519)									
ES2201683-012	SOP_BH110_1.3_220118	EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	0.0	No Limit
		EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: Naphthalene	91-20-3	1	mg/kg	<1	<1	0.0	No Limit
ES2201683-027	SOP_BH116_2.0_220117	EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	0.0	No Limit
		EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: Naphthalene	91-20-3	1	mg/kg	<1	<1	0.0	No Limit
EP231A: Perfluoroalkyl Sulfonic Acids (QC Lot: 4135850)									
EP2200605-001	Anonymous	EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
ES2201683-021	SOP_BH113_0.3_220118	EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
EP231B: Perfluoroalkyl Carboxylic Acids (QC Lot: 4135850)									
EP2200605-001	Anonymous	EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.0002	mg/kg	0.0016	0.0013	18.5	No Limit
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.0002	mg/kg	0.0087	0.0085	2.1	0% - 20%
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.0002	mg/kg	0.0055	0.0046	18.0	0% - 20%
		EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.0002	mg/kg	0.0114	0.0102	11.2	0% - 20%
		EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.001	mg/kg	<0.001	<0.001	0.0	No Limit
ES2201683-021	SOP_BH113_0.3_220118	EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.001	mg/kg	<0.001	<0.001	0.0	No Limit
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QC Lot: 4135850)									

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Acceptable RPD (%)*
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QC Lot: 4135850) - continued									
EP2200605-001	Anonymous	EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.0005	mg/kg	0.0603	0.0572	5.3	0% - 20%
		EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.0005	mg/kg	0.254	0.222	13.1	0% - 20%
		EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.0005	mg/kg	0.0562	0.0465	18.9	0% - 20%
ES2201683-021	SOP_BH113_0.3_220118	EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit

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 (%)*
EG020T: Total Metals by ICP-MS (QC Lot: 4139064)									
ES2201969-002	Anonymous	EG020A-T: Cadmium	7440-43-9	0.0001	mg/L	<0.0001	<0.0001	0.0	No Limit
		EG020A-T: Arsenic	7440-38-2	0.001	mg/L	<0.001	<0.001	0.0	No Limit
		EG020A-T: Chromium	7440-47-3	0.001	mg/L	<0.001	<0.001	0.0	No Limit
		EG020A-T: Copper	7440-50-8	0.001	mg/L	0.146	0.144	1.4	0% - 20%
		EG020A-T: Lead	7439-92-1	0.001	mg/L	<0.001	<0.001	0.0	No Limit
		EG020A-T: Nickel	7440-02-0	0.001	mg/L	<0.001	<0.001	0.0	No Limit
		EG020A-T: Zinc	7440-66-6	0.005	mg/L	0.010	0.009	0.0	No Limit
ES2201931-001	Anonymous	EG020A-T: Cadmium	7440-43-9	0.0001	mg/L	<0.0001	<0.0001	0.0	No Limit
		EG020A-T: Arsenic	7440-38-2	0.001	mg/L	0.006	0.005	0.0	No Limit
		EG020A-T: Chromium	7440-47-3	0.001	mg/L	0.003	0.002	0.0	No Limit
		EG020A-T: Copper	7440-50-8	0.001	mg/L	<0.001	<0.001	0.0	No Limit
		EG020A-T: Lead	7439-92-1	0.001	mg/L	<0.001	<0.001	0.0	No Limit
		EG020A-T: Nickel	7440-02-0	0.001	mg/L	<0.001	0.001	0.0	No Limit
		EG020A-T: Zinc	7440-66-6	0.005	mg/L	0.122	0.126	3.0	0% - 20%
EG035T: Total Recoverable Mercury by FIMS (QC Lot: 4140039)									
ES2201683-020	RIN01_220117	EG035T: Mercury	7439-97-6	0.0001	mg/L	<0.0001	<0.0001	0.0	No Limit
ES2202305-005	Anonymous	EG035T: Mercury	7439-97-6	0.0001	mg/L	<0.0001	<0.0001	0.0	No Limit
EP074A: Monocyclic Aromatic Hydrocarbons (QC Lot: 4137802)									
ES2201683-020	RIN01_220117	EP074: Styrene	100-42-5	5	µg/L	<5	<5	0.0	No Limit
		EP074: Isopropylbenzene	98-82-8	5	µg/L	<5	<5	0.0	No Limit
		EP074: n-Propylbenzene	103-65-1	5	µg/L	<5	<5	0.0	No Limit

Sub-Matrix: **WATER**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Acceptable RPD (%)*
EP074A: Monocyclic Aromatic Hydrocarbons (QC Lot: 4137802) - continued									
ES2201683-020	RIN01_220117	EP074: 1.3.5-Trimethylbenzene	108-67-8	5	µg/L	<5	<5	0.0	No Limit
		EP074: sec-Butylbenzene	135-98-8	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.2.4-Trimethylbenzene	95-63-6	5	µg/L	<5	<5	0.0	No Limit
		EP074: tert-Butylbenzene	98-06-6	5	µg/L	<5	<5	0.0	No Limit
		EP074: p-Isopropyltoluene	99-87-6	5	µg/L	<5	<5	0.0	No Limit
		EP074: n-Butylbenzene	104-51-8	5	µg/L	<5	<5	0.0	No Limit
ES2202156-001	Anonymous	EP074: Styrene	100-42-5	5	µg/L	<5	<5	0.0	No Limit
		EP074: Isopropylbenzene	98-82-8	5	µg/L	<5	<5	0.0	No Limit
		EP074: n-Propylbenzene	103-65-1	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.3.5-Trimethylbenzene	108-67-8	5	µg/L	<5	<5	0.0	No Limit
		EP074: sec-Butylbenzene	135-98-8	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.2.4-Trimethylbenzene	95-63-6	5	µg/L	<5	<5	0.0	No Limit
		EP074: tert-Butylbenzene	98-06-6	5	µg/L	<5	<5	0.0	No Limit
		EP074: p-Isopropyltoluene	99-87-6	5	µg/L	<5	<5	0.0	No Limit
		EP074: n-Butylbenzene	104-51-8	5	µg/L	<5	<5	0.0	No Limit
EP074B: Oxygenated Compounds (QC Lot: 4137802)									
ES2201683-020	RIN01_220117	EP074: Vinyl Acetate	108-05-4	50	µg/L	<50	<50	0.0	No Limit
		EP074: 2-Butanone (MEK)	78-93-3	50	µg/L	<50	<50	0.0	No Limit
		EP074: 4-Methyl-2-pentanone (MIBK)	108-10-1	50	µg/L	<50	<50	0.0	No Limit
		EP074: 2-Hexanone (MBK)	591-78-6	50	µg/L	<50	<50	0.0	No Limit
ES2202156-001	Anonymous	EP074: Vinyl Acetate	108-05-4	50	µg/L	<50	<50	0.0	No Limit
		EP074: 2-Butanone (MEK)	78-93-3	50	µg/L	<50	<50	0.0	No Limit
		EP074: 4-Methyl-2-pentanone (MIBK)	108-10-1	50	µg/L	<50	<50	0.0	No Limit
		EP074: 2-Hexanone (MBK)	591-78-6	50	µg/L	<50	<50	0.0	No Limit
EP074C: Sulfonated Compounds (QC Lot: 4137802)									
ES2201683-020	RIN01_220117	EP074: Carbon disulfide	75-15-0	5	µg/L	<5	<5	0.0	No Limit
ES2202156-001	Anonymous	EP074: Carbon disulfide	75-15-0	5	µg/L	<5	<5	0.0	No Limit
EP074D: Fumigants (QC Lot: 4137802)									
ES2201683-020	RIN01_220117	EP074: 2.2-Dichloropropane	594-20-7	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.2-Dichloropropane	78-87-5	5	µg/L	<5	<5	0.0	No Limit
		EP074: cis-1.3-Dichloropropylene	10061-01-5	5	µg/L	<5	<5	0.0	No Limit
		EP074: trans-1.3-Dichloropropylene	10061-02-6	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.2-Dibromoethane (EDB)	106-93-4	5	µg/L	<5	<5	0.0	No Limit
ES2202156-001	Anonymous	EP074: 2.2-Dichloropropane	594-20-7	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.2-Dichloropropane	78-87-5	5	µg/L	<5	<5	0.0	No Limit
		EP074: cis-1.3-Dichloropropylene	10061-01-5	5	µg/L	<5	<5	0.0	No Limit
		EP074: trans-1.3-Dichloropropylene	10061-02-6	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.2-Dibromoethane (EDB)	106-93-4	5	µg/L	<5	<5	0.0	No Limit
EP074E: Halogenated Aliphatic Compounds (QC Lot: 4137802)									

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 (%)*
EP074E: Halogenated Aliphatic Compounds (QC Lot: 4137802) - continued									
ES2201683-020	RIN01_220117	EP074: 1.1-Dichloroethene	75-35-4	5	µg/L	<5	<5	0.0	No Limit
		EP074: Iodomethane	74-88-4	5	µg/L	<5	<5	0.0	No Limit
		EP074: trans-1.2-Dichloroethene	156-60-5	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.1-Dichloroethane	75-34-3	5	µg/L	<5	<5	0.0	No Limit
		EP074: cis-1.2-Dichloroethene	156-59-2	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.1.1-Trichloroethane	71-55-6	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.1-Dichloropropylene	563-58-6	5	µg/L	<5	<5	0.0	No Limit
		EP074: Carbon Tetrachloride	56-23-5	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.2-Dichloroethane	107-06-2	5	µg/L	<5	<5	0.0	No Limit
		EP074: Trichloroethene	79-01-6	5	µg/L	<5	<5	0.0	No Limit
		EP074: Dibromomethane	74-95-3	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.1.2-Trichloroethane	79-00-5	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.3-Dichloropropane	142-28-9	5	µg/L	<5	<5	0.0	No Limit
		EP074: Tetrachloroethene	127-18-4	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.1.1.2-Tetrachloroethane	630-20-6	5	µg/L	<5	<5	0.0	No Limit
		EP074: trans-1.4-Dichloro-2-butene	110-57-6	5	µg/L	<5	<5	0.0	No Limit
		EP074: cis-1.4-Dichloro-2-butene	1476-11-5	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.1.2.2-Tetrachloroethane	79-34-5	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.2.3-Trichloropropane	96-18-4	5	µg/L	<5	<5	0.0	No Limit
		EP074: Pentachloroethane	76-01-7	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.2-Dibromo-3-chloropropane	96-12-8	5	µg/L	<5	<5	0.0	No Limit
		EP074: Dichlorodifluoromethane	75-71-8	50	µg/L	<50	<50	0.0	No Limit
		EP074: Chloromethane	74-87-3	50	µg/L	<50	<50	0.0	No Limit
		EP074: Vinyl chloride	75-01-4	50	µg/L	<50	<50	0.0	No Limit
		EP074: Bromomethane	74-83-9	50	µg/L	<50	<50	0.0	No Limit
		EP074: Chloroethane	75-00-3	50	µg/L	<50	<50	0.0	No Limit
		EP074: Trichlorofluoromethane	75-69-4	50	µg/L	<50	<50	0.0	No Limit
ES2202156-001	Anonymous	EP074: 1.1-Dichloroethene	75-35-4	5	µg/L	<5	<5	0.0	No Limit
		EP074: Iodomethane	74-88-4	5	µg/L	<5	<5	0.0	No Limit
		EP074: trans-1.2-Dichloroethene	156-60-5	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.1-Dichloroethane	75-34-3	5	µg/L	<5	<5	0.0	No Limit
		EP074: cis-1.2-Dichloroethene	156-59-2	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.1.1-Trichloroethane	71-55-6	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.1-Dichloropropylene	563-58-6	5	µg/L	<5	<5	0.0	No Limit
		EP074: Carbon Tetrachloride	56-23-5	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.2-Dichloroethane	107-06-2	5	µg/L	<5	<5	0.0	No Limit
		EP074: Trichloroethene	79-01-6	5	µg/L	<5	<5	0.0	No Limit
		EP074: Dibromomethane	74-95-3	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.1.2-Trichloroethane	79-00-5	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.3-Dichloropropane	142-28-9	5	µg/L	<5	<5	0.0	No Limit

Sub-Matrix: **WATER**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Acceptable RPD (%)*
EP074E: Halogenated Aliphatic Compounds (QC Lot: 4137802) - continued									
ES2202156-001	Anonymous	EP074: Tetrachloroethene	127-18-4	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.1.1.2-Tetrachloroethane	630-20-6	5	µg/L	<5	<5	0.0	No Limit
		EP074: trans-1.4-Dichloro-2-butene	110-57-6	5	µg/L	<5	<5	0.0	No Limit
		EP074: cis-1.4-Dichloro-2-butene	1476-11-5	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.1.2.2-Tetrachloroethane	79-34-5	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.2.3-Trichloropropane	96-18-4	5	µg/L	<5	<5	0.0	No Limit
		EP074: Pentachloroethane	76-01-7	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.2-Dibromo-3-chloropropane	96-12-8	5	µg/L	<5	<5	0.0	No Limit
		EP074: Dichlorodifluoromethane	75-71-8	50	µg/L	<50	<50	0.0	No Limit
		EP074: Chloromethane	74-87-3	50	µg/L	<50	<50	0.0	No Limit
		EP074: Vinyl chloride	75-01-4	50	µg/L	<50	<50	0.0	No Limit
		EP074: Bromomethane	74-83-9	50	µg/L	<50	<50	0.0	No Limit
		EP074: Chloroethane	75-00-3	50	µg/L	<50	<50	0.0	No Limit
		EP074: Trichlorofluoromethane	75-69-4	50	µg/L	<50	<50	0.0	No Limit
EP074F: Halogenated Aromatic Compounds (QC Lot: 4137802)									
ES2201683-020	RIN01_220117	EP074: Chlorobenzene	108-90-7	5	µg/L	<5	<5	0.0	No Limit
		EP074: Bromobenzene	108-86-1	5	µg/L	<5	<5	0.0	No Limit
		EP074: 2-Chlorotoluene	95-49-8	5	µg/L	<5	<5	0.0	No Limit
		EP074: 4-Chlorotoluene	106-43-4	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.2.3-Trichlorobenzene	87-61-6	5	µg/L	<5	<5	0.0	No Limit
ES2202156-001	Anonymous	EP074: Chlorobenzene	108-90-7	5	µg/L	<5	<5	0.0	No Limit
		EP074: Bromobenzene	108-86-1	5	µg/L	<5	<5	0.0	No Limit
		EP074: 2-Chlorotoluene	95-49-8	5	µg/L	<5	<5	0.0	No Limit
		EP074: 4-Chlorotoluene	106-43-4	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.2.3-Trichlorobenzene	87-61-6	5	µg/L	<5	<5	0.0	No Limit
EP074G: Trihalomethanes (QC Lot: 4137802)									
ES2201683-020	RIN01_220117	EP074: Chloroform	67-66-3	5	µg/L	<5	<5	0.0	No Limit
		EP074: Bromodichloromethane	75-27-4	5	µg/L	<5	<5	0.0	No Limit
		EP074: Dibromochloromethane	124-48-1	5	µg/L	<5	<5	0.0	No Limit
		EP074: Bromoform	75-25-2	5	µg/L	<5	<5	0.0	No Limit
ES2202156-001	Anonymous	EP074: Chloroform	67-66-3	5	µg/L	<5	<5	0.0	No Limit
		EP074: Bromodichloromethane	75-27-4	5	µg/L	<5	<5	0.0	No Limit
		EP074: Dibromochloromethane	124-48-1	5	µg/L	<5	<5	0.0	No Limit
		EP074: Bromoform	75-25-2	5	µg/L	<5	<5	0.0	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 4137803)									
ES2201683-020	RIN01_220117	EP080: C6 - C9 Fraction	----	20	µg/L	<20	<20	0.0	No Limit
ES2202156-001	Anonymous	EP080: C6 - C9 Fraction	----	20	µg/L	<20	<20	0.0	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 4137803)									
ES2201683-020	RIN01_220117	EP080: C6 - C10 Fraction	C6_C10	20	µg/L	<20	<20	0.0	No Limit

Sub-Matrix: **WATER**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Acceptable RPD (%)*
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 4137803) - continued									
ES2202156-001	Anonymous	EP080: C6 - C10 Fraction	C6_C10	20	µg/L	<20	<20	0.0	No Limit
EP080: BTEXN (QC Lot: 4137803)									
ES2201683-020	RIN01_220117	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	108-38-3 106-42-3	2	µg/L	<2	<2	0.0	No Limit
		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
ES2202156-001	Anonymous	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	108-38-3 106-42-3	2	µg/L	<2	<2	0.0	No Limit
		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
EP231A: Perfluoroalkyl Sulfonic Acids (QC Lot: 4137474)									
ES2201941-001	Anonymous	EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	0.05	0.05	0.0	No Limit
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	0.11	0.10	0.0	0% - 50%
		EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	<0.02	0.0	No Limit
ES2202142-003	Anonymous	EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	0.18	0.18	0.0	0% - 50%
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	0.68	0.64	5.6	0% - 20%
		EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	0.02	<0.02	0.0	No Limit
EP231B: Perfluoroalkyl Carboxylic Acids (QC Lot: 4137474)									
ES2201941-001	Anonymous	EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L	<0.1	<0.1	0.0	No Limit
ES2202142-003	Anonymous	EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	0.04	0.04	0.0	No Limit
		EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	0.04	0.03	0.0	No Limit
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	0.08	0.08	0.0	No Limit
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L	<0.1	<0.1	0.0	No Limit
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QC Lot: 4137474)									
ES2201941-001	Anonymous	EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.05	µg/L	<0.05	<0.05	0.0	No Limit

Sub-Matrix: **WATER**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Acceptable RPD (%)*
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QC Lot: 4137474) - continued									
ES2201941-001	Anonymous	EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.05	µg/L	<0.05	<0.05	0.0	No Limit
ES2202142-003	Anonymous	EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.05	µg/L	<0.05	<0.05	0.0	No Limit

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

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

Sub-Matrix: **SOIL**

				Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Acceptable Limits (%)	
Method: Compound	CAS Number	LOR	Unit	Result	Concentration	LCS	Low	High
EG005(ED093)T: Total Metals by ICP-AES (QCLot: 4137376)								
EG005T: Arsenic	7440-38-2	5	mg/kg	<5	121.1 mg/kg	106	88.0	113
EG005T: Cadmium	7440-43-9	1	mg/kg	<1	0.74 mg/kg	101	70.0	130
EG005T: Chromium	7440-47-3	2	mg/kg	<2	19.6 mg/kg	120	68.0	132
EG005T: Copper	7440-50-8	5	mg/kg	<5	52.9 mg/kg	111	89.0	111
EG005T: Lead	7439-92-1	5	mg/kg	<5	60.8 mg/kg	113	82.0	119
EG005T: Nickel	7440-02-0	2	mg/kg	<2	15.3 mg/kg	108	80.0	120
EG005T: Zinc	7440-66-6	5	mg/kg	<5	139.3 mg/kg	92.6	66.0	133
EG005(ED093)T: Total Metals by ICP-AES (QCLot: 4137378)								
EG005T: Arsenic	7440-38-2	5	mg/kg	<5	121.1 mg/kg	104	88.0	113
EG005T: Cadmium	7440-43-9	1	mg/kg	<1	0.74 mg/kg	106	70.0	130
EG005T: Chromium	7440-47-3	2	mg/kg	<2	19.6 mg/kg	109	68.0	132
EG005T: Copper	7440-50-8	5	mg/kg	<5	52.9 mg/kg	105	89.0	111
EG005T: Lead	7439-92-1	5	mg/kg	<5	60.8 mg/kg	98.8	82.0	119
EG005T: Nickel	7440-02-0	2	mg/kg	<2	15.3 mg/kg	98.8	80.0	120
EG005T: Zinc	7440-66-6	5	mg/kg	<5	139.3 mg/kg	92.1	66.0	133
EG035T: Total Recoverable Mercury by FIMS (QCLot: 4137377)								
EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	0.087 mg/kg	116	70.0	125
EG035T: Total Recoverable Mercury by FIMS (QCLot: 4137379)								
EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	0.087 mg/kg	102	70.0	125
EP066: Polychlorinated Biphenyls (PCB) (QCLot: 4135395)								
EP066: Total Polychlorinated biphenyls	----	0.1	mg/kg	<0.1	1 mg/kg	88.1	62.0	126
EP066: Polychlorinated Biphenyls (PCB) (QCLot: 4135405)								
EP066: Total Polychlorinated biphenyls	----	0.1	mg/kg	<0.1	1 mg/kg	85.4	62.0	126
EP068A: Organochlorine Pesticides (OC) (QCLot: 4135394)								
EP068: alpha-BHC	319-84-6	0.05	mg/kg	<0.05	0.5 mg/kg	90.6	69.0	113
EP068: Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	0.5 mg/kg	88.0	65.0	117
EP068: beta-BHC	319-85-7	0.05	mg/kg	<0.05	0.5 mg/kg	92.0	67.0	119
EP068: gamma-BHC	58-89-9	0.05	mg/kg	<0.05	0.5 mg/kg	91.3	68.0	116
EP068: delta-BHC	319-86-8	0.05	mg/kg	<0.05	0.5 mg/kg	88.9	65.0	117
EP068: Heptachlor	76-44-8	0.05	mg/kg	<0.05	0.5 mg/kg	81.5	67.0	115
EP068: Aldrin	309-00-2	0.05	mg/kg	<0.05	0.5 mg/kg	90.2	69.0	115
EP068: Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	0.5 mg/kg	74.3	62.0	118
EP068: trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	0.5 mg/kg	72.3	63.0	117

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Acceptable Limits (%)	
				Result	Concentration	LCS	Low	High
EP068A: Organochlorine Pesticides (OC) (QCLot: 4135394) - continued								
EP068: alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	0.5 mg/kg	87.8	66.0	116
EP068: cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	0.5 mg/kg	72.7	64.0	116
EP068: Dieldrin	60-57-1	0.05	mg/kg	<0.05	0.5 mg/kg	91.7	66.0	116
EP068: 4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	0.5 mg/kg	98.7	67.0	115
EP068: Endrin	72-20-8	0.05	mg/kg	<0.05	0.5 mg/kg	77.2	67.0	123
EP068: beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	0.5 mg/kg	85.7	69.0	115
EP068: 4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	0.5 mg/kg	95.9	69.0	121
EP068: Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	0.5 mg/kg	71.7	56.0	120
EP068: Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	0.5 mg/kg	98.8	62.0	124
EP068: 4.4`-DDT	50-29-3	0.2	mg/kg	<0.2	0.5 mg/kg	79.5	66.0	120
EP068: Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	0.5 mg/kg	86.4	64.0	122
EP068: Methoxychlor	72-43-5	0.2	mg/kg	<0.2	0.5 mg/kg	73.8	54.0	130
EP068A: Organochlorine Pesticides (OC) (QCLot: 4135404)								
EP068: alpha-BHC	319-84-6	0.05	mg/kg	<0.05	0.5 mg/kg	86.7	69.0	113
EP068: Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	0.5 mg/kg	82.7	65.0	117
EP068: beta-BHC	319-85-7	0.05	mg/kg	<0.05	0.5 mg/kg	87.2	67.0	119
EP068: gamma-BHC	58-89-9	0.05	mg/kg	<0.05	0.5 mg/kg	87.3	68.0	116
EP068: delta-BHC	319-86-8	0.05	mg/kg	<0.05	0.5 mg/kg	82.9	65.0	117
EP068: Heptachlor	76-44-8	0.05	mg/kg	<0.05	0.5 mg/kg	78.4	67.0	115
EP068: Aldrin	309-00-2	0.05	mg/kg	<0.05	0.5 mg/kg	84.0	69.0	115
EP068: Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	0.5 mg/kg	72.0	62.0	118
EP068: trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	0.5 mg/kg	78.9	63.0	117
EP068: alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	0.5 mg/kg	84.8	66.0	116
EP068: cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	0.5 mg/kg	67.6	64.0	116
EP068: Dieldrin	60-57-1	0.05	mg/kg	<0.05	0.5 mg/kg	86.5	66.0	116
EP068: 4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	0.5 mg/kg	92.0	67.0	115
EP068: Endrin	72-20-8	0.05	mg/kg	<0.05	0.5 mg/kg	72.0	67.0	123
EP068: beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	0.5 mg/kg	82.2	69.0	115
EP068: 4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	0.5 mg/kg	91.0	69.0	121
EP068: Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	0.5 mg/kg	78.1	56.0	120
EP068: Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	0.5 mg/kg	98.7	62.0	124
EP068: 4.4`-DDT	50-29-3	0.2	mg/kg	<0.2	0.5 mg/kg	83.1	66.0	120
EP068: Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	0.5 mg/kg	89.0	64.0	122
EP068: Methoxychlor	72-43-5	0.2	mg/kg	<0.2	0.5 mg/kg	77.9	54.0	130
EP068B: Organophosphorus Pesticides (OP) (QCLot: 4135394)								
EP068: Dichlorvos	62-73-7	0.05	mg/kg	<0.05	0.5 mg/kg	70.4	59.0	119
EP068: Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	0.5 mg/kg	73.4	62.0	128
EP068: Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	0.5 mg/kg	84.0	54.0	126
EP068: Dimethoate	60-51-5	0.05	mg/kg	<0.05	0.5 mg/kg	105	67.0	119

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Acceptable Limits (%)	
				Result	Concentration	LCS	Low	High
EP068B: Organophosphorus Pesticides (OP) (QCLot: 4135394) - continued								
EP068: Diazinon	333-41-5	0.05	mg/kg	<0.05	0.5 mg/kg	99.5	70.0	120
EP068: Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	0.5 mg/kg	79.0	72.0	120
EP068: Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	0.5 mg/kg	94.6	68.0	120
EP068: Malathion	121-75-5	0.05	mg/kg	<0.05	0.5 mg/kg	84.9	68.0	122
EP068: Fenthion	55-38-9	0.05	mg/kg	<0.05	0.5 mg/kg	85.6	69.0	117
EP068: Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	0.5 mg/kg	80.5	76.0	118
EP068: Parathion	56-38-2	0.2	mg/kg	<0.2	0.5 mg/kg	106	64.0	122
EP068: Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	0.5 mg/kg	78.7	70.0	116
EP068: Chlorfenvinphos	470-90-6	0.05	mg/kg	<0.05	0.5 mg/kg	92.4	69.0	121
EP068: Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	0.5 mg/kg	90.6	66.0	118
EP068: Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	0.5 mg/kg	99.1	68.0	124
EP068: Prothiofos	34643-46-4	0.05	mg/kg	<0.05	0.5 mg/kg	83.8	62.0	112
EP068: Ethion	563-12-2	0.05	mg/kg	<0.05	0.5 mg/kg	76.6	68.0	120
EP068: Carbophenothion	786-19-6	0.05	mg/kg	<0.05	0.5 mg/kg	79.3	65.0	127
EP068: Azinphos Methyl	86-50-0	0.05	mg/kg	<0.05	0.5 mg/kg	71.4	41.0	123
EP068B: Organophosphorus Pesticides (OP) (QCLot: 4135404)								
EP068: Dichlorvos	62-73-7	0.05	mg/kg	<0.05	0.5 mg/kg	71.7	59.0	119
EP068: Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	0.5 mg/kg	78.1	62.0	128
EP068: Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	0.5 mg/kg	83.1	54.0	126
EP068: Dimethoate	60-51-5	0.05	mg/kg	<0.05	0.5 mg/kg	101	67.0	119
EP068: Diazinon	333-41-5	0.05	mg/kg	<0.05	0.5 mg/kg	95.7	70.0	120
EP068: Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	0.5 mg/kg	75.8	72.0	120
EP068: Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	0.5 mg/kg	74.5	68.0	120
EP068: Malathion	121-75-5	0.05	mg/kg	<0.05	0.5 mg/kg	85.4	68.0	122
EP068: Fenthion	55-38-9	0.05	mg/kg	<0.05	0.5 mg/kg	81.5	69.0	117
EP068: Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	0.5 mg/kg	78.7	76.0	118
EP068: Parathion	56-38-2	0.2	mg/kg	<0.2	0.5 mg/kg	74.3	64.0	122
EP068: Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	0.5 mg/kg	75.5	70.0	116
EP068: Chlorfenvinphos	470-90-6	0.05	mg/kg	<0.05	0.5 mg/kg	76.2	69.0	121
EP068: Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	0.5 mg/kg	80.5	66.0	118
EP068: Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	0.5 mg/kg	104	68.0	124
EP068: Prothiofos	34643-46-4	0.05	mg/kg	<0.05	0.5 mg/kg	80.2	62.0	112
EP068: Ethion	563-12-2	0.05	mg/kg	<0.05	0.5 mg/kg	75.1	68.0	120
EP068: Carbophenothion	786-19-6	0.05	mg/kg	<0.05	0.5 mg/kg	81.2	65.0	127
EP068: Azinphos Methyl	86-50-0	0.05	mg/kg	<0.05	0.5 mg/kg	81.6	41.0	123
EP074A: Monocyclic Aromatic Hydrocarbons (QCLot: 4135434)								
EP074: Styrene	100-42-5	0.5	mg/kg	<0.5	1 mg/kg	98.3	67.0	113
EP074: Isopropylbenzene	98-82-8	0.5	mg/kg	<0.5	1 mg/kg	101	65.0	117
EP074: n-Propylbenzene	103-65-1	0.5	mg/kg	<0.5	1 mg/kg	105	66.0	122

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Acceptable Limits (%)	
				Result	Concentration	LCS	Low	High
EP074A: Monocyclic Aromatic Hydrocarbons (QCLot: 4135434) - continued								
EP074: 1.3.5-Trimethylbenzene	108-67-8	0.5	mg/kg	<0.5	1 mg/kg	104	68.0	118
EP074: sec-Butylbenzene	135-98-8	0.5	mg/kg	<0.5	1 mg/kg	104	69.0	119
EP074: 1.2.4-Trimethylbenzene	95-63-6	0.5	mg/kg	<0.5	1 mg/kg	103	69.0	117
EP074: tert-Butylbenzene	98-06-6	0.5	mg/kg	<0.5	1 mg/kg	104	69.0	115
EP074: p-Isopropyltoluene	99-87-6	0.5	mg/kg	<0.5	1 mg/kg	104	66.0	118
EP074: n-Butylbenzene	104-51-8	0.5	mg/kg	<0.5	1 mg/kg	104	59.0	125
EP074A: Monocyclic Aromatic Hydrocarbons (QCLot: 4135484)								
EP074: Styrene	100-42-5	0.5	mg/kg	<0.5	1 mg/kg	96.2	67.0	113
EP074: Isopropylbenzene	98-82-8	0.5	mg/kg	<0.5	1 mg/kg	96.6	65.0	117
EP074: n-Propylbenzene	103-65-1	0.5	mg/kg	<0.5	1 mg/kg	85.3	66.0	122
EP074: 1.3.5-Trimethylbenzene	108-67-8	0.5	mg/kg	<0.5	1 mg/kg	89.4	68.0	118
EP074: sec-Butylbenzene	135-98-8	0.5	mg/kg	<0.5	1 mg/kg	88.6	69.0	119
EP074: 1.2.4-Trimethylbenzene	95-63-6	0.5	mg/kg	<0.5	1 mg/kg	89.4	69.0	117
EP074: tert-Butylbenzene	98-06-6	0.5	mg/kg	<0.5	1 mg/kg	87.1	69.0	115
EP074: p-Isopropyltoluene	99-87-6	0.5	mg/kg	<0.5	1 mg/kg	89.9	66.0	118
EP074: n-Butylbenzene	104-51-8	0.5	mg/kg	<0.5	1 mg/kg	86.6	59.0	125
EP074B: Oxygenated Compounds (QCLot: 4135434)								
EP074: Vinyl Acetate	108-05-4	5	mg/kg	<5	10 mg/kg	87.6	29.6	156
EP074: 2-Butanone (MEK)	78-93-3	5	mg/kg	<5	10 mg/kg	92.8	58.0	136
EP074: 4-Methyl-2-pentanone (MIBK)	108-10-1	5	mg/kg	<5	10 mg/kg	97.9	62.0	132
EP074: 2-Hexanone (MBK)	591-78-6	5	mg/kg	<5	10 mg/kg	93.3	54.0	136
EP074B: Oxygenated Compounds (QCLot: 4135484)								
EP074: Vinyl Acetate	108-05-4	5	mg/kg	<5	10 mg/kg	96.1	29.6	156
EP074: 2-Butanone (MEK)	78-93-3	5	mg/kg	<5	10 mg/kg	107	58.0	136
EP074: 4-Methyl-2-pentanone (MIBK)	108-10-1	5	mg/kg	<5	10 mg/kg	106	62.0	132
EP074: 2-Hexanone (MBK)	591-78-6	5	mg/kg	<5	10 mg/kg	106	54.0	136
EP074C: Sulfonated Compounds (QCLot: 4135434)								
EP074: Carbon disulfide	75-15-0	0.5	mg/kg	<0.5	1 mg/kg	95.8	54.0	126
EP074C: Sulfonated Compounds (QCLot: 4135484)								
EP074: Carbon disulfide	75-15-0	0.5	mg/kg	<0.5	1 mg/kg	87.3	54.0	126
EP074D: Fumigants (QCLot: 4135434)								
EP074: 2.2-Dichloropropane	594-20-7	0.5	mg/kg	<0.5	1 mg/kg	102	60.0	126
EP074: 1.2-Dichloropropane	78-87-5	0.5	mg/kg	<0.5	1 mg/kg	101	68.0	124
EP074: cis-1.3-Dichloropropylene	10061-01-5	0.5	mg/kg	<0.5	1 mg/kg	99.8	51.0	119
EP074: trans-1.3-Dichloropropylene	10061-02-6	0.5	mg/kg	<0.5	1 mg/kg	98.4	52.0	114
EP074: 1.2-Dibromoethane (EDB)	106-93-4	0.5	mg/kg	<0.5	1 mg/kg	97.2	63.0	115
EP074D: Fumigants (QCLot: 4135484)								
EP074: 2.2-Dichloropropane	594-20-7	0.5	mg/kg	<0.5	1 mg/kg	93.7	60.0	126

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Acceptable Limits (%)	
				Result	Concentration	LCS	Low	High
EP074D: Fumigants (QCLot: 4135484) - continued								
EP074: 1.2-Dichloropropane	78-87-5	0.5	mg/kg	<0.5	1 mg/kg	100	68.0	124
EP074: cis-1.3-Dichloropropylene	10061-01-5	0.5	mg/kg	<0.5	1 mg/kg	93.2	51.0	119
EP074: trans-1.3-Dichloropropylene	10061-02-6	0.5	mg/kg	<0.5	1 mg/kg	96.2	52.0	114
EP074: 1.2-Dibromoethane (EDB)	106-93-4	0.5	mg/kg	<0.5	1 mg/kg	104	63.0	115
EP074E: Halogenated Aliphatic Compounds (QCLot: 4135434)								
EP074: Dichlorodifluoromethane	75-71-8	5	mg/kg	<5	10 mg/kg	101	30.0	148
EP074: Chloromethane	74-87-3	5	mg/kg	<5	10 mg/kg	93.0	41.0	141
EP074: Vinyl chloride	75-01-4	5	mg/kg	<5	10 mg/kg	102	43.0	147
EP074: Bromomethane	74-83-9	5	mg/kg	<5	10 mg/kg	100	47.0	141
EP074: Chloroethane	75-00-3	5	mg/kg	<5	10 mg/kg	97.5	49.0	143
EP074: Trichlorofluoromethane	75-69-4	5	mg/kg	<5	10 mg/kg	98.1	49.0	135
EP074: 1.1-Dichloroethene	75-35-4	0.5	mg/kg	<0.5	1 mg/kg	96.6	54.0	126
EP074: Iodomethane	74-88-4	0.5	mg/kg	<0.5	1 mg/kg	89.8	43.0	129
EP074: trans-1.2-Dichloroethene	156-60-5	0.5	mg/kg	<0.5	1 mg/kg	97.8	64.0	120
EP074: 1.1-Dichloroethane	75-34-3	0.5	mg/kg	<0.5	1 mg/kg	97.8	67.0	125
EP074: cis-1.2-Dichloroethene	156-59-2	0.5	mg/kg	<0.5	1 mg/kg	96.4	69.0	121
EP074: 1.1.1-Trichloroethane	71-55-6	0.5	mg/kg	<0.5	1 mg/kg	99.3	65.0	117
EP074: 1.1-Dichloropropylene	563-58-6	0.5	mg/kg	<0.5	1 mg/kg	102	65.0	123
EP074: Carbon Tetrachloride	56-23-5	0.5	mg/kg	<0.5	1 mg/kg	97.8	59.0	125
EP074: 1.2-Dichloroethane	107-06-2	0.5	mg/kg	<0.5	1 mg/kg	95.5	65.0	125
EP074: Trichloroethene	79-01-6	0.5	mg/kg	<0.5	1 mg/kg	102	70.0	118
EP074: Dibromomethane	74-95-3	0.5	mg/kg	<0.5	1 mg/kg	94.1	68.0	118
EP074: 1.1.2-Trichloroethane	79-00-5	0.5	mg/kg	<0.5	1 mg/kg	100	64.0	126
EP074: 1.3-Dichloropropane	142-28-9	0.5	mg/kg	<0.5	1 mg/kg	99.2	68.0	122
EP074: Tetrachloroethene	127-18-4	0.5	mg/kg	<0.5	1 mg/kg	92.3	67.0	143
EP074: 1.1.1.2-Tetrachloroethane	630-20-6	0.5	mg/kg	<0.5	1 mg/kg	101	62.0	122
EP074: trans-1.4-Dichloro-2-butene	110-57-6	0.5	mg/kg	<0.5	1 mg/kg	95.2	54.0	128
EP074: cis-1.4-Dichloro-2-butene	1476-11-5	0.5	mg/kg	<0.5	1 mg/kg	94.7	55.0	129
EP074: 1.1.2.2-Tetrachloroethane	79-34-5	0.5	mg/kg	<0.5	1 mg/kg	98.5	65.0	121
EP074: 1.2.3-Trichloropropane	96-18-4	0.5	mg/kg	<0.5	1 mg/kg	96.4	61.0	125
EP074: Pentachloroethane	76-01-7	0.5	mg/kg	<0.5	1 mg/kg	108	19.8	134
EP074: 1.2-Dibromo-3-chloropropane	96-12-8	0.5	mg/kg	<0.5	1 mg/kg	97.7	53.0	129
EP074E: Halogenated Aliphatic Compounds (QCLot: 4135484)								
EP074: Dichlorodifluoromethane	75-71-8	5	mg/kg	<5	10 mg/kg	78.5	30.0	148
EP074: Chloromethane	74-87-3	5	mg/kg	<5	10 mg/kg	87.2	41.0	141
EP074: Vinyl chloride	75-01-4	5	mg/kg	<5	10 mg/kg	89.0	43.0	147
EP074: Bromomethane	74-83-9	5	mg/kg	<5	10 mg/kg	95.7	47.0	141
EP074: Chloroethane	75-00-3	5	mg/kg	<5	10 mg/kg	91.4	49.0	143
EP074: Trichlorofluoromethane	75-69-4	5	mg/kg	<5	10 mg/kg	92.1	49.0	135

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Acceptable Limits (%)	
				Result	Concentration	LCS	Low	High
EP074E: Halogenated Aliphatic Compounds (QCLot: 4135484) - continued								
EP074: 1.1-Dichloroethene	75-35-4	0.5	mg/kg	<0.5	1 mg/kg	91.2	54.0	126
EP074: Iodomethane	74-88-4	0.5	mg/kg	<0.5	1 mg/kg	68.3	43.0	129
EP074: trans-1.2-Dichloroethene	156-60-5	0.5	mg/kg	<0.5	1 mg/kg	93.6	64.0	120
EP074: 1.1-Dichloroethane	75-34-3	0.5	mg/kg	<0.5	1 mg/kg	98.0	67.0	125
EP074: cis-1.2-Dichloroethene	156-59-2	0.5	mg/kg	<0.5	1 mg/kg	96.9	69.0	121
EP074: 1.1.1-Trichloroethane	71-55-6	0.5	mg/kg	<0.5	1 mg/kg	93.5	65.0	117
EP074: 1.1-Dichloropropylene	563-58-6	0.5	mg/kg	<0.5	1 mg/kg	92.7	65.0	123
EP074: Carbon Tetrachloride	56-23-5	0.5	mg/kg	<0.5	1 mg/kg	87.8	59.0	125
EP074: 1.2-Dichloroethane	107-06-2	0.5	mg/kg	<0.5	1 mg/kg	106	65.0	125
EP074: Trichloroethene	79-01-6	0.5	mg/kg	<0.5	1 mg/kg	96.4	70.0	118
EP074: Dibromomethane	74-95-3	0.5	mg/kg	<0.5	1 mg/kg	104	68.0	118
EP074: 1.1.2-Trichloroethane	79-00-5	0.5	mg/kg	<0.5	1 mg/kg	105	64.0	126
EP074: 1.3-Dichloropropane	142-28-9	0.5	mg/kg	<0.5	1 mg/kg	102	68.0	122
EP074: Tetrachloroethene	127-18-4	0.5	mg/kg	<0.5	1 mg/kg	101	67.0	143
EP074: 1.1.1.2-Tetrachloroethane	630-20-6	0.5	mg/kg	<0.5	1 mg/kg	94.1	62.0	122
EP074: trans-1.4-Dichloro-2-butene	110-57-6	0.5	mg/kg	<0.5	1 mg/kg	96.3	54.0	128
EP074: cis-1.4-Dichloro-2-butene	1476-11-5	0.5	mg/kg	<0.5	1 mg/kg	96.3	55.0	129
EP074: 1.1.2.2-Tetrachloroethane	79-34-5	0.5	mg/kg	<0.5	1 mg/kg	110	65.0	121
EP074: 1.2.3-Trichloropropane	96-18-4	0.5	mg/kg	<0.5	1 mg/kg	103	61.0	125
EP074: Pentachloroethane	76-01-7	0.5	mg/kg	<0.5	1 mg/kg	86.0	19.8	134
EP074: 1.2-Dibromo-3-chloropropane	96-12-8	0.5	mg/kg	<0.5	1 mg/kg	96.1	53.0	129
EP074F: Halogenated Aromatic Compounds (QCLot: 4135434)								
EP074: Chlorobenzene	108-90-7	0.5	mg/kg	<0.5	1 mg/kg	100	68.0	116
EP074: Bromobenzene	108-86-1	0.5	mg/kg	<0.5	1 mg/kg	103	70.0	114
EP074: 2-Chlorotoluene	95-49-8	0.5	mg/kg	<0.5	1 mg/kg	105	68.0	122
EP074: 4-Chlorotoluene	106-43-4	0.5	mg/kg	<0.5	1 mg/kg	104	67.0	123
EP074: 1.2.3-Trichlorobenzene	87-61-6	0.5	mg/kg	<0.5	1 mg/kg	102	52.0	122
EP074F: Halogenated Aromatic Compounds (QCLot: 4135484)								
EP074: Chlorobenzene	108-90-7	0.5	mg/kg	<0.5	1 mg/kg	98.5	68.0	116
EP074: Bromobenzene	108-86-1	0.5	mg/kg	<0.5	1 mg/kg	90.8	70.0	114
EP074: 2-Chlorotoluene	95-49-8	0.5	mg/kg	<0.5	1 mg/kg	90.6	68.0	122
EP074: 4-Chlorotoluene	106-43-4	0.5	mg/kg	<0.5	1 mg/kg	91.1	67.0	123
EP074: 1.2.3-Trichlorobenzene	87-61-6	0.5	mg/kg	<0.5	1 mg/kg	92.4	52.0	122
EP074G: Trihalomethanes (QCLot: 4135434)								
EP074: Chloroform	67-66-3	0.5	mg/kg	<0.5	1 mg/kg	98.5	66.0	124
EP074: Bromodichloromethane	75-27-4	0.5	mg/kg	<0.5	1 mg/kg	97.3	61.0	121
EP074: Dibromochloromethane	124-48-1	0.5	mg/kg	<0.5	1 mg/kg	98.7	63.0	121
EP074: Bromoform	75-25-2	0.5	mg/kg	<0.5	1 mg/kg	95.9	60.0	126

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Acceptable Limits (%)	
				Result	Concentration	LCS	Low	High
EP074G: Trihalomethanes (QCLot: 4135484)								
EP074: Chloroform	67-66-3	0.5	mg/kg	<0.5	1 mg/kg	102	66.0	124
EP074: Bromodichloromethane	75-27-4	0.5	mg/kg	<0.5	1 mg/kg	97.9	61.0	121
EP074: Dibromochloromethane	124-48-1	0.5	mg/kg	<0.5	1 mg/kg	102	63.0	121
EP074: Bromoform	75-25-2	0.5	mg/kg	<0.5	1 mg/kg	98.1	60.0	126
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 4135393)								
EP075(SIM): Naphthalene	91-20-3	0.5	mg/kg	<0.5	6 mg/kg	99.8	77.0	125
EP075(SIM): Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	6 mg/kg	91.9	72.0	124
EP075(SIM): Acenaphthene	83-32-9	0.5	mg/kg	<0.5	6 mg/kg	95.0	73.0	127
EP075(SIM): Fluorene	86-73-7	0.5	mg/kg	<0.5	6 mg/kg	97.1	72.0	126
EP075(SIM): Phenanthrene	85-01-8	0.5	mg/kg	<0.5	6 mg/kg	98.9	75.0	127
EP075(SIM): Anthracene	120-12-7	0.5	mg/kg	<0.5	6 mg/kg	96.2	77.0	127
EP075(SIM): Fluoranthene	206-44-0	0.5	mg/kg	<0.5	6 mg/kg	101	73.0	127
EP075(SIM): Pyrene	129-00-0	0.5	mg/kg	<0.5	6 mg/kg	102	74.0	128
EP075(SIM): Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	6 mg/kg	93.3	69.0	123
EP075(SIM): Chrysene	218-01-9	0.5	mg/kg	<0.5	6 mg/kg	94.9	75.0	127
EP075(SIM): Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	6 mg/kg	89.1	68.0	116
EP075(SIM): Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	6 mg/kg	98.4	74.0	126
EP075(SIM): Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	6 mg/kg	85.6	70.0	126
EP075(SIM): Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	6 mg/kg	90.4	61.0	121
EP075(SIM): Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	6 mg/kg	89.0	62.0	118
EP075(SIM): Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	6 mg/kg	86.4	63.0	121
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 4135403)								
EP075(SIM): Naphthalene	91-20-3	0.5	mg/kg	<0.5	6 mg/kg	112	77.0	125
EP075(SIM): Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	6 mg/kg	114	72.0	124
EP075(SIM): Acenaphthene	83-32-9	0.5	mg/kg	<0.5	6 mg/kg	104	73.0	127
EP075(SIM): Fluorene	86-73-7	0.5	mg/kg	<0.5	6 mg/kg	117	72.0	126
EP075(SIM): Phenanthrene	85-01-8	0.5	mg/kg	<0.5	6 mg/kg	100	75.0	127
EP075(SIM): Anthracene	120-12-7	0.5	mg/kg	<0.5	6 mg/kg	93.0	77.0	127
EP075(SIM): Fluoranthene	206-44-0	0.5	mg/kg	<0.5	6 mg/kg	104	73.0	127
EP075(SIM): Pyrene	129-00-0	0.5	mg/kg	<0.5	6 mg/kg	100	74.0	128
EP075(SIM): Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	6 mg/kg	118	69.0	123
EP075(SIM): Chrysene	218-01-9	0.5	mg/kg	<0.5	6 mg/kg	112	75.0	127
EP075(SIM): Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	6 mg/kg	115	68.0	116
EP075(SIM): Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	6 mg/kg	115	74.0	126
EP075(SIM): Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	6 mg/kg	103	70.0	126
EP075(SIM): Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	6 mg/kg	107	61.0	121
EP075(SIM): Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	6 mg/kg	103	62.0	118

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Acceptable Limits (%)	
				Result	Concentration	LCS	Low	High
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 4135403) - continued								
EP075(SIM): Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	6 mg/kg	110	63.0	121
EP075A: Phenolic Compounds (QCLot: 4135396)								
EP075: Phenol	108-95-2	0.5	mg/kg	<0.5	1.5 mg/kg	100.0	64.0	114
EP075: 2-Chlorophenol	95-57-8	0.5	mg/kg	<0.5	1.5 mg/kg	95.2	57.0	115
EP075: 2-Methylphenol	95-48-7	0.5	mg/kg	<0.5	1.5 mg/kg	113	55.0	117
EP075: 3- & 4-Methylphenol	1319-77-3	0.5	mg/kg	<0.5	1.5 mg/kg	112	46.0	122
EP075: 2-Nitrophenol	88-75-5	0.5	mg/kg	<0.5	1.5 mg/kg	94.3	47.0	117
EP075: 2.4-Dimethylphenol	105-67-9	0.5	mg/kg	<0.5	1.5 mg/kg	91.5	13.7	108
EP075: 2.4-Dichlorophenol	120-83-2	0.5	mg/kg	<0.5	1.5 mg/kg	99.6	47.0	105
EP075: 2.6-Dichlorophenol	87-65-0	0.5	mg/kg	<0.5	1.5 mg/kg	97.4	48.0	110
EP075: 4-Chloro-3-methylphenol	59-50-7	0.5	mg/kg	<0.5	1.5 mg/kg	108	57.0	113
EP075: 2.4.6-Trichlorophenol	88-06-2	0.5	mg/kg	<0.5	1.5 mg/kg	99.6	49.0	109
EP075: 2.4.5-Trichlorophenol	95-95-4	0.5	mg/kg	<0.5	1.5 mg/kg	100	49.0	107
EP075: Pentachlorophenol	87-86-5	1	mg/kg	<1	3 mg/kg	65.3	12.0	76.0
EP075B: Polynuclear Aromatic Hydrocarbons (QCLot: 4135396)								
EP075: Naphthalene	91-20-3	0.5	mg/kg	<0.5	1.5 mg/kg	96.7	62.0	118
EP075: 2-Methylnaphthalene	91-57-6	0.5	mg/kg	<0.5	1.5 mg/kg	99.4	58.0	116
EP075: 2-Chloronaphthalene	91-58-7	0.5	mg/kg	<0.5	1.5 mg/kg	95.2	54.0	112
EP075: Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	1.5 mg/kg	103	56.0	114
EP075: Acenaphthene	83-32-9	0.5	mg/kg	<0.5	1.5 mg/kg	90.4	62.0	112
EP075: Fluorene	86-73-7	0.5	mg/kg	<0.5	1.5 mg/kg	97.0	59.0	115
EP075: Phenanthrene	85-01-8	0.5	mg/kg	<0.5	1.5 mg/kg	94.6	63.0	113
EP075: Anthracene	120-12-7	0.5	mg/kg	<0.5	1.5 mg/kg	99.1	57.0	111
EP075: Fluoranthene	206-44-0	0.5	mg/kg	<0.5	1.5 mg/kg	97.5	58.0	114
EP075: Pyrene	129-00-0	0.5	mg/kg	<0.5	1.5 mg/kg	98.7	57.0	117
EP075: N-2-Fluorenyl Acetamide	53-96-3	0.5	mg/kg	<0.5	1.5 mg/kg	103	58.0	114
EP075: Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	1.5 mg/kg	101	59.0	115
EP075: Chrysene	218-01-9	0.5	mg/kg	<0.5	1.5 mg/kg	101	61.0	117
EP075: Benzo(b+j) & Benzo(k)fluoranthene	205-99-2 207-08-9	1	mg/kg	<1	3 mg/kg	95.2	57.0	119
EP075: 7.12-Dimethylbenz(a)anthracene	57-97-6	0.5	mg/kg	<0.5	1.5 mg/kg	# 111	48.1	106
EP075: Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	1.5 mg/kg	95.4	56.0	116
EP075: 3-Methylcholanthrene	56-49-5	0.5	mg/kg	<0.5	1.5 mg/kg	89.5	50.0	116
EP075: Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	1.5 mg/kg	89.5	55.0	117
EP075: Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	1.5 mg/kg	89.8	53.0	119
EP075: Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	1.5 mg/kg	88.6	56.0	120
EP075C: Phthalate Esters (QCLot: 4135396)								
EP075: Dimethyl phthalate	131-11-3	0.5	mg/kg	<0.5	1.5 mg/kg	106	60.0	118

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Acceptable Limits (%)	
				Result	Concentration	LCS	Low	High
EP075C: Phthalate Esters (QCLot: 4135396) - continued								
EP075: Diethyl phthalate	84-66-2	0.5	mg/kg	<0.5	1.5 mg/kg	103	65.0	115
EP075: Di-n-butyl phthalate	84-74-2	0.5	mg/kg	<0.5	1.5 mg/kg	93.9	65.0	121
EP075: Butyl benzyl phthalate	85-68-7	0.5	mg/kg	<0.5	1.5 mg/kg	94.6	62.0	116
EP075: bis(2-ethylhexyl) phthalate	117-81-7	----	mg/kg	----	1.5 mg/kg	87.1	69.0	133
EP075: Di-n-octylphthalate	117-84-0	0.5	mg/kg	<0.5	1.5 mg/kg	88.7	62.0	124
EP075D: Nitrosamines (QCLot: 4135396)								
EP075: N-Nitrosomethylethylamine	10595-95-6	0.5	mg/kg	<0.5	1.5 mg/kg	97.5	39.4	124
EP075: N-Nitrosodiethylamine	55-18-5	0.5	mg/kg	<0.5	1.5 mg/kg	95.2	59.0	117
EP075: N-Nitrosopyrrolidine	930-55-2	0.5	mg/kg	<0.5	1.5 mg/kg	117	53.0	125
EP075: N-Nitrosomorpholine	59-89-2	0.5	mg/kg	<0.5	1.5 mg/kg	107	65.0	121
EP075: N-Nitrosodi-n-propylamine	621-64-7	0.5	mg/kg	<0.5	1.5 mg/kg	101	59.0	123
EP075: N-Nitrosopiperidine	100-75-4	0.5	mg/kg	<0.5	1.5 mg/kg	104	57.0	115
EP075: N-Nitrosodibutylamine	924-16-3	0.5	mg/kg	<0.5	1.5 mg/kg	105	57.0	119
EP075: N-Nitrosodiphenyl & Diphenylamine	86-30-6 122-39-4	0.5	mg/kg	<0.6	3 mg/kg	98.4	42.0	112
EP075: Methapyrilene	91-80-5	0.5	mg/kg	<0.5	1.5 mg/kg	38.6	16.3	123
EP075E: Nitroaromatics and Ketones (QCLot: 4135396)								
EP075: 2-Picoline	109-06-8	0.5	mg/kg	<0.5	1.5 mg/kg	89.5	27.3	129
EP075: Acetophenone	98-86-2	0.5	mg/kg	<0.5	1.5 mg/kg	98.9	60.0	116
EP075: Nitrobenzene	98-95-3	0.5	mg/kg	<0.5	1.5 mg/kg	99.2	65.0	119
EP075: Isophorone	78-59-1	0.5	mg/kg	<0.5	1.5 mg/kg	101	62.0	116
EP075: 2.6-Dinitrotoluene	606-20-2	0.5	mg/kg	<0.5	1.5 mg/kg	105	58.0	118
EP075: 2.4-Dinitrotoluene	121-14-2	0.5	mg/kg	<0.5	1.5 mg/kg	98.0	59.0	115
EP075: 1-Naphthylamine	134-32-7	0.5	mg/kg	<0.5	1.5 mg/kg	88.2	18.0	112
EP075: 4-Nitroquinoline-N-oxide	56-57-5	0.5	mg/kg	<0.5	1.5 mg/kg	85.3	10.0	87.0
EP075: 5-Nitro-o-toluidine	99-55-8	0.5	mg/kg	<0.5	1.5 mg/kg	91.5	48.3	98.5
EP075: Azobenzene	103-33-3	1	mg/kg	<1	1.5 mg/kg	98.6	62.0	118
EP075: 1.3.5-Trinitrobenzene	99-35-4	0.5	mg/kg	<0.5	1.5 mg/kg	86.8	36.0	114
EP075: Phenacetin	62-44-2	0.5	mg/kg	<0.5	1.5 mg/kg	102	62.0	114
EP075: 4-Aminobiphenyl	92-67-1	0.5	mg/kg	<0.5	1.5 mg/kg	88.0	36.1	102
EP075: Pentachloronitrobenzene	82-68-8	0.5	mg/kg	<0.5	1.5 mg/kg	93.8	56.0	110
EP075: Pronamide	23950-58-5	0.5	mg/kg	<0.5	1.5 mg/kg	99.5	54.0	110
EP075: Dimethylaminoazobenzene	60-11-7	0.5	mg/kg	<0.5	1.5 mg/kg	97.4	48.0	108
EP075: Chlorobenzilate	510-15-6	0.5	mg/kg	<0.5	1.5 mg/kg	91.8	57.4	112
EP075F: Haloethers (QCLot: 4135396)								
EP075: Bis(2-chloroethyl) ether	111-44-4	0.5	mg/kg	<0.5	1.5 mg/kg	92.0	63.0	121
EP075: Bis(2-chloroethoxy) methane	111-91-1	0.5	mg/kg	<0.5	1.5 mg/kg	99.8	59.0	115
EP075: 4-Chlorophenyl phenyl ether	7005-72-3	0.5	mg/kg	<0.5	1.5 mg/kg	96.0	58.0	112

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Acceptable Limits (%)	
				Result	Concentration	LCS	Low	High
EP075F: Haloethers (QCLot: 4135396) - continued								
EP075: 4-Bromophenyl phenyl ether	101-55-3	0.5	mg/kg	<0.5	1.5 mg/kg	95.3	58.0	110
EP075G: Chlorinated Hydrocarbons (QCLot: 4135396)								
EP075: 1.3-Dichlorobenzene	541-73-1	0.5	mg/kg	<0.5	1.5 mg/kg	94.1	58.0	112
EP075: 1.4-Dichlorobenzene	106-46-7	0.5	mg/kg	<0.5	1.5 mg/kg	91.6	58.0	116
EP075: 1.2-Dichlorobenzene	95-50-1	0.5	mg/kg	<0.5	1.5 mg/kg	91.8	57.0	115
EP075: Hexachloroethane	67-72-1	0.5	mg/kg	<0.5	1.5 mg/kg	90.5	54.0	116
EP075: 1.2.4-Trichlorobenzene	120-82-1	0.5	mg/kg	<0.5	1.5 mg/kg	94.3	62.9	108
EP075: Hexachloropropylene	1888-71-7	0.5	mg/kg	<0.5	1.5 mg/kg	91.2	39.1	110
EP075: Hexachlorobutadiene	87-68-3	0.5	mg/kg	<0.5	1.5 mg/kg	91.0	59.0	117
EP075: Hexachlorocyclopentadiene	77-47-4	2.5	mg/kg	<2.5	1.5 mg/kg	91.1	24.3	108
EP075: Pentachlorobenzene	608-93-5	0.5	mg/kg	<0.5	1.5 mg/kg	88.4	57.0	109
EP075: Hexachlorobenzene (HCB)	118-74-1	0.5	mg/kg	<0.5	1.5 mg/kg	95.4	59.0	111
EP075H: Anilines and Benzidines (QCLot: 4135396)								
EP075: Aniline	62-53-3	0.5	mg/kg	<0.5	1.5 mg/kg	92.9	13.2	108
EP075: 4-Chloroaniline	106-47-8	0.5	mg/kg	<0.5	1.5 mg/kg	51.2	20.5	99.0
EP075: 2-Nitroaniline	88-74-4	0.5	mg/kg	<0.5	1.5 mg/kg	111	52.0	112
EP075: 3-Nitroaniline	99-09-2	0.5	mg/kg	<0.5	1.5 mg/kg	# 99.2	31.5	93.7
EP075: Dibenzofuran	132-64-9	0.5	mg/kg	<0.5	1.5 mg/kg	91.5	60.0	110
EP075: 4-Nitroaniline	100-01-6	0.5	mg/kg	<0.5	1.5 mg/kg	# 122	42.0	112
EP075: Carbazole	86-74-8	0.5	mg/kg	<0.5	1.5 mg/kg	101	59.0	111
EP075: 3.3`-Dichlorobenzidine	91-94-1	0.5	mg/kg	<0.5	1.5 mg/kg	94.8	23.1	113
EP075I: Organochlorine Pesticides (QCLot: 4135396)								
EP075: alpha-BHC	319-84-6	0.5	mg/kg	<0.5	1.5 mg/kg	95.6	63.0	113
EP075: beta-BHC	319-85-7	0.5	mg/kg	<0.5	1.5 mg/kg	99.9	57.0	113
EP075: gamma-BHC	58-89-9	0.5	mg/kg	<0.5	1.5 mg/kg	94.4	61.0	117
EP075: delta-BHC	319-86-8	0.5	mg/kg	<0.5	1.5 mg/kg	97.1	64.0	118
EP075: Heptachlor	76-44-8	0.5	mg/kg	<0.5	1.5 mg/kg	89.5	55.0	115
EP075: Aldrin	309-00-2	0.5	mg/kg	<0.5	1.5 mg/kg	90.1	61.0	115
EP075: Heptachlor epoxide	1024-57-3	0.5	mg/kg	<0.5	1.5 mg/kg	91.1	56.0	118
EP075: alpha-Endosulfan	959-98-8	0.5	mg/kg	<0.5	1.5 mg/kg	90.4	65.0	125
EP075: 4.4`-DDE	72-55-9	0.5	mg/kg	<0.5	1.5 mg/kg	93.4	60.0	116
EP075: Dieldrin	60-57-1	0.5	mg/kg	<0.5	1.5 mg/kg	92.1	64.0	118
EP075: Endrin	72-20-8	0.5	mg/kg	<0.5	1.5 mg/kg	92.8	53.0	117
EP075: beta-Endosulfan	33213-65-9	0.5	mg/kg	<0.5	1.5 mg/kg	93.8	65.0	115
EP075: 4.4`-DDD	72-54-8	0.5	mg/kg	<0.5	1.5 mg/kg	94.4	62.0	118
EP075: Endosulfan sulfate	1031-07-8	0.5	mg/kg	<0.5	1.5 mg/kg	112	63.0	129
EP075: 4.4`-DDT	50-29-3	0.5	mg/kg	<0.5	1.5 mg/kg	91.4	46.0	122
EP075J: Organophosphorus Pesticides (QCLot: 4135396)								

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Acceptable Limits (%)	
				Result	Concentration	LCS	Low	High
EP075J: Organophosphorus Pesticides (QCLot: 4135396) - continued								
EP075: Dichlorvos	62-73-7	0.5	mg/kg	<0.5	1.5 mg/kg	90.4	46.0	112
EP075: Dimethoate	60-51-5	0.5	mg/kg	<0.5	1.5 mg/kg	100	63.0	119
EP075: Diazinon	333-41-5	0.5	mg/kg	<0.5	1.5 mg/kg	91.1	68.0	134
EP075: Chlorpyrifos-methyl	5598-13-0	0.5	mg/kg	<0.5	1.5 mg/kg	91.4	60.0	130
EP075: Malathion	121-75-5	0.5	mg/kg	<0.5	1.5 mg/kg	98.9	65.0	127
EP075: Fenthion	55-38-9	0.5	mg/kg	<0.5	1.5 mg/kg	94.3	60.0	116
EP075: Chlorpyrifos	2921-88-2	0.5	mg/kg	<0.5	1.5 mg/kg	89.7	63.0	113
EP075: Pirimphos-ethyl	23505-41-1	0.5	mg/kg	<0.5	1.5 mg/kg	89.7	65.0	115
EP075: Chlorfenvinphos	470-90-6	0.5	mg/kg	<0.5	1.5 mg/kg	82.2	59.0	103
EP075: Prothiofos	34643-46-4	0.5	mg/kg	<0.5	1.5 mg/kg	92.8	59.0	119
EP075: Ethion	563-12-2	0.5	mg/kg	<0.5	1.5 mg/kg	92.2	62.0	118
EP080/071: Total Petroleum Hydrocarbons (QCLot: 4135392)								
EP071: C10 - C14 Fraction	----	50	mg/kg	<50	300 mg/kg	98.6	75.0	129
EP071: C15 - C28 Fraction	----	100	mg/kg	<100	450 mg/kg	101	77.0	131
EP071: C29 - C36 Fraction	----	100	mg/kg	<100	300 mg/kg	103	71.0	129
EP080/071: Total Petroleum Hydrocarbons (QCLot: 4135402)								
EP071: C10 - C14 Fraction	----	50	mg/kg	<50	300 mg/kg	96.1	75.0	129
EP071: C15 - C28 Fraction	----	100	mg/kg	<100	450 mg/kg	98.5	77.0	131
EP071: C29 - C36 Fraction	----	100	mg/kg	<100	300 mg/kg	99.8	71.0	129
EP080/071: Total Petroleum Hydrocarbons (QCLot: 4135433)								
EP080: C6 - C9 Fraction	----	10	mg/kg	<10	26 mg/kg	93.6	68.4	128
EP080/071: Total Petroleum Hydrocarbons (QCLot: 4135481)								
EP080: C6 - C9 Fraction	----	10	mg/kg	<10	26 mg/kg	91.0	68.4	128
EP080/071: Total Petroleum Hydrocarbons (QCLot: 4135483)								
EP080: C6 - C9 Fraction	----	10	mg/kg	<10	26 mg/kg	86.2	68.4	128
EP080/071: Total Petroleum Hydrocarbons (QCLot: 4135519)								
EP080: C6 - C9 Fraction	----	10	mg/kg	<10	26 mg/kg	86.9	68.4	128
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 4135392)								
EP071: >C10 - C16 Fraction	----	50	mg/kg	<50	375 mg/kg	101	77.0	125
EP071: >C16 - C34 Fraction	----	100	mg/kg	<100	525 mg/kg	101	74.0	138
EP071: >C34 - C40 Fraction	----	100	mg/kg	<100	225 mg/kg	104	63.0	131
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 4135402)								
EP071: >C10 - C16 Fraction	----	50	mg/kg	<50	375 mg/kg	99.5	77.0	125
EP071: >C16 - C34 Fraction	----	100	mg/kg	<100	525 mg/kg	97.9	74.0	138
EP071: >C34 - C40 Fraction	----	100	mg/kg	<100	225 mg/kg	99.3	63.0	131
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 4135433)								
EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	31 mg/kg	98.6	68.4	128

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Acceptable Limits (%)	
				Result	Concentration	LCS	Low	High
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 4135481)								
EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	31 mg/kg	94.9	68.4	128
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 4135483)								
EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	31 mg/kg	87.5	68.4	128
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 4135519)								
EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	31 mg/kg	95.0	68.4	128
EP080: BTEXN (QCLot: 4135433)								
EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	1 mg/kg	92.2	62.0	116
EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	1 mg/kg	98.6	67.0	121
EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	1 mg/kg	103	65.0	117
EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	2 mg/kg	102	66.0	118
EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	1 mg/kg	104	68.0	120
EP080: Naphthalene	91-20-3	1	mg/kg	<1	1 mg/kg	96.6	63.0	119
EP080: BTEXN (QCLot: 4135481)								
EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	1 mg/kg	96.5	62.0	116
EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	1 mg/kg	96.6	67.0	121
EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	1 mg/kg	95.3	65.0	117
EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	2 mg/kg	96.1	66.0	118
EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	1 mg/kg	94.3	68.0	120
EP080: Naphthalene	91-20-3	1	mg/kg	<1	1 mg/kg	91.8	63.0	119
EP080: BTEXN (QCLot: 4135483)								
EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	1 mg/kg	94.6	62.0	116
EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	1 mg/kg	98.8	67.0	121
EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	1 mg/kg	96.3	65.0	117
EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	2 mg/kg	98.8	66.0	118
EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	1 mg/kg	98.3	68.0	120
EP080: Naphthalene	91-20-3	1	mg/kg	<1	1 mg/kg	83.9	63.0	119
EP080: BTEXN (QCLot: 4135519)								
EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	1 mg/kg	86.2	62.0	116
EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	1 mg/kg	86.6	67.0	121
EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	1 mg/kg	87.3	65.0	117
EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	2 mg/kg	85.5	66.0	118
EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	1 mg/kg	85.3	68.0	120
EP080: Naphthalene	91-20-3	1	mg/kg	<1	1 mg/kg	90.9	63.0	119
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 4135850)								

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report: Result	Laboratory Control Spike (LCS) Report: Spike Concentration	Spike Recovery (%): LCS	Acceptable Limits (%): Low	Acceptable Limits (%): High
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 4135850) - continued								
EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.0002	mg/kg	<0.0002	0.00125 mg/kg	85.6	72.0	128
EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.0002	mg/kg	<0.0002	0.00125 mg/kg	76.4	67.0	130
EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.0002	mg/kg	<0.0002	0.00125 mg/kg	81.6	68.0	136
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4135850)								
EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.001	mg/kg	<0.001	0.00625 mg/kg	88.2	71.0	135
EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.0002	mg/kg	<0.0002	0.00125 mg/kg	74.4	69.0	132
EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.0002	mg/kg	<0.0002	0.00125 mg/kg	93.6	70.0	132
EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.0002	mg/kg	<0.0002	0.00125 mg/kg	77.6	71.0	131
EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.0002	mg/kg	<0.0002	0.00125 mg/kg	77.2	69.0	133
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 4135850)								
EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.0005	mg/kg	<0.0005	0.00125 mg/kg	72.4	62.0	145
EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.0005	mg/kg	<0.0005	0.00125 mg/kg	72.0	64.0	140
EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.0005	mg/kg	<0.0005	0.00125 mg/kg	82.4	65.0	137
EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.0005	mg/kg	<0.0005	0.00125 mg/kg	84.4	69.2	143

Sub-Matrix: **WATER**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report: Result	Laboratory Control Spike (LCS) Report: Spike Concentration	Spike Recovery (%): LCS	Acceptable Limits (%): Low	Acceptable Limits (%): High
EG020T: Total Metals by ICP-MS (QCLot: 4139064)								
EG020A-T: Arsenic	7440-38-2	0.001	mg/L	<0.001	0.1 mg/L	100	82.0	114
EG020A-T: Cadmium	7440-43-9	0.0001	mg/L	<0.0001	0.1 mg/L	95.9	84.0	112
EG020A-T: Chromium	7440-47-3	0.001	mg/L	<0.001	0.1 mg/L	96.2	86.0	116
EG020A-T: Copper	7440-50-8	0.001	mg/L	<0.001	0.1 mg/L	99.0	83.0	118
EG020A-T: Lead	7439-92-1	0.001	mg/L	<0.001	0.1 mg/L	97.2	85.0	115
EG020A-T: Nickel	7440-02-0	0.001	mg/L	<0.001	0.1 mg/L	99.7	84.0	116
EG020A-T: Zinc	7440-66-6	0.005	mg/L	<0.005	0.1 mg/L	96.9	79.0	117
EG035T: Total Recoverable Mercury by FIMS (QCLot: 4140039)								
EG035T: Mercury	7439-97-6	0.0001	mg/L	<0.0001	0.01 mg/L	101	77.0	111
EP066: Polychlorinated Biphenyls (PCB) (QCLot: 4135355)								
EP066: Total Polychlorinated biphenyls	----	1	µg/L	<1	10 µg/L	94.1	68.9	113
EP068A: Organochlorine Pesticides (OC) (QCLot: 4135352)								
EP068: alpha-BHC	319-84-6	0.5	µg/L	<0.5	5 µg/L	95.4	64.9	107
EP068: Hexachlorobenzene (HCB)	118-74-1	0.5	µg/L	<0.5	5 µg/L	106	58.3	111
EP068: beta-BHC	319-85-7	0.5	µg/L	<0.5	5 µg/L	93.8	69.0	117
EP068: gamma-BHC	58-89-9	0.5	µg/L	<0.5	5 µg/L	94.8	70.0	112
EP068: delta-BHC	319-86-8	0.5	µg/L	<0.5	5 µg/L	93.8	68.9	110
EP068: Heptachlor	76-44-8	0.5	µg/L	<0.5	5 µg/L	92.9	65.2	108
EP068: Aldrin	309-00-2	0.5	µg/L	<0.5	5 µg/L	96.6	65.8	109
EP068: Heptachlor epoxide	1024-57-3	0.5	µg/L	<0.5	5 µg/L	87.2	67.1	107

Sub-Matrix: **WATER**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Acceptable Limits (%)	
				Result	Concentration	LCS	Low	High
EP068A: Organochlorine Pesticides (OC) (QCLot: 4135352) - continued								
EP068: trans-Chlordane	5103-74-2	0.5	µg/L	<0.5	5 µg/L	84.7	64.1	110
EP068: alpha-Endosulfan	959-98-8	0.5	µg/L	<0.5	5 µg/L	89.9	66.7	112
EP068: cis-Chlordane	5103-71-9	0.5	µg/L	<0.5	5 µg/L	85.1	63.2	111
EP068: Dieldrin	60-57-1	0.5	µg/L	<0.5	5 µg/L	84.6	65.2	113
EP068: 4.4`-DDE	72-55-9	0.5	µg/L	<0.5	5 µg/L	83.7	66.0	112
EP068: Endrin	72-20-8	0.5	µg/L	<0.5	5 µg/L	81.3	65.2	113
EP068: beta-Endosulfan	33213-65-9	0.5	µg/L	<0.5	5 µg/L	93.6	67.3	114
EP068: 4.4`-DDD	72-54-8	0.5	µg/L	<0.5	5 µg/L	81.6	72.0	122
EP068: Endrin aldehyde	7421-93-4	0.5	µg/L	<0.5	5 µg/L	80.2	66.9	109
EP068: Endosulfan sulfate	1031-07-8	0.5	µg/L	<0.5	5 µg/L	76.8	65.2	112
EP068: 4.4`-DDT	50-29-3	2	µg/L	<2.0	5 µg/L	84.3	65.2	112
EP068: Endrin ketone	53494-70-5	0.5	µg/L	<0.5	5 µg/L	83.8	63.8	110
EP068: Methoxychlor	72-43-5	2	µg/L	<2.0	5 µg/L	85.4	61.1	114
EP068B: Organophosphorus Pesticides (OP) (QCLot: 4135352)								
EP068: Dichlorvos	62-73-7	0.5	µg/L	<0.5	5 µg/L	93.1	65.6	114
EP068: Demeton-S-methyl	919-86-8	0.5	µg/L	<0.5	5 µg/L	99.8	63.7	113
EP068: Monocrotophos	6923-22-4	2	µg/L	<2.0	5 µg/L	36.7	19.7	48.0
EP068: Dimethoate	60-51-5	0.5	µg/L	<0.5	5 µg/L	96.8	69.5	110
EP068: Diazinon	333-41-5	0.5	µg/L	<0.5	5 µg/L	97.7	71.1	110
EP068: Chlorpyrifos-methyl	5598-13-0	0.5	µg/L	<0.5	5 µg/L	95.4	77.0	119
EP068: Parathion-methyl	298-00-0	2	µg/L	<2.0	5 µg/L	91.8	70.0	124
EP068: Malathion	121-75-5	0.5	µg/L	<0.5	5 µg/L	88.2	68.4	116
EP068: Fenthion	55-38-9	0.5	µg/L	<0.5	5 µg/L	85.4	68.6	112
EP068: Chlorpyrifos	2921-88-2	0.5	µg/L	<0.5	5 µg/L	91.6	75.0	119
EP068: Parathion	56-38-2	2	µg/L	<2.0	5 µg/L	91.9	67.0	121
EP068: Pirimphos-ethyl	23505-41-1	0.5	µg/L	<0.5	5 µg/L	87.6	69.0	121
EP068: Chlorfenvinphos	470-90-6	0.5	µg/L	<0.5	5 µg/L	87.9	71.8	110
EP068: Bromophos-ethyl	4824-78-6	0.5	µg/L	<0.5	5 µg/L	81.0	67.5	112
EP068: Fenamiphos	22224-92-6	0.5	µg/L	<0.5	5 µg/L	84.1	64.1	116
EP068: Prothiofos	34643-46-4	0.5	µg/L	<0.5	5 µg/L	82.5	67.8	114
EP068: Ethion	563-12-2	0.5	µg/L	<0.5	5 µg/L	79.0	74.0	120
EP068: Carbophenothion	786-19-6	0.5	µg/L	<0.5	5 µg/L	78.6	66.2	114
EP068: Azinphos Methyl	86-50-0	0.5	µg/L	<0.5	5 µg/L	103	51.6	128
EP074A: Monocyclic Aromatic Hydrocarbons (QCLot: 4137802)								
EP074: Styrene	100-42-5	5	µg/L	<5	10 µg/L	93.9	73.0	119
EP074: Isopropylbenzene	98-82-8	5	µg/L	<5	10 µg/L	93.4	76.0	118
EP074: n-Propylbenzene	103-65-1	5	µg/L	<5	10 µg/L	91.3	69.0	119
EP074: 1.3.5-Trimethylbenzene	108-67-8	5	µg/L	<5	10 µg/L	91.2	74.0	116
EP074: sec-Butylbenzene	135-98-8	5	µg/L	<5	10 µg/L	90.9	73.0	119

Sub-Matrix: **WATER**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Acceptable Limits (%)	
				Result	Concentration	LCS	Low	High
EP074A: Monocyclic Aromatic Hydrocarbons (QCLot: 4137802) - continued								
EP074: 1.2.4-Trimethylbenzene	95-63-6	5	µg/L	<5	10 µg/L	93.4	74.0	116
EP074: tert-Butylbenzene	98-06-6	5	µg/L	<5	10 µg/L	89.7	72.0	116
EP074: p-Isopropyltoluene	99-87-6	5	µg/L	<5	10 µg/L	91.8	71.0	119
EP074: n-Butylbenzene	104-51-8	5	µg/L	<5	10 µg/L	95.1	65.0	123
EP074B: Oxygenated Compounds (QCLot: 4137802)								
EP074: Vinyl Acetate	108-05-4	50	µg/L	<50	100 µg/L	93.5	61.4	134
EP074: 2-Butanone (MEK)	78-93-3	50	µg/L	<50	100 µg/L	97.8	73.6	130
EP074: 4-Methyl-2-pentanone (MIBK)	108-10-1	50	µg/L	<50	100 µg/L	104	66.0	132
EP074: 2-Hexanone (MBK)	591-78-6	50	µg/L	<50	100 µg/L	102	65.0	137
EP074C: Sulfonated Compounds (QCLot: 4137802)								
EP074: Carbon disulfide	75-15-0	5	µg/L	<5	10 µg/L	96.2	72.8	127
EP074D: Fumigants (QCLot: 4137802)								
EP074: 2.2-Dichloropropane	594-20-7	5	µg/L	<5	10 µg/L	90.5	68.0	122
EP074: 1.2-Dichloropropane	78-87-5	5	µg/L	<5	10 µg/L	93.4	76.0	118
EP074: cis-1.3-Dichloropropylene	10061-01-5	5	µg/L	<5	10 µg/L	94.6	62.0	120
EP074: trans-1.3-Dichloropropylene	10061-02-6	5	µg/L	<5	10 µg/L	97.8	60.0	114
EP074: 1.2-Dibromoethane (EDB)	106-93-4	5	µg/L	<5	10 µg/L	103	69.0	117
EP074E: Halogenated Aliphatic Compounds (QCLot: 4137802)								
EP074: Dichlorodifluoromethane	75-71-8	50	µg/L	<50	100 µg/L	81.1	60.6	138
EP074: Chloromethane	74-87-3	50	µg/L	<50	100 µg/L	86.1	67.4	130
EP074: Vinyl chloride	75-01-4	50	µg/L	<50	100 µg/L	77.3	69.4	129
EP074: Bromomethane	74-83-9	50	µg/L	<50	100 µg/L	96.3	56.0	140
EP074: Chloroethane	75-00-3	50	µg/L	<50	100 µg/L	89.0	61.0	139
EP074: Trichlorofluoromethane	75-69-4	50	µg/L	<50	100 µg/L	91.1	69.0	131
EP074: 1.1-Dichloroethene	75-35-4	5	µg/L	<5	10 µg/L	91.4	70.0	124
EP074: Iodomethane	74-88-4	5	µg/L	<5	10 µg/L	70.9	70.2	128
EP074: trans-1.2-Dichloroethene	156-60-5	5	µg/L	<5	10 µg/L	82.4	74.0	118
EP074: 1.1-Dichloroethane	75-34-3	5	µg/L	<5	10 µg/L	79.9	74.0	120
EP074: cis-1.2-Dichloroethene	156-59-2	5	µg/L	<5	10 µg/L	82.7	77.0	119
EP074: 1.1.1-Trichloroethane	71-55-6	5	µg/L	<5	10 µg/L	90.3	67.0	119
EP074: 1.1-Dichloropropylene	563-58-6	5	µg/L	<5	10 µg/L	89.5	73.0	119
EP074: Carbon Tetrachloride	56-23-5	5	µg/L	<5	10 µg/L	90.6	62.0	120
EP074: 1.2-Dichloroethane	107-06-2	5	µg/L	<5	10 µg/L	94.1	73.0	123
EP074: Trichloroethene	79-01-6	5	µg/L	<5	10 µg/L	90.6	76.0	118
EP074: Dibromomethane	74-95-3	5	µg/L	<5	10 µg/L	97.2	73.0	119
EP074: 1.1.2-Trichloroethane	79-00-5	5	µg/L	<5	10 µg/L	104	72.0	126
EP074: 1.3-Dichloropropane	142-28-9	5	µg/L	<5	10 µg/L	103	71.0	129
EP074: Tetrachloroethene	127-18-4	5	µg/L	<5	10 µg/L	91.6	72.0	124

Sub-Matrix: **WATER**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Acceptable Limits (%)	
				Result	Concentration	LCS	Low	High
EP074E: Halogenated Aliphatic Compounds (QCLot: 4137802) - continued								
EP074: 1.1.1.2-Tetrachloroethane	630-20-6	5	µg/L	<5	10 µg/L	99.4	66.0	114
EP074: trans-1.4-Dichloro-2-butene	110-57-6	5	µg/L	<5	10 µg/L	108	60.0	120
EP074: cis-1.4-Dichloro-2-butene	1476-11-5	5	µg/L	<5	10 µg/L	105	70.6	128
EP074: 1.1.2.2-Tetrachloroethane	79-34-5	5	µg/L	<5	10 µg/L	108	70.0	124
EP074: 1.2.3-Trichloropropane	96-18-4	5	µg/L	<5	10 µg/L	111	74.0	126
EP074: Pentachloroethane	76-01-7	5	µg/L	<5	10 µg/L	112	71.8	126
EP074: 1.2-Dibromo-3-chloropropane	96-12-8	5	µg/L	<5	10 µg/L	102	66.4	136
EP074F: Halogenated Aromatic Compounds (QCLot: 4137802)								
EP074: Chlorobenzene	108-90-7	5	µg/L	<5	10 µg/L	99.9	79.0	117
EP074: Bromobenzene	108-86-1	5	µg/L	<5	10 µg/L	101	76.0	116
EP074: 2-Chlorotoluene	95-49-8	5	µg/L	<5	10 µg/L	94.2	73.0	119
EP074: 4-Chlorotoluene	106-43-4	5	µg/L	<5	10 µg/L	97.2	73.0	119
EP074: 1.2.3-Trichlorobenzene	87-61-6	5	µg/L	<5	10 µg/L	108	67.0	123
EP074G: Trihalomethanes (QCLot: 4137802)								
EP074: Chloroform	67-66-3	5	µg/L	<5	10 µg/L	91.9	72.0	120
EP074: Bromodichloromethane	75-27-4	5	µg/L	<5	10 µg/L	94.3	64.0	118
EP074: Dibromochloromethane	124-48-1	5	µg/L	<5	10 µg/L	105	65.0	115
EP074: Bromoform	75-25-2	5	µg/L	<5	10 µg/L	111	73.5	126
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 4135353)								
EP075(SIM): Naphthalene	91-20-3	1	µg/L	<1.0	5 µg/L	75.9	50.0	94.0
EP075(SIM): Acenaphthylene	208-96-8	1	µg/L	<1.0	5 µg/L	83.4	63.6	114
EP075(SIM): Acenaphthene	83-32-9	1	µg/L	<1.0	5 µg/L	79.1	62.2	113
EP075(SIM): Fluorene	86-73-7	1	µg/L	<1.0	5 µg/L	79.7	63.9	115
EP075(SIM): Phenanthrene	85-01-8	1	µg/L	<1.0	5 µg/L	86.2	62.6	116
EP075(SIM): Anthracene	120-12-7	1	µg/L	<1.0	5 µg/L	91.9	64.3	116
EP075(SIM): Fluoranthene	206-44-0	1	µg/L	<1.0	5 µg/L	92.3	63.6	118
EP075(SIM): Pyrene	129-00-0	1	µg/L	<1.0	5 µg/L	91.9	63.1	118
EP075(SIM): Benz(a)anthracene	56-55-3	1	µg/L	<1.0	5 µg/L	95.0	64.1	117
EP075(SIM): Chrysene	218-01-9	1	µg/L	<1.0	5 µg/L	96.2	62.5	116
EP075(SIM): Benzo(b+j)fluoranthene	205-99-2 205-82-3	1	µg/L	<1.0	5 µg/L	82.6	61.7	119
EP075(SIM): Benzo(k)fluoranthene	207-08-9	1	µg/L	<1.0	5 µg/L	90.6	63.0	115
EP075(SIM): Benzo(a)pyrene	50-32-8	0.5	µg/L	<0.5	5 µg/L	85.2	63.3	117
EP075(SIM): Indeno(1.2.3.cd)pyrene	193-39-5	1	µg/L	<1.0	5 µg/L	90.4	59.9	118
EP075(SIM): Dibenz(a.h)anthracene	53-70-3	1	µg/L	<1.0	5 µg/L	90.8	61.2	117
EP075(SIM): Benzo(g.h.i)perylene	191-24-2	1	µg/L	<1.0	5 µg/L	82.4	59.1	118
EP075A: Phenolic Compounds (QCLot: 4135354)								
EP075: Phenol	108-95-2	2	µg/L	<2	10 µg/L	41.2	25.5	64.1

Sub-Matrix: **WATER**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Acceptable Limits (%)	
				Result	Concentration	LCS	Low	High
EP075A: Phenolic Compounds (QCLot: 4135354) - continued								
EP075: 2-Chlorophenol	95-57-8	2	µg/L	<2	10 µg/L	77.1	52.0	88.0
EP075: 2-Methylphenol	95-48-7	2	µg/L	<2	10 µg/L	81.1	50.0	94.0
EP075: 3- & 4-Methylphenol	1319-77-3	2	µg/L	<2	10 µg/L	74.4	45.0	96.2
EP075: 2-Nitrophenol	88-75-5	2	µg/L	<2	10 µg/L	86.0	48.0	98.0
EP075: 2.4-Dimethylphenol	105-67-9	2	µg/L	<2	10 µg/L	71.9	50.0	94.0
EP075: 2.4-Dichlorophenol	120-83-2	2	µg/L	<2	10 µg/L	89.2	61.9	109
EP075: 2.6-Dichlorophenol	87-65-0	2	µg/L	<2	10 µg/L	86.5	61.5	108
EP075: 4-Chloro-3-methylphenol	59-50-7	2	µg/L	<2	10 µg/L	88.2	61.4	107
EP075: 2.4.6-Trichlorophenol	88-06-2	2	µg/L	<2	10 µg/L	91.6	57.6	112
EP075: 2.4.5-Trichlorophenol	95-95-4	2	µg/L	<2	10 µg/L	93.1	58.0	110
EP075: Pentachlorophenol	87-86-5	4	µg/L	<4	20 µg/L	80.4	12.8	95.0
EP075B: Polynuclear Aromatic Hydrocarbons (QCLot: 4135354)								
EP075: Naphthalene	91-20-3	2	µg/L	<2	10 µg/L	78.1	51.0	95.0
EP075: 2-Methylnaphthalene	91-57-6	2	µg/L	<2	10 µg/L	80.5	59.0	108
EP075: 2-Chloronaphthalene	91-58-7	2	µg/L	<2	10 µg/L	75.6	60.6	106
EP075: Acenaphthylene	208-96-8	2	µg/L	<2	10 µg/L	87.8	64.0	108
EP075: Acenaphthene	83-32-9	2	µg/L	<2	10 µg/L	81.9	65.0	108
EP075: Fluorene	86-73-7	2	µg/L	<2	10 µg/L	87.2	65.2	107
EP075: Phenanthrene	85-01-8	2	µg/L	<2	10 µg/L	93.4	66.7	108
EP075: Anthracene	120-12-7	2	µg/L	<2	10 µg/L	95.6	65.8	108
EP075: Fluoranthene	206-44-0	2	µg/L	<2	10 µg/L	94.9	64.9	109
EP075: Pyrene	129-00-0	2	µg/L	<2	10 µg/L	95.1	60.1	111
EP075: N-2-Fluorenyl Acetamide	53-96-3	2	µg/L	<2	10 µg/L	96.5	59.7	110
EP075: Benz(a)anthracene	56-55-3	2	µg/L	<2	10 µg/L	95.4	62.2	112
EP075: Chrysene	218-01-9	2	µg/L	<2	10 µg/L	95.4	59.3	114
EP075: Benzo(b+j) & Benzo(k)fluoranthene	205-99-2 207-08-9	4	µg/L	<4	20 µg/L	97.2	60.1	111
EP075: 7.12-Dimethylbenz(a)anthracene	57-97-6	2	µg/L	<2	10 µg/L	69.5	50.0	108
EP075: Benzo(a)pyrene	50-32-8	2	µg/L	<2	10 µg/L	95.8	59.2	112
EP075: 3-Methylcholanthrene	56-49-5	2	µg/L	<2	10 µg/L	85.7	60.1	110
EP075: Indeno(1.2.3.cd)pyrene	193-39-5	2	µg/L	<2	10 µg/L	93.6	59.6	110
EP075: Dibenz(a.h)anthracene	53-70-3	2	µg/L	<2	10 µg/L	94.1	57.2	109
EP075: Benzo(g.h.i)perylene	191-24-2	2	µg/L	<2	10 µg/L	93.3	60.6	110
EP075: Benzo(a)pyrene TEQ (zero)	----	2	µg/L	<2	----	----	----	----
EP075C: Phthalate Esters (QCLot: 4135354)								
EP075: Dimethyl phthalate	131-11-3	2	µg/L	<2	10 µg/L	89.9	64.3	112
EP075: Diethyl phthalate	84-66-2	2	µg/L	<2	10 µg/L	90.9	67.3	111
EP075: Di-n-butyl phthalate	84-74-2	2	µg/L	<2	10 µg/L	97.7	68.4	122
EP075: Butyl benzyl phthalate	85-68-7	2	µg/L	<2	10 µg/L	94.9	61.2	114

Sub-Matrix: **WATER**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Acceptable Limits (%)	
				Result	Concentration	LCS	Low	High
EP075C: Phthalate Esters (QCLot: 4135354) - continued								
EP075: bis(2-ethylhexyl) phthalate	117-81-7	----	µg/L	----	10 µg/L	104	60.0	132
EP075: Di-n-octylphthalate	117-84-0	2	µg/L	<2	10 µg/L	96.3	62.1	115
EP075D: Nitrosamines (QCLot: 4135354)								
EP075: N-Nitrosomethylethylamine	10595-95-6	2	µg/L	<2	10 µg/L	58.4	46.0	110
EP075: N-Nitrosodiethylamine	55-18-5	2	µg/L	<2	10 µg/L	106	60.6	113
EP075: N-Nitrosopyrrolidine	930-55-2	4	µg/L	<4	10 µg/L	65.1	45.0	91.0
EP075: N-Nitrosomorpholine	59-89-2	2	µg/L	<2	10 µg/L	59.9	42.0	100
EP075: N-Nitrosodi-n-propylamine	621-64-7	2	µg/L	<2	10 µg/L	81.4	63.5	108
EP075: N-Nitrosopiperidine	100-75-4	2	µg/L	<2	10 µg/L	78.8	61.7	107
EP075: N-Nitrosodibutylamine	924-16-3	2	µg/L	<2	10 µg/L	72.4	62.5	108
EP075: N-Nitrosodiphenyl & Diphenylamine	86-30-6 122-39-4	4	µg/L	<4	20 µg/L	92.0	64.6	112
EP075: Methapyrilene	91-80-5	2	µg/L	<2	10 µg/L	47.8	23.3	125
EP075E: Nitroaromatics and Ketones (QCLot: 4135354)								
EP075: 2-Picoline	109-06-8	2	µg/L	<2	10 µg/L	50.6	41.0	109
EP075: Acetophenone	98-86-2	2	µg/L	<2	10 µg/L	81.9	68.3	112
EP075: Nitrobenzene	98-95-3	2	µg/L	<2	10 µg/L	96.9	68.3	112
EP075: Isophorone	78-59-1	2	µg/L	<2	10 µg/L	83.4	67.6	111
EP075: 2.6-Dinitrotoluene	606-20-2	4	µg/L	<4	10 µg/L	87.3	64.4	113
EP075: 2.4-Dinitrotoluene	121-14-2	4	µg/L	<4	10 µg/L	89.3	59.5	109
EP075: 1-Naphthylamine	134-32-7	2	µg/L	<2	10 µg/L	80.4	46.8	102
EP075: 4-Nitroquinoline-N-oxide	56-57-5	2	µg/L	<2	10 µg/L	88.9	40.0	96.0
EP075: 5-Nitro-o-toluidine	99-55-8	2	µg/L	<2	10 µg/L	91.0	58.3	106
EP075: Azobenzene	103-33-3	2	µg/L	<2	10 µg/L	88.3	66.0	112
EP075: 1.3.5-Trinitrobenzene	99-35-4	2	µg/L	<2	10 µg/L	85.4	46.0	108
EP075: Phenacetin	62-44-2	2	µg/L	<2	10 µg/L	93.4	57.8	101
EP075: 4-Aminobiphenyl	92-67-1	2	µg/L	<2	10 µg/L	105	60.1	112
EP075: Pentachloronitrobenzene	82-68-8	2	µg/L	<2	10 µg/L	89.3	59.0	109
EP075: Pronamide	23950-58-5	2	µg/L	<2	10 µg/L	106	62.7	109
EP075: Dimethylaminoazobenzene	60-11-7	2	µg/L	<2	10 µg/L	94.1	59.4	108
EP075: Chlorobenzilate	510-15-6	2	µg/L	<2	10 µg/L	94.3	57.7	110
EP075F: Haloethers (QCLot: 4135354)								
EP075: Bis(2-chloroethyl) ether	111-44-4	2	µg/L	<2	10 µg/L	76.7	69.1	112
EP075: Bis(2-chloroethoxy) methane	111-91-1	2	µg/L	<2	10 µg/L	82.2	66.2	111
EP075: 4-Chlorophenyl phenyl ether	7005-72-3	2	µg/L	<2	10 µg/L	88.2	64.7	109
EP075: 4-Bromophenyl phenyl ether	101-55-3	2	µg/L	<2	10 µg/L	90.1	61.6	108
EP075G: Chlorinated Hydrocarbons (QCLot: 4135354)								
EP075: 1.4-Dichlorobenzene	106-46-7	2	µg/L	<2	10 µg/L	70.0	41.0	97.0

Sub-Matrix: **WATER**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Acceptable Limits (%)	
				Result	Concentration	LCS	Low	High
EP075G: Chlorinated Hydrocarbons (QCLot: 4135354) - continued								
EP075: 1.3-Dichlorobenzene	541-73-1	2	µg/L	<2	10 µg/L	71.0	40.0	96.0
EP075: 1.2-Dichlorobenzene	95-50-1	2	µg/L	<2	10 µg/L	72.0	41.0	95.0
EP075: Hexachloroethane	67-72-1	2	µg/L	<2	10 µg/L	71.0	46.0	88.0
EP075: 1.2.4-Trichlorobenzene	120-82-1	2	µg/L	<2	10 µg/L	75.5	46.0	96.0
EP075: Hexachloropropylene	1888-71-7	2	µg/L	<2	10 µg/L	74.9	34.0	96.0
EP075: Hexachlorobutadiene	87-68-3	2	µg/L	<2	10 µg/L	74.6	37.4	100
EP075: Hexachlorocyclopentadiene	77-47-4	10	µg/L	<10	10 µg/L	85.6	23.5	107
EP075: Pentachlorobenzene	608-93-5	2	µg/L	<2	10 µg/L	81.6	64.5	107
EP075: Hexachlorobenzene (HCB)	118-74-1	4	µg/L	<4	10 µg/L	88.4	65.7	110
EP075H: Anilines and Benzidines (QCLot: 4135354)								
EP075: Aniline	62-53-3	2	µg/L	<2	10 µg/L	72.1	50.0	104
EP075: 4-Chloroaniline	106-47-8	2	µg/L	<2	10 µg/L	76.5	42.0	106
EP075: 2-Nitroaniline	88-74-4	4	µg/L	<4	10 µg/L	87.7	60.9	110
EP075: 3-Nitroaniline	99-09-2	4	µg/L	<4	10 µg/L	92.0	51.5	96.9
EP075: Dibenzofuran	132-64-9	2	µg/L	<2	10 µg/L	83.1	65.3	108
EP075: 4-Nitroaniline	100-01-6	2	µg/L	<2	10 µg/L	96.7	48.9	99.5
EP075: Carbazole	86-74-8	2	µg/L	<2	10 µg/L	98.6	64.3	107
EP075: 3.3`-Dichlorobenzidine	91-94-1	2	µg/L	<2	10 µg/L	105	60.3	119
EP075I: Organochlorine Pesticides (QCLot: 4135354)								
EP075: alpha-BHC	319-84-6	2	µg/L	<2	10 µg/L	91.8	64.3	110
EP075: beta-BHC	319-85-7	2	µg/L	<2	10 µg/L	93.5	53.0	107
EP075: gamma-BHC	58-89-9	2	µg/L	<2	10 µg/L	91.2	51.0	111
EP075: delta-BHC	319-86-8	2	µg/L	<2	10 µg/L	95.4	57.0	111
EP075: Heptachlor	76-44-8	2	µg/L	<2	10 µg/L	93.9	57.9	108
EP075: Aldrin	309-00-2	2	µg/L	<2	10 µg/L	94.9	56.0	112
EP075: Heptachlor epoxide	1024-57-3	2	µg/L	<2	10 µg/L	95.8	50.0	118
EP075: alpha-Endosulfan	959-98-8	2	µg/L	<2	10 µg/L	95.0	59.0	111
EP075: 4.4`-DDE	72-55-9	2	µg/L	<2	10 µg/L	95.5	53.0	115
EP075: Dieldrin	60-57-1	2	µg/L	<2	10 µg/L	97.3	59.0	115
EP075: Endrin	72-20-8	2	µg/L	<2	10 µg/L	95.3	58.0	114
EP075: beta-Endosulfan	33213-65-9	2	µg/L	<2	10 µg/L	96.4	54.0	116
EP075: 4.4`-DDD	72-54-8	2	µg/L	<2	10 µg/L	95.7	55.0	115
EP075: Endosulfan sulfate	1031-07-8	2	µg/L	<2	10 µg/L	99.2	52.8	114
EP075: 4.4`-DDT	50-29-3	4	µg/L	<4	10 µg/L	96.0	56.0	114
EP075: Sum of Aldrin + Dieldrin	309-00-2/60-57-1	4	µg/L	<4	----	----	----	----
EP075: Sum of DDD + DDE + DDT	72-54-8/72-55-9/50-2	4	µg/L	<4	----	----	----	----
EP075J: Organophosphorus Pesticides (QCLot: 4135354)								

Sub-Matrix: **WATER**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Acceptable Limits (%)	
				Result	Concentration	LCS	Low	High
EP075J: Organophosphorus Pesticides (QCLot: 4135354) - continued								
EP075: Dichlorvos	62-73-7	2	µg/L	<2	10 µg/L	85.8	51.0	113
EP075: Dimethoate	60-51-5	2	µg/L	<2	10 µg/L	84.5	43.0	109
EP075: Diazinon	333-41-5	2	µg/L	<2	10 µg/L	96.2	49.0	113
EP075: Chlorpyrifos-methyl	5598-13-0	2	µg/L	<2	10 µg/L	94.7	54.1	116
EP075: Malathion	121-75-5	2	µg/L	<2	10 µg/L	102	54.0	124
EP075: Fenthion	55-38-9	2	µg/L	<2	10 µg/L	97.2	57.0	115
EP075: Chlorpyrifos	2921-88-2	2	µg/L	<2	10 µg/L	93.8	53.0	109
EP075: Pirimphos-ethyl	23505-41-1	2	µg/L	<2	10 µg/L	97.1	55.0	111
EP075: Chlorfenvinphos	470-90-6	2	µg/L	<2	10 µg/L	97.1	50.0	116
EP075: Prothiofos	34643-46-4	2	µg/L	<2	10 µg/L	96.6	54.0	118
EP075: Ethion	563-12-2	2	µg/L	<2	10 µg/L	99.1	51.0	117
EP080/071: Total Petroleum Hydrocarbons (QCLot: 4135351)								
EP071: C10 - C14 Fraction	----	50	µg/L	<50	400 µg/L	78.6	55.8	112
EP071: C15 - C28 Fraction	----	100	µg/L	<100	600 µg/L	92.8	71.6	113
EP071: C29 - C36 Fraction	----	50	µg/L	<50	400 µg/L	92.2	56.0	121
EP080/071: Total Petroleum Hydrocarbons (QCLot: 4137803)								
EP080: C6 - C9 Fraction	----	20	µg/L	<20	260 µg/L	92.3	75.0	127
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 4135351)								
EP071: >C10 - C16 Fraction	----	100	µg/L	<100	500 µg/L	72.2	57.9	119
EP071: >C16 - C34 Fraction	----	100	µg/L	<100	700 µg/L	85.4	62.5	110
EP071: >C34 - C40 Fraction	----	100	µg/L	<100	300 µg/L	69.4	61.5	121
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 4137803)								
EP080: C6 - C10 Fraction	C6_C10	20	µg/L	<20	310 µg/L	94.9	75.0	127
EP080: BTEXN (QCLot: 4137803)								
EP080: Benzene	71-43-2	1	µg/L	<1	10 µg/L	94.1	70.0	122
EP080: Toluene	108-88-3	2	µg/L	<2	10 µg/L	104	69.0	123
EP080: Ethylbenzene	100-41-4	2	µg/L	<2	10 µg/L	99.7	70.0	120
EP080: meta- & para-Xylene	108-38-3 106-42-3	2	µg/L	<2	10 µg/L	98.6	69.0	121
EP080: ortho-Xylene	95-47-6	2	µg/L	<2	10 µg/L	102	72.0	122
EP080: Naphthalene	91-20-3	5	µg/L	<5	10 µg/L	108	70.0	120
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 4137474)								
EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	0.25 µg/L	88.0	72.0	130
EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	<0.01	0.25 µg/L	80.8	68.0	131
EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	<0.01	0.25 µg/L	83.6	65.0	140
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4137474)								
EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L	<0.1	1.25 µg/L	81.5	73.0	129
EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	<0.02	0.25 µg/L	77.8	72.0	129

Sub-Matrix: **WATER**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report: Result	Laboratory Control Spike (LCS) Report: Spike Concentration	Spike Recovery (%): LCS	Acceptable Limits (%): Low	Acceptable Limits (%): High
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4137474) - continued								
EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	<0.02	0.25 µg/L	92.8	72.0	129
EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	<0.02	0.25 µg/L	78.8	72.0	130
EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	<0.01	0.25 µg/L	82.4	71.0	133
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 4137474)								
EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L	<0.05	0.25 µg/L	77.0	63.0	143
EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.05	µg/L	<0.05	0.25 µg/L	81.0	64.0	140
EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.05	µg/L	<0.05	0.25 µg/L	81.2	67.0	138
EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.05	µg/L	<0.05	0.25 µg/L	85.0	71.4	144

Matrix Spike (MS) Report

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

Sub-Matrix: **SOIL**

Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Matrix Spike (MS) Report: Spike Concentration	SpikeRecovery(%): MS	Acceptable Limits (%): Low	Acceptable Limits (%): High
EG005(ED093)T: Total Metals by ICP-AES (QCLot: 4137376)							
ES2201683-003	SOP_BH103_0.2_220117	EG005T: Arsenic	7440-38-2	50 mg/kg	95.1	70.0	130
		EG005T: Cadmium	7440-43-9	50 mg/kg	95.5	70.0	130
		EG005T: Chromium	7440-47-3	50 mg/kg	95.3	68.0	132
		EG005T: Copper	7440-50-8	250 mg/kg	98.0	70.0	130
		EG005T: Lead	7439-92-1	250 mg/kg	94.8	70.0	130
		EG005T: Nickel	7440-02-0	50 mg/kg	96.2	70.0	130
		EG005T: Zinc	7440-66-6	250 mg/kg	90.1	66.0	133
EG005(ED093)T: Total Metals by ICP-AES (QCLot: 4137378)							
ES2201683-026	SOP_BH116_0.2_220117	EG005T: Arsenic	7440-38-2	50 mg/kg	93.4	70.0	130
		EG005T: Cadmium	7440-43-9	50 mg/kg	89.6	70.0	130
		EG005T: Chromium	7440-47-3	50 mg/kg	88.3	68.0	132
		EG005T: Copper	7440-50-8	250 mg/kg	95.5	70.0	130
		EG005T: Lead	7439-92-1	250 mg/kg	88.1	70.0	130
		EG005T: Nickel	7440-02-0	50 mg/kg	95.1	70.0	130
		EG005T: Zinc	7440-66-6	250 mg/kg	80.1	66.0	133
EG035T: Total Recoverable Mercury by FIMS (QCLot: 4137377)							
ES2201683-003	SOP_BH103_0.2_220117	EG035T: Mercury	7439-97-6	5 mg/kg	102	70.0	130
EG035T: Total Recoverable Mercury by FIMS (QCLot: 4137379)							
ES2201683-026	SOP_BH116_0.2_220117	EG035T: Mercury	7439-97-6	5 mg/kg	103	70.0	130
EP066: Polychlorinated Biphenyls (PCB) (QCLot: 4135395)							

Sub-Matrix: **SOIL**

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Acceptable Limits (%)	
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Concentration	MS	Low	High
EP066: Polychlorinated Biphenyls (PCB) (QCLot: 4135395) - continued							
ES2201683-003	SOP_BH103_0.2_220117	EP066: Total Polychlorinated biphenyls	----	1 mg/kg	109	70.0	130
EP066: Polychlorinated Biphenyls (PCB) (QCLot: 4135405)							
ES2201683-017	SOP_BH113_0.1_220118	EP066: Total Polychlorinated biphenyls	----	1 mg/kg	79.3	70.0	130
EP068A: Organochlorine Pesticides (OC) (QCLot: 4135394)							
ES2201683-003	SOP_BH103_0.2_220117	EP068: gamma-BHC	58-89-9	0.5 mg/kg	97.5	70.0	130
		EP068: Heptachlor	76-44-8	0.5 mg/kg	98.5	70.0	130
		EP068: Aldrin	309-00-2	0.5 mg/kg	99.2	70.0	130
		EP068: Dieldrin	60-57-1	0.5 mg/kg	108	70.0	130
		EP068: Endrin	72-20-8	2 mg/kg	104	70.0	130
		EP068: 4.4`-DDT	50-29-3	2 mg/kg	94.4	70.0	130
EP068A: Organochlorine Pesticides (OC) (QCLot: 4135404)							
ES2201683-017	SOP_BH113_0.1_220118	EP068: gamma-BHC	58-89-9	0.5 mg/kg	94.8	70.0	130
		EP068: Heptachlor	76-44-8	0.5 mg/kg	92.7	70.0	130
		EP068: Aldrin	309-00-2	0.5 mg/kg	102	70.0	130
		EP068: Dieldrin	60-57-1	0.5 mg/kg	108	70.0	130
		EP068: Endrin	72-20-8	2 mg/kg	88.2	70.0	130
		EP068: 4.4`-DDT	50-29-3	2 mg/kg	96.0	70.0	130
EP068B: Organophosphorus Pesticides (OP) (QCLot: 4135394)							
ES2201683-003	SOP_BH103_0.2_220117	EP068: Diazinon	333-41-5	0.5 mg/kg	115	70.0	130
		EP068: Chlorpyrifos-methyl	5598-13-0	0.5 mg/kg	103	70.0	130
		EP068: Pirimphos-ethyl	23505-41-1	0.5 mg/kg	91.2	70.0	130
		EP068: Bromophos-ethyl	4824-78-6	0.5 mg/kg	106	70.0	130
		EP068: Prothiofos	34643-46-4	0.5 mg/kg	104	70.0	130
EP068B: Organophosphorus Pesticides (OP) (QCLot: 4135404)							
ES2201683-017	SOP_BH113_0.1_220118	EP068: Diazinon	333-41-5	0.5 mg/kg	110	70.0	130
		EP068: Chlorpyrifos-methyl	5598-13-0	0.5 mg/kg	90.8	70.0	130
		EP068: Pirimphos-ethyl	23505-41-1	0.5 mg/kg	96.0	70.0	130
		EP068: Bromophos-ethyl	4824-78-6	0.5 mg/kg	76.2	70.0	130
		EP068: Prothiofos	34643-46-4	0.5 mg/kg	99.5	70.0	130
EP074E: Halogenated Aliphatic Compounds (QCLot: 4135434)							
ES2201683-003	SOP_BH103_0.2_220117	EP074: 1.1-Dichloroethene	75-35-4	2.5 mg/kg	94.1	70.0	130
		EP074: Trichloroethene	79-01-6	2.5 mg/kg	99.6	70.0	130
EP074E: Halogenated Aliphatic Compounds (QCLot: 4135484)							
ES2201683-013	SOP_BH111_1.0_220118	EP074: 1.1-Dichloroethene	75-35-4	2.5 mg/kg	95.8	70.0	130
		EP074: Trichloroethene	79-01-6	2.5 mg/kg	115	70.0	130
EP074F: Halogenated Aromatic Compounds (QCLot: 4135434)							

Sub-Matrix: **SOIL**

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Acceptable Limits (%)	
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Concentration	MS	Low	High
EP074F: Halogenated Aromatic Compounds (QCLot: 4135434) - continued							
ES2201683-003	SOP_BH103_0.2_220117	EP074: Chlorobenzene	108-90-7	2.5 mg/kg	116	70.0	130
EP074F: Halogenated Aromatic Compounds (QCLot: 4135484)							
ES2201683-013	SOP_BH111_1.0_220118	EP074: Chlorobenzene	108-90-7	2.5 mg/kg	126	70.0	130
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 4135393)							
ES2201683-003	SOP_BH103_0.2_220117	EP075(SIM): Acenaphthene	83-32-9	10 mg/kg	95.1	70.0	130
		EP075(SIM): Pyrene	129-00-0	10 mg/kg	105	70.0	130
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 4135403)							
ES2201683-017	SOP_BH113_0.1_220118	EP075(SIM): Acenaphthene	83-32-9	10 mg/kg	91.8	70.0	130
		EP075(SIM): Pyrene	129-00-0	10 mg/kg	104	70.0	130
EP075A: Phenolic Compounds (QCLot: 4135396)							
ES2201683-003	SOP_BH103_0.2_220117	EP075: Phenol	108-95-2	10 mg/kg	97.0	60.0	130
		EP075: 2-Chlorophenol	95-57-8	10 mg/kg	95.3	60.0	130
		EP075: 2-Nitrophenol	88-75-5	10 mg/kg	103	50.0	130
		EP075: 4-Chloro-3-methylphenol	59-50-7	10 mg/kg	112	50.0	130
		EP075: Pentachlorophenol	87-86-5	10 mg/kg	120	10.0	130
EP075B: Polynuclear Aromatic Hydrocarbons (QCLot: 4135396)							
ES2201683-003	SOP_BH103_0.2_220117	EP075: Acenaphthene	83-32-9	10 mg/kg	89.0	50.0	130
		EP075: Pyrene	129-00-0	10 mg/kg	95.0	50.0	130
EP075D: Nitrosamines (QCLot: 4135396)							
ES2201683-003	SOP_BH103_0.2_220117	EP075: N-Nitrosodi-n-propylamine	621-64-7	10 mg/kg	98.1	50.0	130
EP075E: Nitroaromatics and Ketones (QCLot: 4135396)							
ES2201683-003	SOP_BH103_0.2_220117	EP075: 2.4-Dinitrotoluene	121-14-2	10 mg/kg	109	40.0	130
EP075G: Chlorinated Hydrocarbons (QCLot: 4135396)							
ES2201683-003	SOP_BH103_0.2_220117	EP075: 1.4-Dichlorobenzene	106-46-7	10 mg/kg	92.0	60.0	130
		EP075: 1.2.4-Trichlorobenzene	120-82-1	10 mg/kg	96.1	50.0	130
EP080/071: Total Petroleum Hydrocarbons (QCLot: 4135392)							
ES2201683-003	SOP_BH103_0.2_220117	EP071: C10 - C14 Fraction	----	480 mg/kg	99.8	73.0	137
		EP071: C15 - C28 Fraction	----	3100 mg/kg	109	53.0	131
		EP071: C29 - C36 Fraction	----	2060 mg/kg	117	52.0	132
EP080/071: Total Petroleum Hydrocarbons (QCLot: 4135402)							
ES2201683-017	SOP_BH113_0.1_220118	EP071: C10 - C14 Fraction	----	480 mg/kg	103	73.0	137
		EP071: C15 - C28 Fraction	----	3100 mg/kg	116	53.0	131
		EP071: C29 - C36 Fraction	----	2060 mg/kg	123	52.0	132
EP080/071: Total Petroleum Hydrocarbons (QCLot: 4135433)							
ES2201683-003	SOP_BH103_0.2_220117	EP080: C6 - C9 Fraction	----	32.5 mg/kg	99.7	70.0	130

Sub-Matrix: **SOIL**

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Acceptable Limits (%)	
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Concentration	MS	Low	High
EP080/071: Total Petroleum Hydrocarbons (QCLot: 4135481)							
ES2201683-004	SOP_BH103_1.0_220117	EP080: C6 - C9 Fraction	----	32.5 mg/kg	102	70.0	130
EP080/071: Total Petroleum Hydrocarbons (QCLot: 4135483)							
ES2201683-013	SOP_BH111_1.0_220118	EP080: C6 - C9 Fraction	----	32.5 mg/kg	79.5	70.0	130
EP080/071: Total Petroleum Hydrocarbons (QCLot: 4135519)							
ES2201683-012	SOP_BH110_1.3_220118	EP080: C6 - C9 Fraction	----	32.5 mg/kg	93.4	70.0	130
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 4135392)							
ES2201683-003	SOP_BH103_0.2_220117	EP071: >C10 - C16 Fraction	----	860 mg/kg	100	73.0	137
		EP071: >C16 - C34 Fraction	----	4320 mg/kg	112	53.0	131
		EP071: >C34 - C40 Fraction	----	890 mg/kg	110	52.0	132
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 4135402)							
ES2201683-017	SOP_BH113_0.1_220118	EP071: >C10 - C16 Fraction	----	860 mg/kg	111	73.0	137
		EP071: >C16 - C34 Fraction	----	4320 mg/kg	120	53.0	131
		EP071: >C34 - C40 Fraction	----	890 mg/kg	124	52.0	132
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 4135433)							
ES2201683-003	SOP_BH103_0.2_220117	EP080: C6 - C10 Fraction	C6_C10	37.5 mg/kg	103	70.0	130
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 4135481)							
ES2201683-004	SOP_BH103_1.0_220117	EP080: C6 - C10 Fraction	C6_C10	37.5 mg/kg	104	70.0	130
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 4135483)							
ES2201683-013	SOP_BH111_1.0_220118	EP080: C6 - C10 Fraction	C6_C10	37.5 mg/kg	76.1	70.0	130
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 4135519)							
ES2201683-012	SOP_BH110_1.3_220118	EP080: C6 - C10 Fraction	C6_C10	37.5 mg/kg	92.6	70.0	130
EP080: BTEXN (QCLot: 4135433)							
ES2201683-003	SOP_BH103_0.2_220117	EP080: Benzene	71-43-2	2.5 mg/kg	78.6	70.0	130
		EP080: Toluene	108-88-3	2.5 mg/kg	83.7	70.0	130
		EP080: Ethylbenzene	100-41-4	2.5 mg/kg	87.9	70.0	130
		EP080: meta- & para-Xylene	108-38-3 106-42-3	2.5 mg/kg	88.3	70.0	130
		EP080: ortho-Xylene	95-47-6	2.5 mg/kg	90.6	70.0	130
		EP080: Naphthalene	91-20-3	2.5 mg/kg	87.1	70.0	130
EP080: BTEXN (QCLot: 4135481)							
ES2201683-004	SOP_BH103_1.0_220117	EP080: Benzene	71-43-2	2.5 mg/kg	91.7	70.0	130
		EP080: Toluene	108-88-3	2.5 mg/kg	90.5	70.0	130
		EP080: Ethylbenzene	100-41-4	2.5 mg/kg	90.4	70.0	130
		EP080: meta- & para-Xylene	108-38-3 106-42-3	2.5 mg/kg	88.9	70.0	130
		EP080: ortho-Xylene	95-47-6	2.5 mg/kg	90.4	70.0	130

Sub-Matrix: **SOIL**

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Acceptable Limits (%)	
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Concentration	MS	Low	High
EP080: BTEXN (QCLot: 4135481) - continued							
ES2201683-004	SOP_BH103_1.0_220117	EP080: Naphthalene	91-20-3	2.5 mg/kg	88.9	70.0	130
EP080: BTEXN (QCLot: 4135483)							
ES2201683-013	SOP_BH111_1.0_220118	EP080: Benzene	71-43-2	2.5 mg/kg	72.3	70.0	130
		EP080: Toluene	108-88-3	2.5 mg/kg	74.2	70.0	130
		EP080: Ethylbenzene	100-41-4	2.5 mg/kg	72.4	70.0	130
		EP080: meta- & para-Xylene	108-38-3 106-42-3	2.5 mg/kg	72.3	70.0	130
		EP080: ortho-Xylene	95-47-6	2.5 mg/kg	75.2	70.0	130
		EP080: Naphthalene	91-20-3	2.5 mg/kg	75.3	70.0	130
EP080: BTEXN (QCLot: 4135519)							
ES2201683-012	SOP_BH110_1.3_220118	EP080: Benzene	71-43-2	2.5 mg/kg	84.7	70.0	130
		EP080: Toluene	108-88-3	2.5 mg/kg	85.4	70.0	130
		EP080: Ethylbenzene	100-41-4	2.5 mg/kg	85.3	70.0	130
		EP080: meta- & para-Xylene	108-38-3 106-42-3	2.5 mg/kg	85.2	70.0	130
		EP080: ortho-Xylene	95-47-6	2.5 mg/kg	85.6	70.0	130
		EP080: Naphthalene	91-20-3	2.5 mg/kg	82.2	70.0	130
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 4135850)							
EP2200605-001	Anonymous	EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.00125 mg/kg	97.2	72.0	128
		EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.00125 mg/kg	77.6	67.0	130
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.00125 mg/kg	83.6	68.0	136
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4135850)							
EP2200605-001	Anonymous	EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.00625 mg/kg	89.6	71.0	135
		EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.00125 mg/kg	72.0	69.0	132
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.00125 mg/kg	# Not Determined	70.0	132
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.00125 mg/kg	# Not Determined	71.0	131
		EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.00125 mg/kg	# Not Determined	69.0	133
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 4135850)							
EP2200605-001	Anonymous	EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.00125 mg/kg	72.0	62.0	145
		EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.00125 mg/kg	# Not Determined	64.0	140
		EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.00125 mg/kg	# Not Determined	65.0	137
		EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.00125 mg/kg	# Not Determined	69.2	143

Sub-Matrix: **WATER**

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Acceptable Limits (%)	
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Concentration	MS	Low	High
EG020T: Total Metals by ICP-MS (QCLot: 4139064)							
ES2201683-035	RIN02_220118	EG020A-T: Arsenic	7440-38-2	1 mg/L	101	70.0	130
		EG020A-T: Cadmium	7440-43-9	0.25 mg/L	99.7	70.0	130
		EG020A-T: Chromium	7440-47-3	1 mg/L	102	70.0	130
		EG020A-T: Copper	7440-50-8	1 mg/L	102	70.0	130
		EG020A-T: Lead	7439-92-1	1 mg/L	101	70.0	130
		EG020A-T: Nickel	7440-02-0	1 mg/L	100	70.0	130
		EG020A-T: Zinc	7440-66-6	1 mg/L	100	70.0	130
EG035T: Total Recoverable Mercury by FIMS (QCLot: 4140039)							
ES2201683-035	RIN02_220118	EG035T: Mercury	7439-97-6	0.01 mg/L	97.6	70.0	130
EP074E: Halogenated Aliphatic Compounds (QCLot: 4137802)							
ES2201683-020	RIN01_220117	EP074: 1.1-Dichloroethene	75-35-4	25 µg/L	118	70.0	130
		EP074: Trichloroethene	79-01-6	25 µg/L	103	70.0	130
EP074F: Halogenated Aromatic Compounds (QCLot: 4137802)							
ES2201683-020	RIN01_220117	EP074: Chlorobenzene	108-90-7	25 µg/L	108	70.0	130
EP080/071: Total Petroleum Hydrocarbons (QCLot: 4137803)							
ES2201683-020	RIN01_220117	EP080: C6 - C9 Fraction	----	325 µg/L	108	70.0	130
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 4137803)							
ES2201683-020	RIN01_220117	EP080: C6 - C10 Fraction	C6_C10	375 µg/L	109	70.0	130
EP080: BTEXN (QCLot: 4137803)							
ES2201683-020	RIN01_220117	EP080: Benzene	71-43-2	25 µg/L	102	70.0	130
		EP080: Toluene	108-88-3	25 µg/L	108	70.0	130
		EP080: Ethylbenzene	100-41-4	25 µg/L	111	70.0	130
		EP080: meta- & para-Xylene	108-38-3 106-42-3	25 µg/L	113	70.0	130
		EP080: ortho-Xylene	95-47-6	25 µg/L	117	70.0	130
		EP080: Naphthalene	91-20-3	25 µg/L	108	70.0	130
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 4137474)							
ES2202142-003	Anonymous	EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.25 µg/L	106	72.0	130
		EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.25 µg/L	79.0	68.0	131
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.25 µg/L	106	65.0	140
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4137474)							
ES2202142-003	Anonymous	EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	1.25 µg/L	76.8	73.0	129
		EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.25 µg/L	85.2	72.0	129
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.25 µg/L	111	72.0	129
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.25 µg/L	91.4	72.0	130
		EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.25 µg/L	80.2	71.0	133

Sub-Matrix: **WATER**

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Acceptable Limits (%)	
Laboratory sample ID	*Sample ID*	*Method: Compound*	*CAS Number*	*Concentration*	*MS*	*Low*	*High*
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 4137474)							
ES2202142-003	Anonymous	EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.25 µg/L	87.2	63.0	143
		EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.25 µg/L	90.2	64.0	140
		EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.25 µg/L	88.6	67.0	138
		EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.25 µg/L	114	71.4	144

ALS Environmental

QA/QC Compliance Assessment to assist with Quality Review

Work Order	: **ES2201683**	Page	: 1 of 25
Client	: **ENVIRONMENTAL RESOURCES MANAGEMENT (ERM)**	Laboratory	: Environmental Division Sydney
Contact	: MS JESSICA LAWRENCE	Telephone	: +61-2-8784 8555
Project	: 0628507 SOP	Date Samples Received	: 19-Jan-2022
Site	: ----	Issue Date	: 01-Feb-2022
Sampler	: Ant R	No. of samples received	: 36
Order number	: ----	No. of samples analysed	: 36

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

Outliers : Analysis Holding Time Compliance

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

Outliers : Frequency of Quality Control Samples

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

Outliers : Quality Control Samples

Duplicates, Method Blanks, Laboratory Control Samples and Matrix Spikes

Matrix: **SOIL**

Compound Group Name	Laboratory Sample ID	Client Sample ID	Analyte	CAS Number	Data	Limits	Comment
Duplicate (DUP) RPDs							
EG005(ED093)T: Total Metals by ICP-AES	ES2201943--002	Anonymous	**Zinc**	7440-66-6	49.4 %	0% - 20%	**RPD exceeds LOR based limits**
Laboratory Control Spike (LCS) Recoveries							
EP075B: Polynuclear Aromatic Hydrocarbons	QC-4135396-002	----	**7.12-Dimethylbenz(a)anthracene**	57-97-6	111 %	48.1-106%	**Recovery greater than upper control limit**
EP075H: Anilines and Benzidines	QC-4135396-002	----	**3-Nitroaniline**	99-09-2	99.2 %	31.5-93.7%	**Recovery greater than upper control limit**
EP075H: Anilines and Benzidines	QC-4135396-002	----	**4-Nitroaniline**	100-01-6	122 %	42.0-112%	**Recovery greater than upper control limit**
Matrix Spike (MS) Recoveries							
EP231B: Perfluoroalkyl Carboxylic Acids	EP2200605--001	Anonymous	**Perfluorohexanoic acid (PFHxA)**	307-24-4	Not Determined	----	**MS recovery not determined, background level greater than or equal to 4x spike level.**
EP231B: Perfluoroalkyl Carboxylic Acids	EP2200605--001	Anonymous	**Perfluoroheptanoic acid (PFHpA)**	375-85-9	Not Determined	----	**MS recovery not determined, background level greater than or equal to 4x spike level.**
EP231B: Perfluoroalkyl Carboxylic Acids	EP2200605--001	Anonymous	**Perfluorooctanoic acid (PFOA)**	335-67-1	Not Determined	----	**MS recovery not determined, background level greater than or equal to 4x spike level.**
EP231D: (n:2) Fluorotelomer Sulfonic Acids	EP2200605--001	Anonymous	**6:2 Fluorotelomer sulfonic acid (6:2 FTS)**	27619-97-2	Not Determined	----	**MS recovery not determined, background level greater than or equal to 4x spike level.**
EP231D: (n:2) Fluorotelomer Sulfonic Acids	EP2200605--001	Anonymous	**8:2 Fluorotelomer sulfonic acid (8:2 FTS)**	39108-34-4	Not Determined	----	**MS recovery not determined, background level greater than or equal to 4x spike level.**
EP231D: (n:2) Fluorotelomer Sulfonic Acids	EP2200605--001	Anonymous	**10:2 Fluorotelomer sulfonic acid (10:2 FTS)**	120226-60-0	Not Determined	----	**MS recovery not determined, background level greater than or equal to 4x spike level.**

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	2	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	2	0.00	10.00	NEPM 2013 B3 & ALS QC Standard
Semivolatile Organic Compounds	0	2	0.00	10.00	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	0	2	0.00	10.00	NEPM 2013 B3 & ALS QC Standard
Matrix Spikes (MS)					

Matrix: **WATER**

Quality Control Sample Type	Count		Rate (%)		Quality Control Specification
Method	QC	Regular	Actual	Expected	
Matrix Spikes (MS) - Continued					
PAH/Phenols (GC/MS - SIM)	0	2	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	2	0.00	5.00	NEPM 2013 B3 & ALS QC Standard
Semivolatile Organic Compounds	0	2	0.00	5.00	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	0	2	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: **SOIL**

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

Method / *Container* / Client Sample ID(s)		*Sample Date*	*Extraction / Preparation*			*Analysis*		
			Date extracted	*Due for extraction*	*Evaluation*	*Date analysed*	*Due for analysis*	*Evaluation*
EA055: Moisture Content (Dried @ 105-110°C)								
Soil Glass Jar - Unpreserved (EA055)								
SOP_BH103_0.2_220117,	SOP_BH103_1.0_220117,	**17-Jan-2022**	**----**	----	----	**25-Jan-2022**	31-Jan-2022	✓
SOP_BH104_1.0_220117,	SOP_BH104_2.0_220117,							
SOP_BH105_0.2_220117,	SOP_BH105_2.0_220117,							
SOP_BH106_0.2_220117,	SOP_BH106_1.0_220117,							
SOP_BH110_0.2_220117,	SOP_BH116_0.2_220117,							
SOP_BH116_2.0_220117,	SOP_BH117_0.2_220117,							
SOP_BH119_0.2_220117,	SOP_BH119_1.0_220117,							
SOP_BH119_3.0_220117,	DUP01_220117							
Soil Glass Jar - Unpreserved (EA055)								
SOP_BH110_1.3_220118,	SOP_BH111_1.0_220118,	**18-Jan-2022**	**----**	----	----	**25-Jan-2022**	01-Feb-2022	✓
SOP_BH111_3.0_220118,	SOP_BH112_1.0_220118,							
SOP_BH112_5.0_220118,	SOP_BH113_0.1_220118,							
SOP_BH113_0.3_220118,	SOP_BH114_0.3_220118,							
SOP_BH114_2._220118,	SOP_BH115_0.1_220118,							
SOP_BH115_2._220118,	SOP_BH117_3.0_220118							

Matrix: **SOIL**

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

Method / Container / Client Sample ID(s)		Sample Date	Extraction / Preparation			Analysis		
			Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EA200: AS 4964 - 2004 Identification of Asbestos in Soils								
Snap Lock Bag: Separate bag received (EA200)								
SOP_BH103_0.2_220117,	SOP_BH104_1.0_220117,	**17-Jan-2022**	**----**	----	----	**25-Jan-2022**	16-Jul-2022	✓
SOP_BH105_0.2_220117,	SOP_BH106_0.2_220117,							
SOP_BH110_0.2_220117,	SOP_BH116_0.2_220117,							
SOP_BH117_0.2_220117,	SOP_BH119_0.2_220117							
Snap Lock Bag: Separate bag received (EA200)								
SOP_BH111_1.0_220118,	SOP_BH112_1.0_220118,	**18-Jan-2022**	**----**	----	----	**25-Jan-2022**	17-Jul-2022	✓
SOP_BH113_0.1_220118,	SOP_BH113_0.3_220118,							
SOP_BH114_0.3_220118,	SOP_BH115_0.1_220118							
EG005(ED093)T: Total Metals by ICP-AES								
Soil Glass Jar - Unpreserved (EG005T)								
SOP_BH103_0.2_220117,	SOP_BH103_1.0_220117,	**17-Jan-2022**	**25-Jan-2022**	16-Jul-2022	✓	**27-Jan-2022**	16-Jul-2022	✓
SOP_BH104_1.0_220117,	SOP_BH104_2.0_220117,							
SOP_BH105_0.2_220117,	SOP_BH105_2.0_220117,							
SOP_BH106_0.2_220117,	SOP_BH106_1.0_220117,							
SOP_BH110_0.2_220117,	SOP_BH116_0.2_220117,							
SOP_BH116_2.0_220117,	SOP_BH117_0.2_220117,							
SOP_BH119_0.2_220117,	SOP_BH119_1.0_220117,							
SOP_BH119_3.0_220117,	DUP01_220117							
Soil Glass Jar - Unpreserved (EG005T)								
SOP_BH110_1.3_220118,	SOP_BH111_1.0_220118,	**18-Jan-2022**	**25-Jan-2022**	17-Jul-2022	✓	**27-Jan-2022**	17-Jul-2022	✓
SOP_BH111_3.0_220118,	SOP_BH112_1.0_220118,							
SOP_BH112_5.0_220118,	SOP_BH113_0.1_220118,							
SOP_BH113_0.3_220118,	SOP_BH114_0.3_220118,							
SOP_BH114_2._220118,	SOP_BH115_0.1_220118,							
SOP_BH115_2._220118,	SOP_BH117_3.0_220118							

Matrix: **SOIL**

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

Method / Container / Client Sample ID(s)		Sample Date	Extraction / Preparation			Analysis		
			Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EG035T: Total Recoverable Mercury by FIMS								
Soil Glass Jar - Unpreserved (EG035T)								
SOP_BH103_0.2_220117,	SOP_BH103_1.0_220117,	**17-Jan-2022**	**25-Jan-2022**	14-Feb-2022	✓	**27-Jan-2022**	14-Feb-2022	✓
SOP_BH104_1.0_220117,	SOP_BH104_2.0_220117,							
SOP_BH105_0.2_220117,	SOP_BH105_2.0_220117,							
SOP_BH106_0.2_220117,	SOP_BH106_1.0_220117,							
SOP_BH110_0.2_220117,	SOP_BH116_0.2_220117,							
SOP_BH116_2.0_220117,	SOP_BH117_0.2_220117,							
SOP_BH119_0.2_220117,	SOP_BH119_1.0_220117,							
SOP_BH119_3.0_220117,	DUP01_220117							
Soil Glass Jar - Unpreserved (EG035T)								
SOP_BH110_1.3_220118,	SOP_BH111_1.0_220118,	**18-Jan-2022**	**25-Jan-2022**	15-Feb-2022	✓	**27-Jan-2022**	15-Feb-2022	✓
SOP_BH111_3.0_220118,	SOP_BH112_1.0_220118,							
SOP_BH112_5.0_220118,	SOP_BH113_0.1_220118,							
SOP_BH113_0.3_220118,	SOP_BH114_0.3_220118,							
SOP_BH114_2._220118,	SOP_BH115_0.1_220118,							
SOP_BH115_2._220118,	SOP_BH117_3.0_220118							
EP066: Polychlorinated Biphenyls (PCB)								
Soil Glass Jar - Unpreserved (EP066)								
SOP_BH103_0.2_220117,	SOP_BH103_1.0_220117,	**17-Jan-2022**	**25-Jan-2022**	31-Jan-2022	✓	**28-Jan-2022**	06-Mar-2022	✓
SOP_BH104_1.0_220117,	SOP_BH104_2.0_220117,							
SOP_BH105_0.2_220117,	SOP_BH105_2.0_220117,							
SOP_BH106_0.2_220117,	SOP_BH106_1.0_220117,							
SOP_BH110_0.2_220117,	SOP_BH116_0.2_220117,							
SOP_BH116_2.0_220117,	SOP_BH117_0.2_220117,							
SOP_BH119_0.2_220117,	SOP_BH119_1.0_220117,							
SOP_BH119_3.0_220117,	DUP01_220117							
Soil Glass Jar - Unpreserved (EP066)								
SOP_BH110_1.3_220118,	SOP_BH111_1.0_220118,	**18-Jan-2022**	**25-Jan-2022**	01-Feb-2022	✓	**28-Jan-2022**	06-Mar-2022	✓
SOP_BH111_3.0_220118,	SOP_BH112_1.0_220118,							
SOP_BH112_5.0_220118,	SOP_BH113_0.1_220118,							
SOP_BH113_0.3_220118,	SOP_BH114_0.3_220118,							
SOP_BH114_2._220118,	SOP_BH115_0.1_220118,							
SOP_BH115_2._220118,	SOP_BH117_3.0_220118							

Matrix: **SOIL**

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

Method / Container / Client Sample ID(s)		Sample Date	Extraction / Preparation			Analysis		
			Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP068A: Organochlorine Pesticides (OC)								
Soil Glass Jar - Unpreserved (EP068)								
SOP_BH103_0.2_220117,	SOP_BH103_1.0_220117,	**17-Jan-2022**	**25-Jan-2022**	31-Jan-2022	✓	**28-Jan-2022**	06-Mar-2022	✓
SOP_BH104_1.0_220117,	SOP_BH104_2.0_220117,							
SOP_BH105_0.2_220117,	SOP_BH105_2.0_220117,							
SOP_BH106_0.2_220117,	SOP_BH106_1.0_220117,							
SOP_BH110_0.2_220117,	SOP_BH116_0.2_220117,							
SOP_BH116_2.0_220117,	SOP_BH117_0.2_220117,							
SOP_BH119_0.2_220117,	SOP_BH119_1.0_220117,							
SOP_BH119_3.0_220117,	DUP01_220117							
Soil Glass Jar - Unpreserved (EP068)								
SOP_BH110_1.3_220118,	SOP_BH111_1.0_220118,	**18-Jan-2022**	**25-Jan-2022**	01-Feb-2022	✓	**28-Jan-2022**	06-Mar-2022	✓
SOP_BH111_3.0_220118,	SOP_BH112_1.0_220118,							
SOP_BH112_5.0_220118,	SOP_BH113_0.1_220118,							
SOP_BH113_0.3_220118,	SOP_BH114_0.3_220118,							
SOP_BH114_2._220118,	SOP_BH115_0.1_220118,							
SOP_BH115_2._220118,	SOP_BH117_3.0_220118							
EP068B: Organophosphorus Pesticides (OP)								
Soil Glass Jar - Unpreserved (EP068)								
SOP_BH103_0.2_220117,	SOP_BH103_1.0_220117,	**17-Jan-2022**	**25-Jan-2022**	31-Jan-2022	✓	**28-Jan-2022**	06-Mar-2022	✓
SOP_BH104_1.0_220117,	SOP_BH104_2.0_220117,							
SOP_BH105_0.2_220117,	SOP_BH105_2.0_220117,							
SOP_BH106_0.2_220117,	SOP_BH106_1.0_220117,							
SOP_BH110_0.2_220117,	SOP_BH116_0.2_220117,							
SOP_BH116_2.0_220117,	SOP_BH117_0.2_220117,							
SOP_BH119_0.2_220117,	SOP_BH119_1.0_220117,							
SOP_BH119_3.0_220117,	DUP01_220117							
Soil Glass Jar - Unpreserved (EP068)								
SOP_BH110_1.3_220118,	SOP_BH111_1.0_220118,	**18-Jan-2022**	**25-Jan-2022**	01-Feb-2022	✓	**28-Jan-2022**	06-Mar-2022	✓
SOP_BH111_3.0_220118,	SOP_BH112_1.0_220118,							
SOP_BH112_5.0_220118,	SOP_BH113_0.1_220118,							
SOP_BH113_0.3_220118,	SOP_BH114_0.3_220118,							
SOP_BH114_2._220118,	SOP_BH115_0.1_220118,							
SOP_BH115_2._220118,	SOP_BH117_3.0_220118							

Matrix: **SOIL**

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

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP074A: Monocyclic Aromatic Hydrocarbons							
Soil Glass Jar - Unpreserved (EP074)							
SOP_BH103_0.2_220117, SOP_BH104_1.0_220117, SOP_BH105_0.2_220117, SOP_BH106_0.2_220117, SOP_BH110_0.2_220117, SOP_BH116_0.2_220117, SOP_BH117_0.2_220117, SOP_BH119_1.0_220117	**17-Jan-2022**	**24-Jan-2022**	24-Jan-2022	✓	**24-Jan-2022**	24-Jan-2022	✓
Soil Glass Jar - Unpreserved (EP074)							
SOP_BH111_1.0_220118, SOP_BH112_1.0_220118, SOP_BH113_0.3_220118, SOP_BH114_0.3_220118, SOP_BH115_0.1_220118	**18-Jan-2022**	**24-Jan-2022**	25-Jan-2022	✓	**25-Jan-2022**	25-Jan-2022	✓
EP074B: Oxygenated Compounds							
Soil Glass Jar - Unpreserved (EP074)							
SOP_BH103_0.2_220117, SOP_BH104_1.0_220117, SOP_BH105_0.2_220117, SOP_BH106_0.2_220117, SOP_BH110_0.2_220117, SOP_BH116_0.2_220117, SOP_BH117_0.2_220117, SOP_BH119_1.0_220117	**17-Jan-2022**	**24-Jan-2022**	24-Jan-2022	✓	**24-Jan-2022**	24-Jan-2022	✓
Soil Glass Jar - Unpreserved (EP074)							
SOP_BH111_1.0_220118, SOP_BH112_1.0_220118, SOP_BH113_0.3_220118, SOP_BH114_0.3_220118, SOP_BH115_0.1_220118	**18-Jan-2022**	**24-Jan-2022**	25-Jan-2022	✓	**25-Jan-2022**	25-Jan-2022	✓
EP074C: Sulfonated Compounds							
Soil Glass Jar - Unpreserved (EP074)							
SOP_BH103_0.2_220117, SOP_BH104_1.0_220117, SOP_BH105_0.2_220117, SOP_BH106_0.2_220117, SOP_BH110_0.2_220117, SOP_BH116_0.2_220117, SOP_BH117_0.2_220117, SOP_BH119_1.0_220117	**17-Jan-2022**	**24-Jan-2022**	24-Jan-2022	✓	**24-Jan-2022**	24-Jan-2022	✓
Soil Glass Jar - Unpreserved (EP074)							
SOP_BH111_1.0_220118, SOP_BH112_1.0_220118, SOP_BH113_0.3_220118, SOP_BH114_0.3_220118, SOP_BH115_0.1_220118	**18-Jan-2022**	**24-Jan-2022**	25-Jan-2022	✓	**25-Jan-2022**	25-Jan-2022	✓
EP074D: Fumigants							
Soil Glass Jar - Unpreserved (EP074)							
SOP_BH103_0.2_220117, SOP_BH104_1.0_220117, SOP_BH105_0.2_220117, SOP_BH106_0.2_220117, SOP_BH110_0.2_220117, SOP_BH116_0.2_220117, SOP_BH117_0.2_220117, SOP_BH119_1.0_220117	**17-Jan-2022**	**24-Jan-2022**	24-Jan-2022	✓	**24-Jan-2022**	24-Jan-2022	✓
Soil Glass Jar - Unpreserved (EP074)							
SOP_BH111_1.0_220118, SOP_BH112_1.0_220118, SOP_BH113_0.3_220118, SOP_BH114_0.3_220118, SOP_BH115_0.1_220118	**18-Jan-2022**	**24-Jan-2022**	25-Jan-2022	✓	**25-Jan-2022**	25-Jan-2022	✓

Matrix: **SOIL**

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

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP074E: Halogenated Aliphatic Compounds							
Soil Glass Jar - Unpreserved (EP074)							
SOP_BH103_0.2_220117, SOP_BH104_1.0_220117, SOP_BH105_0.2_220117, SOP_BH106_0.2_220117, SOP_BH110_0.2_220117, SOP_BH116_0.2_220117, SOP_BH117_0.2_220117, SOP_BH119_1.0_220117	**17-Jan-2022**	**24-Jan-2022**	24-Jan-2022	✓	**24-Jan-2022**	24-Jan-2022	✓
Soil Glass Jar - Unpreserved (EP074)							
SOP_BH111_1.0_220118, SOP_BH112_1.0_220118, SOP_BH113_0.3_220118, SOP_BH114_0.3_220118, SOP_BH115_0.1_220118	**18-Jan-2022**	**24-Jan-2022**	25-Jan-2022	✓	**25-Jan-2022**	25-Jan-2022	✓
EP074F: Halogenated Aromatic Compounds							
Soil Glass Jar - Unpreserved (EP074)							
SOP_BH103_0.2_220117, SOP_BH104_1.0_220117, SOP_BH105_0.2_220117, SOP_BH106_0.2_220117, SOP_BH110_0.2_220117, SOP_BH116_0.2_220117, SOP_BH117_0.2_220117, SOP_BH119_1.0_220117	**17-Jan-2022**	**24-Jan-2022**	24-Jan-2022	✓	**24-Jan-2022**	24-Jan-2022	✓
Soil Glass Jar - Unpreserved (EP074)							
SOP_BH111_1.0_220118, SOP_BH112_1.0_220118, SOP_BH113_0.3_220118, SOP_BH114_0.3_220118, SOP_BH115_0.1_220118	**18-Jan-2022**	**24-Jan-2022**	25-Jan-2022	✓	**25-Jan-2022**	25-Jan-2022	✓
EP074G: Trihalomethanes							
Soil Glass Jar - Unpreserved (EP074)							
SOP_BH103_0.2_220117, SOP_BH104_1.0_220117, SOP_BH105_0.2_220117, SOP_BH106_0.2_220117, SOP_BH110_0.2_220117, SOP_BH116_0.2_220117, SOP_BH117_0.2_220117, SOP_BH119_1.0_220117	**17-Jan-2022**	**24-Jan-2022**	24-Jan-2022	✓	**24-Jan-2022**	24-Jan-2022	✓
Soil Glass Jar - Unpreserved (EP074)							
SOP_BH111_1.0_220118, SOP_BH112_1.0_220118, SOP_BH113_0.3_220118, SOP_BH114_0.3_220118, SOP_BH115_0.1_220118	**18-Jan-2022**	**24-Jan-2022**	25-Jan-2022	✓	**25-Jan-2022**	25-Jan-2022	✓

Matrix: **SOIL**

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

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons							
Soil Glass Jar - Unpreserved (EP075(SIM))							
SOP_BH103_0.2_220117, SOP_BH103_1.0_220117, SOP_BH104_1.0_220117, SOP_BH104_2.0_220117, SOP_BH105_0.2_220117, SOP_BH105_2.0_220117, SOP_BH106_0.2_220117, SOP_BH106_1.0_220117, SOP_BH110_0.2_220117, SOP_BH116_0.2_220117, SOP_BH116_2.0_220117, SOP_BH117_0.2_220117, SOP_BH119_0.2_220117, SOP_BH119_1.0_220117, SOP_BH119_3.0_220117, DUP01_220117	**17-Jan-2022**	**25-Jan-2022**	31-Jan-2022	✓	**28-Jan-2022**	06-Mar-2022	✓
Soil Glass Jar - Unpreserved (EP075(SIM))							
SOP_BH110_1.3_220118, SOP_BH111_1.0_220118, SOP_BH111_3.0_220118, SOP_BH112_1.0_220118, SOP_BH112_5.0_220118, SOP_BH113_0.1_220118, SOP_BH113_0.3_220118, SOP_BH114_0.3_220118, SOP_BH114_2._220118, SOP_BH115_0.1_220118, SOP_BH115_2._220118, SOP_BH117_3.0_220118	**18-Jan-2022**	**25-Jan-2022**	01-Feb-2022	✓	**28-Jan-2022**	06-Mar-2022	✓
EP075A: Phenolic Compounds							
Soil Glass Jar - Unpreserved (EP075)							
SOP_BH103_0.2_220117, SOP_BH104_1.0_220117, SOP_BH105_0.2_220117, SOP_BH106_0.2_220117, SOP_BH110_0.2_220117, SOP_BH116_0.2_220117, SOP_BH117_0.2_220117, SOP_BH119_1.0_220117	**17-Jan-2022**	**25-Jan-2022**	31-Jan-2022	✓	**28-Jan-2022**	06-Mar-2022	✓
Soil Glass Jar - Unpreserved (EP075)							
SOP_BH111_1.0_220118, SOP_BH112_1.0_220118, SOP_BH113_0.3_220118, SOP_BH114_0.3_220118, SOP_BH115_0.1_220118	**18-Jan-2022**	**25-Jan-2022**	01-Feb-2022	✓	**28-Jan-2022**	06-Mar-2022	✓
EP075B: Polynuclear Aromatic Hydrocarbons							
Soil Glass Jar - Unpreserved (EP075)							
SOP_BH103_0.2_220117, SOP_BH104_1.0_220117, SOP_BH105_0.2_220117, SOP_BH106_0.2_220117, SOP_BH110_0.2_220117, SOP_BH116_0.2_220117, SOP_BH117_0.2_220117, SOP_BH119_1.0_220117	**17-Jan-2022**	**25-Jan-2022**	31-Jan-2022	✓	**28-Jan-2022**	06-Mar-2022	✓
Soil Glass Jar - Unpreserved (EP075)							
SOP_BH111_1.0_220118, SOP_BH112_1.0_220118, SOP_BH113_0.3_220118, SOP_BH114_0.3_220118, SOP_BH115_0.1_220118	**18-Jan-2022**	**25-Jan-2022**	01-Feb-2022	✓	**28-Jan-2022**	06-Mar-2022	✓

Matrix: **SOIL**

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

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP075C: Phthalate Esters							
Soil Glass Jar - Unpreserved (EP075)							
SOP_BH103_0.2_220117, SOP_BH104_1.0_220117, SOP_BH105_0.2_220117, SOP_BH106_0.2_220117, SOP_BH110_0.2_220117, SOP_BH116_0.2_220117, SOP_BH117_0.2_220117, SOP_BH119_1.0_220117	**17-Jan-2022**	**25-Jan-2022**	31-Jan-2022	✓	**28-Jan-2022**	06-Mar-2022	✓
Soil Glass Jar - Unpreserved (EP075)							
SOP_BH111_1.0_220118, SOP_BH112_1.0_220118, SOP_BH113_0.3_220118, SOP_BH114_0.3_220118, SOP_BH115_0.1_220118	**18-Jan-2022**	**25-Jan-2022**	01-Feb-2022	✓	**28-Jan-2022**	06-Mar-2022	✓
EP075D: Nitrosamines							
Soil Glass Jar - Unpreserved (EP075)							
SOP_BH103_0.2_220117, SOP_BH104_1.0_220117, SOP_BH105_0.2_220117, SOP_BH106_0.2_220117, SOP_BH110_0.2_220117, SOP_BH116_0.2_220117, SOP_BH117_0.2_220117, SOP_BH119_1.0_220117	**17-Jan-2022**	**25-Jan-2022**	31-Jan-2022	✓	**28-Jan-2022**	06-Mar-2022	✓
Soil Glass Jar - Unpreserved (EP075)							
SOP_BH111_1.0_220118, SOP_BH112_1.0_220118, SOP_BH113_0.3_220118, SOP_BH114_0.3_220118, SOP_BH115_0.1_220118	**18-Jan-2022**	**25-Jan-2022**	01-Feb-2022	✓	**28-Jan-2022**	06-Mar-2022	✓
EP075E: Nitroaromatics and Ketones							
Soil Glass Jar - Unpreserved (EP075)							
SOP_BH103_0.2_220117, SOP_BH104_1.0_220117, SOP_BH105_0.2_220117, SOP_BH106_0.2_220117, SOP_BH110_0.2_220117, SOP_BH116_0.2_220117, SOP_BH117_0.2_220117, SOP_BH119_1.0_220117	**17-Jan-2022**	**25-Jan-2022**	31-Jan-2022	✓	**28-Jan-2022**	06-Mar-2022	✓
Soil Glass Jar - Unpreserved (EP075)							
SOP_BH111_1.0_220118, SOP_BH112_1.0_220118, SOP_BH113_0.3_220118, SOP_BH114_0.3_220118, SOP_BH115_0.1_220118	**18-Jan-2022**	**25-Jan-2022**	01-Feb-2022	✓	**28-Jan-2022**	06-Mar-2022	✓
EP075F: Haloethers							
Soil Glass Jar - Unpreserved (EP075)							
SOP_BH103_0.2_220117, SOP_BH104_1.0_220117, SOP_BH105_0.2_220117, SOP_BH106_0.2_220117, SOP_BH110_0.2_220117, SOP_BH116_0.2_220117, SOP_BH117_0.2_220117, SOP_BH119_1.0_220117	**17-Jan-2022**	**25-Jan-2022**	31-Jan-2022	✓	**28-Jan-2022**	06-Mar-2022	✓
Soil Glass Jar - Unpreserved (EP075)							
SOP_BH111_1.0_220118, SOP_BH112_1.0_220118, SOP_BH113_0.3_220118, SOP_BH114_0.3_220118, SOP_BH115_0.1_220118	**18-Jan-2022**	**25-Jan-2022**	01-Feb-2022	✓	**28-Jan-2022**	06-Mar-2022	✓

Matrix: **SOIL**

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

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP075G: Chlorinated Hydrocarbons							
Soil Glass Jar - Unpreserved (EP075)							
SOP_BH103_0.2_220117, SOP_BH104_1.0_220117, SOP_BH105_0.2_220117, SOP_BH106_0.2_220117, SOP_BH110_0.2_220117, SOP_BH116_0.2_220117, SOP_BH117_0.2_220117, SOP_BH119_1.0_220117	**17-Jan-2022**	**25-Jan-2022**	31-Jan-2022	✓	**28-Jan-2022**	06-Mar-2022	✓
Soil Glass Jar - Unpreserved (EP075)							
SOP_BH111_1.0_220118, SOP_BH112_1.0_220118, SOP_BH113_0.3_220118, SOP_BH114_0.3_220118, SOP_BH115_0.1_220118	**18-Jan-2022**	**25-Jan-2022**	01-Feb-2022	✓	**28-Jan-2022**	06-Mar-2022	✓
EP075H: Anilines and Benzidines							
Soil Glass Jar - Unpreserved (EP075)							
SOP_BH103_0.2_220117, SOP_BH104_1.0_220117, SOP_BH105_0.2_220117, SOP_BH106_0.2_220117, SOP_BH110_0.2_220117, SOP_BH116_0.2_220117, SOP_BH117_0.2_220117, SOP_BH119_1.0_220117	**17-Jan-2022**	**25-Jan-2022**	31-Jan-2022	✓	**28-Jan-2022**	06-Mar-2022	✓
Soil Glass Jar - Unpreserved (EP075)							
SOP_BH111_1.0_220118, SOP_BH112_1.0_220118, SOP_BH113_0.3_220118, SOP_BH114_0.3_220118, SOP_BH115_0.1_220118	**18-Jan-2022**	**25-Jan-2022**	01-Feb-2022	✓	**28-Jan-2022**	06-Mar-2022	✓
EP075I: Organochlorine Pesticides							
Soil Glass Jar - Unpreserved (EP075)							
SOP_BH103_0.2_220117, SOP_BH104_1.0_220117, SOP_BH105_0.2_220117, SOP_BH106_0.2_220117, SOP_BH110_0.2_220117, SOP_BH116_0.2_220117, SOP_BH117_0.2_220117, SOP_BH119_1.0_220117	**17-Jan-2022**	**25-Jan-2022**	31-Jan-2022	✓	**28-Jan-2022**	06-Mar-2022	✓
Soil Glass Jar - Unpreserved (EP075)							
SOP_BH111_1.0_220118, SOP_BH112_1.0_220118, SOP_BH113_0.3_220118, SOP_BH114_0.3_220118, SOP_BH115_0.1_220118	**18-Jan-2022**	**25-Jan-2022**	01-Feb-2022	✓	**28-Jan-2022**	06-Mar-2022	✓
EP075J: Organophosphorus Pesticides							
Soil Glass Jar - Unpreserved (EP075)							
SOP_BH103_0.2_220117, SOP_BH104_1.0_220117, SOP_BH105_0.2_220117, SOP_BH106_0.2_220117, SOP_BH110_0.2_220117, SOP_BH116_0.2_220117, SOP_BH117_0.2_220117, SOP_BH119_1.0_220117	**17-Jan-2022**	**25-Jan-2022**	31-Jan-2022	✓	**28-Jan-2022**	06-Mar-2022	✓
Soil Glass Jar - Unpreserved (EP075)							
SOP_BH111_1.0_220118, SOP_BH112_1.0_220118, SOP_BH113_0.3_220118, SOP_BH114_0.3_220118, SOP_BH115_0.1_220118	**18-Jan-2022**	**25-Jan-2022**	01-Feb-2022	✓	**28-Jan-2022**	06-Mar-2022	✓

Matrix: **SOIL**

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

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP080/071: Total Petroleum Hydrocarbons							
Soil Glass Jar - Unpreserved (EP080) SOP_BH103_0.2_220117, SOP_BH104_1.0_220117, SOP_BH105_0.2_220117, SOP_BH106_0.2_220117, SOP_BH110_0.2_220117, SOP_BH116_0.2_220117, SOP_BH117_0.2_220117, SOP_BH119_1.0_220117	**17-Jan-2022**	**24-Jan-2022**	31-Jan-2022	✓	**24-Jan-2022**	31-Jan-2022	✓
Soil Glass Jar - Unpreserved (EP080) TB, SOP_BH103_1.0_220117, SOP_BH104_2.0_220117, SOP_BH105_2.0_220117, SOP_BH106_1.0_220117, TB, SOP_BH116_2.0_220117, SOP_BH119_0.2_220117, SOP_BH119_3.0_220117, DUP01_220117	**17-Jan-2022**	**24-Jan-2022**	31-Jan-2022	✓	**28-Jan-2022**	31-Jan-2022	✓
Soil Glass Jar - Unpreserved (EP071) SOP_BH103_0.2_220117, SOP_BH103_1.0_220117, SOP_BH104_1.0_220117, SOP_BH104_2.0_220117, SOP_BH105_0.2_220117, SOP_BH105_2.0_220117, SOP_BH106_0.2_220117, SOP_BH106_1.0_220117, SOP_BH110_0.2_220117, SOP_BH116_0.2_220117, SOP_BH116_2.0_220117, SOP_BH117_0.2_220117, SOP_BH119_0.2_220117, SOP_BH119_1.0_220117, SOP_BH119_3.0_220117, DUP01_220117	**17-Jan-2022**	**25-Jan-2022**	31-Jan-2022	✓	**28-Jan-2022**	06-Mar-2022	✓
Soil Glass Jar - Unpreserved (EP080) SOP_BH111_1.0_220118, SOP_BH112_1.0_220118, SOP_BH113_0.3_220118, SOP_BH114_0.3_220118, SOP_BH115_0.1_220118	**18-Jan-2022**	**24-Jan-2022**	01-Feb-2022	✓	**25-Jan-2022**	01-Feb-2022	✓
Soil Glass Jar - Unpreserved (EP080) SOP_BH110_1.3_220118, SOP_BH111_3.0_220118, SOP_BH112_5.0_220118, SOP_BH113_0.1_220118, SOP_BH114_2._220118, SOP_BH115_2._220118, SOP_BH117_3.0_220118	**18-Jan-2022**	**24-Jan-2022**	01-Feb-2022	✓	**28-Jan-2022**	01-Feb-2022	✓
Soil Glass Jar - Unpreserved (EP071) SOP_BH110_1.3_220118, SOP_BH111_1.0_220118, SOP_BH111_3.0_220118, SOP_BH112_1.0_220118, SOP_BH112_5.0_220118, SOP_BH113_0.1_220118, SOP_BH113_0.3_220118, SOP_BH114_0.3_220118, SOP_BH114_2._220118, SOP_BH115_0.1_220118, SOP_BH115_2._220118, SOP_BH117_3.0_220118	**18-Jan-2022**	**25-Jan-2022**	01-Feb-2022	✓	**28-Jan-2022**	06-Mar-2022	✓

Matrix: **SOIL**

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

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions							
Soil Glass Jar - Unpreserved (EP080)							
SOP_BH103_0.2_220117, SOP_BH104_1.0_220117, SOP_BH105_0.2_220117, SOP_BH106_0.2_220117, SOP_BH110_0.2_220117, SOP_BH116_0.2_220117, SOP_BH117_0.2_220117, SOP_BH119_1.0_220117	**17-Jan-2022**	**24-Jan-2022**	31-Jan-2022	✓	**24-Jan-2022**	31-Jan-2022	✓
Soil Glass Jar - Unpreserved (EP080)							
TB, SOP_BH103_1.0_220117, SOP_BH104_2.0_220117, SOP_BH105_2.0_220117, SOP_BH106_1.0_220117, TB, SOP_BH116_2.0_220117, SOP_BH119_0.2_220117, SOP_BH119_3.0_220117, DUP01_220117	**17-Jan-2022**	**24-Jan-2022**	31-Jan-2022	✓	**28-Jan-2022**	31-Jan-2022	✓
Soil Glass Jar - Unpreserved (EP071)							
SOP_BH103_0.2_220117, SOP_BH103_1.0_220117, SOP_BH104_1.0_220117, SOP_BH104_2.0_220117, SOP_BH105_0.2_220117, SOP_BH105_2.0_220117, SOP_BH106_0.2_220117, SOP_BH106_1.0_220117, SOP_BH110_0.2_220117, SOP_BH116_0.2_220117, SOP_BH116_2.0_220117, SOP_BH117_0.2_220117, SOP_BH119_0.2_220117, SOP_BH119_1.0_220117, SOP_BH119_3.0_220117, DUP01_220117	**17-Jan-2022**	**25-Jan-2022**	31-Jan-2022	✓	**28-Jan-2022**	06-Mar-2022	✓
Soil Glass Jar - Unpreserved (EP080)							
SOP_BH111_1.0_220118, SOP_BH112_1.0_220118, SOP_BH113_0.3_220118, SOP_BH114_0.3_220118, SOP_BH115_0.1_220118	**18-Jan-2022**	**24-Jan-2022**	01-Feb-2022	✓	**25-Jan-2022**	01-Feb-2022	✓
Soil Glass Jar - Unpreserved (EP080)							
SOP_BH110_1.3_220118, SOP_BH111_3.0_220118, SOP_BH112_5.0_220118, SOP_BH113_0.1_220118, SOP_BH114_2._220118, SOP_BH115_2._220118, SOP_BH117_3.0_220118	**18-Jan-2022**	**24-Jan-2022**	01-Feb-2022	✓	**28-Jan-2022**	01-Feb-2022	✓
Soil Glass Jar - Unpreserved (EP071)							
SOP_BH110_1.3_220118, SOP_BH111_1.0_220118, SOP_BH111_3.0_220118, SOP_BH112_1.0_220118, SOP_BH112_5.0_220118, SOP_BH113_0.1_220118, SOP_BH113_0.3_220118, SOP_BH114_0.3_220118, SOP_BH114_2._220118, SOP_BH115_0.1_220118, SOP_BH115_2._220118, SOP_BH117_3.0_220118	**18-Jan-2022**	**25-Jan-2022**	01-Feb-2022	✓	**28-Jan-2022**	06-Mar-2022	✓

Matrix: **SOIL**

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

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP080: BTEXN							
Soil Glass Jar - Unpreserved (EP080)							
TS 1, TS 7, Trip Spike Control 1, Trip Spike Control 7	**14-Jan-2022**	**24-Jan-2022**	28-Jan-2022	✓	**28-Jan-2022**	28-Jan-2022	✓
Soil Glass Jar - Unpreserved (EP080)							
SOP_BH103_0.2_220117, SOP_BH104_1.0_220117, SOP_BH105_0.2_220117, SOP_BH106_0.2_220117, SOP_BH110_0.2_220117, SOP_BH116_0.2_220117, SOP_BH117_0.2_220117, SOP_BH119_1.0_220117	**17-Jan-2022**	**24-Jan-2022**	31-Jan-2022	✓	**24-Jan-2022**	31-Jan-2022	✓
Soil Glass Jar - Unpreserved (EP080)							
TB, SOP_BH103_1.0_220117, SOP_BH104_2.0_220117, SOP_BH105_2.0_220117, SOP_BH106_1.0_220117, TB, SOP_BH116_2.0_220117, SOP_BH119_0.2_220117, SOP_BH119_3.0_220117, DUP01_220117	**17-Jan-2022**	**24-Jan-2022**	31-Jan-2022	✓	**28-Jan-2022**	31-Jan-2022	✓
Soil Glass Jar - Unpreserved (EP080)							
SOP_BH111_1.0_220118, SOP_BH112_1.0_220118, SOP_BH113_0.3_220118, SOP_BH114_0.3_220118, SOP_BH115_0.1_220118	**18-Jan-2022**	**24-Jan-2022**	01-Feb-2022	✓	**25-Jan-2022**	01-Feb-2022	✓
Soil Glass Jar - Unpreserved (EP080)							
SOP_BH110_1.3_220118, SOP_BH111_3.0_220118, SOP_BH112_5.0_220118, SOP_BH113_0.1_220118, SOP_BH114_2._220118, SOP_BH115_2._220118, SOP_BH117_3.0_220118	**18-Jan-2022**	**24-Jan-2022**	01-Feb-2022	✓	**28-Jan-2022**	01-Feb-2022	✓
EP231A: Perfluoroalkyl Sulfonic Acids							
HDPE Soil Jar (EP231X)							
SOP_BH103_0.2_220117, SOP_BH104_1.0_220117, SOP_BH106_0.2_220117, SOP_BH110_0.2_220117, SOP_BH119_0.2_220117, SOP_BH119_1.0_220117, SOP_BH119_3.0_220117	**17-Jan-2022**	**25-Jan-2022**	16-Jul-2022	✓	**27-Jan-2022**	06-Mar-2022	✓
HDPE Soil Jar (EP231X)							
SOP_BH111_1.0_220118, SOP_BH111_3.0_220118, SOP_BH112_1.0_220118, SOP_BH112_5.0_220118, SOP_BH113_0.3_220118, SOP_BH114_0.3_220118	**18-Jan-2022**	**25-Jan-2022**	17-Jul-2022	✓	**27-Jan-2022**	06-Mar-2022	✓

Matrix: **SOIL**

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

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP231B: Perfluoroalkyl Carboxylic Acids							
HDPE Soil Jar (EP231X)							
SOP_BH103_0.2_220117, SOP_BH104_1.0_220117, SOP_BH106_0.2_220117, SOP_BH110_0.2_220117, SOP_BH119_0.2_220117, SOP_BH119_1.0_220117, SOP_BH119_3.0_220117	**17-Jan-2022**	**25-Jan-2022**	16-Jul-2022	✓	**27-Jan-2022**	06-Mar-2022	✓
HDPE Soil Jar (EP231X)							
SOP_BH111_1.0_220118, SOP_BH111_3.0_220118, SOP_BH112_1.0_220118, SOP_BH112_5.0_220118, SOP_BH113_0.3_220118, SOP_BH114_0.3_220118	**18-Jan-2022**	**25-Jan-2022**	17-Jul-2022	✓	**27-Jan-2022**	06-Mar-2022	✓
EP231D: (n:2) Fluorotelomer Sulfonic Acids							
HDPE Soil Jar (EP231X)							
SOP_BH103_0.2_220117, SOP_BH104_1.0_220117, SOP_BH106_0.2_220117, SOP_BH110_0.2_220117, SOP_BH119_0.2_220117, SOP_BH119_1.0_220117, SOP_BH119_3.0_220117	**17-Jan-2022**	**25-Jan-2022**	16-Jul-2022	✓	**27-Jan-2022**	06-Mar-2022	✓
HDPE Soil Jar (EP231X)							
SOP_BH111_1.0_220118, SOP_BH111_3.0_220118, SOP_BH112_1.0_220118, SOP_BH112_5.0_220118, SOP_BH113_0.3_220118, SOP_BH114_0.3_220118	**18-Jan-2022**	**25-Jan-2022**	17-Jul-2022	✓	**27-Jan-2022**	06-Mar-2022	✓
EP231P: PFAS Sums							
HDPE Soil Jar (EP231X)							
SOP_BH103_0.2_220117, SOP_BH104_1.0_220117, SOP_BH106_0.2_220117, SOP_BH110_0.2_220117, SOP_BH119_0.2_220117, SOP_BH119_1.0_220117, SOP_BH119_3.0_220117	**17-Jan-2022**	**25-Jan-2022**	16-Jul-2022	✓	**27-Jan-2022**	06-Mar-2022	✓
HDPE Soil Jar (EP231X)							
SOP_BH111_1.0_220118, SOP_BH111_3.0_220118, SOP_BH112_1.0_220118, SOP_BH112_5.0_220118, SOP_BH113_0.3_220118, SOP_BH114_0.3_220118	**18-Jan-2022**	**25-Jan-2022**	17-Jul-2022	✓	**27-Jan-2022**	06-Mar-2022	✓

Matrix: **WATER**

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

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EG020T: Total Metals by ICP-MS							
Clear Plastic Bottle - Nitric Acid; Unfiltered (EG020A-T)							
RIN01_220117	**17-Jan-2022**	**27-Jan-2022**	16-Jul-2022	✓	**27-Jan-2022**	16-Jul-2022	✓
Clear Plastic Bottle - Nitric Acid; Unfiltered (EG020A-T)							
RIN02_220118	**18-Jan-2022**	**27-Jan-2022**	17-Jul-2022	✓	**27-Jan-2022**	17-Jul-2022	✓

Matrix: **WATER**

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

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EG035T: Total Recoverable Mercury by FIMS							
Clear Plastic Bottle - Nitric Acid; Unfiltered (EG035T) RIN01_220117	**17-Jan-2022**	**----**	----	----	**28-Jan-2022**	14-Feb-2022	✓
Clear Plastic Bottle - Nitric Acid; Unfiltered (EG035T) RIN02_220118	**18-Jan-2022**	**----**	----	----	**28-Jan-2022**	15-Feb-2022	✓
EP066: Polychlorinated Biphenyls (PCB)							
Amber Glass Bottle - Unpreserved (EP066) RIN01_220117	**17-Jan-2022**	**24-Jan-2022**	24-Jan-2022	✓	**28-Jan-2022**	05-Mar-2022	✓
Amber Glass Bottle - Unpreserved (EP066) RIN02_220118	**18-Jan-2022**	**24-Jan-2022**	25-Jan-2022	✓	**28-Jan-2022**	05-Mar-2022	✓
EP068A: Organochlorine Pesticides (OC)							
Amber Glass Bottle - Unpreserved (EP068) RIN01_220117	**17-Jan-2022**	**24-Jan-2022**	24-Jan-2022	✓	**28-Jan-2022**	05-Mar-2022	✓
Amber Glass Bottle - Unpreserved (EP068) RIN02_220118	**18-Jan-2022**	**24-Jan-2022**	25-Jan-2022	✓	**28-Jan-2022**	05-Mar-2022	✓
EP068B: Organophosphorus Pesticides (OP)							
Amber Glass Bottle - Unpreserved (EP068) RIN01_220117	**17-Jan-2022**	**24-Jan-2022**	24-Jan-2022	✓	**28-Jan-2022**	05-Mar-2022	✓
Amber Glass Bottle - Unpreserved (EP068) RIN02_220118	**18-Jan-2022**	**24-Jan-2022**	25-Jan-2022	✓	**28-Jan-2022**	05-Mar-2022	✓
EP074A: Monocyclic Aromatic Hydrocarbons							
Amber VOC Vial - Sulfuric Acid (EP074) RIN01_220117	**17-Jan-2022**	**28-Jan-2022**	31-Jan-2022	✓	**28-Jan-2022**	31-Jan-2022	✓
Amber VOC Vial - Sulfuric Acid (EP074) RIN02_220118	**18-Jan-2022**	**28-Jan-2022**	01-Feb-2022	✓	**28-Jan-2022**	01-Feb-2022	✓
EP074B: Oxygenated Compounds							
Amber VOC Vial - Sulfuric Acid (EP074) RIN01_220117	**17-Jan-2022**	**28-Jan-2022**	31-Jan-2022	✓	**28-Jan-2022**	31-Jan-2022	✓
Amber VOC Vial - Sulfuric Acid (EP074) RIN02_220118	**18-Jan-2022**	**28-Jan-2022**	01-Feb-2022	✓	**28-Jan-2022**	01-Feb-2022	✓
EP074C: Sulfonated Compounds							
Amber VOC Vial - Sulfuric Acid (EP074) RIN01_220117	**17-Jan-2022**	**28-Jan-2022**	31-Jan-2022	✓	**28-Jan-2022**	31-Jan-2022	✓
Amber VOC Vial - Sulfuric Acid (EP074) RIN02_220118	**18-Jan-2022**	**28-Jan-2022**	01-Feb-2022	✓	**28-Jan-2022**	01-Feb-2022	✓
EP074D: Fumigants							
Amber VOC Vial - Sulfuric Acid (EP074) RIN01_220117	**17-Jan-2022**	**28-Jan-2022**	31-Jan-2022	✓	**28-Jan-2022**	31-Jan-2022	✓
Amber VOC Vial - Sulfuric Acid (EP074) RIN02_220118	**18-Jan-2022**	**28-Jan-2022**	01-Feb-2022	✓	**28-Jan-2022**	01-Feb-2022	✓

Matrix: **WATER**

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

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP074E: Halogenated Aliphatic Compounds							
Amber VOC Vial - Sulfuric Acid (EP074) RIN01_220117	**17-Jan-2022**	**28-Jan-2022**	31-Jan-2022	✓	**28-Jan-2022**	31-Jan-2022	✓
Amber VOC Vial - Sulfuric Acid (EP074) RIN02_220118	**18-Jan-2022**	**28-Jan-2022**	01-Feb-2022	✓	**28-Jan-2022**	01-Feb-2022	✓
EP074F: Halogenated Aromatic Compounds							
Amber VOC Vial - Sulfuric Acid (EP074) RIN01_220117	**17-Jan-2022**	**28-Jan-2022**	31-Jan-2022	✓	**28-Jan-2022**	31-Jan-2022	✓
Amber VOC Vial - Sulfuric Acid (EP074) RIN02_220118	**18-Jan-2022**	**28-Jan-2022**	01-Feb-2022	✓	**28-Jan-2022**	01-Feb-2022	✓
EP074G: Trihalomethanes							
Amber VOC Vial - Sulfuric Acid (EP074) RIN01_220117	**17-Jan-2022**	**28-Jan-2022**	31-Jan-2022	✓	**28-Jan-2022**	31-Jan-2022	✓
Amber VOC Vial - Sulfuric Acid (EP074) RIN02_220118	**18-Jan-2022**	**28-Jan-2022**	01-Feb-2022	✓	**28-Jan-2022**	01-Feb-2022	✓
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons							
Amber Glass Bottle - Unpreserved (EP075(SIM)) RIN01_220117	**17-Jan-2022**	**24-Jan-2022**	24-Jan-2022	✓	**28-Jan-2022**	05-Mar-2022	✓
Amber Glass Bottle - Unpreserved (EP075(SIM)) RIN02_220118	**18-Jan-2022**	**24-Jan-2022**	25-Jan-2022	✓	**28-Jan-2022**	05-Mar-2022	✓
EP075A: Phenolic Compounds							
Amber Glass Bottle - Unpreserved (EP075) RIN01_220117	**17-Jan-2022**	**24-Jan-2022**	24-Jan-2022	✓	**28-Jan-2022**	05-Mar-2022	✓
Amber Glass Bottle - Unpreserved (EP075) RIN02_220118	**18-Jan-2022**	**24-Jan-2022**	25-Jan-2022	✓	**28-Jan-2022**	05-Mar-2022	✓
EP075B: Polynuclear Aromatic Hydrocarbons							
Amber Glass Bottle - Unpreserved (EP075) RIN01_220117	**17-Jan-2022**	**24-Jan-2022**	24-Jan-2022	✓	**28-Jan-2022**	05-Mar-2022	✓
Amber Glass Bottle - Unpreserved (EP075) RIN02_220118	**18-Jan-2022**	**24-Jan-2022**	25-Jan-2022	✓	**28-Jan-2022**	05-Mar-2022	✓
EP075C: Phthalate Esters							
Amber Glass Bottle - Unpreserved (EP075) RIN01_220117	**17-Jan-2022**	**24-Jan-2022**	24-Jan-2022	✓	**28-Jan-2022**	05-Mar-2022	✓
Amber Glass Bottle - Unpreserved (EP075) RIN02_220118	**18-Jan-2022**	**24-Jan-2022**	25-Jan-2022	✓	**28-Jan-2022**	05-Mar-2022	✓
EP075D: Nitrosamines							
Amber Glass Bottle - Unpreserved (EP075) RIN01_220117	**17-Jan-2022**	**24-Jan-2022**	24-Jan-2022	✓	**28-Jan-2022**	05-Mar-2022	✓
Amber Glass Bottle - Unpreserved (EP075) RIN02_220118	**18-Jan-2022**	**24-Jan-2022**	25-Jan-2022	✓	**28-Jan-2022**	05-Mar-2022	✓

Matrix: **WATER**

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

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP075E: Nitroaromatics and Ketones							
Amber Glass Bottle - Unpreserved (EP075) RIN01_220117	**17-Jan-2022**	**24-Jan-2022**	24-Jan-2022	✓	**28-Jan-2022**	05-Mar-2022	✓
Amber Glass Bottle - Unpreserved (EP075) RIN02_220118	**18-Jan-2022**	**24-Jan-2022**	25-Jan-2022	✓	**28-Jan-2022**	05-Mar-2022	✓
EP075F: Haloethers							
Amber Glass Bottle - Unpreserved (EP075) RIN01_220117	**17-Jan-2022**	**24-Jan-2022**	24-Jan-2022	✓	**28-Jan-2022**	05-Mar-2022	✓
Amber Glass Bottle - Unpreserved (EP075) RIN02_220118	**18-Jan-2022**	**24-Jan-2022**	25-Jan-2022	✓	**28-Jan-2022**	05-Mar-2022	✓
EP075G: Chlorinated Hydrocarbons							
Amber Glass Bottle - Unpreserved (EP075) RIN01_220117	**17-Jan-2022**	**24-Jan-2022**	24-Jan-2022	✓	**28-Jan-2022**	05-Mar-2022	✓
Amber Glass Bottle - Unpreserved (EP075) RIN02_220118	**18-Jan-2022**	**24-Jan-2022**	25-Jan-2022	✓	**28-Jan-2022**	05-Mar-2022	✓
EP075H: Anilines and Benzidines							
Amber Glass Bottle - Unpreserved (EP075) RIN01_220117	**17-Jan-2022**	**24-Jan-2022**	24-Jan-2022	✓	**28-Jan-2022**	05-Mar-2022	✓
Amber Glass Bottle - Unpreserved (EP075) RIN02_220118	**18-Jan-2022**	**24-Jan-2022**	25-Jan-2022	✓	**28-Jan-2022**	05-Mar-2022	✓
EP075I: Organochlorine Pesticides							
Amber Glass Bottle - Unpreserved (EP075) RIN01_220117	**17-Jan-2022**	**24-Jan-2022**	24-Jan-2022	✓	**28-Jan-2022**	05-Mar-2022	✓
Amber Glass Bottle - Unpreserved (EP075) RIN02_220118	**18-Jan-2022**	**24-Jan-2022**	25-Jan-2022	✓	**28-Jan-2022**	05-Mar-2022	✓
EP075J: Organophosphorus Pesticides							
Amber Glass Bottle - Unpreserved (EP075) RIN01_220117	**17-Jan-2022**	**24-Jan-2022**	24-Jan-2022	✓	**28-Jan-2022**	05-Mar-2022	✓
Amber Glass Bottle - Unpreserved (EP075) RIN02_220118	**18-Jan-2022**	**24-Jan-2022**	25-Jan-2022	✓	**28-Jan-2022**	05-Mar-2022	✓
EP080/071: Total Petroleum Hydrocarbons							
Amber Glass Bottle - Unpreserved (EP071) RIN01_220117	**17-Jan-2022**	**24-Jan-2022**	24-Jan-2022	✓	**28-Jan-2022**	05-Mar-2022	✓
Amber Glass Bottle - Unpreserved (EP071) RIN02_220118	**18-Jan-2022**	**24-Jan-2022**	25-Jan-2022	✓	**28-Jan-2022**	05-Mar-2022	✓
Amber VOC Vial - Sulfuric Acid (EP080) RIN01_220117	**17-Jan-2022**	**28-Jan-2022**	31-Jan-2022	✓	**28-Jan-2022**	31-Jan-2022	✓
Amber VOC Vial - Sulfuric Acid (EP080) RIN02_220118	**18-Jan-2022**	**28-Jan-2022**	01-Feb-2022	✓	**28-Jan-2022**	01-Feb-2022	✓

Matrix: **WATER**

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

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions							
Amber Glass Bottle - Unpreserved (EP071)							
RIN01_220117	**17-Jan-2022**	**24-Jan-2022**	24-Jan-2022	✓	**28-Jan-2022**	05-Mar-2022	✓
Amber Glass Bottle - Unpreserved (EP071)							
RIN02_220118	**18-Jan-2022**	**24-Jan-2022**	25-Jan-2022	✓	**28-Jan-2022**	05-Mar-2022	✓
Amber VOC Vial - Sulfuric Acid (EP080)							
RIN01_220117	**17-Jan-2022**	**28-Jan-2022**	31-Jan-2022	✓	**28-Jan-2022**	31-Jan-2022	✓
Amber VOC Vial - Sulfuric Acid (EP080)							
RIN02_220118	**18-Jan-2022**	**28-Jan-2022**	01-Feb-2022	✓	**28-Jan-2022**	01-Feb-2022	✓
EP080: BTEXN							
Amber VOC Vial - Sulfuric Acid (EP080)							
RIN01_220117	**17-Jan-2022**	**28-Jan-2022**	31-Jan-2022	✓	**28-Jan-2022**	31-Jan-2022	✓
Amber VOC Vial - Sulfuric Acid (EP080)							
RIN02_220118	**18-Jan-2022**	**28-Jan-2022**	01-Feb-2022	✓	**28-Jan-2022**	01-Feb-2022	✓
EP231A: Perfluoroalkyl Sulfonic Acids							
HDPE (no PTFE) (EP231X)							
RIN01_220117	**17-Jan-2022**	**25-Jan-2022**	16-Jul-2022	✓	**27-Jan-2022**	16-Jul-2022	✓
HDPE (no PTFE) (EP231X)							
RIN02_220118	**18-Jan-2022**	**25-Jan-2022**	17-Jul-2022	✓	**27-Jan-2022**	17-Jul-2022	✓
EP231B: Perfluoroalkyl Carboxylic Acids							
HDPE (no PTFE) (EP231X)							
RIN01_220117	**17-Jan-2022**	**25-Jan-2022**	16-Jul-2022	✓	**27-Jan-2022**	16-Jul-2022	✓
HDPE (no PTFE) (EP231X)							
RIN02_220118	**18-Jan-2022**	**25-Jan-2022**	17-Jul-2022	✓	**27-Jan-2022**	17-Jul-2022	✓
EP231D: (n:2) Fluorotelomer Sulfonic Acids							
HDPE (no PTFE) (EP231X)							
RIN01_220117	**17-Jan-2022**	**25-Jan-2022**	16-Jul-2022	✓	**27-Jan-2022**	16-Jul-2022	✓
HDPE (no PTFE) (EP231X)							
RIN02_220118	**18-Jan-2022**	**25-Jan-2022**	17-Jul-2022	✓	**27-Jan-2022**	17-Jul-2022	✓
EP231P: PFAS Sums							
HDPE (no PTFE) (EP231X)							
RIN01_220117	**17-Jan-2022**	**25-Jan-2022**	16-Jul-2022	✓	**27-Jan-2022**	16-Jul-2022	✓
HDPE (no PTFE) (EP231X)							
RIN02_220118	**18-Jan-2022**	**25-Jan-2022**	17-Jul-2022	✓	**27-Jan-2022**	17-Jul-2022	✓

Quality Control Parameter Frequency Compliance

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

Matrix: **SOIL**

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

Quality Control Sample Type		Count		Rate (%)			Quality Control Specification
Analytical Methods	*Method*	*QC*	*Regular*	***Actual***	***Expected***	*Evaluation*	
Laboratory Duplicates (DUP)							
Moisture Content	EA055	4	35	**11.43**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
PAH/Phenols (SIM)	EP075(SIM)	3	29	**10.34**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	2	19	**10.53**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	EP068	3	28	**10.71**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Polychlorinated Biphenyls (PCB)	EP066	3	28	**10.71**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Semivolatile Organic Compounds	EP075	2	13	**15.38**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	4	34	**11.76**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	4	35	**11.43**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	3	29	**10.34**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	6	54	**11.11**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Volatile Organic Compounds	EP074	2	13	**15.38**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Laboratory Control Samples (LCS)							
PAH/Phenols (SIM)	EP075(SIM)	2	29	**6.90**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	1	19	**5.26**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	EP068	2	28	**7.14**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Polychlorinated Biphenyls (PCB)	EP066	2	28	**7.14**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Semivolatile Organic Compounds	EP075	1	13	**7.69**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	2	34	**5.88**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	2	35	**5.71**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	2	29	**6.90**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	4	54	**7.41**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Volatile Organic Compounds	EP074	2	13	**15.38**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Method Blanks (MB)							
PAH/Phenols (SIM)	EP075(SIM)	2	29	**6.90**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	1	19	**5.26**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	EP068	2	28	**7.14**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Polychlorinated Biphenyls (PCB)	EP066	2	28	**7.14**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Semivolatile Organic Compounds	EP075	1	13	**7.69**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	2	34	**5.88**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	2	35	**5.71**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	2	29	**6.90**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	4	54	**7.41**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Volatile Organic Compounds	EP074	2	13	**15.38**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Matrix Spikes (MS)							
PAH/Phenols (SIM)	EP075(SIM)	2	29	**6.90**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	1	19	**5.26**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard

Matrix: **SOIL**

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

Quality Control Sample Type		Count		Rate (%)			Quality Control Specification
Analytical Methods	Method	QC	Regular	Actual	Expected	Evaluation	
Matrix Spikes (MS) - Continued							
Pesticides by GCMS	EP068	2	28	7.14	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Polychlorinated Biphenyls (PCB)	EP066	2	28	7.14	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Semivolatile Organic Compounds	EP075	1	13	7.69	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	2	34	5.88	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	2	35	5.71	5.00	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	2	29	6.90	5.00	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	4	54	7.41	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Volatile Organic Compounds	EP074	2	13	15.38	5.00	✓	NEPM 2013 B3 & ALS QC Standard

Matrix: **WATER**

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

Quality Control Sample Type		Count		Rate (%)			Quality Control Specification
Analytical Methods	Method	QC	Regular	Actual	Expected	Evaluation	
Laboratory Duplicates (DUP)							
PAH/Phenols (GC/MS - SIM)	EP075(SIM)	0	2	0.00	10.00	×	NEPM 2013 B3 & ALS QC Standard
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	2	12	16.67	10.00	✓	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	EP068	0	2	0.00	10.00	×	NEPM 2013 B3 & ALS QC Standard
Polychlorinated Biphenyls (PCB)	EP066	0	2	0.00	10.00	×	NEPM 2013 B3 & ALS QC Standard
Semivolatile Organic Compounds	EP075	0	2	0.00	10.00	×	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	2	11	18.18	10.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-MS - Suite A	EG020A-T	2	15	13.33	10.00	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	0	2	0.00	10.00	×	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	2	17	11.76	10.00	✓	NEPM 2013 B3 & ALS QC Standard
Volatile Organic Compounds	EP074	2	16	12.50	10.00	✓	NEPM 2013 B3 & ALS QC Standard
Laboratory Control Samples (LCS)							
PAH/Phenols (GC/MS - SIM)	EP075(SIM)	1	2	50.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	1	12	8.33	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	EP068	1	2	50.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Polychlorinated Biphenyls (PCB)	EP066	1	2	50.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Semivolatile Organic Compounds	EP075	1	2	50.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	1	11	9.09	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-MS - Suite A	EG020A-T	1	15	6.67	5.00	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	1	2	50.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	1	17	5.88	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Volatile Organic Compounds	EP074	1	16	6.25	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Method Blanks (MB)							
PAH/Phenols (GC/MS - SIM)	EP075(SIM)	1	2	50.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	1	12	8.33	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	EP068	1	2	50.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Polychlorinated Biphenyls (PCB)	EP066	1	2	50.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Semivolatile Organic Compounds	EP075	1	2	50.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard

Matrix: **WATER**

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

Quality Control Sample Type		Count		Rate (%)			Quality Control Specification
Analytical Methods	*Method*	*QC*	*Regular*	***Actual***	***Expected***	*Evaluation*	
Method Blanks (MB) - Continued							
Total Mercury by FIMS	EG035T	1	11	**9.09**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-MS - Suite A	EG020A-T	1	15	**6.67**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	1	2	**50.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	1	17	**5.88**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Volatile Organic Compounds	EP074	1	16	**6.25**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Matrix Spikes (MS)							
PAH/Phenols (GC/MS - SIM)	EP075(SIM)	0	2	**0.00**	**5.00**	×	NEPM 2013 B3 & ALS QC Standard
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	1	12	**8.33**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	EP068	0	2	**0.00**	**5.00**	×	NEPM 2013 B3 & ALS QC Standard
Polychlorinated Biphenyls (PCB)	EP066	0	2	**0.00**	**5.00**	×	NEPM 2013 B3 & ALS QC Standard
Semivolatile Organic Compounds	EP075	0	2	**0.00**	**5.00**	×	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	1	11	**9.09**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-MS - Suite A	EG020A-T	1	15	**6.67**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	0	2	**0.00**	**5.00**	×	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	1	17	**5.88**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Volatile Organic Compounds	EP074	1	16	**6.25**	**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).
Asbestos Identification in Soils	EA200	SOIL	AS 4964 Method for the qualitative identification of asbestos in bulk samples Analysis by Polarised Light Microscopy including dispersion staining
Total Metals by ICP-AES	EG005T	SOIL	In house: Referenced to APHA 3120; USEPA SW 846 - 6010. Metals are determined following an appropriate acid digestion of the soil. The ICPAES technique ionises samples in a plasma, emitting a characteristic spectrum based on metals present. Intensities at selected wavelengths are compared against those of matrix matched standards. This method is compliant with NEPM Schedule B(3)
Total Mercury by FIMS	EG035T	SOIL	In house: Referenced to APHA 3112 Hg - B (Flow-injection (SnCl2) (Cold Vapour generation) AAS) FIM-AAS is an automated flameless atomic absorption technique. Mercury in solids are determined following an appropriate acid digestion. Ionic mercury is reduced online to atomic mercury vapour by SnCl2 which is then purged into a heated quartz cell. Quantification is by comparing absorbance against a calibration curve. This method is compliant with NEPM Schedule B(3)
Polychlorinated Biphenyls (PCB)	EP066	SOIL	In house: Referenced to USEPA SW 846 - 8270 Extracts are analysed by Capillary GC/MS and quantification is by comparison against an established 5 point calibration curve. This method is compliant with NEPM Schedule B(3).
Pesticides by GCMS	EP068	SOIL	In house: Referenced to USEPA SW 846 - 8270 Extracts are analysed by Capillary GC/MS and quantification is by comparison against an established 5 point calibration curve. This technique is compliant with NEPM Schedule B(3).
TRH - Semivolatile Fraction	EP071	SOIL	In house: Referenced to USEPA SW 846 - 8015 Sample extracts are analysed by Capillary GC/FID and quantified against alkane standards over the range C10 - C40. Compliant with NEPM Schedule B(3).
Volatile Organic Compounds	EP074	SOIL	In house: Referenced to USEPA SW 846 - 8260 Extracts are analysed by Purge and Trap, Capillary GC/MS. Quantification is by comparison against an established 5 point calibration curve. This method is compliant with NEPM Schedule B(3).
Semivolatile Organic Compounds	EP075	SOIL	In house: Referenced to USEPA SW 846 - 8270 Extracts are analysed by Capillary GC/MS and quantification is by comparison against an established 5 point calibration curve. This technique is compliant with NEPM Schedule B(3).
PAH/Phenols (SIM)	EP075(SIM)	SOIL	In house: Referenced to USEPA SW 846 - 8270. Extracts are analysed by Capillary GC/MS in Selective Ion Mode (SIM) 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	SOIL	In house: Referenced to USEPA SW 846 - 8260. Extracts are analysed by Purge and Trap, Capillary GC/MS. Quantification is by comparison against an established 5 point calibration curve. Compliant with NEPM Schedule B(3) amended.

Analytical Methods	Method	Matrix	Method Descriptions
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	SOIL	In-house: Analysis of soils by solvent extraction followed by LC-Electrospray-MS-MS, Negative Mode using MRM using internal standard quantitation. Isotopically labelled analogues of target analytes used as internal standards and surrogates are added to a portion of soil which is then extracted with MTBE and an ion pairing reagent. A portion of extract is exchanged into the analytical solvent mixture, combined with an equal volume reagent water and filtered for analysis. Method procedures and data quality objectives conform to US DoD QSM 5.3, table B-15 requirements.
Total Metals by ICP-MS - Suite A	EG020A-T	WATER	In house: Referenced to APHA 3125; USEPA SW846 - 6020, ALS QWI-EN/EG020. 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.
Total Mercury by FIMS	EG035T	WATER	In house: Referenced to APHA 3112 Hg - B (Flow-injection (SnCl2)(Cold Vapour generation) AAS) FIM-AAS is an automated flameless atomic absorption technique. A bromate/bromide reagent is used to oxidise any organic mercury compounds in the unfiltered sample. The ionic mercury is reduced online to atomic mercury vapour by SnCl2 which is then purged into a heated quartz cell. Quantification is by comparing absorbance against a calibration curve. This method is compliant with NEPM Schedule B(3).
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)
Volatile Organic Compounds	EP074	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. This method is compliant with NEPM Schedule B(3)
Semivolatile Organic Compounds	EP075	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)
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)

Analytical Methods	Method	Matrix	Method Descriptions
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	WATER	In-house: Analysis of fresh and saline waters by Solid Phase Extraction (SPE) followed by LC-Electrospray-MS-MS, Negative Mode using MRM and internal standard quantitation. Isotopically labelled analogues of target analytes used as internal standards and surrogates are added to the sample container. The entire contents are transferred to a solid phase extraction (SPE) cartridge. The sample container is successively rinsed with aliquots of the elution solvent. The eluted extract is combined with an equal volume of reagent water and a portion is filtered for analysis. Method procedures and data quality objectives conform to US DoD QSM 5.3, table B-15 requirements.

Preparation Methods	Method	Matrix	Method Descriptions
Hot Block Digest for metals in soils sediments and sludges	EN69	SOIL	In house: Referenced to USEPA 200.2. Hot Block Acid Digestion 1.0g of sample is heated with Nitric and Hydrochloric acids, then cooled. Peroxide is added and samples heated and cooled again before being filtered and bulked to volume for analysis. Digest is appropriate for determination of selected metals in sludge, sediments, and soils. This method is compliant with NEPM Schedule B(3).
Methanolic Extraction of Soils for Purge and Trap	ORG16	SOIL	In house: Referenced to USEPA SW 846 - 5030A. 5g of solid is shaken with surrogate and 10mL methanol prior to analysis by Purge and Trap - GC/MS.
Tumbler Extraction of Solids	ORG17	SOIL	In house: Mechanical agitation (tumbler). 10g of sample, Na2SO4 and surrogate are extracted with 30mL 1:1 DCM/Acetone by end over end tumble. The solvent is decanted, dehydrated and concentrated (by KD) to the desired volume for analysis.
QuECheRS Extraction of Solids	ORG71	SOIL	In house: Sequential extractions with Acetonitrile/Methanol by shaking. Extraction efficiency aided by the addition of salts under acidic conditions. Where relevant, interferences from co-extracted organics are removed with dispersive clean-up media (dSPE). The extract is either diluted or concentrated and exchanged into the analytical solvent.
Digestion for Total Recoverable Metals	EN25	WATER	In house: Referenced to USEPA SW846-3005. Method 3005 is a Nitric/Hydrochloric acid digestion procedure used to prepare surface and ground water samples for analysis by ICPAES or ICPMS. This method is compliant with NEPM Schedule B(3)
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.
Solid Phase Extraction (SPE) for PFAS in water	ORG72	WATER	In-house: Isotopically labelled analogues of target analytes used as internal standards and surrogates are added to the sample container. The entire contents are transferred to a solid phase extraction (SPE) cartridge. The sample container is successively rinsed with aliquots of the elution solvent. The eluted extract is combined with an equal volume of reagent water and a portion is filtered for analysis. Method procedures conform to US DoD QSM 5.3, table B-15 requirements.

CHAIN OF CUSTODY

ALS Laboratory: please tick →

☐ADELAIDE 21 Burma Road Pooraka SA 5095 Ph: 08 8359 0890 E: adelaide@alsglobal.com

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☐GLADSTONE 46 Callemondah Drive Clinton QLD 4680 Ph: 07 7471 5600 E: gladstone@alsglobal.com

☐MACKAY 78 Harbour Road Mackay QLD 4740 Ph: 07 4944 0177 E: mackay@alsglobal.com

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☐NOWRA 4/13 Geary Place North Nowra NSW 2541 Ph: 02 4423 2063 E: nowra@alsglobal.com

☐PERTH 10 Hod Way Malaga WA 6090 Ph: 08 9209 7655 E: samples.perth@alsglobal.com

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☐TOWNSVILLE 14-15 Desma Court Bohle QLD 4818 Ph: 07 4796 0600 E: townsville.environmental@alsglobal.com

☐WOLLONGONG 99 Kenny Street Wollongong NSW 2500 Ph: 02 4225 3125 E: wollongong@alsglobal.com

CLIENT: ERM	TURNAROUND REQUIREMENTS: (Standard TAT may be longer for some tests e.g., Ultra Trace Organics)	X Standard TAT (List due date):	FOR LABORATORY USE ONLY (Circle)
OFFICE: SYDNEY		☐ Non Standard or urgent TAT (List due date):	Custody Seal Intact? Yes No N/A
PROJECT: 0628507 SOP PROJECT NO.:	ALS QUOTE NO.:	COC SEQUENCE NUMBER (Circle)	Free ice / frozen ice bricks present upon receipt? Yes No N/A
ORDER NUMBER: PURCHASE ORDER NO.:	COUNTRY OF ORIGIN: Australia	COC: 1 2 3 4 5 6 7	Random Sample Temperature on Receipt: °C
PROJECT MANAGER: [redacted] Jess L / Nick G CONTACT PH: 0415 833 925		OF: 1 2 3 4 5 6 7	Other comment:
SAMPLER: [redacted] Ant R SAMPLER MOBILE: 0427 199 735	RELINQUISHED BY:	RECEIVED BY: Scott Mc	RELINQUISHED BY:
COC Emailed to ALS? (YES (NO) EDD FORMAT (or default):			
Email Reports to (will default to PM if no other addresses are listed): Nick Grbich + Jess Lawrence	DATE/TIME:	DATE/TIME: 19/11/22 1440	DATE/TIME:
Email Invoice to (will default to PM if no other addresses are listed): Default erm			

COMMENTS/SPECIAL HANDLING/STORAGE OR DISPOSAL: [redacted] Repeat.

ALS USE ONLY	SAMPLE DETAILS MATRIX: Solid(S) Water(W)			CONTAINER INFORMATION		ANALYSIS REQUIRED including SUITES (NB. Suite Codes must be listed to attract suite price) Where Metals are required, specify Total (unfilitered bottle required) or Dissolved (field filtered bottle required).							Additional Information
LAB ID	SAMPLE ID	DATE / TIME	MATRIX	TYPE & PRESERVATIVE (refer to codes below)	TOTAL JARS	S16	EA200	EP23	S-23	BTEX TRH			Comments on likely contaminant levels, dilutions, or samples requiring specific QC analysis etc.
	TS/TB	[redacted]	S	Jar	2					X			
	SOP_BH103_0.2_[redacted]17 (17-1)		S	Jar PFAS Bag	3	X	X	X	X				
	SOP_BH103_1.0_220117 (17-1)		S	Jar	1	X							
	SOP_BH104_1.0_220117 (17-1)		S	Jar PFAS Bag	3	X	X	X	X				
	SOP_BH104_2.0_220117 (17-1)		S	Jar	1	X							
	SOP_BH105_0.2_220117 (17-1)		S	Jar Bag	2	X	X		X				
	SOP_BH105_2.0_220117 (17-1)		S	Jar	1	X							
	SOP_BH106_0.2_220117 (17-1)		S	Jar PFAS Bag	3	X	X	X	X				
	SOP_BH106_1.0_220117 (17-1)		S	Jar	1	X							
	SOP_BH110_0.2_220117 (17-1)		S	Jar PFAS Bag	3	X	X	X	X				
	SOP_BH110_1.3_220118 (18-1)		S	[redacted]	1	X							
	SOP_BH111_1.0_220118 (18-1)		S	[redacted] PFAS Bag	3	X	X	X	X				
	SOP_BH111_3.0_220118 (18-1)		S	Jar PFAS	2	X		X					
	SOP_BH112_1.0_220118 (18-1)		S	Jar PFAS Bag	3	X	X	X	X				
	SOP_BH112_5.0_220118 (18-1)		S	Jar PFAS	2	X		X					
	SOP_BH113_0.1_220118 (18-1)		S	Jar Bag	2	X	X		[redacted]				
				TOTAL									

Environmental Division Sydney
Work Order Reference
ES2201683

Telephone : 61-2-8784 8555

Water Container Codes: P = Unpreserved Plastic; N = Nitric Preserved Plastic; ORC = Nitric Preserved ORC; SH = Sodium Hydroxide/Cd Preserved; S = Sodium Hydroxide Preserved Plastic; AG = Amber Glass Unpreserved; AP - Airfreight Unpreserved Plastic
V = VOA Vial HCl Preserved; VB = VOA Vial Sodium Bisulphate Preserved; VS = VOA Vial Sulfuric Preserved; AV = Airfreight Unpreserved Vial SG = Sulfuric Preserved Amber Glass; H = HCl preserved Plastic; HS = HCl preserved Speciation bottle; SP = Sulfuric Preserved Plastic; F = Formaldehyde Preserved Glass;
Z = Zinc Acetate Preserved Bottle; E = EDTA Preserved Bottles; ST = Sterile Bottle; ASS = Plastic Bag for Acid Sulphate Soils; B = Unpreserved Bag; L = Lugols Iodine Preserved Bottles; STT = Sterile Sodium Thiosulfate Preserved Bottles.

CHAIN OF CUSTODY

ALS Laboratory: please tick →

ADELAIDE 21 Burma Road Pooraka SA 5095 Ph: 08 8359 0890 E: adelaide@alsglobal.com

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WOLLONGONG 99 Kenny Street Wollongong NSW 2500 Ph: 02 4225 3125 E: wollongong@alsglobal.com

CLIENT: ERM	TURNAROUND REQUIREMENTS: ☒ Standard TAT (List due date):	FOR LABORATORY USE ONLY (Circle)	
OFFICE: Sydney	(Standard TAT may be longer for some tests e.g., Ultra Trace Organics) ☐ Non Standard or urgent TAT (List due date):	Custody Seal Intact?	Yes / No / N/A
PROJECT: SOP — PROJECT NO.: 062850	ALS QUOTE NO.:	Free ice / frozen ice bricks present upon receipt?	Yes / No / N/A
ORDER NUMBER: — PURCHASE ORDER NO.:	COUNTRY OF ORIGIN: Australia	COC SEQUENCE NUMBER (Circle) COC: 1 2 3 4 5 6 7	
PROJECT MANAGER: Nick G Jess C — CONTACT PH: See page 1		OF: 1 2 3 4 5 6 7	Random Sample Temperature on Receipt: 5.2 °C
SAMPLER: ~~Tristan Rodrigues~~ Ant P — SAMPLER MOBILE: See Page 1			Other comment:
COC Emailed to ALS? (YES / NO) — EDD FORMAT (or default):	RELINQUISHED BY:	RECEIVED BY:	RELINQUISHED BY: / RECEIVED BY:
Email Reports to (will default to PM if no other addresses are listed): SEE PAGE (1)	DATE/TIME:	DATE/TIME: 19/1/22 1440	DATE/TIME: / DATE/TIME:
Email Invoice to (will default to PM if no other addresses are listed):			

COMMENTS/SPECIAL HANDLING/STORAGE OR DISPOSAL: Please issue Preliminary Report.

ALS USE ONLY	SAMPLE DETAILS (MATRIX: Solid(S) Water(W))			CONTAINER INFORMATION		ANALYSIS REQUIRED including SUITES (NB. Suite Codes must be listed to attract suite price). Where Metals are required, specify Total (unfiltered bottle required) or Dissolved (field filtered bottle required).								Additional Information
LAB ID	SAMPLE ID	DATE / TIME	MATRIX	TYPE & PRESERVATIVE (refer to codes below)	TOTAL JARS	S16	EA200G	EP231	S23	BTEX TRH				Comments on likely contaminant levels, dilutions, or samples requiring specific QC analysis etc.
	TS/TB	17-1	S	Jar	2	✓								
	RIN01_220117	17-1	W	Metal, Semi, Vol + PFAS	6	X		X	X					
	SOP_BH113_0.3_220118	(18-1)	S	Jar Bag PFAS	3	X	X	X	X					
	SOP_BH114_0.3_220118	(18-1)	S	Jar PFAS Bag	3	X	X	X	X					
	SOP_BH114_2.0_220118	(18-1)	S	Jar	1	X								
	SOP_BH115_0.1_220118	(18-1)	S	Jar Bag	2	X	X		X					
	SOP_BH115_2.0_220118	(18-1)	S	Jar	1	X								
	SOP_BH116_0.2_220117	(17-1)	S	Jar Bag	2	X	X		X					
	SOP_BH116_2.0_220117	(17-1)	S	Jar	1	X								
	SOP_BH117_0.2_220117	(17-1)	S	Jar Bag	2	X	X		X					
	SOP_BH117_3.0_220118	(18-1)	S	Jar	1	X								
	SOP_BH119_0.2_220117	(17-1)	S	Jar PFAS Bag	3	X	X	X						
	SOP_BH119_1.0_220117	(17-1)	S	Jar PFAS	2	X		X	X					
	SOP_BH119_3.0_220117	(17-1)	S	Jar PFAS	2	X		X						
	DUP01_220117	17-1	S	Jar	1	X								
	TRIP01_220117	17-1	S	Jar	1	X								
	RIN02_220118	18-1	W	Metal, Semi, Vol + PFAS	6	X		X	X					
				TOTAL										

Water Container Codes: P = Unpreserved Plastic; N = Nitric Preserved Plastic; ORC = Nitric Preserved ORC; SH = Sodium Hydroxide/Cd Preserved; S = Sodium Hydroxide Preserved Plastic; AG = Amber Glass Unpreserved; AP - Airfreight Unpreserved Plastic
V = VOA Vial HCl Preserved; VB = VOA Vial Sodium Bisulphate Preserved; VS = VOA Vial Sulfuric Preserved; AV = Airfreight Unpreserved Vial SG = Sulfuric Preserved Amber Glass; H = HCl preserved Plastic; HS = HCl preserved Speciation bottle; SP = Sulfuric Preserved Plastic; F = Formaldehyde Preserved Glass;
Z = Zinc Acetate Preserved Bottle; E = EDTA Preserved Bottles; ST = Sterile Bottle; ASS = Plastic Bag for Acid Sulphate Soils; B = Unpreserved Bag; LI = Lugols Iodine Preserved Bottles; STT = Sterile Sodium Thiosulfate Preserved Bottles.

ALS Environmental

CERTIFICATE OF ANALYSIS

Work Order	: **ES2201979**	Page	: 1 of 18
Client	: **ENVIRONMENTAL RESOURCES MANAGEMENT (ERM)**	Laboratory	: Environmental Division Sydney
Contact	: NICHOLAS GRBICH	Contact	: Customer Services ES
Address	: LEVEL 15 309 KENT STREET SYDNEY NSW AUSTRALIA 2000	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
Telephone	: ----	Telephone	: +61-2-8784 8555
Project	: 0628507	Date Samples Received	: 20-Jan-2022 19:00
Order number	: ----	Date Analysis Commenced	: 22-Jan-2022
C-O-C number	: ----	Issue Date	: 31-Jan-2022 18:28
Sampler	: TAJ MONDON		
Site	: ----		
Quote number	: EN/114		
No. of samples received	: 16		
No. of samples analysed	: 14		

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

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

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results
- Surrogate Control Limits

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

Signatories

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

Signatories	*Position*	*Accreditation Category*
Ankit Joshi	Inorganic Chemist	Sydney Inorganics, Smithfield, NSW
Edwandy Fadjar	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.

- EK059G: LOR raised for NOx due to sample matrix.
- 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.
- 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.
- EK057G: LOR raised for Nitrite on a few samples due to sample matrix.
- EP080&74: ES2201979-08 has been confrimed by re-analysis.
- TDS by method EA-015 may bias high for various samples due to the presence of fine particulate matter, which may pass through the prescribed GF/C paper.
- Sodium Adsorption Ratio (where reported): Where results for Na, Ca or Mg are <LOR, a concentration at half the reported LOR is incorporated into the SAR calculation. This represents a conservative approach for Na relative to the assumption that <LOR = zero concentration and a conservative approach for Ca & Mg relative to the assumption that <LOR is equivalent to the LOR concentration.

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)			Sample ID	S51	S54	S02_d	S06	S40_s
			Sampling date / time	20-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00
Compound	CAS Number	LOR	Unit	ES2201979-001	ES2201979-002	ES2201979-003	ES2201979-004	ES2201979-005
				Result	Result	Result	Result	Result
EA015: Total Dissolved Solids dried at 180 ± 5 °C								
Total Dissolved Solids @180°C	----	10	mg/L	831	8360	2550	1280	446
ED037P: Alkalinity by PC Titrator								
Hydroxide Alkalinity as CaCO3	DMO-210-001	1	mg/L	<1	<1	<1	<1	<1
Carbonate Alkalinity as CaCO3	3812-32-6	1	mg/L	<1	<1	<1	<1	<1
Bicarbonate Alkalinity as CaCO3	71-52-3	1	mg/L	700	59	270	418	205
Total Alkalinity as CaCO3	----	1	mg/L	700	59	270	418	205
ED041G: Sulfate (Turbidimetric) as SO4 2- by DA								
Sulfate as SO4 - Turbidimetric	14808-79-8	1	mg/L	6	334	126	102	64
ED045G: Chloride by Discrete Analyser								
Chloride	16887-00-6	1	mg/L	44	4650	767	457	48
ED093F: Dissolved Major Cations								
Calcium	7440-70-2	1	mg/L	150	105	15	26	77
Magnesium	7439-95-4	1	mg/L	49	279	24	30	9
Sodium	7440-23-5	1	mg/L	67	2060	554	376	35
Potassium	7440-09-7	1	mg/L	23	90	28	33	12
EG020F: Dissolved Metals by ICP-MS								
Arsenic	7440-38-2	0.001	mg/L	0.065	0.002	0.001	0.002	<0.001
Cadmium	7440-43-9	0.0001	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	0.0003
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	0.006	0.002	0.002	0.011
Lead	7439-92-1	0.001	mg/L	<0.001	0.002	<0.001	<0.001	<0.001
Nickel	7440-02-0	0.001	mg/L	<0.001	0.002	0.002	0.002	0.007
Zinc	7440-66-6	0.005	mg/L	<0.005	0.006	<0.005	<0.005	0.287
Iron	7439-89-6	0.05	mg/L	19.1	51.5	0.44	13.4	0.32
EG035F: Dissolved Mercury by FIMS								
Mercury	7439-97-6	0.0001	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
EK055G: Ammonia as N by Discrete Analyser								
Ammonia as N	7664-41-7	0.01	mg/L	4.75	0.64	0.29	0.57	0.04
EK057G: Nitrite as N by Discrete Analyser								
Nitrite as N	14797-65-0	0.01	mg/L	<0.10	<0.10	<0.01	<0.01	0.03
EK058G: Nitrate as N by Discrete Analyser								
Nitrate as N	14797-55-8	0.01	mg/L	<0.10	<0.10	0.04	0.02	0.46
EK059G: Nitrite plus Nitrate as N (NOx) by Discrete Analyser								

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)			Sample ID	S51	S54	S02_d	S06	S40_s
			Sampling date / time	20-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00
Compound	CAS Number	LOR	Unit	ES2201979-001	ES2201979-002	ES2201979-003	ES2201979-004	ES2201979-005
				Result	Result	Result	Result	Result
EK059G: Nitrite plus Nitrate as N (NOx) by Discrete Analyser - Continued								
Nitrite + Nitrate as N	----	0.01	mg/L	<0.10	<0.10	0.04	0.02	0.49
EK061G: Total Kjeldahl Nitrogen By Discrete Analyser								
Total Kjeldahl Nitrogen as N	----	0.1	mg/L	6.8	3.9	4.6	1.0	0.3
EK062G: Total Nitrogen as N (TKN + NOx) by Discrete Analyser								
^ Total Nitrogen as N	----	0.1	mg/L	6.8	3.9	4.6	1.0	0.8
EK067G: Total Phosphorus as P by Discrete Analyser								
Total Phosphorus as P	----	0.01	mg/L	0.68	1.15	1.45	0.03	0.66
EN055: Ionic Balance								
ø Total Anions	----	0.01	meq/L	15.4	139	29.6	23.4	6.78
ø Total Cations	----	0.01	meq/L	15.0	120	27.5	21.0	6.41
ø Ionic Balance	----	0.01	%	1.09	7.40	3.70	5.42	2.80
EP074A: Monocyclic Aromatic Hydrocarbons								
Styrene	100-42-5	5	µg/L	<5	<5	<5	<5	<5
Isopropylbenzene	98-82-8	5	µg/L	<5	<5	<5	<5	<5
n-Propylbenzene	103-65-1	5	µg/L	<5	<5	<5	<5	<5
1.3.5-Trimethylbenzene	108-67-8	5	µg/L	<5	<5	<5	<5	<5
sec-Butylbenzene	135-98-8	5	µg/L	<5	<5	<5	<5	<5
1.2.4-Trimethylbenzene	95-63-6	5	µg/L	<5	<5	<5	<5	<5
tert-Butylbenzene	98-06-6	5	µg/L	<5	<5	<5	<5	<5
p-Isopropyltoluene	99-87-6	5	µg/L	<5	<5	<5	<5	<5
n-Butylbenzene	104-51-8	5	µg/L	<5	<5	<5	<5	<5
EP074B: Oxygenated Compounds								
Vinyl Acetate	108-05-4	50	µg/L	<50	<50	<50	<50	<50
2-Butanone (MEK)	78-93-3	50	µg/L	<50	<50	<50	<50	<50
4-Methyl-2-pentanone (MIBK)	108-10-1	50	µg/L	<50	<50	<50	<50	<50
2-Hexanone (MBK)	591-78-6	50	µg/L	<50	<50	<50	<50	<50
EP074C: Sulfonated Compounds								
Carbon disulfide	75-15-0	5	µg/L	<5	<5	<5	<5	<5
EP074D: Fumigants								
2.2-Dichloropropane	594-20-7	5	µg/L	<5	<5	<5	<5	<5
1.2-Dichloropropane	78-87-5	5	µg/L	<5	<5	<5	<5	<5
cis-1.3-Dichloropropylene	10061-01-5	5	µg/L	<5	<5	<5	<5	<5
trans-1.3-Dichloropropylene	10061-02-6	5	µg/L	<5	<5	<5	<5	<5
1.2-Dibromoethane (EDB)	106-93-4	5	µg/L	<5	<5	<5	<5	<5

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)			Sample ID	S51	S54	S02_d	S06	S40_s
			Sampling date / time	20-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00
Compound	CAS Number	LOR	Unit	ES2201979-001	ES2201979-002	ES2201979-003	ES2201979-004	ES2201979-005
				Result	Result	Result	Result	Result
EP074E: Halogenated Aliphatic Compounds								
Dichlorodifluoromethane	75-71-8	50	µg/L	<50	<50	<50	<50	<50
Chloromethane	74-87-3	50	µg/L	<50	<50	<50	<50	<50
Vinyl chloride	75-01-4	50	µg/L	<50	<50	<50	<50	<50
Bromomethane	74-83-9	50	µg/L	<50	<50	<50	<50	<50
Chloroethane	75-00-3	50	µg/L	<50	<50	<50	<50	<50
Trichlorofluoromethane	75-69-4	50	µg/L	<50	<50	<50	<50	<50
1.1-Dichloroethene	75-35-4	5	µg/L	<5	<5	<5	<5	<5
Iodomethane	74-88-4	5	µg/L	<5	<5	<5	<5	<5
trans-1.2-Dichloroethene	156-60-5	5	µg/L	<5	<5	<5	<5	<5
1.1-Dichloroethane	75-34-3	5	µg/L	<5	<5	<5	<5	<5
cis-1.2-Dichloroethene	156-59-2	5	µg/L	<5	<5	<5	<5	<5
1.1.1-Trichloroethane	71-55-6	5	µg/L	<5	<5	<5	<5	<5
1.1-Dichloropropylene	563-58-6	5	µg/L	<5	<5	<5	<5	<5
Carbon Tetrachloride	56-23-5	5	µg/L	<5	<5	<5	<5	<5
1.2-Dichloroethane	107-06-2	5	µg/L	<5	<5	<5	<5	<5
Trichloroethene	79-01-6	5	µg/L	<5	<5	<5	<5	<5
Dibromomethane	74-95-3	5	µg/L	<5	<5	<5	<5	<5
1.1.2-Trichloroethane	79-00-5	5	µg/L	<5	<5	<5	<5	<5
1.3-Dichloropropane	142-28-9	5	µg/L	<5	<5	<5	<5	<5
Tetrachloroethene	127-18-4	5	µg/L	<5	<5	<5	<5	<5
1.1.1.2-Tetrachloroethane	630-20-6	5	µg/L	<5	<5	<5	<5	<5
trans-1.4-Dichloro-2-butene	110-57-6	5	µg/L	<5	<5	<5	<5	<5
cis-1.4-Dichloro-2-butene	1476-11-5	5	µg/L	<5	<5	<5	<5	<5
1.1.2.2-Tetrachloroethane	79-34-5	5	µg/L	<5	<5	<5	<5	<5
1.2.3-Trichloropropane	96-18-4	5	µg/L	<5	<5	<5	<5	<5
Pentachloroethane	76-01-7	5	µg/L	<5	<5	<5	<5	<5
1.2-Dibromo-3-chloropropane	96-12-8	5	µg/L	<5	<5	<5	<5	<5
Hexachlorobutadiene	87-68-3	5	µg/L	<5	<5	<5	<5	<5
EP074F: Halogenated Aromatic Compounds								
Chlorobenzene	108-90-7	5	µg/L	<5	<5	<5	<5	<5
Bromobenzene	108-86-1	5	µg/L	<5	<5	<5	<5	<5
2-Chlorotoluene	95-49-8	5	µg/L	<5	<5	<5	<5	<5
4-Chlorotoluene	106-43-4	5	µg/L	<5	<5	<5	<5	<5
1.3-Dichlorobenzene	541-73-1	5	µg/L	<5	<5	<5	<5	<5
1.4-Dichlorobenzene	106-46-7	5	µg/L	<5	<5	<5	<5	<5

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)			Sample ID	S51	S54	S02_d	S06	S40_s
			Sampling date / time	20-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00
Compound	CAS Number	LOR	Unit	ES2201979-001	ES2201979-002	ES2201979-003	ES2201979-004	ES2201979-005
				Result	Result	Result	Result	Result
EP074F: Halogenated Aromatic Compounds - Continued								
1.2-Dichlorobenzene	95-50-1	5	µg/L	<5	<5	<5	<5	<5
1.2.4-Trichlorobenzene	120-82-1	5	µg/L	<5	<5	<5	<5	<5
1.2.3-Trichlorobenzene	87-61-6	5	µg/L	<5	<5	<5	<5	<5
EP074G: Trihalomethanes								
Chloroform	67-66-3	5	µg/L	<5	<5	<5	<5	<5
Bromodichloromethane	75-27-4	5	µg/L	<5	<5	<5	<5	<5
Dibromochloromethane	124-48-1	5	µg/L	<5	<5	<5	<5	<5
Bromoform	75-25-2	5	µg/L	<5	<5	<5	<5	<5
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
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								

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	S51	S54	S02_d	S06	S40_s
				Sampling date / time	20-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00
Compound	CAS Number	LOR	Unit		ES2201979-001	ES2201979-002	ES2201979-003	ES2201979-004	ES2201979-005
					Result	Result	Result	Result	Result
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions - Continued									
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
EP074S: VOC Surrogates									
1.2-Dichloroethane-D4	17060-07-0	5	%		**96.0**	**98.2**	**101**	**99.9**	**99.6**
Toluene-D8	2037-26-5	5	%		**114**	**106**	**108**	**111**	**110**
4-Bromofluorobenzene	460-00-4	5	%		**104**	**98.7**	**102**	**94.4**	**89.6**
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	1.0	%		**20.9**	**23.4**	**25.1**	**25.1**	**22.9**
2-Chlorophenol-D4	93951-73-6	1.0	%		**57.6**	**60.1**	**62.2**	**61.3**	**61.1**
2.4.6-Tribromophenol	118-79-6	1.0	%		**68.5**	**68.9**	**79.5**	**90.0**	**65.6**
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	1.0	%		**72.4**	**79.8**	**75.2**	**78.4**	**77.0**
Anthracene-d10	1719-06-8	1.0	%		**92.5**	**98.3**	**93.2**	**90.4**	**96.6**
4-Terphenyl-d14	1718-51-0	1.0	%		**82.6**	**89.1**	**95.8**	**91.7**	**86.5**
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	2	%		**102**	**108**	**108**	**112**	**111**
Toluene-D8	2037-26-5	2	%		**114**	**115**	**107**	**115**	**115**
4-Bromofluorobenzene	460-00-4	2	%		**107**	**108**	**103**	**109**	**107**

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	S40_d	SMW_BH120	SMW_BH019	D01_220119	RO1-220119
				Sampling date / time	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00
Compound	CAS Number	LOR	Unit		ES2201979-006	ES2201979-007	ES2201979-008	ES2201979-009	ES2201979-011
					Result	Result	Result	Result	Result
EA015: Total Dissolved Solids dried at 180 ± 5 °C									
Total Dissolved Solids @180°C	----	10	mg/L		**15000**	**12300**	**11800**	**11700**	----
ED037P: Alkalinity by PC Titrator									
Hydroxide Alkalinity as CaCO3	DMO-210-001	1	mg/L		<1	<1	<1	<1	----
Carbonate Alkalinity as CaCO3	3812-32-6	1	mg/L		<1	<1	<1	<1	----
Bicarbonate Alkalinity as CaCO3	71-52-3	1	mg/L		**70**	**673**	**856**	**855**	----
Total Alkalinity as CaCO3	----	1	mg/L		**70**	**673**	**856**	**855**	----
ED041G: Sulfate (Turbidimetric) as SO4 2- by DA									
Sulfate as SO4 - Turbidimetric	14808-79-8	1	mg/L		**680**	**501**	**2**	**1**	----
ED045G: Chloride by Discrete Analyser									
Chloride	16887-00-6	1	mg/L		**8110**	**6750**	**6580**	**6510**	----
ED093F: Dissolved Major Cations									
Calcium	7440-70-2	1	mg/L		**325**	**247**	**411**	**416**	----
Magnesium	7439-95-4	1	mg/L		**459**	**474**	**358**	**365**	----
Sodium	7440-23-5	1	mg/L		**3640**	**3360**	**2650**	**2700**	----
Potassium	7440-09-7	1	mg/L		**77**	**51**	**43**	**43**	----
EG020F: Dissolved Metals by ICP-MS									
Arsenic	7440-38-2	0.001	mg/L		**0.001**	<0.001	<0.001	<0.001	<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		**0.005**	<0.001	**0.002**	**0.002**	<0.001
Lead	7439-92-1	0.001	mg/L		<0.001	<0.001	<0.001	<0.001	<0.001
Nickel	7440-02-0	0.001	mg/L		**0.080**	<0.001	**0.001**	**0.002**	<0.001
Zinc	7440-66-6	0.005	mg/L		<0.005	<0.005	**0.014**	**0.013**	<0.005
Iron	7439-89-6	0.05	mg/L		**330**	**1.99**	**5.77**	**5.78**	<0.05
EG035F: Dissolved Mercury by FIMS									
Mercury	7439-97-6	0.0001	mg/L		<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
EK055G: Ammonia as N by Discrete Analyser									
Ammonia as N	7664-41-7	0.01	mg/L		**1.07**	**1.66**	**4.76**	**4.61**	**0.02**
EK057G: Nitrite as N by Discrete Analyser									
Nitrite as N	14797-65-0	0.01	mg/L		<0.10	<0.01	<0.01	<0.01	----
EK058G: Nitrate as N by Discrete Analyser									
Nitrate as N	14797-55-8	0.01	mg/L		<0.10	**0.02**	**0.02**	**0.02**	----
EK059G: Nitrite plus Nitrate as N (NOx) by Discrete Analyser									

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)			Sample ID	S40_d	SMW_BH120	SMW_BH019	D01_220119	RO1-220119
			Sampling date / time	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00
Compound	CAS Number	LOR	Unit	ES2201979-006	ES2201979-007	ES2201979-008	ES2201979-009	ES2201979-011
				Result	Result	Result	Result	Result
EK059G: Nitrite plus Nitrate as N (NOx) by Discrete Analyser - Continued								
Nitrite + Nitrate as N	----	0.01	mg/L	<0.10	0.02	0.02	0.02	<0.01
EK061G: Total Kjeldahl Nitrogen By Discrete Analyser								
Total Kjeldahl Nitrogen as N	----	0.1	mg/L	2.2	2.3	6.4	6.3	<0.1
EK062G: Total Nitrogen as N (TKN + NOx) by Discrete Analyser								
^ Total Nitrogen as N	----	0.1	mg/L	2.2	2.3	6.4	6.3	<0.1
EK067G: Total Phosphorus as P by Discrete Analyser								
Total Phosphorus as P	----	0.01	mg/L	0.27	0.15	0.27	0.27	<0.01
EN055: Ionic Balance								
ø Total Anions	----	0.01	meq/L	244	214	203	201	----
ø Total Cations	----	0.01	meq/L	214	199	166	169	----
ø Ionic Balance	----	0.01	%	6.55	3.75	9.87	8.48	----
EP074A: Monocyclic Aromatic Hydrocarbons								
Styrene	100-42-5	5	µg/L	<5	<5	<5	<5	<5
Isopropylbenzene	98-82-8	5	µg/L	<5	<5	<5	<5	<5
n-Propylbenzene	103-65-1	5	µg/L	<5	<5	<5	<5	<5
1.3.5-Trimethylbenzene	108-67-8	5	µg/L	<5	<5	<5	<5	<5
sec-Butylbenzene	135-98-8	5	µg/L	<5	<5	<5	<5	<5
1.2.4-Trimethylbenzene	95-63-6	5	µg/L	<5	<5	<5	<5	<5
tert-Butylbenzene	98-06-6	5	µg/L	<5	<5	<5	<5	<5
p-Isopropyltoluene	99-87-6	5	µg/L	<5	<5	<5	<5	<5
n-Butylbenzene	104-51-8	5	µg/L	<5	<5	<5	<5	<5
EP074B: Oxygenated Compounds								
Vinyl Acetate	108-05-4	50	µg/L	<50	<50	<50	<50	<50
2-Butanone (MEK)	78-93-3	50	µg/L	<50	<50	<50	<50	<50
4-Methyl-2-pentanone (MIBK)	108-10-1	50	µg/L	<50	<50	<50	<50	<50
2-Hexanone (MBK)	591-78-6	50	µg/L	<50	<50	<50	<50	<50
EP074C: Sulfonated Compounds								
Carbon disulfide	75-15-0	5	µg/L	<5	<5	<5	<5	<5
EP074D: Fumigants								
2.2-Dichloropropane	594-20-7	5	µg/L	<5	<5	<5	<5	<5
1.2-Dichloropropane	78-87-5	5	µg/L	<5	<5	<5	<5	<5
cis-1.3-Dichloropropylene	10061-01-5	5	µg/L	<5	<5	<5	<5	<5
trans-1.3-Dichloropropylene	10061-02-6	5	µg/L	<5	<5	<5	<5	<5
1.2-Dibromoethane (EDB)	106-93-4	5	µg/L	<5	<5	<5	<5	<5

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)			Sample ID	S40_d	SMW_BH120	SMW_BH019	D01_220119	RO1-220119
			Sampling date / time	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00
Compound	CAS Number	LOR	Unit	ES2201979-006	ES2201979-007	ES2201979-008	ES2201979-009	ES2201979-011
				Result	Result	Result	Result	Result
EP074E: Halogenated Aliphatic Compounds								
Dichlorodifluoromethane	75-71-8	50	µg/L	<50	<50	<50	<50	<50
Chloromethane	74-87-3	50	µg/L	<50	<50	<50	<50	<50
Vinyl chloride	75-01-4	50	µg/L	<50	<50	<50	<50	<50
Bromomethane	74-83-9	50	µg/L	<50	<50	<50	<50	<50
Chloroethane	75-00-3	50	µg/L	<50	<50	<50	<50	<50
Trichlorofluoromethane	75-69-4	50	µg/L	<50	<50	<50	<50	<50
1.1-Dichloroethene	75-35-4	5	µg/L	<5	<5	<5	<5	<5
Iodomethane	74-88-4	5	µg/L	<5	<5	<5	<5	<5
trans-1.2-Dichloroethene	156-60-5	5	µg/L	<5	<5	<5	<5	<5
1.1-Dichloroethane	75-34-3	5	µg/L	<5	<5	<5	<5	<5
cis-1.2-Dichloroethene	156-59-2	5	µg/L	<5	<5	<5	<5	<5
1.1.1-Trichloroethane	71-55-6	5	µg/L	<5	<5	<5	<5	<5
1.1-Dichloropropylene	563-58-6	5	µg/L	<5	<5	<5	<5	<5
Carbon Tetrachloride	56-23-5	5	µg/L	<5	<5	<5	<5	<5
1.2-Dichloroethane	107-06-2	5	µg/L	<5	<5	<5	<5	<5
Trichloroethene	79-01-6	5	µg/L	<5	<5	<5	<5	<5
Dibromomethane	74-95-3	5	µg/L	<5	<5	<5	<5	<5
1.1.2-Trichloroethane	79-00-5	5	µg/L	<5	<5	<5	<5	<5
1.3-Dichloropropane	142-28-9	5	µg/L	<5	<5	<5	<5	<5
Tetrachloroethene	127-18-4	5	µg/L	<5	<5	<5	<5	<5
1.1.1.2-Tetrachloroethane	630-20-6	5	µg/L	<5	<5	<5	<5	<5
trans-1.4-Dichloro-2-butene	110-57-6	5	µg/L	<5	<5	<5	<5	<5
cis-1.4-Dichloro-2-butene	1476-11-5	5	µg/L	<5	<5	<5	<5	<5
1.1.2.2-Tetrachloroethane	79-34-5	5	µg/L	<5	<5	<5	<5	<5
1.2.3-Trichloropropane	96-18-4	5	µg/L	<5	<5	<5	<5	<5
Pentachloroethane	76-01-7	5	µg/L	<5	<5	<5	<5	<5
1.2-Dibromo-3-chloropropane	96-12-8	5	µg/L	<5	<5	<5	<5	<5
Hexachlorobutadiene	87-68-3	5	µg/L	<5	<5	<5	<5	<5
EP074F: Halogenated Aromatic Compounds								
Chlorobenzene	108-90-7	5	µg/L	<5	<5	<5	<5	<5
Bromobenzene	108-86-1	5	µg/L	<5	<5	<5	<5	<5
2-Chlorotoluene	95-49-8	5	µg/L	<5	<5	<5	<5	<5
4-Chlorotoluene	106-43-4	5	µg/L	<5	<5	<5	<5	<5
1.3-Dichlorobenzene	541-73-1	5	µg/L	<5	<5	<5	<5	<5
1.4-Dichlorobenzene	106-46-7	5	µg/L	<5	<5	<5	<5	<5

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)			Sample ID	S40_d	SMW_BH120	SMW_BH019	D01_220119	RO1-220119
			Sampling date / time	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00
Compound	CAS Number	LOR	Unit	ES2201979-006	ES2201979-007	ES2201979-008	ES2201979-009	ES2201979-011
				Result	Result	Result	Result	Result
EP074F: Halogenated Aromatic Compounds - Continued								
1.2-Dichlorobenzene	95-50-1	5	µg/L	<5	<5	<5	<5	<5
1.2.4-Trichlorobenzene	120-82-1	5	µg/L	<5	<5	<5	<5	<5
1.2.3-Trichlorobenzene	87-61-6	5	µg/L	<5	<5	<5	<5	<5
EP074G: Trihalomethanes								
Chloroform	67-66-3	5	µg/L	<5	<5	<5	<5	<5
Bromodichloromethane	75-27-4	5	µg/L	<5	<5	<5	<5	<5
Dibromochloromethane	124-48-1	5	µg/L	<5	<5	<5	<5	<5
Bromoform	75-25-2	5	µg/L	<5	<5	<5	<5	<5
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
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								

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	S40_d	SMW_BH120	SMW_BH019	D01_220119	RO1-220119
				Sampling date / time	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00
Compound	CAS Number	LOR	Unit		ES2201979-006	ES2201979-007	ES2201979-008	ES2201979-009	ES2201979-011
					Result	Result	Result	Result	Result
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions - Continued									
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
EP074S: VOC Surrogates									
1.2-Dichloroethane-D4	17060-07-0	5	%		102	101	88.2	101	99.4
Toluene-D8	2037-26-5	5	%		112	112	95.3	110	105
4-Bromofluorobenzene	460-00-4	5	%		93.5	94.0	80.0	93.1	87.1
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	1.0	%		18.5	19.3	18.0	22.3	17.9
2-Chlorophenol-D4	93951-73-6	1.0	%		52.0	52.7	51.1	59.0	49.5
2.4.6-Tribromophenol	118-79-6	1.0	%		69.5	63.5	55.7	67.0	48.4
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	1.0	%		72.9	72.5	67.5	80.7	62.7
Anthracene-d10	1719-06-8	1.0	%		90.1	90.5	85.0	99.3	82.2
4-Terphenyl-d14	1718-51-0	1.0	%		81.5	81.6	79.1	90.5	84.8
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	2	%		114	114	98.5	114	112
Toluene-D8	2037-26-5	2	%		116	116	98.8	114	109
4-Bromofluorobenzene	460-00-4	2	%		109	109	92.6	104	102

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)			Sample ID	RO1-20-01-22	Trip Spike	Trip blank	BUR-MW108	----
			Sampling date / time	20-Jan-2022 00:00	13-Jan-2022 00:00	13-Jan-2022 00:00	20-Jan-2022 00:00	----
Compound	CAS Number	LOR	Unit	ES2201979-012	ES2201979-013	ES2201979-014	ES2201979-015	--------
				Result	Result	Result	Result	----
EA015: Total Dissolved Solids dried at 180 ± 5 °C								
Total Dissolved Solids @180°C	----	10	mg/L	----	----	----	**4910**	----
ED037P: Alkalinity by PC Titrator								
Hydroxide Alkalinity as CaCO3	DMO-210-001	1	mg/L	----	----	----	<1	----
Carbonate Alkalinity as CaCO3	3812-32-6	1	mg/L	----	----	----	<1	----
Bicarbonate Alkalinity as CaCO3	71-52-3	1	mg/L	----	----	----	**695**	----
Total Alkalinity as CaCO3	----	1	mg/L	----	----	----	**695**	----
ED041G: Sulfate (Turbidimetric) as SO4 2- by DA								
Sulfate as SO4 - Turbidimetric	14808-79-8	1	mg/L	----	----	----	**518**	----
ED045G: Chloride by Discrete Analyser								
Chloride	16887-00-6	1	mg/L	----	----	----	**2310**	----
ED093F: Dissolved Major Cations								
Calcium	7440-70-2	1	mg/L	----	----	----	**87**	----
Magnesium	7439-95-4	1	mg/L	----	----	----	**125**	----
Sodium	7440-23-5	1	mg/L	----	----	----	**1510**	----
Potassium	7440-09-7	1	mg/L	----	----	----	**27**	----
EG020F: Dissolved Metals by ICP-MS								
Arsenic	7440-38-2	0.001	mg/L	<0.001	----	----	**0.013**	----
Cadmium	7440-43-9	0.0001	mg/L	<0.0001	----	----	**0.0004**	----
Chromium	7440-47-3	0.001	mg/L	<0.001	----	----	<0.001	----
Copper	7440-50-8	0.001	mg/L	<0.001	----	----	**0.004**	----
Lead	7439-92-1	0.001	mg/L	<0.001	----	----	<0.001	----
Nickel	7440-02-0	0.001	mg/L	<0.001	----	----	**0.028**	----
Zinc	7440-66-6	0.005	mg/L	<0.005	----	----	**0.015**	----
Iron	7439-89-6	0.05	mg/L	<0.05	----	----	**0.06**	----
EG035F: Dissolved Mercury by FIMS								
Mercury	7439-97-6	0.0001	mg/L	<0.0001	----	----	<0.0001	----
EK055G: Ammonia as N by Discrete Analyser								
Ammonia as N	7664-41-7	0.01	mg/L	<0.01	----	----	**0.41**	----
EK057G: Nitrite as N by Discrete Analyser								
Nitrite as N	14797-65-0	0.01	mg/L	----	----	----	<0.01	----
EK058G: Nitrate as N by Discrete Analyser								
Nitrate as N	14797-55-8	0.01	mg/L	----	----	----	**0.02**	----
EK059G: Nitrite plus Nitrate as N (NOx) by Discrete Analyser								

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	RO1-20-01-22	Trip Spike	Trip blank	BUR-MW108	----
				Sampling date / time	20-Jan-2022 00:00	13-Jan-2022 00:00	13-Jan-2022 00:00	20-Jan-2022 00:00	----
Compound	CAS Number	LOR	Unit		ES2201979-012	ES2201979-013	ES2201979-014	ES2201979-015	--------
					Result	Result	Result	Result	----
EK059G: Nitrite plus Nitrate as N (NOx) by Discrete Analyser - Continued									
Nitrite + Nitrate as N	----	0.01	mg/L		<0.01	----	----	**0.02**	----
EK061G: Total Kjeldahl Nitrogen By Discrete Analyser									
Total Kjeldahl Nitrogen as N	----	0.1	mg/L		<0.1	----	----	**2.6**	----
EK062G: Total Nitrogen as N (TKN + NOx) by Discrete Analyser									
^ Total Nitrogen as N	----	0.1	mg/L		<0.1	----	----	**2.6**	----
EK067G: Total Phosphorus as P by Discrete Analyser									
Total Phosphorus as P	----	0.01	mg/L		<0.01	----	----	**3.26**	----
EN055: Ionic Balance									
ø Total Anions	----	0.01	meq/L		----	----	----	**89.8**	----
ø Total Cations	----	0.01	meq/L		----	----	----	**81.0**	----
ø Ionic Balance	----	0.01	%		----	----	----	**5.17**	----
EP074A: Monocyclic Aromatic Hydrocarbons									
Styrene	100-42-5	5	µg/L		<5	----	----	<5	----
Isopropylbenzene	98-82-8	5	µg/L		<5	----	----	<5	----
n-Propylbenzene	103-65-1	5	µg/L		<5	----	----	<5	----
1.3.5-Trimethylbenzene	108-67-8	5	µg/L		<5	----	----	<5	----
sec-Butylbenzene	135-98-8	5	µg/L		<5	----	----	<5	----
1.2.4-Trimethylbenzene	95-63-6	5	µg/L		<5	----	----	<5	----
tert-Butylbenzene	98-06-6	5	µg/L		<5	----	----	<5	----
p-Isopropyltoluene	99-87-6	5	µg/L		<5	----	----	<5	----
n-Butylbenzene	104-51-8	5	µg/L		<5	----	----	<5	----
EP074B: Oxygenated Compounds									
Vinyl Acetate	108-05-4	50	µg/L		<50	----	----	<50	----
2-Butanone (MEK)	78-93-3	50	µg/L		<50	----	----	<50	----
4-Methyl-2-pentanone (MIBK)	108-10-1	50	µg/L		<50	----	----	<50	----
2-Hexanone (MBK)	591-78-6	50	µg/L		<50	----	----	<50	----
EP074C: Sulfonated Compounds									
Carbon disulfide	75-15-0	5	µg/L		<5	----	----	<5	----
EP074D: Fumigants									
2.2-Dichloropropane	594-20-7	5	µg/L		<5	----	----	<5	----
1.2-Dichloropropane	78-87-5	5	µg/L		<5	----	----	<5	----
cis-1.3-Dichloropropylene	10061-01-5	5	µg/L		<5	----	----	<5	----
trans-1.3-Dichloropropylene	10061-02-6	5	µg/L		<5	----	----	<5	----
1.2-Dibromoethane (EDB)	106-93-4	5	µg/L		<5	----	----	<5	----

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)			Sample ID	RO1-20-01-22	Trip Spike	Trip blank	BUR-MW108	----
			Sampling date / time	20-Jan-2022 00:00	13-Jan-2022 00:00	13-Jan-2022 00:00	20-Jan-2022 00:00	----
Compound	CAS Number	LOR	Unit	ES2201979-012	ES2201979-013	ES2201979-014	ES2201979-015	--------
				Result	Result	Result	Result	----
EP074E: Halogenated Aliphatic Compounds								
Dichlorodifluoromethane	75-71-8	50	µg/L	<50	----	----	<50	----
Chloromethane	74-87-3	50	µg/L	<50	----	----	<50	----
Vinyl chloride	75-01-4	50	µg/L	<50	----	----	<50	----
Bromomethane	74-83-9	50	µg/L	<50	----	----	<50	----
Chloroethane	75-00-3	50	µg/L	<50	----	----	<50	----
Trichlorofluoromethane	75-69-4	50	µg/L	<50	----	----	<50	----
1.1-Dichloroethene	75-35-4	5	µg/L	<5	----	----	<5	----
Iodomethane	74-88-4	5	µg/L	<5	----	----	<5	----
trans-1.2-Dichloroethene	156-60-5	5	µg/L	<5	----	----	<5	----
1.1-Dichloroethane	75-34-3	5	µg/L	<5	----	----	<5	----
cis-1.2-Dichloroethene	156-59-2	5	µg/L	<5	----	----	<5	----
1.1.1-Trichloroethane	71-55-6	5	µg/L	<5	----	----	<5	----
1.1-Dichloropropylene	563-58-6	5	µg/L	<5	----	----	<5	----
Carbon Tetrachloride	56-23-5	5	µg/L	<5	----	----	<5	----
1.2-Dichloroethane	107-06-2	5	µg/L	<5	----	----	<5	----
Trichloroethene	79-01-6	5	µg/L	<5	----	----	<5	----
Dibromomethane	74-95-3	5	µg/L	<5	----	----	<5	----
1.1.2-Trichloroethane	79-00-5	5	µg/L	<5	----	----	<5	----
1.3-Dichloropropane	142-28-9	5	µg/L	<5	----	----	<5	----
Tetrachloroethene	127-18-4	5	µg/L	<5	----	----	<5	----
1.1.1.2-Tetrachloroethane	630-20-6	5	µg/L	<5	----	----	<5	----
trans-1.4-Dichloro-2-butene	110-57-6	5	µg/L	<5	----	----	<5	----
cis-1.4-Dichloro-2-butene	1476-11-5	5	µg/L	<5	----	----	<5	----
1.1.2.2-Tetrachloroethane	79-34-5	5	µg/L	<5	----	----	<5	----
1.2.3-Trichloropropane	96-18-4	5	µg/L	<5	----	----	<5	----
Pentachloroethane	76-01-7	5	µg/L	<5	----	----	<5	----
1.2-Dibromo-3-chloropropane	96-12-8	5	µg/L	<5	----	----	<5	----
Hexachlorobutadiene	87-68-3	5	µg/L	<5	----	----	<5	----
EP074F: Halogenated Aromatic Compounds								
Chlorobenzene	108-90-7	5	µg/L	<5	----	----	<5	----
Bromobenzene	108-86-1	5	µg/L	<5	----	----	<5	----
2-Chlorotoluene	95-49-8	5	µg/L	<5	----	----	<5	----
4-Chlorotoluene	106-43-4	5	µg/L	<5	----	----	<5	----
1.3-Dichlorobenzene	541-73-1	5	µg/L	<5	----	----	<5	----
1.4-Dichlorobenzene	106-46-7	5	µg/L	<5	----	----	<5	----

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)			Sample ID	RO1-20-01-22	Trip Spike	Trip blank	BUR-MW108	----
			Sampling date / time	20-Jan-2022 00:00	13-Jan-2022 00:00	13-Jan-2022 00:00	20-Jan-2022 00:00	----
Compound	CAS Number	LOR	Unit	ES2201979-012	ES2201979-013	ES2201979-014	ES2201979-015	--------
				Result	Result	Result	Result	----
EP074F: Halogenated Aromatic Compounds - Continued								
1.2-Dichlorobenzene	95-50-1	5	µg/L	<5	----	----	<5	----
1.2.4-Trichlorobenzene	120-82-1	5	µg/L	<5	----	----	<5	----
1.2.3-Trichlorobenzene	87-61-6	5	µg/L	<5	----	----	<5	----
EP074G: Trihalomethanes								
Chloroform	67-66-3	5	µg/L	<5	----	----	<5	----
Bromodichloromethane	75-27-4	5	µg/L	<5	----	----	<5	----
Dibromochloromethane	124-48-1	5	µg/L	<5	----	----	<5	----
Bromoform	75-25-2	5	µg/L	<5	----	----	<5	----
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								

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)			Sample ID	RO1-20-01-22	Trip Spike	Trip blank	BUR-MW108	----
			Sampling date / time	20-Jan-2022 00:00	13-Jan-2022 00:00	13-Jan-2022 00:00	20-Jan-2022 00:00	----
Compound	CAS Number	LOR	Unit	ES2201979-012	ES2201979-013	ES2201979-014	ES2201979-015	--------
				Result	Result	Result	Result	----
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions - Continued								
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	----
^ >C10 - C16 Fraction minus Naphthalene (F2)	----	100	µg/L	<100	----	----	<100	----
EP080: BTEXN								
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	----
ortho-Xylene	95-47-6	2	µg/L	<2	<2	<2	<2	----
^ Total Xylenes	----	2	µg/L	<2	<2	<2	<2	----
^ Sum of BTEX	----	1	µg/L	<1	<1	<1	<1	----
Naphthalene	91-20-3	5	µg/L	<5	<5	<5	<5	----
EP074S: VOC Surrogates								
1.2-Dichloroethane-D4	17060-07-0	5	%	**96.8**	----	----	**100**	----
Toluene-D8	2037-26-5	5	%	**103**	----	----	**107**	----
4-Bromofluorobenzene	460-00-4	5	%	**87.8**	----	----	**98.7**	----
EP075(SIM)S: Phenolic Compound Surrogates								
Phenol-d6	13127-88-3	1.0	%	**18.8**	----	----	**19.6**	----
2-Chlorophenol-D4	93951-73-6	1.0	%	**51.6**	----	----	**51.4**	----
2.4.6-Tribromophenol	118-79-6	1.0	%	**51.6**	----	----	**54.8**	----
EP075(SIM)T: PAH Surrogates								
2-Fluorobiphenyl	321-60-8	1.0	%	**61.2**	----	----	**63.9**	----
Anthracene-d10	1719-06-8	1.0	%	**87.2**	----	----	**89.8**	----
4-Terphenyl-d14	1718-51-0	1.0	%	**91.4**	----	----	**84.5**	----
EP080S: TPH(V)/BTEX Surrogates								
1.2-Dichloroethane-D4	17060-07-0	2	%	**109**	**111**	**105**	**111**	----
Toluene-D8	2037-26-5	2	%	**107**	**111**	**110**	**116**	----
4-Bromofluorobenzene	460-00-4	2	%	**101**	**105**	**105**	**110**	----

Surrogate Control Limits

Sub-Matrix: **WATER**

Compound	CAS Number	Recovery Limits (%) Low	High
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
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

ALS Environmental

QUALITY CONTROL REPORT

Work Order	: **ES2201979**	Page	: 1 of 13
Client	: **ENVIRONMENTAL RESOURCES MANAGEMENT (ERM)**	Laboratory	: Environmental Division Sydney
Contact	: NICHOLAS GRBICH	Contact	: Customer Services ES
Address	: LEVEL 15 309 KENT STREET SYDNEY NSW AUSTRALIA 2000	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
Telephone	: ----	Telephone	: +61-2-8784 8555
Project	: 0628507	Date Samples Received	: 20-Jan-2022
Order number	: ----	Date Analysis Commenced	: 22-Jan-2022
C-O-C number	: ----	Issue Date	: 31-Jan-2022
Sampler	: TAJ MONDON		
Site	: ----		
Quote number	: EN/114		
No. of samples received	: 16		
No. of samples analysed	: 14		

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

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

This Quality Control Report contains the following information:

- Laboratory Duplicate (DUP) Report; Relative Percentage Difference (RPD) and Acceptance Limits
- Method Blank (MB) and Laboratory Control Spike (LCS) Report; Recovery and Acceptance Limits
- Matrix Spike (MS) Report; Recovery and Acceptance Limits

Signatories

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

Signatories	*Position*	*Accreditation Category*
Ankit Joshi	Inorganic Chemist	Sydney Inorganics, Smithfield, NSW
Edwandy Fadjar	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.

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**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Acceptable RPD (%)
EA015: Total Dissolved Solids dried at 180 ± 5 °C (QC Lot: 4136387)									
ES2201867-002	Anonymous	EA015H: Total Dissolved Solids @180°C	----	10	mg/L	4010	3920	2.3	0% - 20%
EW2200210-001	Anonymous	EA015H: Total Dissolved Solids @180°C	----	10	mg/L	458	486	5.8	0% - 20%
EA015: Total Dissolved Solids dried at 180 ± 5 °C (QC Lot: 4136430)									
ES2201969-001	Anonymous	EA015H: Total Dissolved Solids @180°C	----	10	mg/L	104	138	28.9	0% - 50%
ES2202013-003	Anonymous	EA015H: Total Dissolved Solids @180°C	----	10	mg/L	509	512	0.7	0% - 20%
ED037P: Alkalinity by PC Titrator (QC Lot: 4137312)									
ES2201979-001	S51	ED037-P: Hydroxide Alkalinity as CaCO3	DMO-210-001	1	mg/L	<1	<1	0.0	No Limit
		ED037-P: Carbonate Alkalinity as CaCO3	3812-32-6	1	mg/L	<1	<1	0.0	No Limit
		ED037-P: Bicarbonate Alkalinity as CaCO3	71-52-3	1	mg/L	700	714	2.0	0% - 20%
		ED037-P: Total Alkalinity as CaCO3	----	1	mg/L	700	714	2.0	0% - 20%
ES2202025-001	Anonymous	ED037-P: Hydroxide Alkalinity as CaCO3	DMO-210-001	1	mg/L	<1	<1	0.0	No Limit
		ED037-P: Carbonate Alkalinity as CaCO3	3812-32-6	1	mg/L	<1	<1	0.0	No Limit
		ED037-P: Bicarbonate Alkalinity as CaCO3	71-52-3	1	mg/L	410	416	1.5	0% - 20%
		ED037-P: Total Alkalinity as CaCO3	----	1	mg/L	410	416	1.5	0% - 20%
ED041G: Sulfate (Turbidimetric) as SO4 2- by DA (QC Lot: 4133588)									
ES2201979-006	S40_d	ED041G: Sulfate as SO4 - Turbidimetric	14808-79-8	1	mg/L	680	709	4.2	0% - 20%
ES2201864-002	Anonymous	ED041G: Sulfate as SO4 - Turbidimetric	14808-79-8	1	mg/L	1300	1270	2.7	0% - 20%
ED041G: Sulfate (Turbidimetric) as SO4 2- by DA (QC Lot: 4133619)									
ES2202069-002	Anonymous	ED041G: Sulfate as SO4 - Turbidimetric	14808-79-8	1	mg/L	522	550	5.2	0% - 20%
ES2201940-001	Anonymous	ED041G: Sulfate as SO4 - Turbidimetric	14808-79-8	1	mg/L	299	299	0.0	0% - 20%
ED045G: Chloride by Discrete Analyser (QC Lot: 4133589)									
ES2201979-006	S40_d	ED045G: Chloride	16887-00-6	1	mg/L	8110	8040	1.0	0% - 20%
ES2201864-002	Anonymous	ED045G: Chloride	16887-00-6	1	mg/L	1820	1830	0.5	0% - 20%

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 (%)*
ED045G: Chloride by Discrete Analyser (QC Lot: 4133618)									
ES2201976-001	Anonymous	ED045G: Chloride	16887-00-6	1	mg/L	44	44	0.0	0% - 20%
ES2201940-001	Anonymous	ED045G: Chloride	16887-00-6	1	mg/L	288	289	0.0	0% - 20%
ED093F: Dissolved Major Cations (QC Lot: 4138240)									
ES2201979-001	S51	ED093F: Calcium	7440-70-2	1	mg/L	150	152	1.4	0% - 20%
		ED093F: Magnesium	7439-95-4	1	mg/L	49	51	2.7	0% - 20%
		ED093F: Sodium	7440-23-5	1	mg/L	67	68	1.7	0% - 20%
		ED093F: Potassium	7440-09-7	1	mg/L	23	23	0.0	0% - 20%
ES2202046-001	Anonymous	ED093F: Calcium	7440-70-2	1	mg/L	82	77	5.6	0% - 20%
		ED093F: Magnesium	7439-95-4	1	mg/L	102	101	1.7	0% - 20%
		ED093F: Sodium	7440-23-5	1	mg/L	615	595	3.3	0% - 20%
		ED093F: Potassium	7440-09-7	1	mg/L	32	31	3.9	0% - 20%
EG020F: Dissolved Metals by ICP-MS (QC Lot: 4138238)									
ES2201979-001	S51	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	0.065	0.066	2.3	0% - 20%
		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	<0.001	0.001	0.0	No Limit
		EG020A-F: Zinc	7440-66-6	0.005	mg/L	<0.005	<0.005	0.0	No Limit
		EG020A-F: Iron	7439-89-6	0.05	mg/L	19.1	19.3	1.3	0% - 20%
ES2202046-001	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	<0.001	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	0.003	0.003	0.0	No Limit
		EG020A-F: Zinc	7440-66-6	0.005	mg/L	<0.005	<0.005	0.0	No Limit
		EG020A-F: Iron	7439-89-6	0.05	mg/L	<0.05	<0.05	0.0	No Limit
EG035F: Dissolved Mercury by FIMS (QC Lot: 4138239)									
ES2201979-004	S06	EG035F: Mercury	7439-97-6	0.0001	mg/L	<0.0001	<0.0001	0.0	No Limit
ES2201979-011	RO1-220119	EG035F: Mercury	7439-97-6	0.0001	mg/L	<0.0001	<0.0001	0.0	No Limit
EK055G: Ammonia as N by Discrete Analyser (QC Lot: 4136962)									
ES2201979-001	S51	EK055G: Ammonia as N	7664-41-7	0.01	mg/L	4.75	4.70	1.1	0% - 20%
EK057G: Nitrite as N by Discrete Analyser (QC Lot: 4133586)									
ES2201979-006	S40_d	EK057G: Nitrite as N	14797-65-0	0.01	mg/L	<0.10	<0.10	0.0	No Limit
ES2201864-002	Anonymous	EK057G: Nitrite as N	14797-65-0	0.01	mg/L	0.30	0.30	0.0	0% - 20%
EK057G: Nitrite as N by Discrete Analyser (QC Lot: 4133617)									
ES2202069-002	Anonymous	EK057G: Nitrite as N	14797-65-0	0.01	mg/L	<0.01	<0.01	0.0	No Limit
ES2201940-001	Anonymous	EK057G: Nitrite as N	14797-65-0	0.01	mg/L	<0.01	<0.01	0.0	No Limit

Sub-Matrix: **WATER**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Acceptable RPD (%)*
EK059G: Nitrite plus Nitrate as N (NOx) by Discrete Analyser (QC Lot: 4136963)									
ES2201979-001	S51	EK059G: Nitrite + Nitrate as N	----	0.01	mg/L	<0.10	0.19	62.5	No Limit
EK061G: Total Kjeldahl Nitrogen By Discrete Analyser (QC Lot: 4136959)									
ES2201979-001	S51	EK061G: Total Kjeldahl Nitrogen as N	----	0.1	mg/L	6.8	6.6	2.8	0% - 50%
ES2201979-011	RO1-220119	EK061G: Total Kjeldahl Nitrogen as N	----	0.1	mg/L	<0.1	<0.1	0.0	No Limit
EK067G: Total Phosphorus as P by Discrete Analyser (QC Lot: 4136958)									
ES2201979-001	S51	EK067G: Total Phosphorus as P	----	0.01	mg/L	0.68	0.69	1.6	0% - 50%
ES2201979-011	RO1-220119	EK067G: Total Phosphorus as P	----	0.01	mg/L	<0.01	<0.01	0.0	No Limit
EP074A: Monocyclic Aromatic Hydrocarbons (QC Lot: 4137794)									
ES2201979-001	S51	EP074: Styrene	100-42-5	5	µg/L	<5	<5	0.0	No Limit
		EP074: Isopropylbenzene	98-82-8	5	µg/L	<5	<5	0.0	No Limit
		EP074: n-Propylbenzene	103-65-1	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.3.5-Trimethylbenzene	108-67-8	5	µg/L	<5	<5	0.0	No Limit
		EP074: sec-Butylbenzene	135-98-8	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.2.4-Trimethylbenzene	95-63-6	5	µg/L	<5	<5	0.0	No Limit
		EP074: tert-Butylbenzene	98-06-6	5	µg/L	<5	<5	0.0	No Limit
		EP074: p-Isopropyltoluene	99-87-6	5	µg/L	<5	<5	0.0	No Limit
		EP074: n-Butylbenzene	104-51-8	5	µg/L	<5	<5	0.0	No Limit
ES2201979-005	S40_s	EP074: Styrene	100-42-5	5	µg/L	<5	<5	0.0	No Limit
		EP074: Isopropylbenzene	98-82-8	5	µg/L	<5	<5	0.0	No Limit
		EP074: n-Propylbenzene	103-65-1	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.3.5-Trimethylbenzene	108-67-8	5	µg/L	<5	<5	0.0	No Limit
		EP074: sec-Butylbenzene	135-98-8	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.2.4-Trimethylbenzene	95-63-6	5	µg/L	<5	<5	0.0	No Limit
		EP074: tert-Butylbenzene	98-06-6	5	µg/L	<5	<5	0.0	No Limit
		EP074: p-Isopropyltoluene	99-87-6	5	µg/L	<5	<5	0.0	No Limit
		EP074: n-Butylbenzene	104-51-8	5	µg/L	<5	<5	0.0	No Limit
EP074B: Oxygenated Compounds (QC Lot: 4137794)									
ES2201979-001	S51	EP074: Vinyl Acetate	108-05-4	50	µg/L	<50	<50	0.0	No Limit
		EP074: 2-Butanone (MEK)	78-93-3	50	µg/L	<50	<50	0.0	No Limit
		EP074: 4-Methyl-2-pentanone (MIBK)	108-10-1	50	µg/L	<50	<50	0.0	No Limit
		EP074: 2-Hexanone (MBK)	591-78-6	50	µg/L	<50	<50	0.0	No Limit
ES2201979-005	S40_s	EP074: Vinyl Acetate	108-05-4	50	µg/L	<50	<50	0.0	No Limit
		EP074: 2-Butanone (MEK)	78-93-3	50	µg/L	<50	<50	0.0	No Limit
		EP074: 4-Methyl-2-pentanone (MIBK)	108-10-1	50	µg/L	<50	<50	0.0	No Limit
		EP074: 2-Hexanone (MBK)	591-78-6	50	µg/L	<50	<50	0.0	No Limit
EP074C: Sulfonated Compounds (QC Lot: 4137794)									
ES2201979-001	S51	EP074: Carbon disulfide	75-15-0	5	µg/L	<5	<5	0.0	No Limit
ES2201979-005	S40_s	EP074: Carbon disulfide	75-15-0	5	µg/L	<5	<5	0.0	No Limit
EP074D: Fumigants (QC Lot: 4137794)									

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 (%)*
EP074D: Fumigants (QC Lot: 4137794) - continued									
ES2201979-001	S51	EP074: 2.2-Dichloropropane	594-20-7	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.2-Dichloropropane	78-87-5	5	µg/L	<5	<5	0.0	No Limit
		EP074: cis-1.3-Dichloropropylene	10061-01-5	5	µg/L	<5	<5	0.0	No Limit
		EP074: trans-1.3-Dichloropropylene	10061-02-6	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.2-Dibromoethane (EDB)	106-93-4	5	µg/L	<5	<5	0.0	No Limit
ES2201979-005	S40_s	EP074: 2.2-Dichloropropane	594-20-7	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.2-Dichloropropane	78-87-5	5	µg/L	<5	<5	0.0	No Limit
		EP074: cis-1.3-Dichloropropylene	10061-01-5	5	µg/L	<5	<5	0.0	No Limit
		EP074: trans-1.3-Dichloropropylene	10061-02-6	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.2-Dibromoethane (EDB)	106-93-4	5	µg/L	<5	<5	0.0	No Limit
EP074E: Halogenated Aliphatic Compounds (QC Lot: 4137794)									
ES2201979-001	S51	EP074: 1.1-Dichloroethene	75-35-4	5	µg/L	<5	<5	0.0	No Limit
		EP074: Iodomethane	74-88-4	5	µg/L	<5	<5	0.0	No Limit
		EP074: trans-1.2-Dichloroethene	156-60-5	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.1-Dichloroethane	75-34-3	5	µg/L	<5	<5	0.0	No Limit
		EP074: cis-1.2-Dichloroethene	156-59-2	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.1.1-Trichloroethane	71-55-6	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.1-Dichloropropylene	563-58-6	5	µg/L	<5	<5	0.0	No Limit
		EP074: Carbon Tetrachloride	56-23-5	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.2-Dichloroethane	107-06-2	5	µg/L	<5	<5	0.0	No Limit
		EP074: Trichloroethene	79-01-6	5	µg/L	<5	<5	0.0	No Limit
		EP074: Dibromomethane	74-95-3	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.1.2-Trichloroethane	79-00-5	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.3-Dichloropropane	142-28-9	5	µg/L	<5	<5	0.0	No Limit
		EP074: Tetrachloroethene	127-18-4	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.1.1.2-Tetrachloroethane	630-20-6	5	µg/L	<5	<5	0.0	No Limit
		EP074: trans-1.4-Dichloro-2-butene	110-57-6	5	µg/L	<5	<5	0.0	No Limit
		EP074: cis-1.4-Dichloro-2-butene	1476-11-5	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.1.2.2-Tetrachloroethane	79-34-5	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.2.3-Trichloropropane	96-18-4	5	µg/L	<5	<5	0.0	No Limit
		EP074: Pentachloroethane	76-01-7	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.2-Dibromo-3-chloropropane	96-12-8	5	µg/L	<5	<5	0.0	No Limit
		EP074: Hexachlorobutadiene	87-68-3	5	µg/L	<5	<5	0.0	No Limit
		EP074: Dichlorodifluoromethane	75-71-8	50	µg/L	<50	<50	0.0	No Limit
		EP074: Chloromethane	74-87-3	50	µg/L	<50	<50	0.0	No Limit
		EP074: Vinyl chloride	75-01-4	50	µg/L	<50	<50	0.0	No Limit
		EP074: Bromomethane	74-83-9	50	µg/L	<50	<50	0.0	No Limit
		EP074: Chloroethane	75-00-3	50	µg/L	<50	<50	0.0	No Limit
		EP074: Trichlorofluoromethane	75-69-4	50	µg/L	<50	<50	0.0	No Limit
ES2201979-005	S40_s	EP074: 1.1-Dichloroethene	75-35-4	5	µg/L	<5	<5	0.0	No Limit

Sub-Matrix: **WATER**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Acceptable RPD (%)*
EP074E: Halogenated Aliphatic Compounds (QC Lot: 4137794) - continued									
ES2201979-005	S40_s	EP074: Iodomethane	74-88-4	5	µg/L	<5	<5	0.0	No Limit
		EP074: trans-1.2-Dichloroethene	156-60-5	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.1-Dichloroethane	75-34-3	5	µg/L	<5	<5	0.0	No Limit
		EP074: cis-1.2-Dichloroethene	156-59-2	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.1.1-Trichloroethane	71-55-6	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.1-Dichloropropylene	563-58-6	5	µg/L	<5	<5	0.0	No Limit
		EP074: Carbon Tetrachloride	56-23-5	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.2-Dichloroethane	107-06-2	5	µg/L	<5	<5	0.0	No Limit
		EP074: Trichloroethene	79-01-6	5	µg/L	<5	<5	0.0	No Limit
		EP074: Dibromomethane	74-95-3	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.1.2-Trichloroethane	79-00-5	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.3-Dichloropropane	142-28-9	5	µg/L	<5	<5	0.0	No Limit
		EP074: Tetrachloroethene	127-18-4	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.1.1.2-Tetrachloroethane	630-20-6	5	µg/L	<5	<5	0.0	No Limit
		EP074: trans-1.4-Dichloro-2-butene	110-57-6	5	µg/L	<5	<5	0.0	No Limit
		EP074: cis-1.4-Dichloro-2-butene	1476-11-5	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.1.2.2-Tetrachloroethane	79-34-5	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.2.3-Trichloropropane	96-18-4	5	µg/L	<5	<5	0.0	No Limit
		EP074: Pentachloroethane	76-01-7	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.2-Dibromo-3-chloropropane	96-12-8	5	µg/L	<5	<5	0.0	No Limit
		EP074: Hexachlorobutadiene	87-68-3	5	µg/L	<5	<5	0.0	No Limit
		EP074: Dichlorodifluoromethane	75-71-8	50	µg/L	<50	<50	0.0	No Limit
		EP074: Chloromethane	74-87-3	50	µg/L	<50	<50	0.0	No Limit
		EP074: Vinyl chloride	75-01-4	50	µg/L	<50	<50	0.0	No Limit
		EP074: Bromomethane	74-83-9	50	µg/L	<50	<50	0.0	No Limit
		EP074: Chloroethane	75-00-3	50	µg/L	<50	<50	0.0	No Limit
		EP074: Trichlorofluoromethane	75-69-4	50	µg/L	<50	<50	0.0	No Limit
EP074F: Halogenated Aromatic Compounds (QC Lot: 4137794)									
ES2201979-001	S51	EP074: Chlorobenzene	108-90-7	5	µg/L	<5	<5	0.0	No Limit
		EP074: Bromobenzene	108-86-1	5	µg/L	<5	<5	0.0	No Limit
		EP074: 2-Chlorotoluene	95-49-8	5	µg/L	<5	<5	0.0	No Limit
		EP074: 4-Chlorotoluene	106-43-4	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.3-Dichlorobenzene	541-73-1	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.4-Dichlorobenzene	106-46-7	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.2-Dichlorobenzene	95-50-1	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.2.4-Trichlorobenzene	120-82-1	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.2.3-Trichlorobenzene	87-61-6	5	µg/L	<5	<5	0.0	No Limit
ES2201979-005	S40_s	EP074: Chlorobenzene	108-90-7	5	µg/L	<5	<5	0.0	No Limit
		EP074: Bromobenzene	108-86-1	5	µg/L	<5	<5	0.0	No Limit
		EP074: 2-Chlorotoluene	95-49-8	5	µg/L	<5	<5	0.0	No Limit

Sub-Matrix: **WATER**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Acceptable RPD (%)*
EP074F: Halogenated Aromatic Compounds (QC Lot: 4137794) - continued									
ES2201979-005	S40_s	EP074: 4-Chlorotoluene	106-43-4	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.3-Dichlorobenzene	541-73-1	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.4-Dichlorobenzene	106-46-7	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.2-Dichlorobenzene	95-50-1	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.2.4-Trichlorobenzene	120-82-1	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.2.3-Trichlorobenzene	87-61-6	5	µg/L	<5	<5	0.0	No Limit
EP074G: Trihalomethanes (QC Lot: 4137794)									
ES2201979-001	S51	EP074: Chloroform	67-66-3	5	µg/L	<5	<5	0.0	No Limit
		EP074: Bromodichloromethane	75-27-4	5	µg/L	<5	<5	0.0	No Limit
		EP074: Dibromochloromethane	124-48-1	5	µg/L	<5	<5	0.0	No Limit
		EP074: Bromoform	75-25-2	5	µg/L	<5	<5	0.0	No Limit
ES2201979-005	S40_s	EP074: Chloroform	67-66-3	5	µg/L	<5	<5	0.0	No Limit
		EP074: Bromodichloromethane	75-27-4	5	µg/L	<5	<5	0.0	No Limit
		EP074: Dibromochloromethane	124-48-1	5	µg/L	<5	<5	0.0	No Limit
		EP074: Bromoform	75-25-2	5	µg/L	<5	<5	0.0	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 4137793)									
ES2201979-001	S51	EP080: C6 - C9 Fraction	----	20	µg/L	<20	<20	0.0	No Limit
ES2201979-005	S40_s	EP080: C6 - C9 Fraction	----	20	µg/L	<20	<20	0.0	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 4137793)									
ES2201979-001	S51	EP080: C6 - C10 Fraction	C6_C10	20	µg/L	<20	<20	0.0	No Limit
ES2201979-005	S40_s	EP080: C6 - C10 Fraction	C6_C10	20	µg/L	<20	<20	0.0	No Limit
EP080: BTEXN (QC Lot: 4137793)									
ES2201979-001	S51	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	108-38-3 106-42-3	2	µg/L	<2	<2	0.0	No Limit
		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
ES2201979-005	S40_s	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	108-38-3 106-42-3	2	µg/L	<2	<2	0.0	No Limit
		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

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: **WATER**

				Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Acceptable Limits (%)	
Method: Compound	CAS Number	LOR	Unit	Result	Concentration	LCS	Low	High
EA015: Total Dissolved Solids dried at 180 ± 5 °C (QCLot: 4136387)								
EA015H: Total Dissolved Solids @180°C	----	10	mg/L	<10	2000 mg/L	101	87.0	109
				<10	293 mg/L	109	75.2	126
				<10	2835 mg/L	105	83.0	124
EA015: Total Dissolved Solids dried at 180 ± 5 °C (QCLot: 4136430)								
EA015H: Total Dissolved Solids @180°C	----	10	mg/L	<10	2000 mg/L	104	87.0	109
				<10	293 mg/L	116	75.2	126
				<10	2835 mg/L	106	83.0	124
ED037P: Alkalinity by PC Titrator (QCLot: 4137312)								
ED037-P: Total Alkalinity as CaCO3	----	----	mg/L	----	200 mg/L	103	81.0	111
				----	50 mg/L	120	80.0	120
ED041G: Sulfate (Turbidimetric) as SO4 2- by DA (QCLot: 4133588)								
ED041G: Sulfate as SO4 - Turbidimetric	14808-79-8	1	mg/L	<1	25 mg/L	99.0	82.0	122
				<1	500 mg/L	94.9	82.0	122
ED041G: Sulfate (Turbidimetric) as SO4 2- by DA (QCLot: 4133619)								
ED041G: Sulfate as SO4 - Turbidimetric	14808-79-8	1	mg/L	<1	25 mg/L	99.4	82.0	122
				<1	500 mg/L	88.0	82.0	122
ED045G: Chloride by Discrete Analyser (QCLot: 4133589)								
ED045G: Chloride	16887-00-6	1	mg/L	<1	50 mg/L	100	80.9	127
				<1	1000 mg/L	105	80.9	127
ED045G: Chloride by Discrete Analyser (QCLot: 4133618)								
ED045G: Chloride	16887-00-6	1	mg/L	<1	50 mg/L	100	80.9	127
				<1	1000 mg/L	106	80.9	127
ED093F: Dissolved Major Cations (QCLot: 4138240)								
ED093F: Calcium	7440-70-2	1	mg/L	<1	50 mg/L	93.8	80.0	114
ED093F: Magnesium	7439-95-4	1	mg/L	<1	50 mg/L	102	90.0	116
ED093F: Sodium	7440-23-5	1	mg/L	<1	50 mg/L	97.4	82.0	120
ED093F: Potassium	7440-09-7	1	mg/L	<1	50 mg/L	100	85.0	113
EG020F: Dissolved Metals by ICP-MS (QCLot: 4138238)								
EG020A-F: Arsenic	7440-38-2	0.001	mg/L	<0.001	0.1 mg/L	104	85.0	114
EG020A-F: Cadmium	7440-43-9	0.0001	mg/L	<0.0001	0.1 mg/L	106	84.0	110
EG020A-F: Chromium	7440-47-3	0.001	mg/L	<0.001	0.1 mg/L	102	85.0	111
EG020A-F: Copper	7440-50-8	0.001	mg/L	<0.001	0.1 mg/L	97.0	81.0	111
EG020A-F: Lead	7439-92-1	0.001	mg/L	<0.001	0.1 mg/L	98.0	83.0	111
EG020A-F: Nickel	7440-02-0	0.001	mg/L	<0.001	0.1 mg/L	105	82.0	112

Sub-Matrix: **WATER**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Acceptable Limits (%)	
				Result	Concentration	LCS	Low	High
EG020F: Dissolved Metals by ICP-MS (QCLot: 4138238) - continued								
EG020A-F: Zinc	7440-66-6	0.005	mg/L	<0.005	0.1 mg/L	104	81.0	117
EG020A-F: Iron	7439-89-6	0.05	mg/L	<0.05	0.5 mg/L	100	82.0	112
EG035F: Dissolved Mercury by FIMS (QCLot: 4138239)								
EG035F: Mercury	7439-97-6	0.0001	mg/L	<0.0001	0.01 mg/L	94.4	83.0	105
EK055G: Ammonia as N by Discrete Analyser (QCLot: 4136962)								
EK055G: Ammonia as N	7664-41-7	0.01	mg/L	<0.01	1 mg/L	103	90.0	114
EK057G: Nitrite as N by Discrete Analyser (QCLot: 4133586)								
EK057G: Nitrite as N	14797-65-0	0.01	mg/L	<0.01	0.5 mg/L	106	82.0	114
EK057G: Nitrite as N by Discrete Analyser (QCLot: 4133617)								
EK057G: Nitrite as N	14797-65-0	0.01	mg/L	<0.01	0.5 mg/L	105	82.0	114
EK059G: Nitrite plus Nitrate as N (NOx) by Discrete Analyser (QCLot: 4136963)								
EK059G: Nitrite + Nitrate as N	----	0.01	mg/L	<0.01	0.5 mg/L	101	91.0	113
EK061G: Total Kjeldahl Nitrogen By Discrete Analyser (QCLot: 4136959)								
EK061G: Total Kjeldahl Nitrogen as N	----	0.1	mg/L	<0.1	10 mg/L	89.4	69.0	101
				<0.1	1 mg/L	109	70.0	118
				<0.1	5 mg/L	95.9	70.0	130
EK067G: Total Phosphorus as P by Discrete Analyser (QCLot: 4136958)								
EK067G: Total Phosphorus as P	----	0.01	mg/L	<0.01	4.42 mg/L	91.1	71.0	101
				<0.01	0.442 mg/L	# 109	72.0	108
				<0.01	1 mg/L	96.7	70.0	130
EP074A: Monocyclic Aromatic Hydrocarbons (QCLot: 4137794)								
EP074: Styrene	100-42-5	5	µg/L	<5	10 µg/L	98.4	73.0	119
EP074: Isopropylbenzene	98-82-8	5	µg/L	<5	10 µg/L	103	76.0	118
EP074: n-Propylbenzene	103-65-1	5	µg/L	<5	10 µg/L	99.3	69.0	119
EP074: 1.3.5-Trimethylbenzene	108-67-8	5	µg/L	<5	10 µg/L	99.0	74.0	116
EP074: sec-Butylbenzene	135-98-8	5	µg/L	<5	10 µg/L	101	73.0	119
EP074: 1.2.4-Trimethylbenzene	95-63-6	5	µg/L	<5	10 µg/L	102	74.0	116
EP074: tert-Butylbenzene	98-06-6	5	µg/L	<5	10 µg/L	99.6	72.0	116
EP074: p-Isopropyltoluene	99-87-6	5	µg/L	<5	10 µg/L	98.3	71.0	119
EP074: n-Butylbenzene	104-51-8	5	µg/L	<5	10 µg/L	101	65.0	123
EP074B: Oxygenated Compounds (QCLot: 4137794)								
EP074: Vinyl Acetate	108-05-4	50	µg/L	<50	100 µg/L	107	61.4	134
EP074: 2-Butanone (MEK)	78-93-3	50	µg/L	<50	100 µg/L	127	73.6	130
EP074: 4-Methyl-2-pentanone (MIBK)	108-10-1	50	µg/L	<50	100 µg/L	120	66.0	132
EP074: 2-Hexanone (MBK)	591-78-6	50	µg/L	<50	100 µg/L	116	65.0	137
EP074C: Sulfonated Compounds (QCLot: 4137794)								
EP074: Carbon disulfide	75-15-0	5	µg/L	<5	10 µg/L	100	72.8	127

Sub-Matrix: **WATER**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Acceptable Limits (%)	
				Result	Concentration	LCS	Low	High
EP074D: Fumigants (QCLot: 4137794)								
EP074: 2.2-Dichloropropane	594-20-7	5	µg/L	<5	10 µg/L	107	68.0	122
EP074: 1.2-Dichloropropane	78-87-5	5	µg/L	<5	10 µg/L	108	76.0	118
EP074: cis-1.3-Dichloropropylene	10061-01-5	5	µg/L	<5	10 µg/L	109	62.0	120
EP074: trans-1.3-Dichloropropylene	10061-02-6	5	µg/L	<5	10 µg/L	109	60.0	114
EP074: 1.2-Dibromoethane (EDB)	106-93-4	5	µg/L	<5	10 µg/L	116	69.0	117
EP074E: Halogenated Aliphatic Compounds (QCLot: 4137794)								
EP074: Dichlorodifluoromethane	75-71-8	50	µg/L	<50	100 µg/L	95.2	60.6	138
EP074: Chloromethane	74-87-3	50	µg/L	<50	100 µg/L	104	67.4	130
EP074: Vinyl chloride	75-01-4	50	µg/L	<50	100 µg/L	102	69.4	129
EP074: Bromomethane	74-83-9	50	µg/L	<50	100 µg/L	112	56.0	140
EP074: Chloroethane	75-00-3	50	µg/L	<50	100 µg/L	103	61.0	139
EP074: Trichlorofluoromethane	75-69-4	50	µg/L	<50	100 µg/L	104	69.0	131
EP074: 1.1-Dichloroethene	75-35-4	5	µg/L	<5	10 µg/L	107	70.0	124
EP074: Iodomethane	74-88-4	5	µg/L	<5	10 µg/L	98.4	70.2	128
EP074: trans-1.2-Dichloroethene	156-60-5	5	µg/L	<5	10 µg/L	102	74.0	118
EP074: 1.1-Dichloroethane	75-34-3	5	µg/L	<5	10 µg/L	110	74.0	120
EP074: cis-1.2-Dichloroethene	156-59-2	5	µg/L	<5	10 µg/L	107	77.0	119
EP074: 1.1.1-Trichloroethane	71-55-6	5	µg/L	<5	10 µg/L	106	67.0	119
EP074: 1.1-Dichloropropylene	563-58-6	5	µg/L	<5	10 µg/L	103	73.0	119
EP074: Carbon Tetrachloride	56-23-5	5	µg/L	<5	10 µg/L	102	62.0	120
EP074: 1.2-Dichloroethane	107-06-2	5	µg/L	<5	10 µg/L	116	73.0	123
EP074: Trichloroethene	79-01-6	5	µg/L	<5	10 µg/L	105	76.0	118
EP074: Dibromomethane	74-95-3	5	µg/L	<5	10 µg/L	110	73.0	119
EP074: 1.1.2-Trichloroethane	79-00-5	5	µg/L	<5	10 µg/L	115	72.0	126
EP074: 1.3-Dichloropropane	142-28-9	5	µg/L	<5	10 µg/L	114	71.0	129
EP074: Tetrachloroethene	127-18-4	5	µg/L	<5	10 µg/L	110	72.0	124
EP074: 1.1.1.2-Tetrachloroethane	630-20-6	5	µg/L	<5	10 µg/L	106	66.0	114
EP074: trans-1.4-Dichloro-2-butene	110-57-6	5	µg/L	<5	10 µg/L	112	60.0	120
EP074: cis-1.4-Dichloro-2-butene	1476-11-5	5	µg/L	<5	10 µg/L	114	70.6	128
EP074: 1.1.2.2-Tetrachloroethane	79-34-5	5	µg/L	<5	10 µg/L	117	70.0	124
EP074: 1.2.3-Trichloropropane	96-18-4	5	µg/L	<5	10 µg/L	111	74.0	126
EP074: Pentachloroethane	76-01-7	5	µg/L	<5	10 µg/L	107	71.8	126
EP074: 1.2-Dibromo-3-chloropropane	96-12-8	5	µg/L	<5	10 µg/L	112	66.4	136
EP074: Hexachlorobutadiene	87-68-3	5	µg/L	<5	10 µg/L	107	58.0	130
EP074F: Halogenated Aromatic Compounds (QCLot: 4137794)								
EP074: Chlorobenzene	108-90-7	5	µg/L	<5	10 µg/L	109	79.0	117
EP074: Bromobenzene	108-86-1	5	µg/L	<5	10 µg/L	105	76.0	116
EP074: 2-Chlorotoluene	95-49-8	5	µg/L	<5	10 µg/L	104	73.0	119
EP074: 4-Chlorotoluene	106-43-4	5	µg/L	<5	10 µg/L	104	73.0	119

Sub-Matrix: **WATER**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Acceptable Limits (%)	
				Result	Concentration	LCS	Low	High
EP074F: Halogenated Aromatic Compounds (QCLot: 4137794) - continued								
EP074: 1.3-Dichlorobenzene	541-73-1	5	µg/L	<5	10 µg/L	106	75.0	117
EP074: 1.4-Dichlorobenzene	106-46-7	5	µg/L	<5	10 µg/L	108	74.0	118
EP074: 1.2-Dichlorobenzene	95-50-1	5	µg/L	<5	10 µg/L	111	75.0	117
EP074: 1.2.4-Trichlorobenzene	120-82-1	5	µg/L	<5	10 µg/L	108	61.0	125
EP074: 1.2.3-Trichlorobenzene	87-61-6	5	µg/L	<5	10 µg/L	116	67.0	123
EP074G: Trihalomethanes (QCLot: 4137794)								
EP074: Chloroform	67-66-3	5	µg/L	<5	10 µg/L	111	72.0	120
EP074: Bromodichloromethane	75-27-4	5	µg/L	<5	10 µg/L	109	64.0	118
EP074: Dibromochloromethane	124-48-1	5	µg/L	<5	10 µg/L	109	65.0	115
EP074: Bromoform	75-25-2	5	µg/L	<5	10 µg/L	118	73.5	126
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 4134328)								
EP075(SIM): Naphthalene	91-20-3	1	µg/L	<1.0	5 µg/L	75.0	50.0	94.0
EP075(SIM): Acenaphthylene	208-96-8	1	µg/L	<1.0	5 µg/L	81.0	63.6	114
EP075(SIM): Acenaphthene	83-32-9	1	µg/L	<1.0	5 µg/L	88.5	62.2	113
EP075(SIM): Fluorene	86-73-7	1	µg/L	<1.0	5 µg/L	83.0	63.9	115
EP075(SIM): Phenanthrene	85-01-8	1	µg/L	<1.0	5 µg/L	74.8	62.6	116
EP075(SIM): Anthracene	120-12-7	1	µg/L	<1.0	5 µg/L	73.6	64.3	116
EP075(SIM): Fluoranthene	206-44-0	1	µg/L	<1.0	5 µg/L	86.5	63.6	118
EP075(SIM): Pyrene	129-00-0	1	µg/L	<1.0	5 µg/L	86.2	63.1	118
EP075(SIM): Benz(a)anthracene	56-55-3	1	µg/L	<1.0	5 µg/L	77.3	64.1	117
EP075(SIM): Chrysene	218-01-9	1	µg/L	<1.0	5 µg/L	82.7	62.5	116
EP075(SIM): Benzo(b+j)fluoranthene	205-99-2 205-82-3	1	µg/L	<1.0	5 µg/L	69.4	61.7	119
EP075(SIM): Benzo(k)fluoranthene	207-08-9	1	µg/L	<1.0	5 µg/L	73.4	63.0	115
EP075(SIM): Benzo(a)pyrene	50-32-8	0.5	µg/L	<0.5	5 µg/L	70.0	63.3	117
EP075(SIM): Indeno(1.2.3.cd)pyrene	193-39-5	1	µg/L	<1.0	5 µg/L	75.2	59.9	118
EP075(SIM): Dibenz(a.h)anthracene	53-70-3	1	µg/L	<1.0	5 µg/L	75.6	61.2	117
EP075(SIM): Benzo(g.h.i)perylene	191-24-2	1	µg/L	<1.0	5 µg/L	70.7	59.1	118
EP080/071: Total Petroleum Hydrocarbons (QCLot: 4134329)								
EP071: C10 - C14 Fraction	----	50	µg/L	<50	400 µg/L	83.1	55.8	112
EP071: C15 - C28 Fraction	----	100	µg/L	<100	600 µg/L	77.4	71.6	113
EP071: C29 - C36 Fraction	----	50	µg/L	<50	400 µg/L	77.2	56.0	121
EP080/071: Total Petroleum Hydrocarbons (QCLot: 4137793)								
EP080: C6 - C9 Fraction	----	20	µg/L	<20	260 µg/L	89.6	75.0	127
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 4134329)								
EP071: >C10 - C16 Fraction	----	100	µg/L	<100	500 µg/L	71.7	57.9	119
EP071: >C16 - C34 Fraction	----	100	µg/L	<100	700 µg/L	85.2	62.5	110
EP071: >C34 - C40 Fraction	----	100	µg/L	<100	300 µg/L	90.7	61.5	121

Sub-Matrix: **WATER**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report: Result	Laboratory Control Spike (LCS) Report: Spike Concentration	Spike Recovery (%): LCS	Acceptable Limits (%): Low	Acceptable Limits (%): High
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 4137793)								
EP080: C6 - C10 Fraction	C6_C10	20	µg/L	<20	310 µg/L	87.2	75.0	127
EP080: BTEXN (QCLot: 4137793)								
EP080: Benzene	71-43-2	1	µg/L	<1	10 µg/L	90.3	70.0	122
EP080: Toluene	108-88-3	2	µg/L	<2	10 µg/L	93.8	69.0	123
EP080: Ethylbenzene	100-41-4	2	µg/L	<2	10 µg/L	93.9	70.0	120
EP080: meta- & para-Xylene	108-38-3 106-42-3	2	µg/L	<2	10 µg/L	92.6	69.0	121
EP080: ortho-Xylene	95-47-6	2	µg/L	<2	10 µg/L	95.4	72.0	122
EP080: Naphthalene	91-20-3	5	µg/L	<5	10 µg/L	100	70.0	120

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: **WATER**

Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Matrix Spike (MS) Report: Spike Concentration	SpikeRecovery(%): MS	Acceptable Limits (%): Low	Acceptable Limits (%): High
ED041G: Sulfate (Turbidimetric) as SO4 2- by DA (QCLot: 4133588)							
ES2201864-002	Anonymous	ED041G: Sulfate as SO4 - Turbidimetric	14808-79-8	10 mg/L	# Not Determined	70.0	130
ED041G: Sulfate (Turbidimetric) as SO4 2- by DA (QCLot: 4133619)							
ES2201940-001	Anonymous	ED041G: Sulfate as SO4 - Turbidimetric	14808-79-8	10 mg/L	# Not Determined	70.0	130
ED045G: Chloride by Discrete Analyser (QCLot: 4133589)							
ES2201864-002	Anonymous	ED045G: Chloride	16887-00-6	50 mg/L	# Not Determined	70.0	130
ED045G: Chloride by Discrete Analyser (QCLot: 4133618)							
ES2201940-001	Anonymous	ED045G: Chloride	16887-00-6	50 mg/L	# Not Determined	70.0	130
EG020F: Dissolved Metals by ICP-MS (QCLot: 4138238)							
ES2201979-002	S54	EG020A-F: Arsenic	7440-38-2	1 mg/L	109	70.0	130
		EG020A-F: Cadmium	7440-43-9	0.25 mg/L	105	70.0	130
		EG020A-F: Chromium	7440-47-3	1 mg/L	102	70.0	130
		EG020A-F: Copper	7440-50-8	1 mg/L	100	70.0	130
		EG020A-F: Lead	7439-92-1	1 mg/L	97.0	70.0	130
		EG020A-F: Nickel	7440-02-0	1 mg/L	100	70.0	130
		EG020A-F: Zinc	7440-66-6	1 mg/L	105	70.0	130

Sub-Matrix: **WATER**

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Acceptable Limits (%)	
Laboratory sample ID	*Sample ID*	*Method: Compound*	*CAS Number*	*Concentration*	*MS*	*Low*	*High*
EG035F: Dissolved Mercury by FIMS (QCLot: 4138239)							
ES2201979-003	S02_d	EG035F: Mercury	7439-97-6	0.01 mg/L	86.9	70.0	130
EK055G: Ammonia as N by Discrete Analyser (QCLot: 4136962)							
ES2201979-001	S51	EK055G: Ammonia as N	7664-41-7	1 mg/L	# Not Determined	70.0	130
EK057G: Nitrite as N by Discrete Analyser (QCLot: 4133586)							
ES2201864-002	Anonymous	EK057G: Nitrite as N	14797-65-0	0.5 mg/L	105	70.0	130
EK057G: Nitrite as N by Discrete Analyser (QCLot: 4133617)							
ES2201940-001	Anonymous	EK057G: Nitrite as N	14797-65-0	0.5 mg/L	116	70.0	130
EK059G: Nitrite plus Nitrate as N (NOx) by Discrete Analyser (QCLot: 4136963)							
ES2201979-001	S51	EK059G: Nitrite + Nitrate as N	----	0.5 mg/L	94.4	70.0	130
EK061G: Total Kjeldahl Nitrogen By Discrete Analyser (QCLot: 4136959)							
ES2201979-002	S54	EK061G: Total Kjeldahl Nitrogen as N	----	100 mg/L	94.0	70.0	130
EK067G: Total Phosphorus as P by Discrete Analyser (QCLot: 4136958)							
ES2201979-002	S54	EK067G: Total Phosphorus as P	----	20 mg/L	97.9	70.0	130
EP074E: Halogenated Aliphatic Compounds (QCLot: 4137794)							
ES2201979-001	S51	EP074: 1.1-Dichloroethene	75-35-4	25 µg/L	106	70.0	130
		EP074: Trichloroethene	79-01-6	25 µg/L	96.2	70.0	130
EP074F: Halogenated Aromatic Compounds (QCLot: 4137794)							
ES2201979-001	S51	EP074: Chlorobenzene	108-90-7	25 µg/L	106	70.0	130
EP080/071: Total Petroleum Hydrocarbons (QCLot: 4137793)							
ES2201979-001	S51	EP080: C6 - C9 Fraction	----	325 µg/L	86.3	70.0	130
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 4137793)							
ES2201979-001	S51	EP080: C6 - C10 Fraction	C6_C10	375 µg/L	77.7	70.0	130
EP080: BTEXN (QCLot: 4137793)							
ES2201979-001	S51	EP080: Benzene	71-43-2	25 µg/L	88.3	70.0	130
		EP080: Toluene	108-88-3	25 µg/L	92.4	70.0	130
		EP080: Ethylbenzene	100-41-4	25 µg/L	93.0	70.0	130
		EP080: meta- & para-Xylene	108-38-3 106-42-3	25 µg/L	93.3	70.0	130
		EP080: ortho-Xylene	95-47-6	25 µg/L	96.8	70.0	130
		EP080: Naphthalene	91-20-3	25 µg/L	85.2	70.0	130

ALS Environmental

QA/QC Compliance Assessment to assist with Quality Review

Work Order	: **ES2201979**	Page	: 1 of 13
Client	: **ENVIRONMENTAL RESOURCES MANAGEMENT (ERM)**	Laboratory	: Environmental Division Sydney
Contact	: NICHOLAS GRBICH	Telephone	: +61-2-8784 8555
Project	: 0628507	Date Samples Received	: 20-Jan-2022
Site	: ----	Issue Date	: 31-Jan-2022
Sampler	: TAJ MONDON	No. of samples received	: 16
Order number	: ----	No. of samples analysed	: 14

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

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

Summary of Outliers

Outliers : Quality Control Samples

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

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

Outliers : Analysis Holding Time Compliance

- **Analysis Holding Time Outliers exist - please see following pages for full details.**

Outliers : Frequency of Quality Control Samples

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

Outliers : Quality Control Samples

Duplicates, Method Blanks, Laboratory Control Samples and Matrix Spikes

Matrix: **WATER**

Compound Group Name	Laboratory Sample ID	Client Sample ID	Analyte	CAS Number	Data	Limits	Comment
Laboratory Control Spike (LCS) Recoveries							
EK067G: Total Phosphorus as P by Discrete Analyser	QC-MRG2-41369580	----	**Total Phosphorus as P**	----	109 %	72.0-108%	**Recovery greater than upper control limit**
Matrix Spike (MS) Recoveries							
ED041G: Sulfate (Turbidimetric) as SO4 2- by DA	ES2201864--002	Anonymous	**Sulfate as SO4 - Turbidimetric**	14808-79-8	Not Determined	----	**MS recovery not determined, background level greater than or equal to 4x spike level.**
ED041G: Sulfate (Turbidimetric) as SO4 2- by DA	ES2201940--001	Anonymous	**Sulfate as SO4 - Turbidimetric**	14808-79-8	Not Determined	----	**MS recovery not determined, background level greater than or equal to 4x spike level.**
ED045G: Chloride by Discrete Analyser	ES2201864--002	Anonymous	**Chloride**	16887-00-6	Not Determined	----	**MS recovery not determined, background level greater than or equal to 4x spike level.**
ED045G: Chloride by Discrete Analyser	ES2201940--001	Anonymous	**Chloride**	16887-00-6	Not Determined	----	**MS recovery not determined, background level greater than or equal to 4x spike level.**
EK055G: Ammonia as N by Discrete Analyser	ES2201979--001	S51	**Ammonia as N**	7664-41-7	Not Determined	----	**MS recovery not determined, background level greater than or equal to 4x spike level.**

Regular Sample Surrogates

Sub-Matrix: **WATER**

Compound Group Name	Laboratory Sample ID	Client Sample ID	Analyte	CAS Number	Data	Limits	Comment
Samples Submitted							
EP074S: VOC Surrogates	ES2201979-008	SMW_BH019	**4-Bromofluorobenzene**	460-00-4	80.0 %	80.8-124 %	**Recovery less than lower data quality objective**

Outliers : Analysis Holding Time Compliance

Matrix: **WATER**

Method / Container / Client Sample ID(s)	Extraction / Preparation			Analysis		
	Date extracted	Due for extraction	Days overdue	Date analysed	Due for analysis	Days overdue
EK057G: Nitrite as N by Discrete Analyser						
Clear Plastic Bottle - Natural						
S40_d, SMW_BH019, SMW_BH120, D01_220119	----	----	----	22-Jan-2022	21-Jan-2022	**1**
EP080/071: Total Petroleum Hydrocarbons						
Amber VOC Vial - Sulfuric Acid						
Trip blank	28-Jan-2022	27-Jan-2022	**1**	28-Jan-2022	27-Jan-2022	**1**
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions						

Matrix: **WATER**

Method / Container / Client Sample ID(s)	Extraction / Preparation: Date extracted	Extraction / Preparation: Due for extraction	Extraction / Preparation: Days overdue	Analysis: Date analysed	Analysis: Due for analysis	Analysis: Days overdue
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions - Analysis Holding Time						
Amber VOC Vial - Sulfuric Acid						
Trip blank	28-Jan-2022	27-Jan-2022	**1**	28-Jan-2022	27-Jan-2022	**1**
EP080: BTEXN						
Amber VOC Vial - Sulfuric Acid						
Trip Spike, Trip blank	28-Jan-2022	27-Jan-2022	**1**	28-Jan-2022	27-Jan-2022	**1**

Outliers : Frequency of Quality Control Samples

Matrix: **WATER**

Quality Control Sample Type / Method	Count: QC	Count: Regular	Rate (%): Actual	Rate (%): Expected	Quality Control Specification
Laboratory Duplicates (DUP)					
Ammonia as N by Discrete analyser	1	19	5.26	10.00	NEPM 2013 B3 & ALS QC Standard
Nitrite and Nitrate as N (NOx) by Discrete Analyser	1	17	5.88	10.00	NEPM 2013 B3 & ALS QC Standard
PAH/Phenols (GC/MS - SIM)	0	19	0.00	10.00	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	0	19	0.00	10.00	NEPM 2013 B3 & ALS QC Standard
Matrix Spikes (MS)					
PAH/Phenols (GC/MS - SIM)	0	19	0.00	5.00	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	0	19	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 / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation: Date extracted	Extraction / Preparation: Due for extraction	Extraction / Preparation: Evaluation	Analysis: Date analysed	Analysis: Due for analysis	Analysis: Evaluation
EA015: Total Dissolved Solids dried at 180 ± 5 °C							
Clear Plastic Bottle - Natural (EA015H)							
S40_d, SMW_BH120, SMW_BH019, D01_220119	**19-Jan-2022**	**----**	----	----	**25-Jan-2022**	26-Jan-2022	✓
Clear Plastic Bottle - Natural (EA015H)							
S51, S54, S02_d, S06, S40_s, BUR-MW108	**20-Jan-2022**	**----**	----	----	**25-Jan-2022**	27-Jan-2022	✓

Matrix: **WATER**

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

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
ED037P: Alkalinity by PC Titrator							
Clear Plastic Bottle - Natural (ED037-P)							
S40_d, SMW_BH019, SMW_BH120, D01_220119	**19-Jan-2022**	**----**	----	----	**25-Jan-2022**	02-Feb-2022	✓
Clear Plastic Bottle - Natural (ED037-P)							
S51, S02_d, S40_s, S54, S06, BUR-MW108	**20-Jan-2022**	**----**	----	----	**25-Jan-2022**	03-Feb-2022	✓
ED041G: Sulfate (Turbidimetric) as SO4 2- by DA							
Clear Plastic Bottle - Natural (ED041G)							
S40_d, SMW_BH019, SMW_BH120, D01_220119	**19-Jan-2022**	**----**	----	----	**22-Jan-2022**	16-Feb-2022	✓
Clear Plastic Bottle - Natural (ED041G)							
S51, S02_d, S40_s, S54, S06, BUR-MW108	**20-Jan-2022**	**----**	----	----	**22-Jan-2022**	17-Feb-2022	✓
ED045G: Chloride by Discrete Analyser							
Clear Plastic Bottle - Natural (ED045G)							
S40_d, SMW_BH019, SMW_BH120, D01_220119	**19-Jan-2022**	**----**	----	----	**22-Jan-2022**	16-Feb-2022	✓
Clear Plastic Bottle - Natural (ED045G)							
S51, S02_d, S40_s, S54, S06, BUR-MW108	**20-Jan-2022**	**----**	----	----	**22-Jan-2022**	17-Feb-2022	✓
ED093F: Dissolved Major Cations							
Clear Plastic Bottle - Nitric Acid; Filtered (ED093F)							
S40_d, SMW_BH019, SMW_BH120, D01_220119	**19-Jan-2022**	**----**	----	----	**25-Jan-2022**	16-Feb-2022	✓
Clear Plastic Bottle - Nitric Acid; Filtered (ED093F)							
S51, S02_d, S40_s, S54, S06, BUR-MW108	**20-Jan-2022**	**----**	----	----	**25-Jan-2022**	17-Feb-2022	✓
EG020F: Dissolved Metals by ICP-MS							
Clear Plastic Bottle - Nitric Acid; Filtered (EG020A-F)							
S40_d, SMW_BH019, RO1-220119, SMW_BH120, D01_220119,	**19-Jan-2022**	**----**	----	----	**25-Jan-2022**	18-Jul-2022	✓
Clear Plastic Bottle - Nitric Acid; Filtered (EG020A-F)							
S51, S02_d, S40_s, BUR-MW108, S54, S06, RO1-20-01-22,	**20-Jan-2022**	**----**	----	----	**25-Jan-2022**	19-Jul-2022	✓

Matrix: **WATER**

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

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EG035F: Dissolved Mercury by FIMS							
Clear Plastic Bottle - Nitric Acid; Filtered (EG035F)							
S40_d, SMW_BH019, RO1-220119, SMW_BH120, D01_220119,	**19-Jan-2022**	**----**	----	----	**27-Jan-2022**	16-Feb-2022	✓
Clear Plastic Bottle - Nitric Acid; Filtered (EG035F)							
S51, S02_d, S40_s, BUR-MW108, S54, S06, RO1-20-01-22,	**20-Jan-2022**	**----**	----	----	**27-Jan-2022**	17-Feb-2022	✓
EK055G: Ammonia as N by Discrete Analyser							
Clear Plastic Bottle - Sulfuric Acid (EK055G)							
S40_d, SMW_BH019, RO1-220119, SMW_BH120, D01_220119,	**19-Jan-2022**	**----**	----	----	**25-Jan-2022**	16-Feb-2022	✓
Clear Plastic Bottle - Sulfuric Acid (EK055G)							
S51, S02_d, S40_s, BUR-MW108, S54, S06, RO1-20-01-22,	**20-Jan-2022**	**----**	----	----	**25-Jan-2022**	17-Feb-2022	✓
EK057G: Nitrite as N by Discrete Analyser							
Clear Plastic Bottle - Natural (EK057G)							
S40_d, SMW_BH019, SMW_BH120, D01_220119	**19-Jan-2022**	**----**	----	----	**22-Jan-2022**	21-Jan-2022	×
Clear Plastic Bottle - Natural (EK057G)							
S51, S02_d, S40_s, S54, S06, BUR-MW108	**20-Jan-2022**	**----**	----	----	**22-Jan-2022**	22-Jan-2022	✓
EK059G: Nitrite plus Nitrate as N (NOx) by Discrete Analyser							
Clear Plastic Bottle - Sulfuric Acid (EK059G)							
S40_d, SMW_BH019, RO1-220119, SMW_BH120, D01_220119,	**19-Jan-2022**	**----**	----	----	**25-Jan-2022**	16-Feb-2022	✓
Clear Plastic Bottle - Sulfuric Acid (EK059G)							
S51, S02_d, S40_s, BUR-MW108, S54, S06, RO1-20-01-22,	**20-Jan-2022**	**----**	----	----	**25-Jan-2022**	17-Feb-2022	✓

Matrix: **WATER**

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

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EK061G: Total Kjeldahl Nitrogen By Discrete Analyser							
Clear Plastic Bottle - Sulfuric Acid (EK061G)							
S40_d, SMW_BH120, SMW_BH019, D01_220119, RO1-220119	**19-Jan-2022**	**25-Jan-2022**	16-Feb-2022	✓	**25-Jan-2022**	16-Feb-2022	✓
Clear Plastic Bottle - Sulfuric Acid (EK061G)							
S51, S54, S02_d, S06, S40_s, RO1-20-01-22, BUR-MW108	**20-Jan-2022**	**25-Jan-2022**	17-Feb-2022	✓	**25-Jan-2022**	17-Feb-2022	✓
EK067G: Total Phosphorus as P by Discrete Analyser							
Clear Plastic Bottle - Sulfuric Acid (EK067G)							
S40_d, SMW_BH120, SMW_BH019, D01_220119, RO1-220119	**19-Jan-2022**	**25-Jan-2022**	16-Feb-2022	✓	**25-Jan-2022**	16-Feb-2022	✓
Clear Plastic Bottle - Sulfuric Acid (EK067G)							
S51, S54, S02_d, S06, S40_s, RO1-20-01-22, BUR-MW108	**20-Jan-2022**	**25-Jan-2022**	17-Feb-2022	✓	**25-Jan-2022**	17-Feb-2022	✓
EP074A: Monocyclic Aromatic Hydrocarbons							
Amber VOC Vial - Sulfuric Acid (EP074)							
S40_d, SMW_BH120, SMW_BH019, D01_220119, RO1-220119	**19-Jan-2022**	**28-Jan-2022**	02-Feb-2022	✓	**28-Jan-2022**	02-Feb-2022	✓
Amber VOC Vial - Sulfuric Acid (EP074)							
S51, S54, S02_d, S06, S40_s, RO1-20-01-22, BUR-MW108	**20-Jan-2022**	**28-Jan-2022**	03-Feb-2022	✓	**28-Jan-2022**	03-Feb-2022	✓
EP074B: Oxygenated Compounds							
Amber VOC Vial - Sulfuric Acid (EP074)							
S40_d, SMW_BH120, SMW_BH019, D01_220119, RO1-220119	**19-Jan-2022**	**28-Jan-2022**	02-Feb-2022	✓	**28-Jan-2022**	02-Feb-2022	✓
Amber VOC Vial - Sulfuric Acid (EP074)							
S51, S54, S02_d, S06, S40_s, RO1-20-01-22, BUR-MW108	**20-Jan-2022**	**28-Jan-2022**	03-Feb-2022	✓	**28-Jan-2022**	03-Feb-2022	✓

Matrix: **WATER**

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

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP074C: Sulfonated Compounds							
Amber VOC Vial - Sulfuric Acid (EP074) S40_d, SMW_BH120, SMW_BH019, D01_220119, RO1-220119	**19-Jan-2022**	**28-Jan-2022**	02-Feb-2022	✓	**28-Jan-2022**	02-Feb-2022	✓
Amber VOC Vial - Sulfuric Acid (EP074) S51, S54, S02_d, S06, S40_s, RO1-20-01-22, BUR-MW108	**20-Jan-2022**	**28-Jan-2022**	03-Feb-2022	✓	**28-Jan-2022**	03-Feb-2022	✓
EP074D: Fumigants							
Amber VOC Vial - Sulfuric Acid (EP074) S40_d, SMW_BH120, SMW_BH019, D01_220119, RO1-220119	**19-Jan-2022**	**28-Jan-2022**	02-Feb-2022	✓	**28-Jan-2022**	02-Feb-2022	✓
Amber VOC Vial - Sulfuric Acid (EP074) S51, S54, S02_d, S06, S40_s, RO1-20-01-22, BUR-MW108	**20-Jan-2022**	**28-Jan-2022**	03-Feb-2022	✓	**28-Jan-2022**	03-Feb-2022	✓
EP074E: Halogenated Aliphatic Compounds							
Amber VOC Vial - Sulfuric Acid (EP074) S40_d, SMW_BH120, SMW_BH019, D01_220119, RO1-220119	**19-Jan-2022**	**28-Jan-2022**	02-Feb-2022	✓	**28-Jan-2022**	02-Feb-2022	✓
Amber VOC Vial - Sulfuric Acid (EP074) S51, S54, S02_d, S06, S40_s, RO1-20-01-22, BUR-MW108	**20-Jan-2022**	**28-Jan-2022**	03-Feb-2022	✓	**28-Jan-2022**	03-Feb-2022	✓
EP074F: Halogenated Aromatic Compounds							
Amber VOC Vial - Sulfuric Acid (EP074) S40_d, SMW_BH120, SMW_BH019, D01_220119, RO1-220119	**19-Jan-2022**	**28-Jan-2022**	02-Feb-2022	✓	**28-Jan-2022**	02-Feb-2022	✓
Amber VOC Vial - Sulfuric Acid (EP074) S51, S54, S02_d, S06, S40_s, RO1-20-01-22, BUR-MW108	**20-Jan-2022**	**28-Jan-2022**	03-Feb-2022	✓	**28-Jan-2022**	03-Feb-2022	✓

Matrix: **WATER**

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

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP074G: Trihalomethanes							
Amber VOC Vial - Sulfuric Acid (EP074) S40_d, SMW_BH120, SMW_BH019, D01_220119, RO1-220119	**19-Jan-2022**	**28-Jan-2022**	02-Feb-2022	✓	**28-Jan-2022**	02-Feb-2022	✓
Amber VOC Vial - Sulfuric Acid (EP074) S51, S54, S02_d, S06, S40_s, RO1-20-01-22, BUR-MW108	**20-Jan-2022**	**28-Jan-2022**	03-Feb-2022	✓	**28-Jan-2022**	03-Feb-2022	✓
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons							
Amber Glass Bottle - Unpreserved (EP075(SIM)) S40_d, SMW_BH120, SMW_BH019, D01_220119, RO1-220119	**19-Jan-2022**	**25-Jan-2022**	26-Jan-2022	✓	**27-Jan-2022**	06-Mar-2022	✓
Amber Glass Bottle - Unpreserved (EP075(SIM)) S51, S54, S02_d, S06, S40_s, RO1-20-01-22, BUR-MW108	**20-Jan-2022**	**25-Jan-2022**	27-Jan-2022	✓	**27-Jan-2022**	06-Mar-2022	✓
EP080/071: Total Petroleum Hydrocarbons							
Amber Glass Bottle - Unpreserved (EP071) S40_d, SMW_BH120, SMW_BH019, D01_220119, RO1-220119	**19-Jan-2022**	**25-Jan-2022**	26-Jan-2022	✓	**27-Jan-2022**	06-Mar-2022	✓
Amber Glass Bottle - Unpreserved (EP071) S51, S54, S02_d, S06, S40_s, RO1-20-01-22, BUR-MW108	**20-Jan-2022**	**25-Jan-2022**	27-Jan-2022	✓	**27-Jan-2022**	06-Mar-2022	✓
Amber VOC Vial - Sulfuric Acid (EP080) Trip blank	**13-Jan-2022**	**28-Jan-2022**	27-Jan-2022	×	**28-Jan-2022**	27-Jan-2022	×
Amber VOC Vial - Sulfuric Acid (EP080) S40_d, SMW_BH120, SMW_BH019, D01_220119, RO1-220119	**19-Jan-2022**	**28-Jan-2022**	02-Feb-2022	✓	**28-Jan-2022**	02-Feb-2022	✓
Amber VOC Vial - Sulfuric Acid (EP080) S51, S54, S02_d, S06, S40_s, RO1-20-01-22, BUR-MW108	**20-Jan-2022**	**28-Jan-2022**	03-Feb-2022	✓	**28-Jan-2022**	03-Feb-2022	✓

Matrix: **WATER**

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

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions							
Amber Glass Bottle - Unpreserved (EP071) S40_d, SMW_BH120, SMW_BH019, D01_220119, RO1-220119	**19-Jan-2022**	**25-Jan-2022**	26-Jan-2022	✓	**27-Jan-2022**	06-Mar-2022	✓
Amber Glass Bottle - Unpreserved (EP071) S51, S54, S02_d, S06, S40_s, RO1-20-01-22, BUR-MW108	**20-Jan-2022**	**25-Jan-2022**	27-Jan-2022	✓	**27-Jan-2022**	06-Mar-2022	✓
Amber VOC Vial - Sulfuric Acid (EP080) Trip blank	**13-Jan-2022**	**28-Jan-2022**	27-Jan-2022	×	**28-Jan-2022**	27-Jan-2022	×
Amber VOC Vial - Sulfuric Acid (EP080) S40_d, SMW_BH120, SMW_BH019, D01_220119, RO1-220119	**19-Jan-2022**	**28-Jan-2022**	02-Feb-2022	✓	**28-Jan-2022**	02-Feb-2022	✓
Amber VOC Vial - Sulfuric Acid (EP080) S51, S54, S02_d, S06, S40_s, RO1-20-01-22, BUR-MW108	**20-Jan-2022**	**28-Jan-2022**	03-Feb-2022	✓	**28-Jan-2022**	03-Feb-2022	✓
EP080: BTEXN							
Amber VOC Vial - Sulfuric Acid (EP080) Trip Spike, Trip blank	**13-Jan-2022**	**28-Jan-2022**	27-Jan-2022	×	**28-Jan-2022**	27-Jan-2022	×
Amber VOC Vial - Sulfuric Acid (EP080) S40_d, SMW_BH120, SMW_BH019, D01_220119, RO1-220119	**19-Jan-2022**	**28-Jan-2022**	02-Feb-2022	✓	**28-Jan-2022**	02-Feb-2022	✓
Amber VOC Vial - Sulfuric Acid (EP080) S51, S54, S02_d, S06, S40_s, RO1-20-01-22, BUR-MW108	**20-Jan-2022**	**28-Jan-2022**	03-Feb-2022	✓	**28-Jan-2022**	03-Feb-2022	✓

Quality Control Parameter Frequency Compliance

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

Matrix: **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)							
Alkalinity by PC Titrator	ED037-P	2	17	**11.76**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Ammonia as N by Discrete analyser	EK055G	1	19	**5.26**	**10.00**	×	NEPM 2013 B3 & ALS QC Standard
Chloride by Discrete Analyser	ED045G	4	39	**10.26**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
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
Major Cations - Dissolved	ED093F	2	20	**10.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Nitrite and Nitrate as N (NOx) by Discrete Analyser	EK059G	1	17	**5.88**	**10.00**	×	NEPM 2013 B3 & ALS QC Standard
Nitrite as N by Discrete Analyser	EK057G	4	30	**13.33**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
PAH/Phenols (GC/MS - SIM)	EP075(SIM)	0	19	**0.00**	**10.00**	×	NEPM 2013 B3 & ALS QC Standard
Sulfate (Turbidimetric) as SO4 2- by Discrete Analyser	ED041G	4	39	**10.26**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Dissolved Solids (High Level)	EA015H	4	31	**12.90**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Kjeldahl Nitrogen as N By Discrete Analyser	EK061G	2	17	**11.76**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Phosphorus as P By Discrete Analyser	EK067G	2	19	**10.53**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	0	19	**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
Volatile Organic Compounds	EP074	2	18	**11.11**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Laboratory Control Samples (LCS)							
Alkalinity by PC Titrator	ED037-P	2	17	**11.76**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Ammonia as N by Discrete analyser	EK055G	1	19	**5.26**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Chloride by Discrete Analyser	ED045G	4	39	**10.26**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
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
Major Cations - Dissolved	ED093F	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Nitrite and Nitrate as N (NOx) by Discrete Analyser	EK059G	1	17	**5.88**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Nitrite as N by Discrete Analyser	EK057G	2	30	**6.67**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
PAH/Phenols (GC/MS - SIM)	EP075(SIM)	1	19	**5.26**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Sulfate (Turbidimetric) as SO4 2- by Discrete Analyser	ED041G	4	39	**10.26**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Dissolved Solids (High Level)	EA015H	6	31	**19.35**	**15.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Kjeldahl Nitrogen as N By Discrete Analyser	EK061G	3	17	**17.65**	**15.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Phosphorus as P By Discrete Analyser	EK067G	3	19	**15.79**	**15.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	1	19	**5.26**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Volatile Organic Compounds	EP074	1	18	**5.56**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Method Blanks (MB)							
Ammonia as N by Discrete analyser	EK055G	1	19	**5.26**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Chloride by Discrete Analyser	ED045G	2	39	**5.13**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard

Matrix: **WATER**

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

Quality Control Sample Type		Count		Rate (%)			Quality Control Specification
Analytical Methods	*Method*	*QC*	*Regular*	***Actual***	***Expected***	*Evaluation*	
Method Blanks (MB) - Continued							
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
Major Cations - Dissolved	ED093F	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Nitrite and Nitrate as N (NOx) by Discrete Analyser	EK059G	1	17	**5.88**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Nitrite as N by Discrete Analyser	EK057G	2	30	**6.67**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
PAH/Phenols (GC/MS - SIM)	EP075(SIM)	1	19	**5.26**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Sulfate (Turbidimetric) as SO4 2- by Discrete Analyser	ED041G	2	39	**5.13**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Dissolved Solids (High Level)	EA015H	2	31	**6.45**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Kjeldahl Nitrogen as N By Discrete Analyser	EK061G	1	17	**5.88**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Phosphorus as P By Discrete Analyser	EK067G	1	19	**5.26**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	1	19	**5.26**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Volatile Organic Compounds	EP074	1	18	**5.56**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Matrix Spikes (MS)							
Ammonia as N by Discrete analyser	EK055G	1	19	**5.26**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Chloride by Discrete Analyser	ED045G	2	39	**5.13**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
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
Nitrite and Nitrate as N (NOx) by Discrete Analyser	EK059G	1	17	**5.88**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Nitrite as N by Discrete Analyser	EK057G	2	30	**6.67**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
PAH/Phenols (GC/MS - SIM)	EP075(SIM)	0	19	**0.00**	**5.00**	×	NEPM 2013 B3 & ALS QC Standard
Sulfate (Turbidimetric) as SO4 2- by Discrete Analyser	ED041G	2	39	**5.13**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Kjeldahl Nitrogen as N By Discrete Analyser	EK061G	1	17	**5.88**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Phosphorus as P By Discrete Analyser	EK067G	1	19	**5.26**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	0	19	**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
Volatile Organic Compounds	EP074	1	18	**5.56**	**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
Total Dissolved Solids (High Level)	EA015H	WATER	In house: Referenced to APHA 2540C. A gravimetric procedure that determines the amount of `filterable` residue in an aqueous sample. A well-mixed sample is filtered through a glass fibre filter (1.2um). The filtrate is evaporated to dryness and dried to constant weight at 180+/-5C. This method is compliant with NEPM Schedule B(3)
Alkalinity by PC Titrator	ED037-P	WATER	In house: Referenced to APHA 2320 B This procedure determines alkalinity by automated measurement (e.g. PC Titrate) on a settled supernatant aliquot of the sample using pH 4.5 for indicating the total alkalinity end-point. This method is compliant with NEPM Schedule B(3)
Sulfate (Turbidimetric) as SO4 2- by Discrete Analyser	ED041G	WATER	In house: Referenced to APHA 4500-SO4. Dissolved sulfate is determined in a 0.45um filtered sample. Sulfate ions are converted to a barium sulfate suspension in an acetic acid medium with barium chloride. Light absorbance of the BaSO4 suspension is measured by a photometer and the SO4-2 concentration is determined by comparison of the reading with a standard curve. This method is compliant with NEPM Schedule B(3)
Chloride by Discrete Analyser	ED045G	WATER	In house: Referenced to APHA 4500 Cl - G.The thiocyanate ion is liberated from mercuric thiocyanate through sequestration of mercury by the chloride ion to form non-ionised mercuric chloride.in the presence of ferric ions the librated thiocynate forms highly-coloured ferric thiocynate which is measured at 480 nm APHA seal method 2 017-1-L
Major Cations - Dissolved	ED093F	WATER	In house: Referenced to APHA 3120 and 3125; USEPA SW 846 - 6010 and 6020; Cations are determined by either ICP-AES or ICP-MS techniques. This method is compliant with NEPM Schedule B(3) Sodium Adsorption Ratio is calculated from Ca, Mg and Na which determined by ALS in house method QWI-EN/ED093F. This method is compliant with NEPM Schedule B(3) Hardness parameters are calculated based on APHA 2340 B. This method is compliant with NEPM Schedule B(3)
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 (SnCl2)(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 SnCl2 which is then purged into a heated quartz cell. Quantification is by comparing absorbance against a calibration curve. This method is compliant with NEPM Schedule B(3).
Ammonia as N by Discrete analyser	EK055G	WATER	In house: Referenced to APHA 4500-NH3 G Ammonia is determined by direct colorimetry by Discrete Analyser. This method is compliant with NEPM Schedule B(3)
Nitrite as N by Discrete Analyser	EK057G	WATER	In house: Referenced to APHA 4500-NO2- B. Nitrite is determined by direct colourimetry by Discrete Analyser. This method is compliant with NEPM Schedule B(3)
Nitrate as N by Discrete Analyser	EK058G	WATER	In house: Referenced to APHA 4500-NO3- F. Nitrate is reduced to nitrite by way of a chemical reduction followed by quantification by Discrete Analyser. Nitrite is determined seperately by direct colourimetry and result for Nitrate calculated as the difference between the two results. This method is compliant with NEPM Schedule B(3)

Analytical Methods	Method	Matrix	Method Descriptions
Nitrite and Nitrate as N (NOx) by Discrete Analyser	EK059G	WATER	In house: Referenced to APHA 4500-NO3- F. Combined oxidised Nitrogen (NO2+NO3) is determined by Chemical Reduction and direct colourimetry by Discrete Analyser. This method is compliant with NEPM Schedule B(3)
Total Kjeldahl Nitrogen as N By Discrete Analyser	EK061G	WATER	In house: Referenced to APHA 4500-Norg D (In house). An aliquot of sample is digested using a high temperature Kjeldahl digestion to convert nitrogenous compounds to ammonia. Ammonia is determined colorimetrically by discrete analyser. This method is compliant with NEPM Schedule B(3)
Total Nitrogen as N (TKN + Nox) By Discrete Analyser	EK062G	WATER	In house: Referenced to APHA 4500-Norg / 4500-NO3-. This method is compliant with NEPM Schedule B(3)
Total Phosphorus as P By Discrete Analyser	EK067G	WATER	In house: Referenced to APHA 4500-P H, Jirka et al, Zhang et al. This procedure involves sulphuric acid digestion of a sample aliquot to break phosphorus down to orthophosphate. The orthophosphate reacts with ammonium molybdate and antimony potassium tartrate to form a complex which is then reduced and its concentration measured at 880nm using discrete analyser. This method is compliant with NEPM Schedule B(3)
Ionic Balance by PCT DA and Turbi SO4 DA	* EN055 - PG	WATER	In house: Referenced to APHA 1030F. 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)
Volatile Organic Compounds	EP074	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. This method is compliant with 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
TKN/TP Digestion	EK061/EK067	WATER	In house: Referenced to APHA 4500 Norg - D; APHA 4500 P - H. This method is compliant with NEPM Schedule B(3)
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.

CHAIN OF CUSTODY

ALS Laboratory: please tick →

ADELAIDE 21 Burma Road Pooraka SA 5095 Ph: 08 8359 0690 E: adelaide@alsglobal.com
BRISBANE 32 Shand Street Stafford QLD 4053 Ph: 07 3243 7222 E: samples.brisbane@alsglobal.com
GLADSTONE 46 Callemondah Drive Clinton QLD 4680 Ph: 07 7471 5600 E: gladstone@alsglobal.com
MACKAY 78 Harbour Road Mackay QLD 4740 Ph: 07 4944 0177 E: mackay@alsglobal.com
MELBOURNE 2-4 Westall Road Springvale VIC 3171 Ph: 03 8549 9600 E: samples.melbourne@alsglobal.com
MUDGEE 27 Sydney Road Mudgee NSW 2850 Ph: 02 6372 6735 E: mudgee.mail@alsglobal.com
NEWCASTLE 5/585 Maitland Rd Mayfield West NSW 2304 Ph: 02 4014 2500 E: samples.newcastle@alsglobal.com
NOWRA 4/13 Geary Place North Nowra NSW 2541 Ph: 024423 2063 E: nowra@alsglobal.com
PERTH 10 Hod Way Malaga WA 6090 Ph: 08 9209 7655 E: samples.perth@alsglobal.com
SYDNEY 277-289 Woodpark Road Smithfield NSW 2164 Ph: 02 8784 8555 E: samples.sydney@alsglobal.com
TOWNSVILLE 14-15 Desma Court Bohle QLD 4818 Ph: 07 4796 0600 E: townsville.environmental@alsglobal.com
WOLLONGONG 99 Kenny Street Wollongong NSW 2500 Ph: 02 4225 3125 E: portkembla@alsglobal.com

CLIENT: ERM	TURNAROUND REQUIREMENTS: ☑ Standard TAT (List due date):	FOR LABORATORY USE ONLY (Circle)	
OFFICE: Sydney	(Standard TAT may be longer for some tests e.g. Ultra Trace Organics) ☐ Non Standard or urgent TAT (List due date):	Custody Seal Intact?	Yes / No / N/A
PROJECT: 0628507	ALS QUOTE NO.:	Free ice / frozen ice bricks present upon receipt?	Yes / No / N/A
ORDER NUMBER:	COC SEQUENCE NUMBER (Circle) COC: 1 2 3 4 5 6 7 OF: 1 2 3 4 5 6 7	Random Sample Temperature on Receipt:	°C
PROJECT MANAGER: Dosa Nicholas Gubich	CONTACT PH: 0415 833 925	Other comment:	6.2
SAMPLER: Taj Monsor	SAMPLER MOBILE: 0467 295 082	RELINQUISHED BY: Taj Monsor	RECEIVED BY: [illegible]
COC emailed to ALS? (YES / (NO)	EDD FORMAT (or default):	DATE/TIME: 20/01/22	DATE/TIME: 20/1/22 1900
Email Reports to (will default to PM if no other addresses are listed):		RELINQUISHED BY:	RECEIVED BY:
Email Invoice to (will default to PM if no other addresses are listed):		DATE/TIME:	DATE/TIME:

COMMENTS/SPECIAL HANDLING/STORAGE OR DISPOSAL:

ALS USE	SAMPLE DETAILS MATRIX: SOLID (S) WATER (W)			CONTAINER INFORMATION		ANALYSIS REQUIRED including SUITES (NB. Suite Codes must be listed to attract suite price) Where Metals are required, specify Total (unfiltered bottle required) or Dissolved (field filtered bottle required)							Additional Information
LAB ID	SAMPLE ID	DATE / TIME	MATRIX	TYPE & PRESERVATIVE (refer to codes below)	TOTAL CONTAINERS	TRH & BTEXN	PAHs	VOCs	Heavy metals plus iron	Ammonia, Nitrate, Total nitrogen & Total phosphorus	Major anions & calcium	Fluoride & TDS	
1	S51	20-01-22	W			X	X	X	X	X	X	X	
2	S54												
3	S02-D												
4	S06												
5	S40-S												
6	S40-D												
7	SMW_BH120	19-01-22											
8	SMW_BH019												
9	D01-220119												
10	T01-220119												
11	R01-220119												minus nitrate analysis
12	R01-220120	20-01-22											minus nitrate analysis
				TOTAL									

Environmental Division Sydney
Work Order Reference
ES2201979

Telephone : +61-2-8784 8555

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

CHAIN OF CUSTODY

ALS Laboratory; please tick →

ADELAIDE 21 Burma Road Pooraka SA 5095 Ph: 08 8359 0890 E: adelaide@alsglobal.com
BRISBANE 32 Shand Street Stafford QLD 4053 Ph: 07 3243 7222 E: samples.brisbane@alsglobal.com
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MUDGEE 27 Sydney Road Mudgee NSW 2850 Ph: 02 6372 6735 E: mudgee.mail@alsglobal.com
NEWCASTLE 5/585 Maitland Rd Mayfield West NSW 2304 Ph: 02 4014 2500 E: samples.newcastle@alsglobal.com
NOWRA 4/12 Geary Place North Nowra NSW 2541 Ph: 02 4423 2063 E: nowra@alsglobal.com
PERTH 10 Hod Way Malaga WA 6090 Ph: 08 9209 7655 E: samples.perth@alsglobal.com
SYDNEY 277-289 Woodpark Road Smithfield NSW 2164 Ph: 02 8784 8555 E: samples.sydney@alsglobal.com
TOWNSVILLE 14-15 Desma Court Bohle QLD 4818 Ph: 07 4796 0600 E: townsville.environmental@alsglobal.com
WOLLONGONG 99 Kenny Street Wollongong NSW 2500 Ph: 02 4225 3125 E: portkembla@alsglobal.com

CLIENT: ERM	TURNAROUND REQUIREMENTS : ☑ Standard TAT (List due date):	FOR LABORATORY USE ONLY (Circle)	
OFFICE: Sydney	(Standard TAT may be longer for some tests e.g. Ultra Trace Organics) ☐ Non Standard or urgent TAT (List due date):	Custody Seal Intact?	Yes No N/A
PROJECT: 0628507	ALS QUOTE NO.:	Free ice / frozen ice bricks present upon receipt?	Yes No N/A
ORDER NUMBER:	COC SEQUENCE NUMBER (Circle) COC: 1 2 3 4 5 6 7 OF: 1 2 3 4 5 6 7	Random Sample Temperature on Receipt:	6.2 °C
PROJECT MANAGER: Nicholas Garrick	CONTACT PH: 0415 833 922	Other comment:	
SAMPLER: Tai, Marcus	SAMPLER MOBILE: 0467 295 882	RELINQUISHED BY: T. Marcus	RECEIVED BY: Scott Miles ALS
COC emailed to ALS? (YES / NO)	EDD FORMAT (or default):	DATE/TIME: 20/01/22	DATE/TIME: 20/1/22 1900
Email Reports to (will default to PM if no other addresses are listed):		RELINQUISHED BY:	RECEIVED BY:
Email Invoice to (will default to PM if no other addresses are listed):		DATE/TIME:	DATE/TIME:

COMMENTS/SPECIAL HANDLING/STORAGE OR DISPOSAL:

ALS USE	SAMPLE DETAILS MATRIX: SOLID (S) WATER (W)			CONTAINER INFORMATION		ANALYSIS REQUIRED Including SUITES (NB. Suite Codes must be listed to attract suite price) Where Metals are required, specify Total (unfiltered bottle required) or Dissolved (field filtered bottle required)								Additional Information
LAB ID	SAMPLE ID	DATE / TIME	MATRIX	TYPE & PRESERVATIVE (refer to codes below)	TOTAL CONTAINERS	TRH + BTEX + N	PAHs	VOC's	Heavy metals plus iron	Ammonia + nitrate + nitrite + total phosphorus	TDS	Major anions & cations		Comments on likely contaminant levels, dilutions, or samples requiring specific QC analysis etc.
13	Trip spike x 2	20-01-22	W			X	X	X	X	X	X	X		
14	Trip blank x2					X	X	X	X	X	X	X		
15	BUR-MW108					X	X	X	X	X	X	X		
16	BUR-BH121					X	X	X	X	X	X	X		
	[redacted]					X	X	X	X	X	X	X		
				TOTAL										

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

ALS Environmental

CERTIFICATE OF ANALYSIS

Work Order	: **ES2202047**	Page	: 1 of 23
Client	: **ENVIRONMENTAL RESOURCES MANAGEMENT (ERM)**	Laboratory	: Environmental Division Sydney
Contact	: NICHOLAS GRBICH	Contact	: Customer Services ES
Address	: LEVEL 15 309 KENT STREET SYDNEY NSW AUSTRALIA 2000	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
Telephone	: ----	Telephone	: +61-2-8784 8555
Project	: 0628507	Date Samples Received	: 21-Jan-2022 13:15
Order number	: ----	Date Analysis Commenced	: 24-Jan-2022
C-O-C number	: ----	Issue Date	: 01-Feb-2022 15:29
Sampler	: TAJ MONDON		
Site	: ----		
Quote number	: EN/114		
No. of samples received	: 24		
No. of samples analysed	: 23		

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

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

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results
- Surrogate Control Limits

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

Signatories

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

Signatories	*Position*	*Accreditation Category*
Ankit Joshi	Inorganic Chemist	Sydney Inorganics, Smithfield, NSW
Edwandy Fadjar	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.

- 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.
- 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: Positive result for various analytes on sample ES2202047_001,004-005,007,009-011,017,019,021 has been confirmed by re-extraction and re-analysis.
- EG035: Poor matrix spike recovery was obtained for Mercury on sample ES2201942 # 1. Confirmed by re-analysis.
- EK059G, EK057G: NOx and Nitrite results for sample no: 12 confirmed via re-analysis.
- EP075: Poor surrogate recovery due to sample heterogeneity. Confirmed by re-extraction and re-analysis.
- EP075(SIM): Particular sample phenolic surrogate not determined due to sample matrix interferences.
- 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
- Sodium Adsorption Ratio (where reported): Where results for Na, Ca or Mg are <LOR, a concentration at half the reported LOR is incorporated into the SAR calculation. This represents a conservative approach for Na relative to the assumption that <LOR = zero concentration and a conservative approach for Ca & Mg relative to the assumption that <LOR is equivalent to the LOR concentration.
- 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	SMW_BH051	S51	S54	S02_d	S06
			Sampling date / time	18-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00
Compound	CAS Number	LOR	Unit	ES2202047-001	ES2202047-003	ES2202047-004	ES2202047-005	ES2202047-006
				Result	Result	Result	Result	Result
EP231A: Perfluoroalkyl Sulfonic Acids								
Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	<0.01	<0.01	<0.01	**0.02**	**0.04**
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	<0.01	<0.01	<0.01	<0.01	**0.07**
Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
EP231B: Perfluoroalkyl Carboxylic Acids								
Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	**0.09**
Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	<0.01	<0.01	<0.01	<0.01	**0.06**
Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05
EP231C: Perfluoroalkyl Sulfonamides								
Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	SMW_BH051	S51	S54	S02_d	S06
				Sampling date / time	18-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00
Compound	CAS Number	LOR	Unit		ES2202047-001	ES2202047-003	ES2202047-004	ES2202047-005	ES2202047-006
					Result	Result	Result	Result	Result
EP231C: Perfluoroalkyl Sulfonamides - Continued									
N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L		<0.05	<0.05	<0.05	<0.05	<0.05
N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L		<0.05	<0.05	<0.05	<0.05	<0.05
N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	<0.02
N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	<0.02
EP231D: (n:2) Fluorotelomer Sulfonic Acids									
4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L		<0.05	<0.05	<0.05	<0.05	<0.05
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.05	µg/L		**0.13**	<0.05	**0.12**	<0.05	**0.07**
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		**0.13**	<0.01	**0.12**	**0.02**	**0.33**
Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L		<0.01	<0.01	<0.01	**0.02**	**0.11**
Sum of PFAS (WA DER List)	----	0.01	µg/L		**0.13**	<0.01	**0.12**	**0.02**	**0.33**
EP231S: PFAS Surrogate									
13C4-PFOS	----	0.02	%		**114**	**113**	**110**	**111**	**100**
13C8-PFOA	----	0.02	%		**101**	**99.8**	**103**	**104**	**98.6**

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)			Sample ID	S40_d	S40_S	BUR_MW108	D01_220119	T01_220119
			Sampling date / time	20-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00
Compound	CAS Number	LOR	Unit	ES2202047-007	ES2202047-008	ES2202047-009	ES2202047-010	ES2202047-011
				Result	Result	Result	Result	Result
EP231A: Perfluoroalkyl Sulfonic Acids								
Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	**0.02**	<0.01	<0.01	<0.01	<0.01
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	<0.01	<0.01	<0.01	**0.02**	**0.02**
Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
EP231B: Perfluoroalkyl Carboxylic Acids								
Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	<0.01	<0.01	<0.01	<0.01	<0.01
Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05
EP231C: Perfluoroalkyl Sulfonamides								
Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)			Sample ID	S40_d	S40_S	BUR_MW108	D01_220119	T01_220119
			Sampling date / time	20-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00
Compound	CAS Number	LOR	Unit	ES2202047-007	ES2202047-008	ES2202047-009	ES2202047-010	ES2202047-011
				Result	Result	Result	Result	Result
EP231C: Perfluoroalkyl Sulfonamides - Continued								
N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05
N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05
N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
EP231D: (n:2) Fluorotelomer Sulfonic Acids								
4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.05	µg/L	<0.05	<0.05	**0.07**	<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	**0.02**	<0.01	**0.07**	**0.02**	**0.02**
Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L	**0.02**	<0.01	<0.01	**0.02**	**0.02**
Sum of PFAS (WA DER List)	----	0.01	µg/L	**0.02**	<0.01	**0.07**	**0.02**	**0.02**
EP231S: PFAS Surrogate								
13C4-PFOS	----	0.02	%	**110**	**111**	**106**	**112**	**105**
13C8-PFOA	----	0.02	%	**108**	**102**	**101**	**104**	**99.7**

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)			Sample ID	BUR_BH125	R01_220121	TRIP SPIKE	TRIP BLANK	SMW_BH120
			Sampling date / time	21-Jan-2022 00:00	21-Jan-2022 00:00	13-Jan-2022 00:00	13-Jan-2022 00:00	19-Jan-2022 00:00
Compound	CAS Number	LOR	Unit	ES2202047-012	ES2202047-013	ES2202047-014	ES2202047-015	ES2202047-016
				Result	Result	Result	Result	Result
EA015: Total Dissolved Solids dried at 180 ± 5 °C								
Total Dissolved Solids @180°C	----	10	mg/L	**1350**	----	----	----	----
ED037P: Alkalinity by PC Titrator								
Hydroxide Alkalinity as CaCO3	DMO-210-001	1	mg/L	**98**	----	----	----	----
Carbonate Alkalinity as CaCO3	3812-32-6	1	mg/L	**43**	----	----	----	----
Bicarbonate Alkalinity as CaCO3	71-52-3	1	mg/L	<1	----	----	----	----
Total Alkalinity as CaCO3	----	1	mg/L	**142**	----	----	----	----
ED041G: Sulfate (Turbidimetric) as SO4 2- by DA								
Sulfate as SO4 - Turbidimetric	14808-79-8	1	mg/L	**274**	----	----	----	----
ED045G: Chloride by Discrete Analyser								
Chloride	16887-00-6	1	mg/L	**566**	----	----	----	----
ED093F: Dissolved Major Cations								
Calcium	7440-70-2	1	mg/L	**4**	----	----	----	----
Magnesium	7439-95-4	1	mg/L	**2**	----	----	----	----
Sodium	7440-23-5	1	mg/L	**456**	----	----	----	----
Potassium	7440-09-7	1	mg/L	**13**	----	----	----	----
EG020F: Dissolved Metals by ICP-MS								
Arsenic	7440-38-2	0.001	mg/L	**0.017**	----	----	----	----
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	**0.002**	----	----	----	----
Lead	7439-92-1	0.001	mg/L	<0.001	----	----	----	----
Nickel	7440-02-0	0.001	mg/L	**0.004**	----	----	----	----
Zinc	7440-66-6	0.005	mg/L	<0.005	----	----	----	----
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	----	----	----
Lead	7439-92-1	0.001	mg/L	----	<0.001	----	----	----
Nickel	7440-02-0	0.001	mg/L	----	<0.001	----	----	----
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	----	----	----	----
EG035T: Total Recoverable Mercury by FIMS								

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)			Sample ID	BUR_BH125	R01_220121	TRIP SPIKE	TRIP BLANK	SMW_BH120
			Sampling date / time	21-Jan-2022 00:00	21-Jan-2022 00:00	13-Jan-2022 00:00	13-Jan-2022 00:00	19-Jan-2022 00:00
Compound	CAS Number	LOR	Unit	ES2202047-012	ES2202047-013	ES2202047-014	ES2202047-015	ES2202047-016
				Result	Result	Result	Result	Result
EG035T: Total Recoverable Mercury by FIMS - Continued								
Mercury	7439-97-6	0.0001	mg/L	----	<0.0001	----	----	----
EK055G: Ammonia as N by Discrete Analyser								
Ammonia as N	7664-41-7	0.01	mg/L	**1.48**	<0.01	----	----	----
EK057G: Nitrite as N by Discrete Analyser								
Nitrite as N	14797-65-0	0.01	mg/L	**0.26**	----	----	----	----
EK058G: Nitrate as N by Discrete Analyser								
Nitrate as N	14797-55-8	0.01	mg/L	<0.01	----	----	----	----
EK059G: Nitrite plus Nitrate as N (NOx) by Discrete Analyser								
Nitrite + Nitrate as N	----	0.01	mg/L	**0.10**	<0.01	----	----	----
EK061G: Total Kjeldahl Nitrogen By Discrete Analyser								
Total Kjeldahl Nitrogen as N	----	0.1	mg/L	**3.8**	<0.1	----	----	----
EK062G: Total Nitrogen as N (TKN + NOx) by Discrete Analyser								
^ Total Nitrogen as N	----	0.1	mg/L	**3.9**	<0.1	----	----	----
EK067G: Total Phosphorus as P by Discrete Analyser								
Total Phosphorus as P	----	0.01	mg/L	**1.13**	<0.01	----	----	----
EK071G: Reactive Phosphorus as P by discrete analyser								
Reactive Phosphorus as P	14265-44-2	0.01	mg/L	<0.01	----	----	----	----
EN055: Ionic Balance								
ø Total Anions	----	0.01	meq/L	**24.5**	----	----	----	----
ø Total Cations	----	0.01	meq/L	**20.5**	----	----	----	----
ø Ionic Balance	----	0.01	%	**8.83**	----	----	----	----
EP074A: Monocyclic Aromatic Hydrocarbons								
Styrene	100-42-5	5	µg/L	<5	<5	----	----	----
Isopropylbenzene	98-82-8	5	µg/L	<5	<5	----	----	----
n-Propylbenzene	103-65-1	5	µg/L	<5	<5	----	----	----
1.3.5-Trimethylbenzene	108-67-8	5	µg/L	<5	<5	----	----	----
sec-Butylbenzene	135-98-8	5	µg/L	<5	<5	----	----	----
1.2.4-Trimethylbenzene	95-63-6	5	µg/L	<5	<5	----	----	----
tert-Butylbenzene	98-06-6	5	µg/L	<5	<5	----	----	----
p-Isopropyltoluene	99-87-6	5	µg/L	<5	<5	----	----	----
n-Butylbenzene	104-51-8	5	µg/L	<5	<5	----	----	----
EP074B: Oxygenated Compounds								
Vinyl Acetate	108-05-4	50	µg/L	<50	<50	----	----	----

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)			Sample ID	BUR_BH125	R01_220121	TRIP SPIKE	TRIP BLANK	SMW_BH120
			Sampling date / time	21-Jan-2022 00:00	21-Jan-2022 00:00	13-Jan-2022 00:00	13-Jan-2022 00:00	19-Jan-2022 00:00
Compound	CAS Number	LOR	Unit	ES2202047-012	ES2202047-013	ES2202047-014	ES2202047-015	ES2202047-016
				Result	Result	Result	Result	Result
EP074B: Oxygenated Compounds - Continued								
2-Butanone (MEK)	78-93-3	50	µg/L	<50	<50	----	----	----
4-Methyl-2-pentanone (MIBK)	108-10-1	50	µg/L	<50	<50	----	----	----
2-Hexanone (MBK)	591-78-6	50	µg/L	<50	<50	----	----	----
EP074C: Sulfonated Compounds								
Carbon disulfide	75-15-0	5	µg/L	<5	<5	----	----	----
EP074D: Fumigants								
2.2-Dichloropropane	594-20-7	5	µg/L	<5	<5	----	----	----
1.2-Dichloropropane	78-87-5	5	µg/L	<5	<5	----	----	----
cis-1.3-Dichloropropylene	10061-01-5	5	µg/L	<5	<5	----	----	----
trans-1.3-Dichloropropylene	10061-02-6	5	µg/L	<5	<5	----	----	----
1.2-Dibromoethane (EDB)	106-93-4	5	µg/L	<5	<5	----	----	----
EP074E: Halogenated Aliphatic Compounds								
Dichlorodifluoromethane	75-71-8	50	µg/L	<50	<50	----	----	----
Chloromethane	74-87-3	50	µg/L	<50	<50	----	----	----
Vinyl chloride	75-01-4	50	µg/L	<50	<50	----	----	----
Bromomethane	74-83-9	50	µg/L	<50	<50	----	----	----
Chloroethane	75-00-3	50	µg/L	<50	<50	----	----	----
Trichlorofluoromethane	75-69-4	50	µg/L	<50	<50	----	----	----
1.1-Dichloroethene	75-35-4	5	µg/L	<5	<5	----	----	----
Iodomethane	74-88-4	5	µg/L	<5	<5	----	----	----
trans-1.2-Dichloroethene	156-60-5	5	µg/L	<5	<5	----	----	----
1.1-Dichloroethane	75-34-3	5	µg/L	<5	<5	----	----	----
cis-1.2-Dichloroethene	156-59-2	5	µg/L	<5	<5	----	----	----
1.1.1-Trichloroethane	71-55-6	5	µg/L	<5	<5	----	----	----
1.1-Dichloropropylene	563-58-6	5	µg/L	<5	<5	----	----	----
Carbon Tetrachloride	56-23-5	5	µg/L	<5	<5	----	----	----
1.2-Dichloroethane	107-06-2	5	µg/L	<5	<5	----	----	----
Trichloroethene	79-01-6	5	µg/L	<5	<5	----	----	----
Dibromomethane	74-95-3	5	µg/L	<5	<5	----	----	----
1.1.2-Trichloroethane	79-00-5	5	µg/L	<5	<5	----	----	----
1.3-Dichloropropane	142-28-9	5	µg/L	<5	<5	----	----	----
Tetrachloroethene	127-18-4	5	µg/L	<5	<5	----	----	----
1.1.1.2-Tetrachloroethane	630-20-6	5	µg/L	<5	<5	----	----	----
trans-1.4-Dichloro-2-butene	110-57-6	5	µg/L	<5	<5	----	----	----

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)			Sample ID	BUR_BH125	R01_220121	TRIP SPIKE	TRIP BLANK	SMW_BH120
			Sampling date / time	21-Jan-2022 00:00	21-Jan-2022 00:00	13-Jan-2022 00:00	13-Jan-2022 00:00	19-Jan-2022 00:00
Compound	CAS Number	LOR	Unit	ES2202047-012	ES2202047-013	ES2202047-014	ES2202047-015	ES2202047-016
				Result	Result	Result	Result	Result
EP074E: Halogenated Aliphatic Compounds - Continued								
cis-1.4-Dichloro-2-butene	1476-11-5	5	µg/L	<5	<5	----	----	----
1.1.2.2-Tetrachloroethane	79-34-5	5	µg/L	<5	<5	----	----	----
1.2.3-Trichloropropane	96-18-4	5	µg/L	<5	<5	----	----	----
Pentachloroethane	76-01-7	5	µg/L	<5	<5	----	----	----
1.2-Dibromo-3-chloropropane	96-12-8	5	µg/L	<5	<5	----	----	----
EP074F: Halogenated Aromatic Compounds								
Chlorobenzene	108-90-7	5	µg/L	<5	<5	----	----	----
Bromobenzene	108-86-1	5	µg/L	<5	<5	----	----	----
2-Chlorotoluene	95-49-8	5	µg/L	<5	<5	----	----	----
4-Chlorotoluene	106-43-4	5	µg/L	<5	<5	----	----	----
1.2.3-Trichlorobenzene	87-61-6	5	µg/L	<5	<5	----	----	----
EP074G: Trihalomethanes								
Chloroform	67-66-3	5	µg/L	**7**	<5	----	----	----
Bromodichloromethane	75-27-4	5	µg/L	<5	<5	----	----	----
Dibromochloromethane	124-48-1	5	µg/L	<5	<5	----	----	----
Bromoform	75-25-2	5	µg/L	<5	<5	----	----	----
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	----	----	----

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	BUR_BH125	R01_220121	TRIP SPIKE	TRIP BLANK	SMW_BH120
				Sampling date / time	21-Jan-2022 00:00	21-Jan-2022 00:00	13-Jan-2022 00:00	13-Jan-2022 00:00	19-Jan-2022 00:00
Compound	CAS Number	LOR	Unit		ES2202047-012	ES2202047-013	ES2202047-014	ES2202047-015	ES2202047-016
					Result	Result	Result	Result	Result
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued									
^ Benzo(a)pyrene TEQ (zero)	----	0.5	µg/L		<0.5	<0.5	----	----	----
EP075A: Phenolic Compounds									
Phenol	108-95-2	2	µg/L		<2	<2	----	----	----
2-Chlorophenol	95-57-8	2	µg/L		<2	<2	----	----	----
2-Methylphenol	95-48-7	2	µg/L		<2	<2	----	----	----
3- & 4-Methylphenol	1319-77-3	4	µg/L		<4	<4	----	----	----
2-Nitrophenol	88-75-5	2	µg/L		<2	<2	----	----	----
2.4-Dimethylphenol	105-67-9	2	µg/L		<2	<2	----	----	----
2.4-Dichlorophenol	120-83-2	2	µg/L		<2	<2	----	----	----
2.6-Dichlorophenol	87-65-0	2	µg/L		<2	<2	----	----	----
4-Chloro-3-methylphenol	59-50-7	2	µg/L		<2	<2	----	----	----
2.4.6-Trichlorophenol	88-06-2	2	µg/L		<2	<2	----	----	----
2.4.5-Trichlorophenol	95-95-4	2	µg/L		<2	<2	----	----	----
Pentachlorophenol	87-86-5	4	µg/L		<4	<4	----	----	----
EP075B: Polynuclear Aromatic Hydrocarbons									
Naphthalene	91-20-3	2	µg/L		<2	<2	----	----	----
2-Methylnaphthalene	91-57-6	2	µg/L		<2	<2	----	----	----
2-Chloronaphthalene	91-58-7	2	µg/L		<2	<2	----	----	----
Acenaphthylene	208-96-8	2	µg/L		<2	<2	----	----	----
Acenaphthene	83-32-9	2	µg/L		<2	<2	----	----	----
Fluorene	86-73-7	2	µg/L		<2	<2	----	----	----
Phenanthrene	85-01-8	2	µg/L		<2	<2	----	----	----
Anthracene	120-12-7	2	µg/L		<2	<2	----	----	----
Fluoranthene	206-44-0	2	µg/L		<2	<2	----	----	----
Pyrene	129-00-0	2	µg/L		<2	<2	----	----	----
N-2-Fluorenyl Acetamide	53-96-3	2	µg/L		<2	<2	----	----	----
Benz(a)anthracene	56-55-3	2	µg/L		<2	<2	----	----	----
Chrysene	218-01-9	2	µg/L		<2	<2	----	----	----
Benzo(b+j) & Benzo(k)fluoranthene	205-99-2 207-08-9	4	µg/L		<4	<4	----	----	----
7.12-Dimethylbenz(a)anthracene	57-97-6	2	µg/L		<2	<2	----	----	----
Benzo(a)pyrene	50-32-8	2	µg/L		<2	<2	----	----	----
3-Methylcholanthrene	56-49-5	2	µg/L		<2	<2	----	----	----
Indeno(1.2.3.cd)pyrene	193-39-5	2	µg/L		<2	<2	----	----	----
Dibenz(a.h)anthracene	53-70-3	2	µg/L		<2	<2	----	----	----

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	BUR_BH125	R01_220121	TRIP SPIKE	TRIP BLANK	SMW_BH120
				Sampling date / time	21-Jan-2022 00:00	21-Jan-2022 00:00	13-Jan-2022 00:00	13-Jan-2022 00:00	19-Jan-2022 00:00
Compound	CAS Number	LOR	Unit		ES2202047-012	ES2202047-013	ES2202047-014	ES2202047-015	ES2202047-016
					Result	Result	Result	Result	Result
EP075B: Polynuclear Aromatic Hydrocarbons - Continued									
Benzo(g.h.i)perylene	191-24-2	2	µg/L		<2	<2	----	----	----
^ Sum of PAHs	----	2	µg/L		<2	<2	----	----	----
^ Benzo(a)pyrene TEQ (zero)	----	2	µg/L		<2	<2	----	----	----
EP075C: Phthalate Esters									
Dimethyl phthalate	131-11-3	2	µg/L		<2	<2	----	----	----
Diethyl phthalate	84-66-2	2	µg/L		<2	<2	----	----	----
Di-n-butyl phthalate	84-74-2	2	µg/L		<2	<2	----	----	----
Butyl benzyl phthalate	85-68-7	2	µg/L		<2	<2	----	----	----
bis(2-ethylhexyl) phthalate	117-81-7	10	µg/L		<10	<10	----	----	----
Di-n-octylphthalate	117-84-0	2	µg/L		<2	<2	----	----	----
EP075D: Nitrosamines									
N-Nitrosomethylethylamine	10595-95-6	2	µg/L		<2	<2	----	----	----
N-Nitrosodiethylamine	55-18-5	2	µg/L		<2	<2	----	----	----
N-Nitrosopyrrolidine	930-55-2	4	µg/L		<4	<4	----	----	----
N-Nitrosomorpholine	59-89-2	2	µg/L		<2	<2	----	----	----
N-Nitrosodi-n-propylamine	621-64-7	2	µg/L		<2	<2	----	----	----
N-Nitrosopiperidine	100-75-4	2	µg/L		<2	<2	----	----	----
N-Nitrosodibutylamine	924-16-3	2	µg/L		<2	<2	----	----	----
N-Nitrosodiphenyl & Diphenylamine	86-30-6 122-39-4	4	µg/L		<4	<4	----	----	----
Methapyrilene	91-80-5	2	µg/L		<2	<2	----	----	----
EP075E: Nitroaromatics and Ketones									
2-Picoline	109-06-8	2	µg/L		<2	<2	----	----	----
Acetophenone	98-86-2	2	µg/L		<2	<2	----	----	----
Nitrobenzene	98-95-3	2	µg/L		<2	<2	----	----	----
Isophorone	78-59-1	2	µg/L		<2	<2	----	----	----
2.6-Dinitrotoluene	606-20-2	4	µg/L		<4	<4	----	----	----
2.4-Dinitrotoluene	121-14-2	4	µg/L		<4	<4	----	----	----
1-Naphthylamine	134-32-7	2	µg/L		<2	<2	----	----	----
4-Nitroquinoline-N-oxide	56-57-5	2	µg/L		<2	<2	----	----	----
5-Nitro-o-toluidine	99-55-8	2	µg/L		<2	<2	----	----	----
Azobenzene	103-33-3	2	µg/L		<2	<2	----	----	----
1.3.5-Trinitrobenzene	99-35-4	2	µg/L		<2	<2	----	----	----
Phenacetin	62-44-2	2	µg/L		<2	<2	----	----	----

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)			Sample ID	BUR_BH125	R01_220121	TRIP SPIKE	TRIP BLANK	SMW_BH120
			Sampling date / time	21-Jan-2022 00:00	21-Jan-2022 00:00	13-Jan-2022 00:00	13-Jan-2022 00:00	19-Jan-2022 00:00
Compound	CAS Number	LOR	Unit	ES2202047-012	ES2202047-013	ES2202047-014	ES2202047-015	ES2202047-016
				Result	Result	Result	Result	Result
EP075E: Nitroaromatics and Ketones - Continued								
4-Aminobiphenyl	92-67-1	2	µg/L	<2	<2	----	----	----
Pentachloronitrobenzene	82-68-8	2	µg/L	<2	<2	----	----	----
Pronamide	23950-58-5	2	µg/L	<2	<2	----	----	----
Dimethylaminoazobenzene	60-11-7	2	µg/L	<2	<2	----	----	----
Chlorobenzilate	510-15-6	2	µg/L	<2	<2	----	----	----
EP075F: Haloethers								
Bis(2-chloroethyl) ether	111-44-4	2	µg/L	<2	<2	----	----	----
Bis(2-chloroethoxy) methane	111-91-1	2	µg/L	<2	<2	----	----	----
4-Chlorophenyl phenyl ether	7005-72-3	2	µg/L	<2	<2	----	----	----
4-Bromophenyl phenyl ether	101-55-3	2	µg/L	<2	<2	----	----	----
EP075G: Chlorinated Hydrocarbons								
1.3-Dichlorobenzene	541-73-1	2	µg/L	<2	<2	----	----	----
1.4-Dichlorobenzene	106-46-7	2	µg/L	<2	<2	----	----	----
1.2-Dichlorobenzene	95-50-1	2	µg/L	<2	<2	----	----	----
Hexachloroethane	67-72-1	2	µg/L	<2	<2	----	----	----
1.2.4-Trichlorobenzene	120-82-1	2	µg/L	<2	<2	----	----	----
Hexachloropropylene	1888-71-7	2	µg/L	<2	<2	----	----	----
Hexachlorobutadiene	87-68-3	2	µg/L	<2	<2	----	----	----
Hexachlorocyclopentadiene	77-47-4	10	µg/L	<10	<10	----	----	----
Pentachlorobenzene	608-93-5	2	µg/L	<2	<2	----	----	----
Hexachlorobenzene (HCB)	118-74-1	4	µg/L	<4	<4	----	----	----
EP075H: Anilines and Benzidines								
Aniline	62-53-3	2	µg/L	<2	<2	----	----	----
4-Chloroaniline	106-47-8	2	µg/L	<2	<2	----	----	----
2-Nitroaniline	88-74-4	4	µg/L	<4	<4	----	----	----
3-Nitroaniline	99-09-2	4	µg/L	<4	<4	----	----	----
Dibenzofuran	132-64-9	2	µg/L	<2	<2	----	----	----
4-Nitroaniline	100-01-6	2	µg/L	<2	<2	----	----	----
Carbazole	86-74-8	2	µg/L	<2	<2	----	----	----
3.3`-Dichlorobenzidine	91-94-1	2	µg/L	<2	<2	----	----	----
EP075I: Organochlorine Pesticides								
alpha-BHC	319-84-6	2	µg/L	<2	<2	----	----	----
beta-BHC	319-85-7	2	µg/L	<2	<2	----	----	----
gamma-BHC	58-89-9	2	µg/L	<2	<2	----	----	----

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)			Sample ID	BUR_BH125	R01_220121	TRIP SPIKE	TRIP BLANK	SMW_BH120
			Sampling date / time	21-Jan-2022 00:00	21-Jan-2022 00:00	13-Jan-2022 00:00	13-Jan-2022 00:00	19-Jan-2022 00:00
Compound	CAS Number	LOR	Unit	ES2202047-012	ES2202047-013	ES2202047-014	ES2202047-015	ES2202047-016
				Result	Result	Result	Result	Result
EP075I: Organochlorine Pesticides - Continued								
delta-BHC	319-86-8	2	µg/L	<2	<2	----	----	----
Heptachlor	76-44-8	2	µg/L	<2	<2	----	----	----
Aldrin	309-00-2	2	µg/L	<2	<2	----	----	----
Heptachlor epoxide	1024-57-3	2	µg/L	<2	<2	----	----	----
alpha-Endosulfan	959-98-8	2	µg/L	<2	<2	----	----	----
4.4`-DDE	72-55-9	2	µg/L	<2	<2	----	----	----
Dieldrin	60-57-1	2	µg/L	<2	<2	----	----	----
Endrin	72-20-8	2	µg/L	<2	<2	----	----	----
beta-Endosulfan	33213-65-9	2	µg/L	<2	<2	----	----	----
4.4`-DDD	72-54-8	2	µg/L	<2	<2	----	----	----
Endosulfan sulfate	1031-07-8	2	µg/L	<2	<2	----	----	----
4.4`-DDT	50-29-3	4	µg/L	<4	<4	----	----	----
^ Sum of Aldrin + Dieldrin	309-00-2/60-57-1	4	µg/L	<4	<4	----	----	----
^ Sum of DDD + DDE + DDT	72-54-8/72-55-9/50-2	4	µg/L	<4	<4	----	----	----
EP075J: Organophosphorus Pesticides								
Dichlorvos	62-73-7	2	µg/L	<2	<2	----	----	----
Dimethoate	60-51-5	2	µg/L	<2	<2	----	----	----
Diazinon	333-41-5	2	µg/L	<2	<2	----	----	----
Chlorpyrifos-methyl	5598-13-0	2	µg/L	<2	<2	----	----	----
Malathion	121-75-5	2	µg/L	<2	<2	----	----	----
Fenthion	55-38-9	2	µg/L	<2	<2	----	----	----
Chlorpyrifos	2921-88-2	2	µg/L	<2	<2	----	----	----
Pirimphos-ethyl	23505-41-1	2	µg/L	<2	<2	----	----	----
Chlorfenvinphos	470-90-6	2	µg/L	<2	<2	----	----	----
Prothiofos	34643-46-4	2	µg/L	<2	<2	----	----	----
Ethion	563-12-2	2	µg/L	<2	<2	----	----	----
EP080/071: Total Petroleum Hydrocarbons								
C6 - C9 Fraction	----	20	µg/L	<20	<20	----	<20	----
C10 - C14 Fraction	----	50	µg/L	**290**	<50	----	----	----
C15 - C28 Fraction	----	100	µg/L	**430**	<100	----	----	----
C29 - C36 Fraction	----	50	µg/L	<50	<50	----	----	----
^ C10 - C36 Fraction (sum)	----	50	µg/L	**720**	<50	----	----	----
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions								

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	BUR_BH125	R01_220121	TRIP SPIKE	TRIP BLANK	SMW_BH120
				Sampling date / time	21-Jan-2022 00:00	21-Jan-2022 00:00	13-Jan-2022 00:00	13-Jan-2022 00:00	19-Jan-2022 00:00
Compound	CAS Number	LOR	Unit		ES2202047-012	ES2202047-013	ES2202047-014	ES2202047-015	ES2202047-016
					Result	Result	Result	Result	Result
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions - Continued									
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		**570**	<100	----	----	----
>C16 - C34 Fraction	----	100	µg/L		**190**	<100	----	----	----
>C34 - C40 Fraction	----	100	µg/L		<100	<100	----	----	----
^ **>C10 - C40 Fraction (sum)**	----	100	µg/L		**760**	<100	----	----	----
^ **>C10 - C16 Fraction minus Naphthalene (F2)**	----	100	µg/L		**570**	<100	----	----	----
EP080: BTEXN									
Benzene	71-43-2	1	µg/L		<1	<1	**16**	<1	----
Toluene	108-88-3	2	µg/L		<2	<2	**16**	<2	----
Ethylbenzene	100-41-4	2	µg/L		<2	<2	**15**	<2	----
meta- & para-Xylene	108-38-3 106-42-3	2	µg/L		<2	<2	**15**	<2	----
ortho-Xylene	95-47-6	2	µg/L		<2	<2	**16**	<2	----
^ **Total Xylenes**	----	2	µg/L		<2	<2	**31**	<2	----
^ **Sum of BTEX**	----	1	µg/L		<1	<1	**78**	<1	----
Naphthalene	91-20-3	5	µg/L		<5	<5	**18**	<5	----
EP231A: Perfluoroalkyl Sulfonic Acids									
Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L		<0.02	<0.02	----	----	<0.02
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L		<0.02	<0.02	----	----	<0.02
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L		<0.01	<0.01	----	----	<0.01
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L		<0.02	<0.02	----	----	<0.02
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L		<0.01	<0.01	----	----	<0.01
Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L		<0.02	<0.02	----	----	<0.02
EP231B: Perfluoroalkyl Carboxylic Acids									
Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L		<0.1	<0.1	----	----	<0.1
Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L		<0.02	<0.02	----	----	<0.02
Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L		<0.02	<0.02	----	----	<0.02

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	BUR_BH125	R01_220121	TRIP SPIKE	TRIP BLANK	SMW_BH120
				Sampling date / time	21-Jan-2022 00:00	21-Jan-2022 00:00	13-Jan-2022 00:00	13-Jan-2022 00:00	19-Jan-2022 00:00
Compound	CAS Number	LOR	Unit		ES2202047-012	ES2202047-013	ES2202047-014	ES2202047-015	ES2202047-016
					Result	Result	Result	Result	Result
EP231B: Perfluoroalkyl Carboxylic Acids - Continued									
Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L		<0.02	<0.02	----	----	<0.02
Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L		<0.01	<0.01	----	----	<0.01
Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L		<0.02	<0.02	----	----	<0.02
Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L		<0.02	<0.02	----	----	<0.02
Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L		<0.02	<0.02	----	----	<0.02
Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L		<0.02	<0.02	----	----	<0.02
Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L		<0.02	<0.02	----	----	<0.02
Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L		<0.05	<0.05	----	----	<0.05
EP231C: Perfluoroalkyl Sulfonamides									
Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	µg/L		<0.02	<0.02	----	----	<0.02
N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L		<0.05	<0.05	----	----	<0.05
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	µg/L		<0.05	<0.05	----	----	<0.05
N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L		<0.05	<0.05	----	----	<0.05
N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L		<0.05	<0.05	----	----	<0.05
N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.02	µg/L		<0.02	<0.02	----	----	<0.02
N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.02	µg/L		<0.02	<0.02	----	----	<0.02
EP231D: (n:2) Fluorotelomer Sulfonic Acids									
4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L		<0.05	<0.05	----	----	<0.05
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.05	µg/L		<0.05	<0.05	----	----	<0.05
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.05	µg/L		<0.05	<0.05	----	----	<0.05

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)			Sample ID	BUR_BH125	R01_220121	TRIP SPIKE	TRIP BLANK	SMW_BH120
			Sampling date / time	21-Jan-2022 00:00	21-Jan-2022 00:00	13-Jan-2022 00:00	13-Jan-2022 00:00	19-Jan-2022 00:00
Compound	CAS Number	LOR	Unit	ES2202047-012	ES2202047-013	ES2202047-014	ES2202047-015	ES2202047-016
				Result	Result	Result	Result	Result
EP231D: (n:2) Fluorotelomer Sulfonic Acids - Continued								
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.05	µg/L	<0.05	<0.05	----	----	<0.05
EP231P: PFAS Sums								
Sum of PFAS	----	0.01	µg/L	<0.01	<0.01	----	----	<0.01
Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L	<0.01	<0.01	----	----	<0.01
Sum of PFAS (WA DER List)	----	0.01	µg/L	<0.01	<0.01	----	----	<0.01
EP074S: VOC Surrogates								
1.2-Dichloroethane-D4	17060-07-0	5	%	114	111	----	----	----
Toluene-D8	2037-26-5	5	%	128	110	----	----	----
4-Bromofluorobenzene	460-00-4	5	%	119	106	----	----	----
EP075(SIM)S: Phenolic Compound Surrogates								
Phenol-d6	13127-88-3	1.0	%	Not Determined	21.0	----	----	----
2-Chlorophenol-D4	93951-73-6	1.0	%	Not Determined	53.9	----	----	----
2.4.6-Tribromophenol	118-79-6	1.0	%	Not Determined	50.2	----	----	----
EP075(SIM)T: PAH Surrogates								
2-Fluorobiphenyl	321-60-8	1.0	%	66.1	71.4	----	----	----
Anthracene-d10	1719-06-8	1.0	%	89.0	94.5	----	----	----
4-Terphenyl-d14	1718-51-0	1.0	%	79.4	84.5	----	----	----
EP075S: Acid Extractable Surrogates								
2-Fluorophenol	367-12-4	2	%	Not Determined	44.2	----	----	----
Phenol-d6	13127-88-3	2	%	Not Determined	30.2	----	----	----
2-Chlorophenol-D4	93951-73-6	2	%	Not Determined	62.8	----	----	----
2.4.6-Tribromophenol	118-79-6	2	%	Not Determined	69.1	----	----	----
EP075T: Base/Neutral Extractable Surrogates								
Nitrobenzene-D5	4165-60-0	2	%	48.1	61.6	----	----	----
1.2-Dichlorobenzene-D4	2199-69-1	2	%	45.0	56.6	----	----	----
2-Fluorobiphenyl	321-60-8	2	%	55.5	64.9	----	----	----
Anthracene-d10	1719-06-8	2	%	89.7	99.5	----	----	----
4-Terphenyl-d14	1718-51-0	2	%	73.3	83.5	----	----	----
EP080S: TPH(V)/BTEX Surrogates								
1.2-Dichloroethane-D4	17060-07-0	2	%	114	111	119	102	----
Toluene-D8	2037-26-5	2	%	121	104	110	109	----
4-Bromofluorobenzene	460-00-4	2	%	119	106	110	109	----

Analytical Results

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

Compound	CAS Number	LOR	Unit	Sample ID	BUR_BH125	R01_220121	TRIP SPIKE	TRIP BLANK	SMW_BH120
				Sampling date / time	21-Jan-2022 00:00	21-Jan-2022 00:00	13-Jan-2022 00:00	13-Jan-2022 00:00	19-Jan-2022 00:00
					ES2202047-012	ES2202047-013	ES2202047-014	ES2202047-015	ES2202047-016
					Result	Result	Result	Result	Result
EP231S: PFAS Surrogate									
13C4-PFOS	----	0.02	%		**104**	**108**	**----**	**----**	**109**
13C8-PFOA	----	0.02	%		**101**	**101**	**----**	**----**	**103**

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	SMW_BH019	R01_220119	SMW_BH038	SMW_BH035	SMW_BH035_S
				Sampling date / time	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	18-Jan-2022 00:00	18-Jan-2022 00:00
Compound	CAS Number	LOR	Unit		ES2202047-017	ES2202047-018	ES2202047-019	ES2202047-020	ES2202047-021
					Result	Result	Result	Result	Result
EP231A: Perfluoroalkyl Sulfonic Acids									
Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	<0.02
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L		<0.01	<0.01	**0.01**	<0.01	**0.02**
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		**0.02**	<0.01	<0.01	<0.01	<0.01
Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	<0.02
EP231B: Perfluoroalkyl Carboxylic Acids									
Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L		<0.1	<0.1	<0.1	<0.1	<0.1
Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L		<0.02	<0.02	**0.03**	<0.02	<0.02
Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L		<0.02	<0.02	**0.10**	<0.02	<0.02
Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L		<0.01	<0.01	**0.02**	<0.01	<0.01
Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	<0.02
Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L		<0.05	<0.05	<0.05	<0.05	<0.05
EP231C: Perfluoroalkyl Sulfonamides									
Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	<0.02
N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L		<0.05	<0.05	<0.05	<0.05	<0.05
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	µg/L		<0.05	<0.05	<0.05	<0.05	<0.05

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	SMW_BH019	R01_220119	SMW_BH038	SMW_BH035	SMW_BH035_S
				Sampling date / time	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	18-Jan-2022 00:00	18-Jan-2022 00:00
Compound	CAS Number	LOR	Unit		ES2202047-017	ES2202047-018	ES2202047-019	ES2202047-020	ES2202047-021
					Result	Result	Result	Result	Result
EP231C: Perfluoroalkyl Sulfonamides - Continued									
N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L		<0.05	<0.05	<0.05	<0.05	<0.05
N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L		<0.05	<0.05	<0.05	<0.05	<0.05
N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	<0.02
N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	<0.02
EP231D: (n:2) Fluorotelomer Sulfonic Acids									
4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L		<0.05	<0.05	<0.05	<0.05	<0.05
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.05	µg/L		<0.05	<0.05	**0.48**	<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		**0.02**	<0.01	**0.64**	<0.01	**0.02**
Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L		**0.02**	<0.01	**0.01**	<0.01	**0.02**
Sum of PFAS (WA DER List)	----	0.01	µg/L		**0.02**	<0.01	**0.64**	<0.01	**0.02**
EP231S: PFAS Surrogate									
13C4-PFOS	----	0.02	%		**117**	**104**	**110**	**105**	**108**
13C8-PFOA	----	0.02	%		**102**	**101**	**106**	**100**	**102**

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	R01_220118	R01_220117	R01_220120	----	----
				Sampling date / time	18-Jan-2022 00:00	17-Jan-2022 00:00	20-Jan-2022 00:00	----	----
Compound	CAS Number	LOR	Unit		ES2202047-022	ES2202047-023	ES2202047-024	--------	--------
					Result	Result	Result	----	----
EP231A: Perfluoroalkyl Sulfonic Acids									
Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L		<0.02	<0.02	<0.02	----	----
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L		<0.02	<0.02	<0.02	----	----
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L		<0.01	<0.01	<0.01	----	----
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L		<0.02	<0.02	<0.02	----	----
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L		<0.01	<0.01	<0.01	----	----
Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L		<0.02	<0.02	<0.02	----	----
EP231B: Perfluoroalkyl Carboxylic Acids									
Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L		<0.1	<0.1	<0.1	----	----
Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L		<0.02	<0.02	<0.02	----	----
Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L		<0.02	<0.02	<0.02	----	----
Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L		<0.02	<0.02	<0.02	----	----
Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L		<0.01	<0.01	<0.01	----	----
Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L		<0.02	<0.02	<0.02	----	----
Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L		<0.02	<0.02	<0.02	----	----
Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L		<0.02	<0.02	<0.02	----	----
Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L		<0.02	<0.02	<0.02	----	----
Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L		<0.02	<0.02	<0.02	----	----
Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L		<0.05	<0.05	<0.05	----	----
EP231C: Perfluoroalkyl Sulfonamides									
Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	µg/L		<0.02	<0.02	<0.02	----	----
N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L		<0.05	<0.05	<0.05	----	----
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	µg/L		<0.05	<0.05	<0.05	----	----

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	R01_220118	R01_220117	R01_220120	----	----
				Sampling date / time	18-Jan-2022 00:00	17-Jan-2022 00:00	20-Jan-2022 00:00	----	----
Compound	CAS Number	LOR	Unit		ES2202047-022	ES2202047-023	ES2202047-024	--------	--------
					Result	Result	Result	----	----
EP231C: Perfluoroalkyl Sulfonamides - Continued									
N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L		<0.05	<0.05	<0.05	----	----
N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L		<0.05	<0.05	<0.05	----	----
N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.02	µg/L		<0.02	<0.02	<0.02	----	----
N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.02	µg/L		<0.02	<0.02	<0.02	----	----
EP231D: (n:2) Fluorotelomer Sulfonic Acids									
4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L		<0.05	<0.05	<0.05	----	----
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.05	µg/L		<0.05	<0.05	<0.05	----	----
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.05	µg/L		<0.05	<0.05	<0.05	----	----
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.05	µg/L		<0.05	<0.05	<0.05	----	----
EP231P: PFAS Sums									
Sum of PFAS	----	0.01	µg/L		<0.01	<0.01	<0.01	----	----
Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L		<0.01	<0.01	<0.01	----	----
Sum of PFAS (WA DER List)	----	0.01	µg/L		<0.01	<0.01	<0.01	----	----
EP231S: PFAS Surrogate									
13C4-PFOS	----	0.02	%		**107**	**98.2**	**107**	----	----
13C8-PFOA	----	0.02	%		**98.3**	**93.4**	**96.7**	----	----

Surrogate Control Limits

Sub-Matrix: **WATER**

Compound	CAS Number	Recovery Limits (%) Low	High
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

ALS Environmental

QUALITY CONTROL REPORT

Work Order	: **ES2202047**	Page	: 1 of 22
Client	: **ENVIRONMENTAL RESOURCES MANAGEMENT (ERM)**	Laboratory	: Environmental Division Sydney
Contact	: NICHOLAS GRBICH	Contact	: Customer Services ES
Address	: LEVEL 15 309 KENT STREET SYDNEY NSW AUSTRALIA 2000	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
Telephone	: ----	Telephone	: +61-2-8784 8555
Project	: 0628507	Date Samples Received	: 21-Jan-2022
Order number	: ----	Date Analysis Commenced	: 24-Jan-2022
C-O-C number	: ----	Issue Date	: 01-Feb-2022
Sampler	: TAJ MONDON		
Site	: ----		
Quote number	: EN/114		
No. of samples received	: 24		
No. of samples analysed	: 23		

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

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

This Quality Control Report contains the following information:

- Laboratory Duplicate (DUP) Report; Relative Percentage Difference (RPD) and Acceptance Limits
- Method Blank (MB) and Laboratory Control Spike (LCS) Report; Recovery and Acceptance Limits
- Matrix Spike (MS) Report; Recovery and Acceptance Limits

Signatories

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

Signatories	*Position*	*Accreditation Category*
Ankit Joshi	Inorganic Chemist	Sydney Inorganics, Smithfield, NSW
Edwandy Fadjar	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.

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**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Acceptable RPD (%)
EA015: Total Dissolved Solids dried at 180 ± 5 °C (QC Lot: 4136430)									
ES2201969-001	Anonymous	EA015H: Total Dissolved Solids @180°C	----	10	mg/L	104	138	28.9	0% - 50%
ES2202013-003	Anonymous	EA015H: Total Dissolved Solids @180°C	----	10	mg/L	509	512	0.7	0% - 20%
ED037P: Alkalinity by PC Titrator (QC Lot: 4137312)									
ES2201979-001	Anonymous	ED037-P: Hydroxide Alkalinity as CaCO3	DMO-210-001	1	mg/L	<1	<1	0.0	No Limit
		ED037-P: Carbonate Alkalinity as CaCO3	3812-32-6	1	mg/L	<1	<1	0.0	No Limit
		ED037-P: Bicarbonate Alkalinity as CaCO3	71-52-3	1	mg/L	700	714	2.0	0% - 20%
		ED037-P: Total Alkalinity as CaCO3	----	1	mg/L	700	714	2.0	0% - 20%
ES2202025-001	Anonymous	ED037-P: Hydroxide Alkalinity as CaCO3	DMO-210-001	1	mg/L	<1	<1	0.0	No Limit
		ED037-P: Carbonate Alkalinity as CaCO3	3812-32-6	1	mg/L	<1	<1	0.0	No Limit
		ED037-P: Bicarbonate Alkalinity as CaCO3	71-52-3	1	mg/L	410	416	1.5	0% - 20%
		ED037-P: Total Alkalinity as CaCO3	----	1	mg/L	410	416	1.5	0% - 20%
ED041G: Sulfate (Turbidimetric) as SO4 2- by DA (QC Lot: 4137505)									
ES2202205-001	Anonymous	ED041G: Sulfate as SO4 - Turbidimetric	14808-79-8	1	mg/L	<1	<1	0.0	No Limit
ES2202047-012	BUR_BH125	ED041G: Sulfate as SO4 - Turbidimetric	14808-79-8	1	mg/L	274	273	0.0	0% - 20%
ED045G: Chloride by Discrete Analyser (QC Lot: 4137508)									
ES2202205-001	Anonymous	ED045G: Chloride	16887-00-6	1	mg/L	8	8	0.0	No Limit
ES2202047-012	BUR_BH125	ED045G: Chloride	16887-00-6	1	mg/L	566	565	0.2	0% - 20%
ED093F: Dissolved Major Cations (QC Lot: 4139030)									
ES2202047-012	BUR_BH125	ED093F: Calcium	7440-70-2	1	mg/L	4	4	0.0	No Limit
		ED093F: Magnesium	7439-95-4	1	mg/L	2	2	0.0	No Limit
		ED093F: Sodium	7440-23-5	1	mg/L	456	467	2.3	0% - 20%
		ED093F: Potassium	7440-09-7	1	mg/L	13	13	0.0	0% - 50%
ES2202206-001	Anonymous	ED093F: Calcium	7440-70-2	1	mg/L	50	49	0.0	0% - 20%

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 (%)*
ED093F: Dissolved Major Cations (QC Lot: 4139030) - continued									
ES2202206-001	Anonymous	ED093F: Magnesium	7439-95-4	1	mg/L	9	9	0.0	No Limit
		ED093F: Sodium	7440-23-5	1	mg/L	48	44	9.6	0% - 20%
		ED093F: Potassium	7440-09-7	1	mg/L	15	14	0.0	0% - 50%
EG020F: Dissolved Metals by ICP-MS (QC Lot: 4139027)									
ES2202047-012	BUR_BH125	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	0.017	0.017	0.0	0% - 50%
		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	0.002	0.002	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	0.004	0.004	0.0	No Limit
		EG020A-F: Zinc	7440-66-6	0.005	mg/L	<0.005	<0.005	0.0	No Limit
ES2202206-001	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	0.030	0.031	0.0	0% - 20%
		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	0.027	0.029	6.8	0% - 20%
		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	<0.001	<0.001	0.0	No Limit
		EG020A-F: Zinc	7440-66-6	0.005	mg/L	<0.005	<0.005	0.0	No Limit
EG020T: Total Metals by ICP-MS (QC Lot: 4139064)									
ES2201969-002	Anonymous	EG020A-T: Cadmium	7440-43-9	0.0001	mg/L	<0.0001	<0.0001	0.0	No Limit
		EG020A-T: Arsenic	7440-38-2	0.001	mg/L	<0.001	<0.001	0.0	No Limit
		EG020A-T: Chromium	7440-47-3	0.001	mg/L	<0.001	<0.001	0.0	No Limit
		EG020A-T: Copper	7440-50-8	0.001	mg/L	0.146	0.144	1.4	0% - 20%
		EG020A-T: Lead	7439-92-1	0.001	mg/L	<0.001	<0.001	0.0	No Limit
		EG020A-T: Nickel	7440-02-0	0.001	mg/L	<0.001	<0.001	0.0	No Limit
		EG020A-T: Zinc	7440-66-6	0.005	mg/L	0.010	0.009	0.0	No Limit
ES2201931-001	Anonymous	EG020A-T: Cadmium	7440-43-9	0.0001	mg/L	<0.0001	<0.0001	0.0	No Limit
		EG020A-T: Arsenic	7440-38-2	0.001	mg/L	0.006	0.005	0.0	No Limit
		EG020A-T: Chromium	7440-47-3	0.001	mg/L	0.003	0.002	0.0	No Limit
		EG020A-T: Copper	7440-50-8	0.001	mg/L	<0.001	<0.001	0.0	No Limit
		EG020A-T: Lead	7439-92-1	0.001	mg/L	<0.001	<0.001	0.0	No Limit
		EG020A-T: Nickel	7440-02-0	0.001	mg/L	<0.001	0.001	0.0	No Limit
		EG020A-T: Zinc	7440-66-6	0.005	mg/L	0.122	0.126	3.0	0% - 20%
EG035F: Dissolved Mercury by FIMS (QC Lot: 4139028)									
ES2201966-005	Anonymous	EG035F: Mercury	7439-97-6	0.0001	mg/L	<0.0001	<0.0001	0.0	No Limit
ES2202206-001	Anonymous	EG035F: Mercury	7439-97-6	0.0001	mg/L	<0.0001	<0.0001	0.0	No Limit
EG035T: Total Recoverable Mercury by FIMS (QC Lot: 4139154)									
ES2201969-002	Anonymous	EG035T: Mercury	7439-97-6	0.0001	mg/L	<0.0001	<0.0001	0.0	No Limit
ES2202101-003	Anonymous	EG035T: Mercury	7439-97-6	0.0001	mg/L	<0.0001	<0.0001	0.0	No Limit

Sub-Matrix: **WATER**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Acceptable RPD (%)*
EK055G: Ammonia as N by Discrete Analyser (QC Lot: 4136962)									
ES2201979-001	Anonymous	EK055G: Ammonia as N	7664-41-7	0.01	mg/L	4.75	4.70	1.1	0% - 20%
EK057G: Nitrite as N by Discrete Analyser (QC Lot: 4137507)									
ES2202205-001	Anonymous	EK057G: Nitrite as N	14797-65-0	0.01	mg/L	<0.01	<0.01	0.0	No Limit
ES2202047-012	BUR_BH125	EK057G: Nitrite as N	14797-65-0	0.01	mg/L	0.26	0.26	0.0	0% - 20%
EK059G: Nitrite plus Nitrate as N (NOx) by Discrete Analyser (QC Lot: 4136963)									
ES2201979-001	Anonymous	EK059G: Nitrite + Nitrate as N	----	0.01	mg/L	<0.10	0.19	62.5	No Limit
EK061G: Total Kjeldahl Nitrogen By Discrete Analyser (QC Lot: 4136959)									
ES2201979-001	Anonymous	EK061G: Total Kjeldahl Nitrogen as N	----	0.1	mg/L	6.8	6.6	2.8	0% - 50%
ES2201979-011	Anonymous	EK061G: Total Kjeldahl Nitrogen as N	----	0.1	mg/L	<0.1	<0.1	0.0	No Limit
EK067G: Total Phosphorus as P by Discrete Analyser (QC Lot: 4136958)									
ES2201979-001	Anonymous	EK067G: Total Phosphorus as P	----	0.01	mg/L	0.68	0.69	1.6	0% - 50%
ES2201979-011	Anonymous	EK067G: Total Phosphorus as P	----	0.01	mg/L	<0.01	<0.01	0.0	No Limit
EK071G: Reactive Phosphorus as P by discrete analyser (QC Lot: 4137506)									
ES2202047-012	BUR_BH125	EK071G: Reactive Phosphorus as P	14265-44-2	0.01	mg/L	<0.01	<0.01	0.0	No Limit
EP074A: Monocyclic Aromatic Hydrocarbons (QC Lot: 4137802)									
ES2201683-020	Anonymous	EP074: Styrene	100-42-5	5	µg/L	<5	<5	0.0	No Limit
		EP074: Isopropylbenzene	98-82-8	5	µg/L	<5	<5	0.0	No Limit
		EP074: n-Propylbenzene	103-65-1	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.3.5-Trimethylbenzene	108-67-8	5	µg/L	<5	<5	0.0	No Limit
		EP074: sec-Butylbenzene	135-98-8	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.2.4-Trimethylbenzene	95-63-6	5	µg/L	<5	<5	0.0	No Limit
		EP074: tert-Butylbenzene	98-06-6	5	µg/L	<5	<5	0.0	No Limit
		EP074: p-Isopropyltoluene	99-87-6	5	µg/L	<5	<5	0.0	No Limit
		EP074: n-Butylbenzene	104-51-8	5	µg/L	<5	<5	0.0	No Limit
ES2202156-001	Anonymous	EP074: Styrene	100-42-5	5	µg/L	<5	<5	0.0	No Limit
		EP074: Isopropylbenzene	98-82-8	5	µg/L	<5	<5	0.0	No Limit
		EP074: n-Propylbenzene	103-65-1	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.3.5-Trimethylbenzene	108-67-8	5	µg/L	<5	<5	0.0	No Limit
		EP074: sec-Butylbenzene	135-98-8	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.2.4-Trimethylbenzene	95-63-6	5	µg/L	<5	<5	0.0	No Limit
		EP074: tert-Butylbenzene	98-06-6	5	µg/L	<5	<5	0.0	No Limit
		EP074: p-Isopropyltoluene	99-87-6	5	µg/L	<5	<5	0.0	No Limit
		EP074: n-Butylbenzene	104-51-8	5	µg/L	<5	<5	0.0	No Limit
EP074B: Oxygenated Compounds (QC Lot: 4137802)									
ES2201683-020	Anonymous	EP074: Vinyl Acetate	108-05-4	50	µg/L	<50	<50	0.0	No Limit
		EP074: 2-Butanone (MEK)	78-93-3	50	µg/L	<50	<50	0.0	No Limit
		EP074: 4-Methyl-2-pentanone (MIBK)	108-10-1	50	µg/L	<50	<50	0.0	No Limit
		EP074: 2-Hexanone (MBK)	591-78-6	50	µg/L	<50	<50	0.0	No Limit
ES2202156-001	Anonymous	EP074: Vinyl Acetate	108-05-4	50	µg/L	<50	<50	0.0	No Limit

Sub-Matrix: **WATER**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Acceptable RPD (%)*
EP074B: Oxygenated Compounds (QC Lot: 4137802) - continued									
ES2202156-001	Anonymous	EP074: 2-Butanone (MEK)	78-93-3	50	µg/L	<50	<50	0.0	No Limit
		EP074: 4-Methyl-2-pentanone (MIBK)	108-10-1	50	µg/L	<50	<50	0.0	No Limit
		EP074: 2-Hexanone (MBK)	591-78-6	50	µg/L	<50	<50	0.0	No Limit
EP074C: Sulfonated Compounds (QC Lot: 4137802)									
ES2201683-020	Anonymous	EP074: Carbon disulfide	75-15-0	5	µg/L	<5	<5	0.0	No Limit
ES2202156-001	Anonymous	EP074: Carbon disulfide	75-15-0	5	µg/L	<5	<5	0.0	No Limit
EP074D: Fumigants (QC Lot: 4137802)									
ES2201683-020	Anonymous	EP074: 2.2-Dichloropropane	594-20-7	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.2-Dichloropropane	78-87-5	5	µg/L	<5	<5	0.0	No Limit
		EP074: cis-1.3-Dichloropropylene	10061-01-5	5	µg/L	<5	<5	0.0	No Limit
		EP074: trans-1.3-Dichloropropylene	10061-02-6	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.2-Dibromoethane (EDB)	106-93-4	5	µg/L	<5	<5	0.0	No Limit
ES2202156-001	Anonymous	EP074: 2.2-Dichloropropane	594-20-7	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.2-Dichloropropane	78-87-5	5	µg/L	<5	<5	0.0	No Limit
		EP074: cis-1.3-Dichloropropylene	10061-01-5	5	µg/L	<5	<5	0.0	No Limit
		EP074: trans-1.3-Dichloropropylene	10061-02-6	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.2-Dibromoethane (EDB)	106-93-4	5	µg/L	<5	<5	0.0	No Limit
EP074E: Halogenated Aliphatic Compounds (QC Lot: 4137802)									
ES2201683-020	Anonymous	EP074: 1.1-Dichloroethene	75-35-4	5	µg/L	<5	<5	0.0	No Limit
		EP074: Iodomethane	74-88-4	5	µg/L	<5	<5	0.0	No Limit
		EP074: trans-1.2-Dichloroethene	156-60-5	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.1-Dichloroethane	75-34-3	5	µg/L	<5	<5	0.0	No Limit
		EP074: cis-1.2-Dichloroethene	156-59-2	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.1.1-Trichloroethane	71-55-6	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.1-Dichloropropylene	563-58-6	5	µg/L	<5	<5	0.0	No Limit
		EP074: Carbon Tetrachloride	56-23-5	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.2-Dichloroethane	107-06-2	5	µg/L	<5	<5	0.0	No Limit
		EP074: Trichloroethene	79-01-6	5	µg/L	<5	<5	0.0	No Limit
		EP074: Dibromomethane	74-95-3	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.1.2-Trichloroethane	79-00-5	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.3-Dichloropropane	142-28-9	5	µg/L	<5	<5	0.0	No Limit
		EP074: Tetrachloroethene	127-18-4	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.1.1.2-Tetrachloroethane	630-20-6	5	µg/L	<5	<5	0.0	No Limit
		EP074: trans-1.4-Dichloro-2-butene	110-57-6	5	µg/L	<5	<5	0.0	No Limit
		EP074: cis-1.4-Dichloro-2-butene	1476-11-5	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.1.2.2-Tetrachloroethane	79-34-5	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.2.3-Trichloropropane	96-18-4	5	µg/L	<5	<5	0.0	No Limit
		EP074: Pentachloroethane	76-01-7	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.2-Dibromo-3-chloropropane	96-12-8	5	µg/L	<5	<5	0.0	No Limit
		EP074: Dichlorodifluoromethane	75-71-8	50	µg/L	<50	<50	0.0	No Limit

Sub-Matrix: **WATER**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Acceptable RPD (%)*
EP074E: Halogenated Aliphatic Compounds (QC Lot: 4137802) - continued									
ES2201683-020	Anonymous	EP074: Chloromethane	74-87-3	50	µg/L	<50	<50	0.0	No Limit
		EP074: Vinyl chloride	75-01-4	50	µg/L	<50	<50	0.0	No Limit
		EP074: Bromomethane	74-83-9	50	µg/L	<50	<50	0.0	No Limit
		EP074: Chloroethane	75-00-3	50	µg/L	<50	<50	0.0	No Limit
		EP074: Trichlorofluoromethane	75-69-4	50	µg/L	<50	<50	0.0	No Limit
ES2202156-001	Anonymous	EP074: 1.1-Dichloroethene	75-35-4	5	µg/L	<5	<5	0.0	No Limit
		EP074: Iodomethane	74-88-4	5	µg/L	<5	<5	0.0	No Limit
		EP074: trans-1.2-Dichloroethene	156-60-5	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.1-Dichloroethane	75-34-3	5	µg/L	<5	<5	0.0	No Limit
		EP074: cis-1.2-Dichloroethene	156-59-2	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.1.1-Trichloroethane	71-55-6	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.1-Dichloropropylene	563-58-6	5	µg/L	<5	<5	0.0	No Limit
		EP074: Carbon Tetrachloride	56-23-5	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.2-Dichloroethane	107-06-2	5	µg/L	<5	<5	0.0	No Limit
		EP074: Trichloroethene	79-01-6	5	µg/L	<5	<5	0.0	No Limit
		EP074: Dibromomethane	74-95-3	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.1.2-Trichloroethane	79-00-5	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.3-Dichloropropane	142-28-9	5	µg/L	<5	<5	0.0	No Limit
		EP074: Tetrachloroethene	127-18-4	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.1.1.2-Tetrachloroethane	630-20-6	5	µg/L	<5	<5	0.0	No Limit
		EP074: trans-1.4-Dichloro-2-butene	110-57-6	5	µg/L	<5	<5	0.0	No Limit
		EP074: cis-1.4-Dichloro-2-butene	1476-11-5	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.1.2.2-Tetrachloroethane	79-34-5	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.2.3-Trichloropropane	96-18-4	5	µg/L	<5	<5	0.0	No Limit
		EP074: Pentachloroethane	76-01-7	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.2-Dibromo-3-chloropropane	96-12-8	5	µg/L	<5	<5	0.0	No Limit
		EP074: Dichlorodifluoromethane	75-71-8	50	µg/L	<50	<50	0.0	No Limit
		EP074: Chloromethane	74-87-3	50	µg/L	<50	<50	0.0	No Limit
		EP074: Vinyl chloride	75-01-4	50	µg/L	<50	<50	0.0	No Limit
		EP074: Bromomethane	74-83-9	50	µg/L	<50	<50	0.0	No Limit
		EP074: Chloroethane	75-00-3	50	µg/L	<50	<50	0.0	No Limit
		EP074: Trichlorofluoromethane	75-69-4	50	µg/L	<50	<50	0.0	No Limit
EP074F: Halogenated Aromatic Compounds (QC Lot: 4137802)									
ES2201683-020	Anonymous	EP074: Chlorobenzene	108-90-7	5	µg/L	<5	<5	0.0	No Limit
		EP074: Bromobenzene	108-86-1	5	µg/L	<5	<5	0.0	No Limit
		EP074: 2-Chlorotoluene	95-49-8	5	µg/L	<5	<5	0.0	No Limit
		EP074: 4-Chlorotoluene	106-43-4	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.2.3-Trichlorobenzene	87-61-6	5	µg/L	<5	<5	0.0	No Limit
ES2202156-001	Anonymous	EP074: Chlorobenzene	108-90-7	5	µg/L	<5	<5	0.0	No Limit
		EP074: Bromobenzene	108-86-1	5	µg/L	<5	<5	0.0	No Limit

Sub-Matrix: **WATER**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Acceptable RPD (%)*
EP074F: Halogenated Aromatic Compounds (QC Lot: 4137802) - continued									
ES2202156-001	Anonymous	EP074: 2-Chlorotoluene	95-49-8	5	µg/L	<5	<5	0.0	No Limit
		EP074: 4-Chlorotoluene	106-43-4	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.2.3-Trichlorobenzene	87-61-6	5	µg/L	<5	<5	0.0	No Limit
EP074G: Trihalomethanes (QC Lot: 4137802)									
ES2201683-020	Anonymous	EP074: Chloroform	67-66-3	5	µg/L	<5	<5	0.0	No Limit
		EP074: Bromodichloromethane	75-27-4	5	µg/L	<5	<5	0.0	No Limit
		EP074: Dibromochloromethane	124-48-1	5	µg/L	<5	<5	0.0	No Limit
		EP074: Bromoform	75-25-2	5	µg/L	<5	<5	0.0	No Limit
ES2202156-001	Anonymous	EP074: Chloroform	67-66-3	5	µg/L	<5	<5	0.0	No Limit
		EP074: Bromodichloromethane	75-27-4	5	µg/L	<5	<5	0.0	No Limit
		EP074: Dibromochloromethane	124-48-1	5	µg/L	<5	<5	0.0	No Limit
		EP074: Bromoform	75-25-2	5	µg/L	<5	<5	0.0	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 4137803)									
ES2201683-020	Anonymous	EP080: C6 - C9 Fraction	----	20	µg/L	<20	<20	0.0	No Limit
ES2202156-001	Anonymous	EP080: C6 - C9 Fraction	----	20	µg/L	<20	<20	0.0	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 4137803)									
ES2201683-020	Anonymous	EP080: C6 - C10 Fraction	C6_C10	20	µg/L	<20	<20	0.0	No Limit
ES2202156-001	Anonymous	EP080: C6 - C10 Fraction	C6_C10	20	µg/L	<20	<20	0.0	No Limit
EP080: BTEXN (QC Lot: 4137803)									
ES2201683-020	Anonymous	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	108-38-3 106-42-3	2	µg/L	<2	<2	0.0	No Limit
		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
ES2202156-001	Anonymous	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	108-38-3 106-42-3	2	µg/L	<2	<2	0.0	No Limit
		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
EP231A: Perfluoroalkyl Sulfonic Acids (QC Lot: 4137474)									
ES2201941-001	Anonymous	EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	0.05	0.05	0.0	No Limit
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	0.11	0.10	0.0	0% - 50%
		EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	<0.02	<0.02	0.0	No Limit

Sub-Matrix: **WATER**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Acceptable RPD (%)*
EP231A: Perfluoroalkyl Sulfonic Acids (QC Lot: 4137474) - continued									
ES2201941-001	Anonymous	EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L	<0.02	<0.02	0.0	No Limit
ES2202142-003	Anonymous	EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	0.18	0.18	0.0	0% - 50%
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	0.68	0.64	5.6	0% - 20%
		EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	0.02	<0.02	0.0	No Limit
		EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L	<0.02	<0.02	0.0	No Limit
EP231B: Perfluoroalkyl Carboxylic Acids (QC Lot: 4137474)									
ES2201941-001	Anonymous	EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L	<0.1	<0.1	0.0	No Limit
ES2202142-003	Anonymous	EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	0.04	0.04	0.0	No Limit
		EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	0.04	0.03	0.0	No Limit
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	0.08	0.08	0.0	No Limit
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L	<0.1	<0.1	0.0	No Limit
EP231C: Perfluoroalkyl Sulfonamides (QC Lot: 4137474)									
ES2201941-001	Anonymous	EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	µg/L	<0.05	<0.05	0.0	No Limit

Sub-Matrix: **WATER**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Acceptable RPD (%)*
EP231C: Perfluoroalkyl Sulfonamides (QC Lot: 4137474) - continued									
ES2201941-001	Anonymous	EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L	<0.05	<0.05	0.0	No Limit
ES2202142-003	Anonymous	EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L	<0.05	<0.05	0.0	No Limit
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QC Lot: 4137474)									
ES2201941-001	Anonymous	EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.05	µg/L	<0.05	<0.05	0.0	No Limit
ES2202142-003	Anonymous	EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.05	µg/L	<0.05	<0.05	0.0	No Limit
EP231P: PFAS Sums (QC Lot: 4137474)									
ES2201941-001	Anonymous	EP231X: Sum of PFAS	----	0.01	µg/L	0.16	0.15	6.5	0% - 50%
ES2202142-003	Anonymous	EP231X: Sum of PFAS	----	0.01	µg/L	1.04	0.97	7.0	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: **WATER**

				Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Acceptable Limits (%)	
Method: Compound	CAS Number	LOR	Unit	Result	Concentration	LCS	Low	High
EA015: Total Dissolved Solids dried at 180 ± 5 °C (QCLot: 4136430)								
EA015H: Total Dissolved Solids @180°C	----	10	mg/L	<10	2000 mg/L	104	87.0	109
				<10	293 mg/L	116	75.2	126
				<10	2835 mg/L	106	83.0	124
ED037P: Alkalinity by PC Titrator (QCLot: 4137312)								
ED037-P: Total Alkalinity as CaCO3	----	----	mg/L	----	200 mg/L	103	81.0	111
				----	50 mg/L	120	80.0	120
ED041G: Sulfate (Turbidimetric) as SO4 2- by DA (QCLot: 4137505)								
ED041G: Sulfate as SO4 - Turbidimetric	14808-79-8	1	mg/L	<1	25 mg/L	104	82.0	122
				<1	500 mg/L	110	82.0	122
ED045G: Chloride by Discrete Analyser (QCLot: 4137508)								
ED045G: Chloride	16887-00-6	1	mg/L	<1	50 mg/L	93.6	80.9	127
				<1	1000 mg/L	106	80.9	127
ED093F: Dissolved Major Cations (QCLot: 4139030)								
ED093F: Calcium	7440-70-2	1	mg/L	<1	50 mg/L	95.4	80.0	114
ED093F: Magnesium	7439-95-4	1	mg/L	<1	50 mg/L	98.3	90.0	116
ED093F: Sodium	7440-23-5	1	mg/L	<1	50 mg/L	94.9	82.0	120
ED093F: Potassium	7440-09-7	1	mg/L	<1	50 mg/L	94.6	85.0	113
EG020F: Dissolved Metals by ICP-MS (QCLot: 4139027)								
EG020A-F: Arsenic	7440-38-2	0.001	mg/L	<0.001	0.1 mg/L	89.2	85.0	114
EG020A-F: Cadmium	7440-43-9	0.0001	mg/L	<0.0001	0.1 mg/L	96.0	84.0	110
EG020A-F: Chromium	7440-47-3	0.001	mg/L	<0.001	0.1 mg/L	97.1	85.0	111
EG020A-F: Copper	7440-50-8	0.001	mg/L	<0.001	0.1 mg/L	89.0	81.0	111
EG020A-F: Lead	7439-92-1	0.001	mg/L	<0.001	0.1 mg/L	93.9	83.0	111
EG020A-F: Nickel	7440-02-0	0.001	mg/L	<0.001	0.1 mg/L	87.0	82.0	112
EG020A-F: Zinc	7440-66-6	0.005	mg/L	<0.005	0.1 mg/L	87.5	81.0	117
EG020T: Total Metals by ICP-MS (QCLot: 4139064)								
EG020A-T: Arsenic	7440-38-2	0.001	mg/L	<0.001	0.1 mg/L	100	82.0	114
EG020A-T: Cadmium	7440-43-9	0.0001	mg/L	<0.0001	0.1 mg/L	95.9	84.0	112
EG020A-T: Chromium	7440-47-3	0.001	mg/L	<0.001	0.1 mg/L	96.2	86.0	116
EG020A-T: Copper	7440-50-8	0.001	mg/L	<0.001	0.1 mg/L	99.0	83.0	118
EG020A-T: Lead	7439-92-1	0.001	mg/L	<0.001	0.1 mg/L	97.2	85.0	115
EG020A-T: Nickel	7440-02-0	0.001	mg/L	<0.001	0.1 mg/L	99.7	84.0	116
EG020A-T: Zinc	7440-66-6	0.005	mg/L	<0.005	0.1 mg/L	96.9	79.0	117
EG035F: Dissolved Mercury by FIMS (QCLot: 4139028)								

Sub-Matrix: **WATER**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Acceptable Limits (%)	
				Result	Concentration	LCS	Low	High
EG035F: Dissolved Mercury by FIMS (QCLot: 4139028) - continued								
EG035F: Mercury	7439-97-6	0.0001	mg/L	<0.0001	0.01 mg/L	102	83.0	105
EG035T: Total Recoverable Mercury by FIMS (QCLot: 4139154)								
EG035T: Mercury	7439-97-6	0.0001	mg/L	<0.0001	0.01 mg/L	101	77.0	111
EK055G: Ammonia as N by Discrete Analyser (QCLot: 4136962)								
EK055G: Ammonia as N	7664-41-7	0.01	mg/L	<0.01	1 mg/L	103	90.0	114
EK057G: Nitrite as N by Discrete Analyser (QCLot: 4137507)								
EK057G: Nitrite as N	14797-65-0	0.01	mg/L	<0.01	0.5 mg/L	103	82.0	114
EK059G: Nitrite plus Nitrate as N (NOx) by Discrete Analyser (QCLot: 4136963)								
EK059G: Nitrite + Nitrate as N	----	0.01	mg/L	<0.01	0.5 mg/L	101	91.0	113
EK061G: Total Kjeldahl Nitrogen By Discrete Analyser (QCLot: 4136959)								
EK061G: Total Kjeldahl Nitrogen as N	----	0.1	mg/L	<0.1	10 mg/L	89.4	69.0	101
				<0.1	1 mg/L	109	70.0	118
				<0.1	5 mg/L	95.9	70.0	130
EK067G: Total Phosphorus as P by Discrete Analyser (QCLot: 4136958)								
EK067G: Total Phosphorus as P	----	0.01	mg/L	<0.01	4.42 mg/L	91.1	71.0	101
				<0.01	0.442 mg/L	# 109	72.0	108
				<0.01	1 mg/L	96.7	70.0	130
EK071G: Reactive Phosphorus as P by discrete analyser (QCLot: 4137506)								
EK071G: Reactive Phosphorus as P	14265-44-2	0.01	mg/L	<0.01	0.5 mg/L	109	85.0	117
EP074A: Monocyclic Aromatic Hydrocarbons (QCLot: 4137802)								
EP074: Styrene	100-42-5	5	µg/L	<5	10 µg/L	93.9	73.0	119
EP074: Isopropylbenzene	98-82-8	5	µg/L	<5	10 µg/L	93.4	76.0	118
EP074: n-Propylbenzene	103-65-1	5	µg/L	<5	10 µg/L	91.3	69.0	119
EP074: 1.3.5-Trimethylbenzene	108-67-8	5	µg/L	<5	10 µg/L	91.2	74.0	116
EP074: sec-Butylbenzene	135-98-8	5	µg/L	<5	10 µg/L	90.9	73.0	119
EP074: 1.2.4-Trimethylbenzene	95-63-6	5	µg/L	<5	10 µg/L	93.4	74.0	116
EP074: tert-Butylbenzene	98-06-6	5	µg/L	<5	10 µg/L	89.7	72.0	116
EP074: p-Isopropyltoluene	99-87-6	5	µg/L	<5	10 µg/L	91.8	71.0	119
EP074: n-Butylbenzene	104-51-8	5	µg/L	<5	10 µg/L	95.1	65.0	123
EP074B: Oxygenated Compounds (QCLot: 4137802)								
EP074: Vinyl Acetate	108-05-4	50	µg/L	<50	100 µg/L	93.5	61.4	134
EP074: 2-Butanone (MEK)	78-93-3	50	µg/L	<50	100 µg/L	97.8	73.6	130
EP074: 4-Methyl-2-pentanone (MIBK)	108-10-1	50	µg/L	<50	100 µg/L	104	66.0	132
EP074: 2-Hexanone (MBK)	591-78-6	50	µg/L	<50	100 µg/L	102	65.0	137
EP074C: Sulfonated Compounds (QCLot: 4137802)								
EP074: Carbon disulfide	75-15-0	5	µg/L	<5	10 µg/L	96.2	72.8	127
EP074D: Fumigants (QCLot: 4137802)								

Sub-Matrix: **WATER**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Acceptable Limits (%)	
				Result	Concentration	LCS	Low	High
EP074D: Fumigants (QCLot: 4137802) - continued								
EP074: 2.2-Dichloropropane	594-20-7	5	µg/L	<5	10 µg/L	90.5	68.0	122
EP074: 1.2-Dichloropropane	78-87-5	5	µg/L	<5	10 µg/L	93.4	76.0	118
EP074: cis-1.3-Dichloropropylene	10061-01-5	5	µg/L	<5	10 µg/L	94.6	62.0	120
EP074: trans-1.3-Dichloropropylene	10061-02-6	5	µg/L	<5	10 µg/L	97.8	60.0	114
EP074: 1.2-Dibromoethane (EDB)	106-93-4	5	µg/L	<5	10 µg/L	103	69.0	117
EP074E: Halogenated Aliphatic Compounds (QCLot: 4137802)								
EP074: Dichlorodifluoromethane	75-71-8	50	µg/L	<50	100 µg/L	81.1	60.6	138
EP074: Chloromethane	74-87-3	50	µg/L	<50	100 µg/L	86.1	67.4	130
EP074: Vinyl chloride	75-01-4	50	µg/L	<50	100 µg/L	77.3	69.4	129
EP074: Bromomethane	74-83-9	50	µg/L	<50	100 µg/L	96.3	56.0	140
EP074: Chloroethane	75-00-3	50	µg/L	<50	100 µg/L	89.0	61.0	139
EP074: Trichlorofluoromethane	75-69-4	50	µg/L	<50	100 µg/L	91.1	69.0	131
EP074: 1.1-Dichloroethene	75-35-4	5	µg/L	<5	10 µg/L	91.4	70.0	124
EP074: Iodomethane	74-88-4	5	µg/L	<5	10 µg/L	70.9	70.2	128
EP074: trans-1.2-Dichloroethene	156-60-5	5	µg/L	<5	10 µg/L	82.4	74.0	118
EP074: 1.1-Dichloroethane	75-34-3	5	µg/L	<5	10 µg/L	79.9	74.0	120
EP074: cis-1.2-Dichloroethene	156-59-2	5	µg/L	<5	10 µg/L	82.7	77.0	119
EP074: 1.1.1-Trichloroethane	71-55-6	5	µg/L	<5	10 µg/L	90.3	67.0	119
EP074: 1.1-Dichloropropylene	563-58-6	5	µg/L	<5	10 µg/L	89.5	73.0	119
EP074: Carbon Tetrachloride	56-23-5	5	µg/L	<5	10 µg/L	90.6	62.0	120
EP074: 1.2-Dichloroethane	107-06-2	5	µg/L	<5	10 µg/L	94.1	73.0	123
EP074: Trichloroethene	79-01-6	5	µg/L	<5	10 µg/L	90.6	76.0	118
EP074: Dibromomethane	74-95-3	5	µg/L	<5	10 µg/L	97.2	73.0	119
EP074: 1.1.2-Trichloroethane	79-00-5	5	µg/L	<5	10 µg/L	104	72.0	126
EP074: 1.3-Dichloropropane	142-28-9	5	µg/L	<5	10 µg/L	103	71.0	129
EP074: Tetrachloroethene	127-18-4	5	µg/L	<5	10 µg/L	91.6	72.0	124
EP074: 1.1.1.2-Tetrachloroethane	630-20-6	5	µg/L	<5	10 µg/L	99.4	66.0	114
EP074: trans-1.4-Dichloro-2-butene	110-57-6	5	µg/L	<5	10 µg/L	108	60.0	120
EP074: cis-1.4-Dichloro-2-butene	1476-11-5	5	µg/L	<5	10 µg/L	105	70.6	128
EP074: 1.1.2.2-Tetrachloroethane	79-34-5	5	µg/L	<5	10 µg/L	108	70.0	124
EP074: 1.2.3-Trichloropropane	96-18-4	5	µg/L	<5	10 µg/L	111	74.0	126
EP074: Pentachloroethane	76-01-7	5	µg/L	<5	10 µg/L	112	71.8	126
EP074: 1.2-Dibromo-3-chloropropane	96-12-8	5	µg/L	<5	10 µg/L	102	66.4	136
EP074F: Halogenated Aromatic Compounds (QCLot: 4137802)								
EP074: Chlorobenzene	108-90-7	5	µg/L	<5	10 µg/L	99.9	79.0	117
EP074: Bromobenzene	108-86-1	5	µg/L	<5	10 µg/L	101	76.0	116
EP074: 2-Chlorotoluene	95-49-8	5	µg/L	<5	10 µg/L	94.2	73.0	119
EP074: 4-Chlorotoluene	106-43-4	5	µg/L	<5	10 µg/L	97.2	73.0	119
EP074: 1.2.3-Trichlorobenzene	87-61-6	5	µg/L	<5	10 µg/L	108	67.0	123

Sub-Matrix: **WATER**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Acceptable Limits (%)	
				Result	Concentration	LCS	Low	High
EP074G: Trihalomethanes (QCLot: 4137802)								
EP074: Chloroform	67-66-3	5	µg/L	<5	10 µg/L	91.9	72.0	120
EP074: Bromodichloromethane	75-27-4	5	µg/L	<5	10 µg/L	94.3	64.0	118
EP074: Dibromochloromethane	124-48-1	5	µg/L	<5	10 µg/L	105	65.0	115
EP074: Bromoform	75-25-2	5	µg/L	<5	10 µg/L	111	73.5	126
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 4136769)								
EP075(SIM): Naphthalene	91-20-3	1	µg/L	<1.0	5 µg/L	71.8	50.0	94.0
EP075(SIM): Acenaphthylene	208-96-8	1	µg/L	<1.0	5 µg/L	66.6	63.6	114
EP075(SIM): Acenaphthene	83-32-9	1	µg/L	<1.0	5 µg/L	70.4	62.2	113
EP075(SIM): Fluorene	86-73-7	1	µg/L	<1.0	5 µg/L	76.6	63.9	115
EP075(SIM): Phenanthrene	85-01-8	1	µg/L	<1.0	5 µg/L	69.0	62.6	116
EP075(SIM): Anthracene	120-12-7	1	µg/L	<1.0	5 µg/L	90.0	64.3	116
EP075(SIM): Fluoranthene	206-44-0	1	µg/L	<1.0	5 µg/L	84.4	63.6	118
EP075(SIM): Pyrene	129-00-0	1	µg/L	<1.0	5 µg/L	84.4	63.1	118
EP075(SIM): Benz(a)anthracene	56-55-3	1	µg/L	<1.0	5 µg/L	71.2	64.1	117
EP075(SIM): Chrysene	218-01-9	1	µg/L	<1.0	5 µg/L	72.5	62.5	116
EP075(SIM): Benzo(b+j)fluoranthene	205-99-2 205-82-3	1	µg/L	<1.0	5 µg/L	67.6	61.7	119
EP075(SIM): Benzo(k)fluoranthene	207-08-9	1	µg/L	<1.0	5 µg/L	84.9	63.0	115
EP075(SIM): Benzo(a)pyrene	50-32-8	0.5	µg/L	<0.5	5 µg/L	68.2	63.3	117
EP075(SIM): Indeno(1.2.3.cd)pyrene	193-39-5	1	µg/L	<1.0	5 µg/L	73.0	59.9	118
EP075(SIM): Dibenz(a.h)anthracene	53-70-3	1	µg/L	<1.0	5 µg/L	72.4	61.2	117
EP075(SIM): Benzo(g.h.i)perylene	191-24-2	1	µg/L	<1.0	5 µg/L	80.5	59.1	118
EP075A: Phenolic Compounds (QCLot: 4136770)								
EP075: Phenol	108-95-2	2	µg/L	<2	10 µg/L	31.4	25.5	64.1
EP075: 2-Chlorophenol	95-57-8	2	µg/L	<2	10 µg/L	59.3	52.0	88.0
EP075: 2-Methylphenol	95-48-7	2	µg/L	<2	10 µg/L	65.0	50.0	94.0
EP075: 3- & 4-Methylphenol	1319-77-3	2	µg/L	<2	10 µg/L	58.5	45.0	96.2
EP075: 2-Nitrophenol	88-75-5	2	µg/L	<2	10 µg/L	66.1	48.0	98.0
EP075: 2.4-Dimethylphenol	105-67-9	2	µg/L	<2	10 µg/L	59.1	50.0	94.0
EP075: 2.4-Dichlorophenol	120-83-2	2	µg/L	<2	10 µg/L	70.0	61.9	109
EP075: 2.6-Dichlorophenol	87-65-0	2	µg/L	<2	10 µg/L	67.4	61.5	108
EP075: 4-Chloro-3-methylphenol	59-50-7	2	µg/L	<2	10 µg/L	72.2	61.4	107
EP075: 2.4.6-Trichlorophenol	88-06-2	2	µg/L	<2	10 µg/L	72.2	57.6	112
EP075: 2.4.5-Trichlorophenol	95-95-4	2	µg/L	<2	10 µg/L	76.1	58.0	110
EP075: Pentachlorophenol	87-86-5	4	µg/L	<4	20 µg/L	66.2	12.8	95.0
EP075B: Polynuclear Aromatic Hydrocarbons (QCLot: 4136770)								
EP075: Naphthalene	91-20-3	2	µg/L	<2	10 µg/L	61.1	51.0	95.0
EP075: 2-Methylnaphthalene	91-57-6	2	µg/L	<2	10 µg/L	62.4	59.0	108

Sub-Matrix: **WATER**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Acceptable Limits (%)	
				Result	Concentration	LCS	Low	High
EP075B: Polynuclear Aromatic Hydrocarbons (QCLot: 4136770) - continued								
EP075: 2-Chloronaphthalene	91-58-7	2	µg/L	<2	10 µg/L	# 59.4	60.6	106
EP075: Acenaphthylene	208-96-8	2	µg/L	<2	10 µg/L	69.2	64.0	108
EP075: Acenaphthene	83-32-9	2	µg/L	<2	10 µg/L	67.5	65.0	108
EP075: Fluorene	86-73-7	2	µg/L	<2	10 µg/L	73.6	65.2	107
EP075: Phenanthrene	85-01-8	2	µg/L	<2	10 µg/L	82.9	66.7	108
EP075: Anthracene	120-12-7	2	µg/L	<2	10 µg/L	86.5	65.8	108
EP075: Fluoranthene	206-44-0	2	µg/L	<2	10 µg/L	91.9	64.9	109
EP075: Pyrene	129-00-0	2	µg/L	<2	10 µg/L	93.7	60.1	111
EP075: N-2-Fluorenyl Acetamide	53-96-3	2	µg/L	<2	10 µg/L	104	59.7	110
EP075: Benz(a)anthracene	56-55-3	2	µg/L	<2	10 µg/L	94.4	62.2	112
EP075: Chrysene	218-01-9	2	µg/L	<2	10 µg/L	95.4	59.3	114
EP075: Benzo(b+j) & Benzo(k)fluoranthene	205-99-2 207-08-9	4	µg/L	<4	20 µg/L	96.4	60.1	111
EP075: 7.12-Dimethylbenz(a)anthracene	57-97-6	2	µg/L	<2	10 µg/L	59.2	50.0	108
EP075: Benzo(a)pyrene	50-32-8	2	µg/L	<2	10 µg/L	96.0	59.2	112
EP075: 3-Methylcholanthrene	56-49-5	2	µg/L	<2	10 µg/L	63.8	60.1	110
EP075: Indeno(1.2.3.cd)pyrene	193-39-5	2	µg/L	<2	10 µg/L	92.3	59.6	110
EP075: Dibenz(a.h)anthracene	53-70-3	2	µg/L	<2	10 µg/L	92.4	57.2	109
EP075: Benzo(g.h.i)perylene	191-24-2	2	µg/L	<2	10 µg/L	91.6	60.6	110
EP075: Benzo(a)pyrene TEQ (zero)	----	2	µg/L	<2	----	----	----	----
EP075C: Phthalate Esters (QCLot: 4136770)								
EP075: Dimethyl phthalate	131-11-3	2	µg/L	<2	10 µg/L	76.9	64.3	112
EP075: Diethyl phthalate	84-66-2	2	µg/L	<2	10 µg/L	82.9	67.3	111
EP075: Di-n-butyl phthalate	84-74-2	2	µg/L	<2	10 µg/L	97.7	68.4	122
EP075: Butyl benzyl phthalate	85-68-7	2	µg/L	<2	10 µg/L	97.4	61.2	114
EP075: bis(2-ethylhexyl) phthalate	117-81-7	----	µg/L	----	10 µg/L	106	60.0	132
EP075: Di-n-octylphthalate	117-84-0	2	µg/L	<2	10 µg/L	96.7	62.1	115
EP075D: Nitrosamines (QCLot: 4136770)								
EP075: N-Nitrosomethylethylamine	10595-95-6	2	µg/L	<2	10 µg/L	50.1	46.0	110
EP075: N-Nitrosodiethylamine	55-18-5	2	µg/L	<2	10 µg/L	89.6	60.6	113
EP075: N-Nitrosopyrrolidine	930-55-2	4	µg/L	<4	10 µg/L	55.1	45.0	91.0
EP075: N-Nitrosomorpholine	59-89-2	2	µg/L	<2	10 µg/L	50.1	42.0	100
EP075: N-Nitrosodi-n-propylamine	621-64-7	2	µg/L	<2	10 µg/L	68.0	63.5	108
EP075: N-Nitrosopiperidine	100-75-4	2	µg/L	<2	10 µg/L	68.1	61.7	107
EP075: N-Nitrosodibutylamine	924-16-3	2	µg/L	<2	10 µg/L	103	62.5	108
EP075: N-Nitrosodiphenyl & Diphenylamine	86-30-6 122-39-4	4	µg/L	<4	20 µg/L	82.4	64.6	112
EP075: Methapyrilene	91-80-5	2	µg/L	<2	10 µg/L	33.8	23.3	125
EP075E: Nitroaromatics and Ketones (QCLot: 4136770)								

Sub-Matrix: **WATER**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Acceptable Limits (%)	
				Result	Concentration	LCS	Low	High
EP075E: Nitroaromatics and Ketones (QCLot: 4136770) - continued								
EP075: 2-Picoline	109-06-8	2	µg/L	<2	10 µg/L	46.6	41.0	109
EP075: Acetophenone	98-86-2	2	µg/L	<2	10 µg/L	72.8	68.3	112
EP075: Nitrobenzene	98-95-3	2	µg/L	<2	10 µg/L	76.7	68.3	112
EP075: Isophorone	78-59-1	2	µg/L	<2	10 µg/L	69.5	67.6	111
EP075: 2.6-Dinitrotoluene	606-20-2	4	µg/L	<4	10 µg/L	74.6	64.4	113
EP075: 2.4-Dinitrotoluene	121-14-2	4	µg/L	<4	10 µg/L	82.9	59.5	109
EP075: 1-Naphthylamine	134-32-7	2	µg/L	<2	10 µg/L	# 116	46.8	102
EP075: 4-Nitroquinoline-N-oxide	56-57-5	2	µg/L	<2	10 µg/L	95.8	40.0	96.0
EP075: 5-Nitro-o-toluidine	99-55-8	2	µg/L	<2	10 µg/L	87.6	58.3	106
EP075: Azobenzene	103-33-3	2	µg/L	<2	10 µg/L	77.5	66.0	112
EP075: 1.3.5-Trinitrobenzene	99-35-4	2	µg/L	<2	10 µg/L	88.1	46.0	108
EP075: Phenacetin	62-44-2	2	µg/L	<2	10 µg/L	# 103	57.8	101
EP075: 4-Aminobiphenyl	92-67-1	2	µg/L	<2	10 µg/L	110	60.1	112
EP075: Pentachloronitrobenzene	82-68-8	2	µg/L	<2	10 µg/L	87.2	59.0	109
EP075: Pronamide	23950-58-5	2	µg/L	<2	10 µg/L	104	62.7	109
EP075: Dimethylaminoazobenzene	60-11-7	2	µg/L	<2	10 µg/L	97.2	59.4	108
EP075: Chlorobenzilate	510-15-6	2	µg/L	<2	10 µg/L	95.9	57.7	110
EP075F: Haloethers (QCLot: 4136770)								
EP075: Bis(2-chloroethyl) ether	111-44-4	2	µg/L	<2	10 µg/L	# 59.9	69.1	112
EP075: Bis(2-chloroethoxy) methane	111-91-1	2	µg/L	<2	10 µg/L	68.9	66.2	111
EP075: 4-Chlorophenyl phenyl ether	7005-72-3	2	µg/L	<2	10 µg/L	73.4	64.7	109
EP075: 4-Bromophenyl phenyl ether	101-55-3	2	µg/L	<2	10 µg/L	77.4	61.6	108
EP075G: Chlorinated Hydrocarbons (QCLot: 4136770)								
EP075: 1.4-Dichlorobenzene	106-46-7	2	µg/L	<2	10 µg/L	55.1	41.0	97.0
EP075: 1.3-Dichlorobenzene	541-73-1	2	µg/L	<2	10 µg/L	56.0	40.0	96.0
EP075: 1.2-Dichlorobenzene	95-50-1	2	µg/L	<2	10 µg/L	57.1	41.0	95.0
EP075: Hexachloroethane	67-72-1	2	µg/L	<2	10 µg/L	56.4	46.0	88.0
EP075: 1.2.4-Trichlorobenzene	120-82-1	2	µg/L	<2	10 µg/L	59.0	46.0	96.0
EP075: Hexachloropropylene	1888-71-7	2	µg/L	<2	10 µg/L	58.1	34.0	96.0
EP075: Hexachlorobutadiene	87-68-3	2	µg/L	<2	10 µg/L	57.5	37.4	100
EP075: Hexachlorocyclopentadiene	77-47-4	10	µg/L	<10	10 µg/L	58.5	23.5	107
EP075: Pentachlorobenzene	608-93-5	2	µg/L	<2	10 µg/L	65.4	64.5	107
EP075: Hexachlorobenzene (HCB)	118-74-1	4	µg/L	<4	10 µg/L	76.9	65.7	110
EP075H: Anilines and Benzidines (QCLot: 4136770)								
EP075: Aniline	62-53-3	2	µg/L	<2	10 µg/L	60.1	50.0	104
EP075: 4-Chloroaniline	106-47-8	2	µg/L	<2	10 µg/L	64.2	42.0	106
EP075: 2-Nitroaniline	88-74-4	4	µg/L	<4	10 µg/L	73.2	60.9	110
EP075: 3-Nitroaniline	99-09-2	4	µg/L	<4	10 µg/L	81.9	51.5	96.9

Sub-Matrix: **WATER**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Acceptable Limits (%)	
				Result	Concentration	LCS	Low	High
EP075H: Anilines and Benzidines (QCLot: 4136770) - continued								
EP075: Dibenzofuran	132-64-9	2	µg/L	<2	10 µg/L	68.4	65.3	108
EP075: 4-Nitroaniline	100-01-6	2	µg/L	<2	10 µg/L	96.3	48.9	99.5
EP075: Carbazole	86-74-8	2	µg/L	<2	10 µg/L	94.5	64.3	107
EP075: 3.3`-Dichlorobenzidine	91-94-1	2	µg/L	<2	10 µg/L	109	60.3	119
EP075I: Organochlorine Pesticides (QCLot: 4136770)								
EP075: alpha-BHC	319-84-6	2	µg/L	<2	10 µg/L	81.2	64.3	110
EP075: beta-BHC	319-85-7	2	µg/L	<2	10 µg/L	92.7	53.0	107
EP075: gamma-BHC	58-89-9	2	µg/L	<2	10 µg/L	85.3	51.0	111
EP075: delta-BHC	319-86-8	2	µg/L	<2	10 µg/L	90.6	57.0	111
EP075: Heptachlor	76-44-8	2	µg/L	<2	10 µg/L	83.5	57.9	108
EP075: Aldrin	309-00-2	2	µg/L	<2	10 µg/L	84.3	56.0	112
EP075: Heptachlor epoxide	1024-57-3	2	µg/L	<2	10 µg/L	91.9	50.0	118
EP075: alpha-Endosulfan	959-98-8	2	µg/L	<2	10 µg/L	92.0	59.0	111
EP075: 4.4`-DDE	72-55-9	2	µg/L	<2	10 µg/L	93.4	53.0	115
EP075: Dieldrin	60-57-1	2	µg/L	<2	10 µg/L	93.8	59.0	115
EP075: Endrin	72-20-8	2	µg/L	<2	10 µg/L	93.3	58.0	114
EP075: beta-Endosulfan	33213-65-9	2	µg/L	<2	10 µg/L	94.9	54.0	116
EP075: 4.4`-DDD	72-54-8	2	µg/L	<2	10 µg/L	95.9	55.0	115
EP075: Endosulfan sulfate	1031-07-8	2	µg/L	<2	10 µg/L	100	52.8	114
EP075: 4.4`-DDT	50-29-3	4	µg/L	<4	10 µg/L	95.9	56.0	114
EP075: Sum of Aldrin + Dieldrin	309-00-2/60-57-1	4	µg/L	<4	----	----	----	----
EP075: Sum of DDD + DDE + DDT	72-54-8/72-55-9/50-2	4	µg/L	<4	----	----	----	----
EP075J: Organophosphorus Pesticides (QCLot: 4136770)								
EP075: Dichlorvos	62-73-7	2	µg/L	<2	10 µg/L	73.6	51.0	113
EP075: Dimethoate	60-51-5	2	µg/L	<2	10 µg/L	89.2	43.0	109
EP075: Diazinon	333-41-5	2	µg/L	<2	10 µg/L	90.8	49.0	113
EP075: Chlorpyrifos-methyl	5598-13-0	2	µg/L	<2	10 µg/L	92.5	54.1	116
EP075: Malathion	121-75-5	2	µg/L	<2	10 µg/L	103	54.0	124
EP075: Fenthion	55-38-9	2	µg/L	<2	10 µg/L	96.1	57.0	115
EP075: Chlorpyrifos	2921-88-2	2	µg/L	<2	10 µg/L	94.0	53.0	109
EP075: Pirimphos-ethyl	23505-41-1	2	µg/L	<2	10 µg/L	93.4	55.0	111
EP075: Chlorfenvinphos	470-90-6	2	µg/L	<2	10 µg/L	89.2	50.0	116
EP075: Prothiofos	34643-46-4	2	µg/L	<2	10 µg/L	95.6	54.0	118
EP075: Ethion	563-12-2	2	µg/L	<2	10 µg/L	99.5	51.0	117
EP080/071: Total Petroleum Hydrocarbons (QCLot: 4136768)								
EP071: C10 - C14 Fraction	----	50	µg/L	<50	400 µg/L	76.2	55.8	112

Sub-Matrix: **WATER**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Acceptable Limits (%)	
				Result	Concentration	LCS	Low	High
EP080/071: Total Petroleum Hydrocarbons (QCLot: 4136768) - continued								
EP071: C15 - C28 Fraction	----	100	µg/L	<100	600 µg/L	75.8	71.6	113
EP071: C29 - C36 Fraction	----	50	µg/L	<50	400 µg/L	85.8	56.0	121
EP080/071: Total Petroleum Hydrocarbons (QCLot: 4137803)								
EP080: C6 - C9 Fraction	----	20	µg/L	<20	260 µg/L	92.3	75.0	127
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 4136768)								
EP071: >C10 - C16 Fraction	----	100	µg/L	<100	500 µg/L	69.3	57.9	119
EP071: >C16 - C34 Fraction	----	100	µg/L	<100	700 µg/L	72.6	62.5	110
EP071: >C34 - C40 Fraction	----	100	µg/L	<100	300 µg/L	77.0	61.5	121
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 4137803)								
EP080: C6 - C10 Fraction	C6_C10	20	µg/L	<20	310 µg/L	94.9	75.0	127
EP080: BTEXN (QCLot: 4137803)								
EP080: Benzene	71-43-2	1	µg/L	<1	10 µg/L	94.1	70.0	122
EP080: Toluene	108-88-3	2	µg/L	<2	10 µg/L	104	69.0	123
EP080: Ethylbenzene	100-41-4	2	µg/L	<2	10 µg/L	99.7	70.0	120
EP080: meta- & para-Xylene	108-38-3 106-42-3	2	µg/L	<2	10 µg/L	98.6	69.0	121
EP080: ortho-Xylene	95-47-6	2	µg/L	<2	10 µg/L	102	72.0	122
EP080: Naphthalene	91-20-3	5	µg/L	<5	10 µg/L	108	70.0	120
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 4137434)								
EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	0.25 µg/L	90.8	72.0	130
EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	<0.02	0.25 µg/L	82.4	71.0	127
EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	<0.01	0.25 µg/L	84.2	68.0	131
EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	<0.02	0.25 µg/L	80.4	69.0	134
EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	<0.01	0.25 µg/L	84.2	65.0	140
EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L	<0.02	0.25 µg/L	80.6	53.0	142
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 4137474)								
EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	0.25 µg/L	88.0	72.0	130
EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	<0.02	0.25 µg/L	78.8	71.0	127
EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	<0.01	0.25 µg/L	80.8	68.0	131
EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	<0.02	0.25 µg/L	84.0	69.0	134
EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	<0.01	0.25 µg/L	83.6	65.0	140
EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L	<0.02	0.25 µg/L	88.8	53.0	142
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4137434)								
EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L	<0.1	1.25 µg/L	81.5	73.0	129
EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	<0.02	0.25 µg/L	90.4	72.0	129
EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	<0.02	0.25 µg/L	112	72.0	129
EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	<0.02	0.25 µg/L	94.2	72.0	130
EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	<0.01	0.25 µg/L	94.2	71.0	133

Sub-Matrix: **WATER**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Acceptable Limits (%)	
				Result	Concentration	LCS	Low	High
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4137434) - continued								
EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L	<0.02	0.25 µg/L	89.6	69.0	130
EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L	<0.02	0.25 µg/L	92.4	71.0	129
EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L	<0.02	0.25 µg/L	99.8	69.0	133
EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L	<0.02	0.25 µg/L	94.8	72.0	134
EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L	<0.02	0.25 µg/L	89.2	65.0	144
EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L	<0.05	0.625 µg/L	99.0	71.0	132
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4137474)								
EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L	<0.1	1.25 µg/L	81.5	73.0	129
EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	<0.02	0.25 µg/L	77.8	72.0	129
EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	<0.02	0.25 µg/L	92.8	72.0	129
EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	<0.02	0.25 µg/L	78.8	72.0	130
EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	<0.01	0.25 µg/L	82.4	71.0	133
EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L	<0.02	0.25 µg/L	78.6	69.0	130
EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L	<0.02	0.25 µg/L	79.2	71.0	129
EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L	<0.02	0.25 µg/L	89.4	69.0	133
EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L	<0.02	0.25 µg/L	87.8	72.0	134
EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L	<0.02	0.25 µg/L	79.2	65.0	144
EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L	<0.05	0.625 µg/L	86.6	71.0	132
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 4137434)								
EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	µg/L	<0.02	0.25 µg/L	95.0	67.0	137
EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L	<0.05	0.625 µg/L	108	68.0	141
EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	µg/L	<0.05	0.625 µg/L	103	62.6	147
EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L	<0.05	0.625 µg/L	103	66.0	145
EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L	<0.05	0.625 µg/L	100	57.6	145
EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.02	µg/L	<0.02	0.25 µg/L	83.0	65.0	136
EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.02	µg/L	<0.02	0.25 µg/L	90.6	61.0	135
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 4137474)								
EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	µg/L	<0.02	0.25 µg/L	85.6	67.0	137
EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L	<0.05	0.625 µg/L	82.8	68.0	141
EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	µg/L	<0.05	0.625 µg/L	85.5	62.6	147
EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L	<0.05	0.625 µg/L	86.8	66.0	145
EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L	<0.05	0.625 µg/L	86.4	57.6	145

Sub-Matrix: **WATER**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report: Result	Laboratory Control Spike (LCS) Report: Spike Concentration	Spike Recovery (%): LCS	Acceptable Limits (%): Low	Acceptable Limits (%): High
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 4137474) - continued								
EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.02	µg/L	<0.02	0.25 µg/L	85.2	65.0	136
EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.02	µg/L	<0.02	0.25 µg/L	81.8	61.0	135
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 4137434)								
EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L	<0.05	0.25 µg/L	95.6	63.0	143
EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.05	µg/L	<0.05	0.25 µg/L	73.0	64.0	140
EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.05	µg/L	<0.05	0.25 µg/L	79.4	67.0	138
EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.05	µg/L	<0.05	0.25 µg/L	90.6	71.4	144
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 4137474)								
EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L	<0.05	0.25 µg/L	77.0	63.0	143
EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.05	µg/L	<0.05	0.25 µg/L	81.0	64.0	140
EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.05	µg/L	<0.05	0.25 µg/L	81.2	67.0	138
EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.05	µg/L	<0.05	0.25 µg/L	85.0	71.4	144

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: **WATER**

Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Matrix Spike (MS) Report: Spike Concentration	SpikeRecovery(%): MS	Acceptable Limits (%): Low	Acceptable Limits (%): High
ED041G: Sulfate (Turbidimetric) as SO4 2- by DA (QCLot: 4137505)							
ES2202021-001	Anonymous	ED041G: Sulfate as SO4 - Turbidimetric	14808-79-8	10 mg/L	# Not Determined	70.0	130
ED045G: Chloride by Discrete Analyser (QCLot: 4137508)							
ES2202047-012	BUR_BH125	ED045G: Chloride	16887-00-6	50 mg/L	# Not Determined	70.0	130
EG020F: Dissolved Metals by ICP-MS (QCLot: 4139027)							
ES2201966-005	Anonymous	EG020A-F: Arsenic	7440-38-2	1 mg/L	83.2	70.0	130
		EG020A-F: Cadmium	7440-43-9	0.25 mg/L	86.0	70.0	130
		EG020A-F: Chromium	7440-47-3	1 mg/L	99.7	70.0	130
		EG020A-F: Copper	7440-50-8	1 mg/L	85.7	70.0	130
		EG020A-F: Lead	7439-92-1	1 mg/L	82.0	70.0	130
		EG020A-F: Nickel	7440-02-0	1 mg/L	87.0	70.0	130
		EG020A-F: Zinc	7440-66-6	1 mg/L	87.2	70.0	130
EG020T: Total Metals by ICP-MS (QCLot: 4139064)							
ES2201683-035	Anonymous	EG020A-T: Arsenic	7440-38-2	1 mg/L	101	70.0	130

Sub-Matrix: **WATER**

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Acceptable Limits (%)	
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Concentration	MS	Low	High
EG020T: Total Metals by ICP-MS (QCLot: 4139064) - continued							
ES2201683-035	Anonymous	EG020A-T: Cadmium	7440-43-9	0.25 mg/L	99.7	70.0	130
		EG020A-T: Chromium	7440-47-3	1 mg/L	102	70.0	130
		EG020A-T: Copper	7440-50-8	1 mg/L	102	70.0	130
		EG020A-T: Lead	7439-92-1	1 mg/L	101	70.0	130
		EG020A-T: Nickel	7440-02-0	1 mg/L	100	70.0	130
		EG020A-T: Zinc	7440-66-6	1 mg/L	100	70.0	130
EG035F: Dissolved Mercury by FIMS (QCLot: 4139028)							
ES2201942-001	Anonymous	EG035F: Mercury	7439-97-6	0.01 mg/L	# 40.6	70.0	130
EG035T: Total Recoverable Mercury by FIMS (QCLot: 4139154)							
ES2201969-003	Anonymous	EG035T: Mercury	7439-97-6	0.01 mg/L	96.2	70.0	130
EK055G: Ammonia as N by Discrete Analyser (QCLot: 4136962)							
ES2201979-001	Anonymous	EK055G: Ammonia as N	7664-41-7	1 mg/L	# Not Determined	70.0	130
EK057G: Nitrite as N by Discrete Analyser (QCLot: 4137507)							
ES2202047-012	BUR_BH125	EK057G: Nitrite as N	14797-65-0	0.5 mg/L	109	70.0	130
EK059G: Nitrite plus Nitrate as N (NOx) by Discrete Analyser (QCLot: 4136963)							
ES2201979-001	Anonymous	EK059G: Nitrite + Nitrate as N	----	0.5 mg/L	94.4	70.0	130
EK061G: Total Kjeldahl Nitrogen By Discrete Analyser (QCLot: 4136959)							
ES2201979-002	Anonymous	EK061G: Total Kjeldahl Nitrogen as N	----	100 mg/L	94.0	70.0	130
EK067G: Total Phosphorus as P by Discrete Analyser (QCLot: 4136958)							
ES2201979-002	Anonymous	EK067G: Total Phosphorus as P	----	20 mg/L	97.9	70.0	130
EK071G: Reactive Phosphorus as P by discrete analyser (QCLot: 4137506)							
ES2202047-012	BUR_BH125	EK071G: Reactive Phosphorus as P	14265-44-2	0.5 mg/L	112	70.0	130
EP074E: Halogenated Aliphatic Compounds (QCLot: 4137802)							
ES2201683-020	Anonymous	EP074: 1.1-Dichloroethene	75-35-4	25 µg/L	118	70.0	130
		EP074: Trichloroethene	79-01-6	25 µg/L	103	70.0	130
EP074F: Halogenated Aromatic Compounds (QCLot: 4137802)							
ES2201683-020	Anonymous	EP074: Chlorobenzene	108-90-7	25 µg/L	108	70.0	130
EP080/071: Total Petroleum Hydrocarbons (QCLot: 4137803)							
ES2201683-020	Anonymous	EP080: C6 - C9 Fraction	----	325 µg/L	108	70.0	130
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 4137803)							
ES2201683-020	Anonymous	EP080: C6 - C10 Fraction	C6_C10	375 µg/L	109	70.0	130
EP080: BTEXN (QCLot: 4137803)							
ES2201683-020	Anonymous	EP080: Benzene	71-43-2	25 µg/L	102	70.0	130

Sub-Matrix: **WATER**

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Acceptable Limits (%)	
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Concentration	MS	Low	High
EP080: BTEXN (QCLot: 4137803) - continued							
ES2201683-020	Anonymous	EP080: Toluene	108-88-3	25 µg/L	108	70.0	130
		EP080: Ethylbenzene	100-41-4	25 µg/L	111	70.0	130
		EP080: meta- & para-Xylene	108-38-3 106-42-3	25 µg/L	113	70.0	130
		EP080: ortho-Xylene	95-47-6	25 µg/L	117	70.0	130
		EP080: Naphthalene	91-20-3	25 µg/L	108	70.0	130
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 4137474)							
ES2202142-003	Anonymous	EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.25 µg/L	106	72.0	130
		EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.25 µg/L	90.0	71.0	127
		EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.25 µg/L	79.0	68.0	131
		EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.25 µg/L	99.8	69.0	134
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.25 µg/L	106	65.0	140
		EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.25 µg/L	101	53.0	142
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4137474)							
ES2202142-003	Anonymous	EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	1.25 µg/L	76.8	73.0	129
		EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.25 µg/L	85.2	72.0	129
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.25 µg/L	111	72.0	129
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.25 µg/L	91.4	72.0	130
		EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.25 µg/L	80.2	71.0	133
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.25 µg/L	87.4	69.0	130
		EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.25 µg/L	86.6	71.0	129
		EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.25 µg/L	98.6	69.0	133
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.25 µg/L	103	72.0	134
		EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.25 µg/L	81.2	65.0	144
		EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.625 µg/L	93.0	71.0	132
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 4137474)							
ES2202142-003	Anonymous	EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.25 µg/L	87.8	67.0	137
		EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.625 µg/L	97.0	68.0	141
		EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.625 µg/L	93.4	62.6	147
		EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.625 µg/L	99.2	66.0	145
		EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.625 µg/L	99.8	57.6	145
		EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.25 µg/L	87.0	65.0	136
		EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.25 µg/L	84.4	61.0	135

Sub-Matrix: **WATER**

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Acceptable Limits (%)	
Laboratory sample ID	*Sample ID*	*Method: Compound*	*CAS Number*	*Concentration*	*MS*	*Low*	*High*
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 4137474)							
ES2202142-003	Anonymous	EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.25 µg/L	87.2	63.0	143
		EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.25 µg/L	90.2	64.0	140
		EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.25 µg/L	88.6	67.0	138
		EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.25 µg/L	114	71.4	144

ALS Environmental

QA/QC Compliance Assessment to assist with Quality Review

Work Order	: **ES2202047**	Page	: 1 of 15
Client	: **ENVIRONMENTAL RESOURCES MANAGEMENT (ERM)**	Laboratory	: Environmental Division Sydney
Contact	: NICHOLAS GRBICH	Telephone	: +61-2-8784 8555
Project	: 0628507	Date Samples Received	: 21-Jan-2022
Site	: ----	Issue Date	: 01-Feb-2022
Sampler	: TAJ MONDON	No. of samples received	: 24
Order number	: ----	No. of samples analysed	: 23

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

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

Summary of Outliers

Outliers : Quality Control Samples

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

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

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

Outliers : Quality Control Samples

Duplicates, Method Blanks, Laboratory Control Samples and Matrix Spikes

Matrix: **WATER**

Compound Group Name	Laboratory Sample ID	Client Sample ID	Analyte	CAS Number	Data	Limits	Comment
Laboratory Control Spike (LCS) Recoveries							
EK067G: Total Phosphorus as P by Discrete Analyser	QC-MRG2-41369580	----	**Total Phosphorus as P**	----	109 %	72.0-108%	**Recovery greater than upper control limit**
EP075B: Polynuclear Aromatic Hydrocarbons	QC-4136770-002	----	**2-Chloronaphthalene**	91-58-7	59.4 %	60.6-106%	**Recovery less than lower control limit**
EP075E: Nitroaromatics and Ketones	QC-4136770-002	----	**1-Naphthylamine**	134-32-7	116 %	46.8-102%	**Recovery greater than upper control limit**
EP075E: Nitroaromatics and Ketones	QC-4136770-002	----	**Phenacetin**	62-44-2	103 %	57.8-101%	**Recovery greater than upper control limit**
EP075F: Haloethers	QC-4136770-002	----	**Bis(2-chloroethyl) ether**	111-44-4	59.9 %	69.1-112%	**Recovery less than lower control limit**
Matrix Spike (MS) Recoveries							
ED041G: Sulfate (Turbidimetric) as SO4 2- by DA	ES2202021--001	Anonymous	**Sulfate as SO4 - Turbidimetric**	14808-79-8	Not Determined	----	**MS recovery not determined, background level greater than or equal to 4x spike level.**
ED045G: Chloride by Discrete Analyser	ES2202047--012	BUR_BH125	**Chloride**	16887-00-6	Not Determined	----	**MS recovery not determined, background level greater than or equal to 4x spike level.**
EG035F: Dissolved Mercury by FIMS	ES2201942--001	Anonymous	**Mercury**	7439-97-6	40.6 %	70.0-130%	**Recovery less than lower data quality objective**
EK055G: Ammonia as N by Discrete Analyser	ES2201979--001	Anonymous	**Ammonia as N**	7664-41-7	Not Determined	----	**MS recovery not determined, background level greater than or equal to 4x spike level.**

Outliers : Analysis Holding Time Compliance

Matrix: **WATER**

Method / **Container** / Client Sample ID(s)	*Extraction / Preparation*			*Analysis*		
	Date extracted	*Due for extraction*	***Days overdue***	*Date analysed*	*Due for analysis*	***Days overdue***
EK057G: Nitrite as N by Discrete Analyser						
Clear Plastic Bottle - Natural						
BUR_BH125	----	----	----	25-Jan-2022	23-Jan-2022	**2**
EK071G: Reactive Phosphorus as P by discrete analyser						
Clear Plastic Bottle - Natural						
BUR_BH125	----	----	----	25-Jan-2022	23-Jan-2022	**2**
EP080/071: Total Petroleum Hydrocarbons						
Amber VOC Vial - Sulfuric Acid						
TRIP BLANK	28-Jan-2022	27-Jan-2022	**1**	28-Jan-2022	27-Jan-2022	**1**
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions						
Amber VOC Vial - Sulfuric Acid						
TRIP BLANK	28-Jan-2022	27-Jan-2022	**1**	28-Jan-2022	27-Jan-2022	**1**
EP080: BTEXN						

Matrix: **WATER**

Method / Container / Client Sample ID(s)	Extraction / Preparation: Date extracted	Extraction / Preparation: Due for extraction	Extraction / Preparation: Days overdue	Analysis: Date analysed	Analysis: Due for analysis	Analysis: Days overdue
EP080: BTEXN - Analysis Holding Time Compliance						
Amber VOC Vial - Sulfuric Acid						
TRIP SPIKE, TRIP BLANK	28-Jan-2022	27-Jan-2022	**1**	28-Jan-2022	27-Jan-2022	**1**

Outliers : Frequency of Quality Control Samples

Matrix: **WATER**

Quality Control Sample Type / Method	Count: QC	Count: Regular	Rate (%): Actual	Rate (%): Expected	Quality Control Specification
Laboratory Duplicates (DUP)					
Ammonia as N by Discrete analyser	1	19	5.26	10.00	NEPM 2013 B3 & ALS QC Standard
Nitrite and Nitrate as N (NOx) by Discrete Analyser	1	17	5.88	10.00	NEPM 2013 B3 & ALS QC Standard
PAH/Phenols (GC/MS - SIM)	0	6	0.00	10.00	NEPM 2013 B3 & ALS QC Standard
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	2	31	6.45	10.00	NEPM 2013 B3 & ALS QC Standard
Semivolatile Organic Compounds	0	2	0.00	10.00	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	0	7	0.00	10.00	NEPM 2013 B3 & ALS QC Standard
Matrix Spikes (MS)					
PAH/Phenols (GC/MS - SIM)	0	6	0.00	5.00	NEPM 2013 B3 & ALS QC Standard
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	1	31	3.23	5.00	NEPM 2013 B3 & ALS QC Standard
Semivolatile Organic Compounds	0	2	0.00	5.00	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	0	7	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 / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation: Date extracted	Extraction / Preparation: Due for extraction	Extraction / Preparation: Evaluation	Analysis: Date analysed	Analysis: Due for analysis	Analysis: Evaluation
EA015: Total Dissolved Solids dried at 180 ± 5 °C							
Clear Plastic Bottle - Natural (EA015H)							
BUR_BH125	**21-Jan-2022**	**----**	----	----	**25-Jan-2022**	28-Jan-2022	✓
ED037P: Alkalinity by PC Titrator							
Clear Plastic Bottle - Natural (ED037-P)							
BUR_BH125	**21-Jan-2022**	**----**	----	----	**25-Jan-2022**	04-Feb-2022	✓
ED041G: Sulfate (Turbidimetric) as SO4 2- by DA							
Clear Plastic Bottle - Natural (ED041G)							
BUR_BH125	**21-Jan-2022**	**----**	----	----	**25-Jan-2022**	18-Feb-2022	✓

Matrix: **WATER**

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

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
ED045G: Chloride by Discrete Analyser							
Clear Plastic Bottle - Natural (ED045G)							
BUR_BH125	**21-Jan-2022**	**----**	----	----	**25-Jan-2022**	18-Feb-2022	✓
ED093F: Dissolved Major Cations							
Clear Plastic Bottle - Nitric Acid; Filtered (ED093F)							
BUR_BH125	**21-Jan-2022**	**----**	----	----	**27-Jan-2022**	18-Feb-2022	✓
EG020F: Dissolved Metals by ICP-MS							
Clear Plastic Bottle - Nitric Acid; Filtered (EG020A-F)							
BUR_BH125	**21-Jan-2022**	**----**	----	----	**27-Jan-2022**	20-Jul-2022	✓
EG020T: Total Metals by ICP-MS							
Clear Plastic Bottle - Nitric Acid; Unfiltered (EG020A-T)							
R01_220121	**21-Jan-2022**	**27-Jan-2022**	20-Jul-2022	✓	**27-Jan-2022**	20-Jul-2022	✓
EG035F: Dissolved Mercury by FIMS							
Clear Plastic Bottle - Nitric Acid; Filtered (EG035F)							
BUR_BH125	**21-Jan-2022**	**----**	----	----	**28-Jan-2022**	18-Feb-2022	✓
EG035T: Total Recoverable Mercury by FIMS							
Clear Plastic Bottle - Nitric Acid; Unfiltered (EG035T)							
R01_220121	**21-Jan-2022**	**----**	----	----	**28-Jan-2022**	18-Feb-2022	✓
EK055G: Ammonia as N by Discrete Analyser							
Clear Plastic Bottle - Sulfuric Acid (EK055G)							
BUR_BH125, R01_220121	**21-Jan-2022**	**----**	----	----	**25-Jan-2022**	18-Feb-2022	✓
EK057G: Nitrite as N by Discrete Analyser							
Clear Plastic Bottle - Natural (EK057G)							
BUR_BH125	**21-Jan-2022**	**----**	----	----	**25-Jan-2022**	23-Jan-2022	×
EK059G: Nitrite plus Nitrate as N (NOx) by Discrete Analyser							
Clear Plastic Bottle - Sulfuric Acid (EK059G)							
BUR_BH125, R01_220121	**21-Jan-2022**	**----**	----	----	**25-Jan-2022**	18-Feb-2022	✓
EK061G: Total Kjeldahl Nitrogen By Discrete Analyser							
Clear Plastic Bottle - Sulfuric Acid (EK061G)							
BUR_BH125, R01_220121	**21-Jan-2022**	**25-Jan-2022**	18-Feb-2022	✓	**25-Jan-2022**	18-Feb-2022	✓
EK067G: Total Phosphorus as P by Discrete Analyser							
Clear Plastic Bottle - Sulfuric Acid (EK067G)							
BUR_BH125, R01_220121	**21-Jan-2022**	**25-Jan-2022**	18-Feb-2022	✓	**25-Jan-2022**	18-Feb-2022	✓
EK071G: Reactive Phosphorus as P by discrete analyser							
Clear Plastic Bottle - Natural (EK071G)							
BUR_BH125	**21-Jan-2022**	**----**	----	----	**25-Jan-2022**	23-Jan-2022	×
EP074A: Monocyclic Aromatic Hydrocarbons							
Amber VOC Vial - Sulfuric Acid (EP074)							
BUR_BH125, R01_220121	**21-Jan-2022**	**28-Jan-2022**	04-Feb-2022	✓	**28-Jan-2022**	04-Feb-2022	✓

Matrix: **WATER**

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

Method / Container / Client Sample ID(s)		Sample Date	Extraction / Preparation			Analysis		
			Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP074B: Oxygenated Compounds								
Amber VOC Vial - Sulfuric Acid (EP074)								
BUR_BH125,	R01_220121	**21-Jan-2022**	**28-Jan-2022**	04-Feb-2022	✓	**28-Jan-2022**	04-Feb-2022	✓
EP074C: Sulfonated Compounds								
Amber VOC Vial - Sulfuric Acid (EP074)								
BUR_BH125,	R01_220121	**21-Jan-2022**	**28-Jan-2022**	04-Feb-2022	✓	**28-Jan-2022**	04-Feb-2022	✓
EP074D: Fumigants								
Amber VOC Vial - Sulfuric Acid (EP074)								
BUR_BH125,	R01_220121	**21-Jan-2022**	**28-Jan-2022**	04-Feb-2022	✓	**28-Jan-2022**	04-Feb-2022	✓
EP074E: Halogenated Aliphatic Compounds								
Amber VOC Vial - Sulfuric Acid (EP074)								
BUR_BH125,	R01_220121	**21-Jan-2022**	**28-Jan-2022**	04-Feb-2022	✓	**28-Jan-2022**	04-Feb-2022	✓
EP074F: Halogenated Aromatic Compounds								
Amber VOC Vial - Sulfuric Acid (EP074)								
BUR_BH125,	R01_220121	**21-Jan-2022**	**28-Jan-2022**	04-Feb-2022	✓	**28-Jan-2022**	04-Feb-2022	✓
EP074G: Trihalomethanes								
Amber VOC Vial - Sulfuric Acid (EP074)								
BUR_BH125,	R01_220121	**21-Jan-2022**	**28-Jan-2022**	04-Feb-2022	✓	**28-Jan-2022**	04-Feb-2022	✓
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons								
Amber Glass Bottle - Unpreserved (EP075(SIM))								
BUR_BH125,	R01_220121	**21-Jan-2022**	**25-Jan-2022**	28-Jan-2022	✓	**28-Jan-2022**	06-Mar-2022	✓
EP075A: Phenolic Compounds								
Amber Glass Bottle - Unpreserved (EP075)								
BUR_BH125,	R01_220121	**21-Jan-2022**	**25-Jan-2022**	28-Jan-2022	✓	**28-Jan-2022**	06-Mar-2022	✓
EP075B: Polynuclear Aromatic Hydrocarbons								
Amber Glass Bottle - Unpreserved (EP075)								
BUR_BH125,	R01_220121	**21-Jan-2022**	**25-Jan-2022**	28-Jan-2022	✓	**28-Jan-2022**	06-Mar-2022	✓
EP075C: Phthalate Esters								
Amber Glass Bottle - Unpreserved (EP075)								
BUR_BH125,	R01_220121	**21-Jan-2022**	**25-Jan-2022**	28-Jan-2022	✓	**28-Jan-2022**	06-Mar-2022	✓
EP075D: Nitrosamines								
Amber Glass Bottle - Unpreserved (EP075)								
BUR_BH125,	R01_220121	**21-Jan-2022**	**25-Jan-2022**	28-Jan-2022	✓	**28-Jan-2022**	06-Mar-2022	✓
EP075E: Nitroaromatics and Ketones								
Amber Glass Bottle - Unpreserved (EP075)								
BUR_BH125,	R01_220121	**21-Jan-2022**	**25-Jan-2022**	28-Jan-2022	✓	**28-Jan-2022**	06-Mar-2022	✓
EP075F: Haloethers								
Amber Glass Bottle - Unpreserved (EP075)								
BUR_BH125,	R01_220121	**21-Jan-2022**	**25-Jan-2022**	28-Jan-2022	✓	**28-Jan-2022**	06-Mar-2022	✓

Matrix: **WATER**

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

Method / Container / Client Sample ID(s)		Sample Date	Extraction / Preparation			Analysis		
			Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP075G: Chlorinated Hydrocarbons								
Amber Glass Bottle - Unpreserved (EP075)								
BUR_BH125,	R01_220121	**21-Jan-2022**	**25-Jan-2022**	28-Jan-2022	✓	**28-Jan-2022**	06-Mar-2022	✓
EP075H: Anilines and Benzidines								
Amber Glass Bottle - Unpreserved (EP075)								
BUR_BH125,	R01_220121	**21-Jan-2022**	**25-Jan-2022**	28-Jan-2022	✓	**28-Jan-2022**	06-Mar-2022	✓
EP075I: Organochlorine Pesticides								
Amber Glass Bottle - Unpreserved (EP075)								
BUR_BH125,	R01_220121	**21-Jan-2022**	**25-Jan-2022**	28-Jan-2022	✓	**28-Jan-2022**	06-Mar-2022	✓
EP075J: Organophosphorus Pesticides								
Amber Glass Bottle - Unpreserved (EP075)								
BUR_BH125,	R01_220121	**21-Jan-2022**	**25-Jan-2022**	28-Jan-2022	✓	**28-Jan-2022**	06-Mar-2022	✓
EP080/071: Total Petroleum Hydrocarbons								
Amber Glass Bottle - Unpreserved (EP071)								
BUR_BH125,	R01_220121	**21-Jan-2022**	**25-Jan-2022**	28-Jan-2022	✓	**28-Jan-2022**	06-Mar-2022	✓
Amber VOC Vial - Sulfuric Acid (EP080)								
TRIP BLANK		**13-Jan-2022**	**28-Jan-2022**	27-Jan-2022	×	**28-Jan-2022**	27-Jan-2022	×
Amber VOC Vial - Sulfuric Acid (EP080)								
BUR_BH125,	R01_220121	**21-Jan-2022**	**28-Jan-2022**	04-Feb-2022	✓	**28-Jan-2022**	04-Feb-2022	✓
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions								
Amber Glass Bottle - Unpreserved (EP071)								
BUR_BH125,	R01_220121	**21-Jan-2022**	**25-Jan-2022**	28-Jan-2022	✓	**28-Jan-2022**	06-Mar-2022	✓
Amber VOC Vial - Sulfuric Acid (EP080)								
TRIP BLANK		**13-Jan-2022**	**28-Jan-2022**	27-Jan-2022	×	**28-Jan-2022**	27-Jan-2022	×
Amber VOC Vial - Sulfuric Acid (EP080)								
BUR_BH125,	R01_220121	**21-Jan-2022**	**28-Jan-2022**	04-Feb-2022	✓	**28-Jan-2022**	04-Feb-2022	✓
EP080: BTEXN								
Amber VOC Vial - Sulfuric Acid (EP080)								
TRIP SPIKE,	TRIP BLANK	**13-Jan-2022**	**28-Jan-2022**	27-Jan-2022	×	**28-Jan-2022**	27-Jan-2022	×
Amber VOC Vial - Sulfuric Acid (EP080)								
BUR_BH125,	R01_220121	**21-Jan-2022**	**28-Jan-2022**	04-Feb-2022	✓	**28-Jan-2022**	04-Feb-2022	✓

Matrix: **WATER**

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

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP231A: Perfluoroalkyl Sulfonic Acids							
HDPE (no PTFE) (EP231X) R01_220117	**17-Jan-2022**	**25-Jan-2022**	16-Jul-2022	✓	**27-Jan-2022**	16-Jul-2022	✓
HDPE (no PTFE) (EP231X) SMW_BH051, SMW_BH035, SMW_BH035_S, R01_220118	**18-Jan-2022**	**25-Jan-2022**	17-Jul-2022	✓	**27-Jan-2022**	17-Jul-2022	✓
HDPE (no PTFE) (EP231X) D01_220119, T01_220119, SMW_BH120, SMW_BH019, R01_220119, SMW_BH038	**19-Jan-2022**	**25-Jan-2022**	18-Jul-2022	✓	**27-Jan-2022**	18-Jul-2022	✓
HDPE (no PTFE) (EP231X) S51, S54, S02_d, S06, S40_d, S40_S, BUR_MW108, R01_220120	**20-Jan-2022**	**25-Jan-2022**	19-Jul-2022	✓	**27-Jan-2022**	19-Jul-2022	✓
HDPE (no PTFE) (EP231X) BUR_BH125, R01_220121	**21-Jan-2022**	**25-Jan-2022**	20-Jul-2022	✓	**27-Jan-2022**	20-Jul-2022	✓
EP231B: Perfluoroalkyl Carboxylic Acids							
HDPE (no PTFE) (EP231X) R01_220117	**17-Jan-2022**	**25-Jan-2022**	16-Jul-2022	✓	**27-Jan-2022**	16-Jul-2022	✓
HDPE (no PTFE) (EP231X) SMW_BH051, SMW_BH035, SMW_BH035_S, R01_220118	**18-Jan-2022**	**25-Jan-2022**	17-Jul-2022	✓	**27-Jan-2022**	17-Jul-2022	✓
HDPE (no PTFE) (EP231X) D01_220119, T01_220119, SMW_BH120, SMW_BH019, R01_220119, SMW_BH038	**19-Jan-2022**	**25-Jan-2022**	18-Jul-2022	✓	**27-Jan-2022**	18-Jul-2022	✓
HDPE (no PTFE) (EP231X) S51, S54, S02_d, S06, S40_d, S40_S, BUR_MW108, R01_220120	**20-Jan-2022**	**25-Jan-2022**	19-Jul-2022	✓	**27-Jan-2022**	19-Jul-2022	✓
HDPE (no PTFE) (EP231X) BUR_BH125, R01_220121	**21-Jan-2022**	**25-Jan-2022**	20-Jul-2022	✓	**27-Jan-2022**	20-Jul-2022	✓

Matrix: **WATER**

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

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP231C: Perfluoroalkyl Sulfonamides							
HDPE (no PTFE) (EP231X) R01_220117	**17-Jan-2022**	**25-Jan-2022**	16-Jul-2022	✓	**27-Jan-2022**	16-Jul-2022	✓
HDPE (no PTFE) (EP231X) SMW_BH051, SMW_BH035, SMW_BH035_S, R01_220118	**18-Jan-2022**	**25-Jan-2022**	17-Jul-2022	✓	**27-Jan-2022**	17-Jul-2022	✓
HDPE (no PTFE) (EP231X) D01_220119, T01_220119, SMW_BH120, SMW_BH019, R01_220119, SMW_BH038	**19-Jan-2022**	**25-Jan-2022**	18-Jul-2022	✓	**27-Jan-2022**	18-Jul-2022	✓
HDPE (no PTFE) (EP231X) S51, S54, S02_d, S06, S40_d, S40_S, BUR_MW108, R01_220120	**20-Jan-2022**	**25-Jan-2022**	19-Jul-2022	✓	**27-Jan-2022**	19-Jul-2022	✓
HDPE (no PTFE) (EP231X) BUR_BH125, R01_220121	**21-Jan-2022**	**25-Jan-2022**	20-Jul-2022	✓	**27-Jan-2022**	20-Jul-2022	✓
EP231D: (n:2) Fluorotelomer Sulfonic Acids							
HDPE (no PTFE) (EP231X) R01_220117	**17-Jan-2022**	**25-Jan-2022**	16-Jul-2022	✓	**27-Jan-2022**	16-Jul-2022	✓
HDPE (no PTFE) (EP231X) SMW_BH051, SMW_BH035, SMW_BH035_S, R01_220118	**18-Jan-2022**	**25-Jan-2022**	17-Jul-2022	✓	**27-Jan-2022**	17-Jul-2022	✓
HDPE (no PTFE) (EP231X) D01_220119, T01_220119, SMW_BH120, SMW_BH019, R01_220119, SMW_BH038	**19-Jan-2022**	**25-Jan-2022**	18-Jul-2022	✓	**27-Jan-2022**	18-Jul-2022	✓
HDPE (no PTFE) (EP231X) S51, S54, S02_d, S06, S40_d, S40_S, BUR_MW108, R01_220120	**20-Jan-2022**	**25-Jan-2022**	19-Jul-2022	✓	**27-Jan-2022**	19-Jul-2022	✓
HDPE (no PTFE) (EP231X) BUR_BH125, R01_220121	**21-Jan-2022**	**25-Jan-2022**	20-Jul-2022	✓	**27-Jan-2022**	20-Jul-2022	✓

Matrix: **WATER**

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

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP231P: PFAS Sums							
HDPE (no PTFE) (EP231X)							
R01_220117	**17-Jan-2022**	**25-Jan-2022**	16-Jul-2022	✓	**27-Jan-2022**	16-Jul-2022	✓
HDPE (no PTFE) (EP231X)							
SMW_BH051, SMW_BH035, SMW_BH035_S, R01_220118	**18-Jan-2022**	**25-Jan-2022**	17-Jul-2022	✓	**27-Jan-2022**	17-Jul-2022	✓
HDPE (no PTFE) (EP231X)							
D01_220119, T01_220119, SMW_BH120, SMW_BH019, R01_220119, SMW_BH038	**19-Jan-2022**	**25-Jan-2022**	18-Jul-2022	✓	**27-Jan-2022**	18-Jul-2022	✓
HDPE (no PTFE) (EP231X)							
S51, S54, S02_d, S06, S40_d, S40_S, BUR_MW108, R01_220120	**20-Jan-2022**	**25-Jan-2022**	19-Jul-2022	✓	**27-Jan-2022**	19-Jul-2022	✓
HDPE (no PTFE) (EP231X)							
BUR_BH125, R01_220121	**21-Jan-2022**	**25-Jan-2022**	20-Jul-2022	✓	**27-Jan-2022**	20-Jul-2022	✓

Quality Control Parameter Frequency Compliance

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

Matrix: **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)							
Alkalinity by PC Titrator	ED037-P	2	17	**11.76**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Ammonia as N by Discrete analyser	EK055G	1	19	**5.26**	**10.00**	×	NEPM 2013 B3 & ALS QC Standard
Chloride by Discrete Analyser	ED045G	2	11	**18.18**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Dissolved Mercury by FIMS	EG035F	2	17	**11.76**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Dissolved Metals by ICP-MS - Suite A	EG020A-F	2	18	**11.11**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Major Cations - Dissolved	ED093F	2	20	**10.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Nitrite and Nitrate as N (NOx) by Discrete Analyser	EK059G	1	17	**5.88**	**10.00**	×	NEPM 2013 B3 & ALS QC Standard
Nitrite as N by Discrete Analyser	EK057G	2	20	**10.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
PAH/Phenols (GC/MS - SIM)	EP075(SIM)	0	6	**0.00**	**10.00**	×	NEPM 2013 B3 & ALS QC Standard
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	2	31	**6.45**	**10.00**	×	NEPM 2013 B3 & ALS QC Standard
Reactive Phosphorus as P-By Discrete Analyser	EK071G	1	4	**25.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Semivolatile Organic Compounds	EP075	0	2	**0.00**	**10.00**	×	NEPM 2013 B3 & ALS QC Standard
Sulfate (Turbidimetric) as SO4 2- by Discrete Analyser	ED041G	2	20	**10.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Dissolved Solids (High Level)	EA015H	2	20	**10.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Kjeldahl Nitrogen as N By Discrete Analyser	EK061G	2	17	**11.76**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	2	20	**10.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-MS - Suite A	EG020A-T	2	15	**13.33**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Phosphorus as P By Discrete Analyser	EK067G	2	19	**10.53**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	0	7	**0.00**	**10.00**	×	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	2	17	**11.76**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Volatile Organic Compounds	EP074	2	16	**12.50**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Laboratory Control Samples (LCS)							
Alkalinity by PC Titrator	ED037-P	2	17	**11.76**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Ammonia as N by Discrete analyser	EK055G	1	19	**5.26**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Chloride by Discrete Analyser	ED045G	2	11	**18.18**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Dissolved Mercury by FIMS	EG035F	1	17	**5.88**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Dissolved Metals by ICP-MS - Suite A	EG020A-F	1	18	**5.56**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Major Cations - Dissolved	ED093F	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Nitrite and Nitrate as N (NOx) by Discrete Analyser	EK059G	1	17	**5.88**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Nitrite as N by Discrete Analyser	EK057G	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
PAH/Phenols (GC/MS - SIM)	EP075(SIM)	1	6	**16.67**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	2	31	**6.45**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Reactive Phosphorus as P-By Discrete Analyser	EK071G	1	4	**25.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Semivolatile Organic Compounds	EP075	1	2	**50.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Sulfate (Turbidimetric) as SO4 2- by Discrete Analyser	ED041G	2	20	**10.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Dissolved Solids (High Level)	EA015H	3	20	**15.00**	**15.00**	✓	NEPM 2013 B3 & ALS QC Standard

Matrix: **WATER**

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

Quality Control Sample Type		Count		Rate (%)			Quality Control Specification
Analytical Methods	*Method*	*QC*	*Regular*	***Actual***	***Expected***	*Evaluation*	
Laboratory Control Samples (LCS) - Continued							
Total Kjeldahl Nitrogen as N By Discrete Analyser	EK061G	3	17	**17.65**	**15.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-MS - Suite A	EG020A-T	1	15	**6.67**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Phosphorus as P By Discrete Analyser	EK067G	3	19	**15.79**	**15.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	1	7	**14.29**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	1	17	**5.88**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Volatile Organic Compounds	EP074	1	16	**6.25**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Method Blanks (MB)							
Ammonia as N by Discrete analyser	EK055G	1	19	**5.26**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Chloride by Discrete Analyser	ED045G	1	11	**9.09**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Dissolved Mercury by FIMS	EG035F	1	17	**5.88**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Dissolved Metals by ICP-MS - Suite A	EG020A-F	1	18	**5.56**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Major Cations - Dissolved	ED093F	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Nitrite and Nitrate as N (NOx) by Discrete Analyser	EK059G	1	17	**5.88**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Nitrite as N by Discrete Analyser	EK057G	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
PAH/Phenols (GC/MS - SIM)	EP075(SIM)	1	6	**16.67**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	2	31	**6.45**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Reactive Phosphorus as P-By Discrete Analyser	EK071G	1	4	**25.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Semivolatile Organic Compounds	EP075	1	2	**50.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Sulfate (Turbidimetric) as SO4 2- by Discrete Analyser	ED041G	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Dissolved Solids (High Level)	EA015H	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Kjeldahl Nitrogen as N By Discrete Analyser	EK061G	1	17	**5.88**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-MS - Suite A	EG020A-T	1	15	**6.67**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Phosphorus as P By Discrete Analyser	EK067G	1	19	**5.26**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	1	7	**14.29**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	1	17	**5.88**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Volatile Organic Compounds	EP074	1	16	**6.25**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Matrix Spikes (MS)							
Ammonia as N by Discrete analyser	EK055G	1	19	**5.26**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Chloride by Discrete Analyser	ED045G	1	11	**9.09**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Dissolved Mercury by FIMS	EG035F	1	17	**5.88**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Dissolved Metals by ICP-MS - Suite A	EG020A-F	1	18	**5.56**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Nitrite and Nitrate as N (NOx) by Discrete Analyser	EK059G	1	17	**5.88**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Nitrite as N by Discrete Analyser	EK057G	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
PAH/Phenols (GC/MS - SIM)	EP075(SIM)	0	6	**0.00**	**5.00**	×	NEPM 2013 B3 & ALS QC Standard
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	1	31	**3.23**	**5.00**	×	NEPM 2013 B3 & ALS QC Standard
Reactive Phosphorus as P-By Discrete Analyser	EK071G	1	4	**25.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Semivolatile Organic Compounds	EP075	0	2	**0.00**	**5.00**	×	NEPM 2013 B3 & ALS QC Standard
Sulfate (Turbidimetric) as SO4 2- by Discrete Analyser	ED041G	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard

Matrix: **WATER**

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

Quality Control Sample Type		Count		Rate (%)			Quality Control Specification
Analytical Methods	*Method*	*QC*	*Regular*	***Actual***	***Expected***	*Evaluation*	
Matrix Spikes (MS) - Continued							
Total Kjeldahl Nitrogen as N By Discrete Analyser	EK061G	1	17	**5.88**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-MS - Suite A	EG020A-T	1	15	**6.67**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Phosphorus as P By Discrete Analyser	EK067G	1	19	**5.26**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	0	7	**0.00**	**5.00**	×	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	1	17	**5.88**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Volatile Organic Compounds	EP074	1	16	**6.25**	**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
Total Dissolved Solids (High Level)	EA015H	WATER	In house: Referenced to APHA 2540C. A gravimetric procedure that determines the amount of `filterable` residue in an aqueous sample. A well-mixed sample is filtered through a glass fibre filter (1.2um). The filtrate is evaporated to dryness and dried to constant weight at 180+/-5C. This method is compliant with NEPM Schedule B(3)
Alkalinity by PC Titrator	ED037-P	WATER	In house: Referenced to APHA 2320 B This procedure determines alkalinity by automated measurement (e.g. PC Titrate) on a settled supernatant aliquot of the sample using pH 4.5 for indicating the total alkalinity end-point. This method is compliant with NEPM Schedule B(3)
Sulfate (Turbidimetric) as SO4 2- by Discrete Analyser	ED041G	WATER	In house: Referenced to APHA 4500-SO4. Dissolved sulfate is determined in a 0.45um filtered sample. Sulfate ions are converted to a barium sulfate suspension in an acetic acid medium with barium chloride. Light absorbance of the BaSO4 suspension is measured by a photometer and the SO4-2 concentration is determined by comparison of the reading with a standard curve. This method is compliant with NEPM Schedule B(3)
Chloride by Discrete Analyser	ED045G	WATER	In house: Referenced to APHA 4500 Cl - G.The thiocyanate ion is liberated from mercuric thiocyanate through sequestration of mercury by the chloride ion to form non-ionised mercuric chloride.in the presence of ferric ions the librated thiocynate forms highly-coloured ferric thiocynate which is measured at 480 nm APHA seal method 2 017-1-L
Major Cations - Dissolved	ED093F	WATER	In house: Referenced to APHA 3120 and 3125; USEPA SW 846 - 6010 and 6020; Cations are determined by either ICP-AES or ICP-MS techniques. This method is compliant with NEPM Schedule B(3) Sodium Adsorption Ratio is calculated from Ca, Mg and Na which determined by ALS in house method QWI-EN/ED093F. This method is compliant with NEPM Schedule B(3) Hardness parameters are calculated based on APHA 2340 B. This method is compliant with NEPM Schedule B(3)
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.
Total Metals by ICP-MS - Suite A	EG020A-T	WATER	In house: Referenced to APHA 3125; USEPA SW846 - 6020, ALS QWI-EN/EG020. 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 (SnCl2)(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 SnCl2 which is then purged into a heated quartz cell. Quantification is by comparing absorbance against a calibration curve. This method is compliant with NEPM Schedule B(3).

Analytical Methods	Method	Matrix	Method Descriptions
Total Mercury by FIMS	EG035T	WATER	In house: Referenced to APHA 3112 Hg - B (Flow-injection (SnCl2)(Cold Vapour generation) AAS) FIM-AAS is an automated flameless atomic absorption technique. A bromate/bromide reagent is used to oxidise any organic mercury compounds in the unfiltered sample. The ionic mercury is reduced online to atomic mercury vapour by SnCl2 which is then purged into a heated quartz cell. Quantification is by comparing absorbance against a calibration curve. This method is compliant with NEPM Schedule B(3).
Ammonia as N by Discrete analyser	EK055G	WATER	In house: Referenced to APHA 4500-NH3 G Ammonia is determined by direct colorimetry by Discrete Analyser. This method is compliant with NEPM Schedule B(3)
Nitrite as N by Discrete Analyser	EK057G	WATER	In house: Referenced to APHA 4500-NO2- B. Nitrite is determined by direct colourimetry by Discrete Analyser. This method is compliant with NEPM Schedule B(3)
Nitrate as N by Discrete Analyser	EK058G	WATER	In house: Referenced to APHA 4500-NO3- F. Nitrate is reduced to nitrite by way of a chemical reduction followed by quantification by Discrete Analyser. Nitrite is determined seperately by direct colourimetry and result for Nitrate calculated as the difference between the two results. This method is compliant with NEPM Schedule B(3)
Nitrite and Nitrate as N (NOx) by Discrete Analyser	EK059G	WATER	In house: Referenced to APHA 4500-NO3- F. Combined oxidised Nitrogen (NO2+NO3) is determined by Chemical Reduction and direct colourimetry by Discrete Analyser. This method is compliant with NEPM Schedule B(3)
Total Kjeldahl Nitrogen as N By Discrete Analyser	EK061G	WATER	In house: Referenced to APHA 4500-Norg D (In house). An aliquot of sample is digested using a high temperature Kjeldahl digestion to convert nitrogenous compounds to ammonia. Ammonia is determined colorimetrically by discrete analyser. This method is compliant with NEPM Schedule B(3)
Total Nitrogen as N (TKN + Nox) By Discrete Analyser	EK062G	WATER	In house: Referenced to APHA 4500-Norg / 4500-NO3-. This method is compliant with NEPM Schedule B(3)
Total Phosphorus as P By Discrete Analyser	EK067G	WATER	In house: Referenced to APHA 4500-P H, Jirka et al, Zhang et al. This procedure involves sulphuric acid digestion of a sample aliquot to break phosphorus down to orthophosphate. The orthophosphate reacts with ammonium molybdate and antimony potassium tartrate to form a complex which is then reduced and its concentration measured at 880nm using discrete analyser. This method is compliant with NEPM Schedule B(3)
Reactive Phosphorus as P-By Discrete Analyser	EK071G	WATER	In house: Referenced to APHA 4500-P F Ammonium molybdate and potassium antimonyl tartrate reacts in acid medium with othophosphate to form a heteropoly acid -phosphomolybdic acid - which is reduced to intensely coloured molybdenum blue by ascorbic acid. Quantification is by Discrete Analyser. This method is compliant with NEPM Schedule B(3)
Ionic Balance by PCT DA and Turbi SO4 DA	* EN055 - PG	WATER	In house: Referenced to APHA 1030F. 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)
Volatile Organic Compounds	EP074	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. This method is compliant with NEPM Schedule B(3)
Semivolatile Organic Compounds	EP075	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)

Analytical Methods	Method	Matrix	Method Descriptions
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)
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	WATER	In-house: Analysis of fresh and saline waters by Solid Phase Extraction (SPE) followed by LC-Electrospray-MS-MS, Negative Mode using MRM and internal standard quantitation. Isotopically labelled analogues of target analytes used as internal standards and surrogates are added to the sample container. The entire contents are transferred to a solid phase extraction (SPE) cartridge. The sample container is successively rinsed with aliquots of the elution solvent. The eluted extract is combined with an equal volume of reagent water and a portion is filtered for analysis. Method procedures and data quality objectives conform to US DoD QSM 5.3, table B-15 requirements.

Preparation Methods	Method	Matrix	Method Descriptions
TKN/TP Digestion	EK061/EK067	WATER	In house: Referenced to APHA 4500 Norg - D; APHA 4500 P - H. This method is compliant with NEPM Schedule B(3)
Digestion for Total Recoverable Metals	EN25	WATER	In house: Referenced to USEPA SW846-3005. Method 3005 is a Nitric/Hydrochloric acid digestion procedure used to prepare surface and ground water samples for analysis by ICPAES or ICPMS. This method is compliant with NEPM Schedule B(3)
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.
Solid Phase Extraction (SPE) for PFAS in water	ORG72	WATER	In-house: Isotopically labelled analogues of target analytes used as internal standards and surrogates are added to the sample container. The entire contents are transferred to a solid phase extraction (SPE) cartridge. The sample container is successively rinsed with aliquots of the elution solvent. The eluted extract is combined with an equal volume of reagent water and a portion is filtered for analysis. Method procedures conform to US DoD QSM 5.3, table B-15 requirements.

CHAIN OF CUSTODY

ALS Laboratory: please tick →

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☐TOWNSVILLE 14-15 Desma Court Bohle QLD 4818 Ph: 07 4796 0600 E: townsville.environmental@alsglobal.com

☐WOLLONGONG 99 Kenny Street Wollongong NSW 2500 Ph: 02 4225 3125 E: portkembla@alsglobal.com

CLIENT: FRM	TURNAROUND REQUIREMENTS: (Standard TAT may be longer for some tests e.g. Ultra Trace Organics)	☑ Standard TAT (List due date):	FOR LABORATORY USE ONLY (Circle)
OFFICE: Sydney		☐ Non Standard or urgent TAT (List due date):	Custody Seal Intact? Yes No N/A
PROJECT: 0628507	ALS QUOTE NO.:	COC SEQUENCE NUMBER (Circle)	Free ice / frozen ice bricks present upon receipt? Yes No N/A
ORDER NUMBER:		COC: 1 2 3 4 5 6 7	Random Sample Temperature on Receipt: °C
PROJECT MANAGER: Nicholas Arbuth	CONTACT PH: 0415 833 925	OF: 1 2 3 4 5 6 7	Other comment:
SAMPLER: Taj Hanson	SAMPLER MOBILE: 0467 295 082		
COC emailed to ALS? (YES / (NO))	EDD FORMAT (or default):		
Email Reports to (will default to PM if no other addresses are listed):			
Email Invoice to (will default to PM if no other addresses are listed):			

RELINQUISHED BY:	RECEIVED BY:	RELINQUISHED BY:	RECEIVED BY:
T. Hanson	Sky		
DATE/TIME: 21/01/22	DATE/TIME: 21-1-22 1:15pm	DATE/TIME:	DATE/TIME:

COMMENTS/SPECIAL HANDLING/STORAGE OR DISPOSAL:

ALS USE	SAMPLE DETAILS MATRIX: SOLID (S) WATER (W)			CONTAINER INFORMATION		ANALYSIS REQUIRED including SUITES (NB. Suite Codes must be listed to attract suite price) Where Metals are required, specify Total (unfiltered bottle required) or Dissolved (field filtered bottle required).								Additional Information
LAB ID	SAMPLE ID	DATE / TIME	MATRIX	TYPE & PRESERVATIVE (refer to codes below)	TOTAL CONTAINERS	PFAS								Comments on likely contaminant levels, dilutions, or samples requiring specific QC analysis etc.
1	SMW-BH051	18-01-22	W											
2	SMW-BH051_S	18-01-22												
3	851	20-01-22												
4	S54													
5	S02_d													
6	S06													
7	S40_d													
8	S40_S													
9	BUR_MW108													
10	DO1-220119	19-01-22												
11	TO1-220119	19-01-22												
				TOTAL										

Environmental Division
Sydney
Work Order Reference
ES2202047

Telephone - 61-2-8784 8555

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

CHAIN OF CUSTODY

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☐MUDGEE 27 Sydney Road Mudgee NSW 2850 Ph: 02 6372 6735 E: mudgee.mail@alsglobal.com

☐NEWCASTLE 5/585 Maitland Rd Mayfield West NSW 2304 Ph: 02 4014 2500 E: samples.newcastle@alsglobal.com

☐NOWRA 4/13 Geary Place North Nowra NSW 2541 Ph: 024423 2063 E: nowra@alsglobal.com

☐PERTH 10 Hod Way Malaga WA 6090 Ph: 08 9209 7655 E: samples.perth@alsglobal.com

☐SYDNEY 277-289 Woodpark Road Smithfield NSW 2164 Ph: 02 8784 8555 E: samples.sydney@alsglobal.com

☐TOWNSVILLE 14-15 Desma Court Bohle QLD 4818 Ph: 07 4796 0600 E: townsville.environmental@alsglobal.com

☐WOLLONGONG 99 Kenny Street Wollongong NSW 2500 Ph: 02 4225 3125 E: portkembla@alsglobal.com

CLIENT: ERM	TURNAROUND REQUIREMENTS: ☑ Standard TAT (List due date):	FOR LABORATORY USE ONLY (Circle)	
OFFICE: Sydney	(Standard TAT may be longer for some tests e.g. Ultra Trace Organics) ☐ Non Standard or urgent TAT (List due date):	Custody Seal Intact?	Yes / No / N/A
PROJECT: 0628507	ALS QUOTE NO.:	Free ice / frozen ice bricks present upon receipt?	Yes / No / N/A
ORDER NUMBER:	COC SEQUENCE NUMBER (Circle) COC: 1 2 3 4 5 6 7 OF: 1 2 3 4 5 6 7	Random Sample Temperature on Receipt:	°C
PROJECT MANAGER: Nicholas Grbich	CONTACT PH: 0415 833 925	Other comment:	
SAMPLER: Taj Morgan	SAMPLER MOBILE: 0467 295 082		
COC emailed to ALS? (YES / (NO)	EDD FORMAT (or default):		
Email Reports to (will default to PM if no other addresses are listed):			
Email Invoice to (will default to PM if no other addresses are listed):			

RELINQUISHED BY:	RECEIVED BY:	RELINQUISHED BY:	RECEIVED BY:
Taj Morgan			
DATE/TIME: 21/01/22	DATE/TIME:	DATE/TIME:	DATE/TIME:

COMMENTS/SPECIAL HANDLING/STORAGE OR DISPOSAL:

ALS USE	SAMPLE DETAILS MATRIX: SOLID (S) WATER (W)			CONTAINER INFORMATION		ANALYSIS REQUIRED including SUITES (NB. Suite Codes must be listed to attract suite price) Where Metals are required, specify Total (unfiltered bottle required) or Dissolved (field filtered bottle required).								Additional Information
LAB ID	SAMPLE ID	DATE / TIME	MATRIX	TYPE & PRESERVATIVE (refer to codes below)	TOTAL CONTAINERS	TRH & BTEXN	PAHs	VOCs	Heavy metals plus iron	PFAS	Ammonia, nitrate, total Nitrogen, total phosphorus	Major anions & cations	PFAS	Comments on likely contaminant levels, dilutions, or samples requiring specific QC analysis etc.
12	BUR_BH125	21-01-22	W			X	X	X	X	X	X	X	X	PFAS sample taken on 20/01/22
13	ROI-220121	↓	↓			X	X	X	X	X	X			No nitrate analysis
14	Trip spike + Trip blank					X	X	X	X					
15	SMW-BH120	19-01-22								X				
16	SMW-BH019	19-01-22								↓				
17	ROI-220119	19-01-22												
18	SMW_BH038	18-01-22												
19	SMW_BH035	18-01-22												
20	SMW-BH035_S	18-01-22												
21	ROI-220118	18-01-22												
22	ROI-220117	17-01-22	↓											
23	ROI-220120	20-01-22												
					TOTAL									

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

CHAIN OF CUSTODY

ALS Laboratory: please tick →

☐ADELAIDE 21 Burma Road Pooraka SA 5095 Ph: 08 8359 0890 E: ade.ade@alsglobal.com

☐BRISBANE 32 Shand Street Stafford QLD 4053 Ph: 07 3243 7222 E: samples.brisbane@alsglobal.com

☐GLADSTONE 46 Callemondah Drive Clinton QLD 4680 Ph: 07 7471 5600 E: gladstone@alsglobal.com

☐MACKAY 78 Harbour Road Mackay QLD 4740 Ph: 07 4944 0177 E: mackay@alsglobal.com

☐MELBOURNE 2-4 Westall Road Springvale VIC 3171 Ph: 03 8549 9600 E: samples.melbourne@alsglobal.com

☐MUDGEE 27 Sydney Road Mudgee NSW 2850 Ph: 02 6372 6735 E: mudgee.mail@alsglobal.com

☐NEWCASTLE 5/585 Maitland Rd Mayfield West NSW 2304 Ph: 02 4014 2500 E: samples.newcastle@alsglobal.com

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☐SYDNEY 277-289 Woodpark Road Smithfield NSW 2164 Ph: 02 8784 8555 E: samples.sydney@alsglobal.com

☐TOWNSVILLE 14-15 Desma Court Bohle QLD 4818 Ph: 07 4796 0600 E: townsville.environmental@alsglobal.com

☐WOLLONGONG 99 Kenny Street Wollongong NSW 2500 Ph: 02 4225 3125 E: portkembla@alsglobal.com

CLIENT: EPM	TURNAROUND REQUIREMENTS: (Standard TAT may be longer for some tests e.g. Ultra Trace Organics)	☑ Standard TAT (List due date):	FOR LABORATORY USE ONLY (Circle)
OFFICE: Sydney		☐ Non Standard or urgent TAT (List due date):	Custody Seal Intact? Yes No N/A
PROJECT: 0628507	ALS QUOTE NO.:	COC SEQUENCE NUMBER (Circle)	Free ice / frozen ice bricks present upon receipt? Yes No N/A
ORDER NUMBER:		COC: 1 2 3 4 5 6 7	Random Sample Temperature on Receipt: °C
PROJECT MANAGER: Nicholas Arbuth	CONTACT PH: 0415 833 925	OF: 1 2 3 4 5 6 7	Other comment:
SAMPLER: Tay Manson	SAMPLER MOBILE: 0467 295 082		
COC emailed to ALS? (YES / (NO))	EDD FORMAT (or default):		
Email Reports to (will default to PM if no other addresses are listed):			
Email Invoice to (will default to PM if no other addresses are listed):			

RELINQUISHED BY:	RECEIVED BY:	RELINQUISHED BY:	RECEIVED BY:
T. Manson	Sky c		
DATE/TIME: 21/01/22	DATE/TIME: 21-1-22 1015	DATE/TIME:	DATE/TIME:

COMMENTS/SPECIAL HANDLING/STORAGE OR DISPOSAL:

ALS USE	SAMPLE DETAILS MATRIX: SOLID (S) WATER (W)			CONTAINER INFORMATION		ANALYSIS REQUIRED including SUITES (NB. Suite Codes must be listed to attract suite price) Where Metals are required, specify Total (unfiltered bottle required) or Dissolved (field filtered bottle required).								Additional Information
LAB ID	SAMPLE ID	DATE / TIME	MATRIX	TYPE & PRESERVATIVE (refer to codes below)	TOTAL CONTAINERS	PFAS								Comments on likely contaminant levels, dilutions, or samples requiring specific QC analysis etc.
1	SMW-BH051	18-01-22	W			✓								
2	SMW-BH051_S	18-01-22												
3	851	20-01-22												
4	S54													
5	S02_d													
6	S06													
7	S40_d													
8	S40_S													
9	BUR-MW108													
10	DQ1-220119	19-01-22												
11	TQ1-220119	19-01-22	✓			✓								
				TOTAL										

Environmental Division
Sydney
Work Order Reference
ES2202047

Telephone - 61-2-8784 8555

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V = VOA Vial HCl Preserved; VB = VOA Vial Sodium Bisulphate Preserved; VS = VOA Vial Sulfuric Preserved; AV = Airfreight Unpreserved Vial SG = Sulfuric Preserved Amber Glass; H = HCl preserved Plastic; HS = HCl preserved Speciation bottle; SP = Sulfuric Preserved Plastic; F = Formaldehyde Preserved Glass;
Z = Zinc Acetate Preserved Bottle; E = EDTA Preserved Bottles; ST = Sterile Bottle; ASS = Plastic Bag for Acid Sulphate Soils; B = Unpreserved Bag.

CHAIN OF CUSTODY

ALS Laboratory: please tick →

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☐GLADSTONE 46 Callemondah Drive Clinton QLD 4680 Ph: 07 7471 5600 E: gladstone@alsglobal.com

☐MACKAY 78 Harbour Road Mackay QLD 4740 Ph: 07 4944 0177 E: mackay@alsglobal.com

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☐WOLLONGONG 99 Kenny Street Wollongong NSW 2500 Ph: 02 4225 3125 E: portkembla@alsglobal.com

CLIENT: ERM	TURNAROUND REQUIREMENTS : ☑ Standard TAT (List due date):	FOR LABORATORY USE ONLY (Circle)	
OFFICE: Sydney	(Standard TAT may be longer for some tests e.g. Ultra Trace Organics) ☐ Non Standard or urgent TAT (List due date):	Custody Seal Intact?	Yes / No / N/A
PROJECT: 0628507	ALS QUOTE NO.:	Free ice / frozen ice bricks present upon receipt?	Yes / No / N/A
ORDER NUMBER:	COC SEQUENCE NUMBER (Circle) COC: 1 2 3 4 5 6 7	Random Sample Temperature on Receipt:	°C
PROJECT MANAGER: Nicholas Gubiza CONTACT PH: 0415 833 925	OF: 1 2 3 4 5 6 7	Other comment:	

SAMPLER: Taj Manson	SAMPLER MOBILE: 0467 295 082	RELINQUISHED BY: Taj Manson	RECEIVED BY:	RELINQUISHED BY:	RECEIVED BY:
COC emailed to ALS? (YES / (NO))	EDD FORMAT (or default):	DATE/TIME: 21/01/22	DATE/TIME:	DATE/TIME:	DATE/TIME:
Email Reports to (will default to PM if no other addresses are listed):					
Email Invoice to (will default to PM if no other addresses are listed):					

COMMENTS/SPECIAL HANDLING/STORAGE OR DISPOSAL:

ALS USE	SAMPLE DETAILS MATRIX: SOLID (S) WATER (W)			CONTAINER INFORMATION		ANALYSIS REQUIRED including SUITES (NB. Suite Codes must be listed to attract suite price) Where Metals are required, specify Total (unfiltered bottle required) or Dissolved (field filtered bottle required).								Additional Information
LAB ID	SAMPLE ID	DATE / TIME	MATRIX	TYPE & PRESERVATIVE (refer to codes below)	TOTAL CONTAINERS	TRH & BTEX N	PAH's	VOC's	Heavy metals plus ASRC	PFAS	Ammonia, nitrate, nitrite, nitrogen, total phosphorus	Major anions & cations	PFAS	Comments on likely contaminant levels, dilutions, or samples requiring specific QC analysis etc.
12	BUR_BH125	21-01-22	W			X	X	X	X	X	X	X	X	PFAS sample taken on 20/01/22
13	ROL-220121	↓	↓			X	X	X	X	X	X			No nitrate analysis
14,15	Trip spike + Trip blank	↓	↓			X	X	X	X					
16	SMW_BH120	19-01-22								X				
17	SMW_BH019	19-01-22												
18	ROL_220119	19-01-22												
19	SMW_BH038	18-01-22												
20	SMW_BH035	18-01-22												
21	SMW_BH035_S	18-01-22												
22	ROL-220118	18-01-22												
23	ROL-220117	17-01-22	↓											
24	ROL-220120	20-01-22								↓				
					TOTAL									

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V = VOA Vial HCl Preserved; VB = VOA Vial Sodium Bisulphate Preserved; VS = VOA Vial Sulfuric Preserved; AV = Airfreight Unpreserved Vial SG = Sulfuric Preserved Amber Glass; H = HCl preserved Plastic; HS = HCl preserved Speciation bottle; SP = Sulfuric Preserved Plastic; F = Formaldehyde Preserved Glass; Z = Zinc Acetate Preserved Bottle; E = EDTA Preserved Bottles; ST = Sterile Bottle; ASS = Plastic Bag for Acid Sulphate Soils; B = Unpreserved Bag.

ALS Environmental

CERTIFICATE OF ANALYSIS

Work Order	: **ES2202264**	Page	: 1 of 119
Client	: **ENVIRONMENTAL RESOURCES MANAGEMENT (ERM)**	Laboratory	: Environmental Division Sydney
Contact	: NICHOLAS GRBICH	Contact	: Customer Services ES
Address	: LEVEL 15 309 KENT STREET SYDNEY NSW AUSTRALIA 2000	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
Telephone	: ----	Telephone	: +61-2-8784 8555
Project	: 0628507 SOP	Date Samples Received	: 24-Jan-2022 14:20
Order number	: ----	Date Analysis Commenced	: 27-Jan-2022
C-O-C number	: ----	Issue Date	: 03-Feb-2022 17:00
Sampler	: ANTHONY RICHARD		
Site	: ----		
Quote number	: EN/114		
No. of samples received	: 57		
No. of samples analysed	: 56		

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

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

This 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.

Signatories	*Position*	*Accreditation Category*
Alana Smylie	Asbestos Identifier	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.
- 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-dichlorothene, trans-1,2-dichlorothene, 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: Positive results for sample ES2202264-033 was confirmed by re-analysis.
- EP080: The trip spike and its control have been analysed for volatile TPH and BTEXN only. The trip spike and control were prepared in the lab using reagent grade sand spiked with petrol. The spike was dispatched from the lab and the control retained.
- 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	SOP_BH118_0.1_220119	SOP_BH118_1.0_220119	SOP_BH118_5.0_220119	SOP_BH118_10.0_220119	SOP_BH118_15.0_220119
			Sampling date / time	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00
Compound	CAS Number	LOR	Unit	ES2202264-001	ES2202264-002	ES2202264-003	ES2202264-004	ES2202264-005
				Result	Result	Result	Result	Result
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	----	1.0	%	7.9	13.4	6.4	7.3	13.6
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	534	----	----	----	----
APPROVED IDENTIFIER:	----	-	--	A. SMYLIE	----	----	----	----
EG005(ED093)T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	<5	<5	8	8	5
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	<1	<1
Chromium	7440-47-3	2	mg/kg	13	<2	7	10	13
Copper	7440-50-8	5	mg/kg	57	13	37	40	40
Lead	7439-92-1	5	mg/kg	<5	<5	15	18	19
Nickel	7440-02-0	2	mg/kg	109	<2	24	24	22
Zinc	7440-66-6	5	mg/kg	42	<5	178	92	84
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	<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	<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

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	SOP_BH118_0.1_220119	SOP_BH118_1.0_220119	SOP_BH118_5.0_220119	SOP_BH118_10.0_220119	SOP_BH118_15.0_220119
				Sampling date / time	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00
Compound	CAS Number	LOR	Unit		ES2202264-001	ES2202264-002	ES2202264-003	ES2202264-004	ES2202264-005
					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

Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH118_0.1_220119	SOP_BH118_1.0_220119	SOP_BH118_5.0_220119	SOP_BH118_10.0_220119	SOP_BH118_15.0_220119
				Sampling date / time	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00
					ES2202264-001	ES2202264-002	ES2202264-003	ES2202264-004	ES2202264-005
					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**)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH118_0.1_220119	SOP_BH118_1.0_220119	SOP_BH118_5.0_220119	SOP_BH118_10.0_220119	SOP_BH118_15.0_220119
				Sampling date / time	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00
					ES2202264-001	ES2202264-002	ES2202264-003	ES2202264-004	ES2202264-005
					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	----	<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)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		<0.5	<0.5	<0.5	**0.8**	<0.5
Anthracene	120-12-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	SOP_BH118_0.1_220119	SOP_BH118_1.0_220119	SOP_BH118_5.0_220119	SOP_BH118_10.0_220119	SOP_BH118_15.0_220119
				Sampling date / time	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00
Compound	CAS Number	LOR	Unit		ES2202264-001	ES2202264-002	ES2202264-003	ES2202264-004	ES2202264-005
					Result	Result	Result	Result	Result
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued									
Fluoranthene	206-44-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Pyrene	129-00-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benz(a)anthracene	56-55-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Chrysene	218-01-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg		<0.5	<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		<0.5	<0.5	<0.5	<0.5	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg		<0.5	<0.5	<0.5	**0.8**	<0.5
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg		**0.6**	**0.6**	**0.6**	**0.6**	**0.6**
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg		**1.2**	**1.2**	**1.2**	**1.2**	**1.2**
EP075A: 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	0.5	mg/kg		<0.5	----	<0.5	----	<0.5
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	1	mg/kg		<1	----	<1	----	<1
EP075B: Polynuclear Aromatic Hydrocarbons									
2-Methylnaphthalene	91-57-6	0.5	mg/kg		<0.5	----	**1.4**	----	**0.6**
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	SOP_BH118_0.1_220119	SOP_BH118_1.0_220119	SOP_BH118_5.0_220119	SOP_BH118_10.0_220119	SOP_BH118_15.0_220119
				Sampling date / time	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00
Compound	CAS Number	LOR	Unit		ES2202264-001	ES2202264-002	ES2202264-003	ES2202264-004	ES2202264-005
					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

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	SOP_BH118_0.1_220119	SOP_BH118_1.0_220119	SOP_BH118_5.0_220119	SOP_BH118_10.0_220119	SOP_BH118_15.0_220119
				Sampling date / time	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00
Compound	CAS Number	LOR	Unit		ES2202264-001	ES2202264-002	ES2202264-003	ES2202264-004	ES2202264-005
					Result	Result	Result	Result	Result
EP075E: Nitroaromatics and Ketones - Continued									
Chlorobenzilate	510-15-6	0.5	mg/kg		<0.5	----	<0.5	----	<0.5
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	**19**	**31**	**15**
C10 - C14 Fraction	----	50	mg/kg		<50	<50	<50	<50	<50
C15 - C28 Fraction	----	100	mg/kg		<100	<100	<100	**110**	<100
C29 - C36 Fraction	----	100	mg/kg		**160**	<100	<100	<100	<100
^ C10 - C36 Fraction (sum)	----	50	mg/kg		**160**	<50	<50	**110**	<50
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
C6 - C10 Fraction	C6_C10	10	mg/kg		<10	<10	**24**	**39**	**20**

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	SOP_BH118_0.1_220119	SOP_BH118_1.0_220119	SOP_BH118_5.0_220119	SOP_BH118_10.0_220119	SOP_BH118_15.0_220119
			Sampling date / time	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00
Compound	CAS Number	LOR	Unit	ES2202264-001	ES2202264-002	ES2202264-003	ES2202264-004	ES2202264-005
				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	**24**	**38**	**20**
>C10 - C16 Fraction	----	50	mg/kg	<50	<50	<50	**50**	**50**
>C16 - C34 Fraction	----	100	mg/kg	**160**	<100	**120**	**120**	<100
>C34 - C40 Fraction	----	100	mg/kg	**180**	<100	<100	<100	<100
^ >C10 - C40 Fraction (sum)	----	50	mg/kg	**340**	<50	**120**	**170**	**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	**0.5**	<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	----
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.0002	mg/kg	----	<0.0002	----	<0.0002	----
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.0002	mg/kg	----	<0.0002	----	<0.0002	----
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.0002	mg/kg	----	<0.0002	----	<0.0002	----
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.0002	mg/kg	----	<0.0002	----	<0.0002	----
Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.0002	mg/kg	----	<0.0002	----	<0.0002	----
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	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	SOP_BH118_0.1_220119	SOP_BH118_1.0_220119	SOP_BH118_5.0_220119	SOP_BH118_10.0_220119	SOP_BH118_15.0_220119
				Sampling date / time	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00
Compound	CAS Number	LOR	Unit		ES2202264-001	ES2202264-002	ES2202264-003	ES2202264-004	ES2202264-005
					Result	Result	Result	Result	Result
EP231B: Perfluoroalkyl Carboxylic Acids - Continued									
Perfluorooctanoic acid (PFOA)	335-67-1	0.0002	mg/kg	----	<0.0002	----	<0.0002	----	
Perfluorononanoic acid (PFNA)	375-95-1	0.0002	mg/kg	----	<0.0002	----	<0.0002	----	
Perfluorodecanoic acid (PFDA)	335-76-2	0.0002	mg/kg	----	<0.0002	----	<0.0002	----	
Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.0002	mg/kg	----	<0.0002	----	<0.0002	----	
Perfluorododecanoic acid (PFDoDA)	307-55-1	0.0002	mg/kg	----	<0.0002	----	<0.0002	----	
Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.0002	mg/kg	----	<0.0002	----	<0.0002	----	
Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.0005	mg/kg	----	<0.0005	----	<0.0005	----	
EP231C: Perfluoroalkyl Sulfonamides									
Perfluorooctane sulfonamide (FOSA)	754-91-6	0.0002	mg/kg	----	<0.0002	----	<0.0002	----	
N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.0005	mg/kg	----	<0.0005	----	<0.0005	----	
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.0005	mg/kg	----	<0.0005	----	<0.0005	----	
N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.0005	mg/kg	----	<0.0005	----	<0.0005	----	
N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.0005	mg/kg	----	<0.0005	----	<0.0005	----	
N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.0002	mg/kg	----	<0.0002	----	<0.0002	----	
N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.0002	mg/kg	----	<0.0002	----	<0.0002	----	
EP231D: (n:2) Fluorotelomer Sulfonic Acids									
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	----	

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	SOP_BH118_0.1_220119	SOP_BH118_1.0_220119	SOP_BH118_5.0_220119	SOP_BH118_10.0_220119	SOP_BH118_15.0_220119
			Sampling date / time	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00
Compound	CAS Number	LOR	Unit	ES2202264-001	ES2202264-002	ES2202264-003	ES2202264-004	ES2202264-005
				Result	Result	Result	Result	Result
EP231D: (n:2) Fluorotelomer Sulfonic Acids - Continued								
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.0005	mg/kg	----	<0.0005	----	<0.0005	----
EP231P: PFAS Sums								
Sum of PFAS	----	0.0002	mg/kg	----	<0.0002	----	<0.0002	----
Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.0002	mg/kg	----	<0.0002	----	<0.0002	----
Sum of PFAS (WA DER List)	----	0.0002	mg/kg	----	<0.0002	----	<0.0002	----
EP066S: PCB Surrogate								
Decachlorobiphenyl	2051-24-3	0.1	%	109	124	113	114	122
EP068S: Organochlorine Pesticide Surrogate								
Dibromo-DDE	21655-73-2	0.05	%	120	117	121	104	109
EP068T: Organophosphorus Pesticide Surrogate								
DEF	78-48-8	0.05	%	84.7	101	104	90.5	96.5
EP074S: VOC Surrogates								
1.2-Dichloroethane-D4	17060-07-0	0.5	%	88.0	----	86.7	----	89.3
Toluene-D8	2037-26-5	0.5	%	88.3	----	94.4	----	94.0
4-Bromofluorobenzene	460-00-4	0.5	%	83.5	----	91.6	----	94.2
EP075(SIM)S: Phenolic Compound Surrogates								
Phenol-d6	13127-88-3	0.5	%	91.2	97.4	92.9	95.0	90.5
2-Chlorophenol-D4	93951-73-6	0.5	%	91.6	96.2	92.2	96.6	91.4
2.4.6-Tribromophenol	118-79-6	0.5	%	75.5	83.9	79.2	81.3	77.8
EP075(SIM)T: PAH Surrogates								
2-Fluorobiphenyl	321-60-8	0.5	%	97.6	102	98.2	103	97.4
Anthracene-d10	1719-06-8	0.5	%	108	114	109	115	111
4-Terphenyl-d14	1718-51-0	0.5	%	92.6	99.4	94.4	99.1	95.3
EP075S: Acid Extractable Surrogates								
2-Fluorophenol	367-12-4	0.5	%	105	----	88.4	----	102
Phenol-d6	13127-88-3	0.5	%	98.8	----	91.3	----	98.9
2-Chlorophenol-D4	93951-73-6	0.5	%	104	----	90.6	----	102
2.4.6-Tribromophenol	118-79-6	0.5	%	99.9	----	49.1	----	75.2
EP075T: Base/Neutral Extractable Surrogates								
Nitrobenzene-D5	4165-60-0	0.5	%	89.0	----	83.6	----	88.8
1.2-Dichlorobenzene-D4	2199-69-1	0.5	%	93.0	----	87.8	----	90.2

Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH118_0.1_220119	SOP_BH118_1.0_220119	SOP_BH118_5.0_220119	SOP_BH118_10.0_220119	SOP_BH118_15.0_220119
				Sampling date / time	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00
					ES2202264-001	ES2202264-002	ES2202264-003	ES2202264-004	ES2202264-005
					Result	Result	Result	Result	Result
EP075T: Base/Neutral Extractable Surrogates - Continued									
2-Fluorobiphenyl	321-60-8	0.5	%		**109**	**----**	**93.2**	**----**	**98.7**
Anthracene-d10	1719-06-8	0.5	%		**119**	**----**	**120**	**----**	**118**
4-Terphenyl-d14	1718-51-0	0.5	%		**95.9**	**----**	**91.0**	**----**	**90.6**
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	0.2	%		**87.8**	**86.7**	**86.4**	**89.9**	**89.0**
Toluene-D8	2037-26-5	0.2	%		**83.3**	**78.6**	**88.7**	**99.9**	**88.5**
4-Bromofluorobenzene	460-00-4	0.2	%		**81.2**	**96.6**	**87.3**	**102**	**87.7**
EP231S: PFAS Surrogate									
13C4-PFOS	----	0.0002	%		**----**	**100**	**----**	**110**	**----**
13C8-PFOA	----	0.0002	%		**----**	**96.0**	**----**	**100**	**----**

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	SOP_BH118_20.0_220119	SOP_BH118_25.0_220119	SOP_BH142_0.4_220119	SOP_BH142_4.0_220119	SOP_BH143_0.3_220119
			Sampling date / time	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00
Compound	CAS Number	LOR	Unit	ES2202264-006	ES2202264-007	ES2202264-008	ES2202264-009	ES2202264-010
				Result	Result	Result	Result	Result
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	----	1.0	%	31.2	12.9	12.4	12.5	14.8
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	-	--	----	----	-	----	-
Synthetic Mineral Fibre	----	0.1	g/kg	----	----	No	----	No
Organic Fibre	----	0.1	g/kg	----	----	No	----	No
Sample weight (dry)	----	0.01	g	----	----	321	----	273
APPROVED IDENTIFIER:	----	-	--	----	----	A. SMYLIE	----	A. SMYLIE
EG005(ED093)T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	6	<5	<5	<5	6
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	<1	<1
Chromium	7440-47-3	2	mg/kg	15	10	3	4	13
Copper	7440-50-8	5	mg/kg	41	49	11	40	6
Lead	7439-92-1	5	mg/kg	20	26	8	11	15
Nickel	7440-02-0	2	mg/kg	22	24	<2	12	<2
Zinc	7440-66-6	5	mg/kg	87	88	<5	120	5
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	<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	<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

Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH118_20.0_220119	SOP_BH118_25.0_220119	SOP_BH142_0.4_220119	SOP_BH142_4.0_220119	SOP_BH143_0.3_220119
				Sampling date / time	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00
					ES2202264-006	ES2202264-007	ES2202264-008	ES2202264-009	ES2202264-010
					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

Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH118_20.0_220119	SOP_BH118_25.0_220119	SOP_BH142_0.4_220119	SOP_BH142_4.0_220119	SOP_BH143_0.3_220119
				Sampling date / time	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00
					ES2202264-006	ES2202264-007	ES2202264-008	ES2202264-009	ES2202264-010
					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**)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH118_20.0_220119	SOP_BH118_25.0_220119	SOP_BH142_0.4_220119	SOP_BH142_4.0_220119	SOP_BH143_0.3_220119
				Sampling date / time	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00
					ES2202264-006	ES2202264-007	ES2202264-008	ES2202264-009	ES2202264-010
					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)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		<0.5	<0.5	<0.5	<0.5	<0.5
Anthracene	120-12-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5

Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH118_20.0_220119	SOP_BH118_25.0_220119	SOP_BH142_0.4_220119	SOP_BH142_4.0_220119	SOP_BH143_0.3_220119
				Sampling date / time	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00
					ES2202264-006	ES2202264-007	ES2202264-008	ES2202264-009	ES2202264-010
					Result	Result	Result	Result	Result
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued									
Fluoranthene	206-44-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Pyrene	129-00-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benz(a)anthracene	56-55-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Chrysene	218-01-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg		<0.5	<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		<0.5	<0.5	<0.5	<0.5	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ **Sum of polycyclic aromatic hydrocarbons**	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ **Benzo(a)pyrene TEQ (zero)**	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ **Benzo(a)pyrene TEQ (half LOR)**	----	0.5	mg/kg		**0.6**	**0.6**	**0.6**	**0.6**	**0.6**
^ **Benzo(a)pyrene TEQ (LOR)**	----	0.5	mg/kg		**1.2**	**1.2**	**1.2**	**1.2**	**1.2**
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									
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**)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH118_20.0_220119	SOP_BH118_25.0_220119	SOP_BH142_0.4_220119	SOP_BH142_4.0_220119	SOP_BH143_0.3_220119
				Sampling date / time	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00
					ES2202264-006	ES2202264-007	ES2202264-008	ES2202264-009	ES2202264-010
					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	----	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	SOP_BH118_20.0_220119	SOP_BH118_25.0_220119	SOP_BH142_0.4_220119	SOP_BH142_4.0_220119	SOP_BH143_0.3_220119
				Sampling date / time	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00
Compound	CAS Number	LOR	Unit		ES2202264-006	ES2202264-007	ES2202264-008	ES2202264-009	ES2202264-010
					Result	Result	Result	Result	Result
EP075E: Nitroaromatics and Ketones - Continued									
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	----	----
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	----	10	mg/kg		**10**	**20**	<10	<10	<10
C10 - C14 Fraction	----	50	mg/kg		<50	**60**	<50	<50	<50
C15 - C28 Fraction	----	100	mg/kg		<100	**140**	<100	<100	<100
C29 - C36 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
^ C10 - C36 Fraction (sum)	----	50	mg/kg		<50	**200**	<50	<50	<50
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
C6 - C10 Fraction	C6_C10	10	mg/kg		**14**	**29**	<10	<10	<10

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	SOP_BH118_20.0_220119	SOP_BH118_25.0_220119	SOP_BH142_0.4_220119	SOP_BH142_4.0_220119	SOP_BH143_0.3_220119
				Sampling date / time	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00
Compound	CAS Number	LOR	Unit		ES2202264-006	ES2202264-007	ES2202264-008	ES2202264-009	ES2202264-010
					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		**14**	**29**	<10	<10	<10
>C10 - C16 Fraction	----	50	mg/kg		<50	**80**	<50	<50	<50
>C16 - C34 Fraction	----	100	mg/kg		<100	**130**	<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	**80**	<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	<0.0002
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.0002	mg/kg		----	<0.0002	<0.0002	<0.0002	<0.0002
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.0002	mg/kg		----	<0.0002	<0.0002	<0.0002	<0.0002
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.0002	mg/kg		----	<0.0002	<0.0002	<0.0002	<0.0002
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.0002	mg/kg		----	<0.0002	<0.0002	<0.0002	<0.0002
Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.0002	mg/kg		----	<0.0002	<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	<0.001
Perfluoropentanoic acid (PFPeA)	2706-90-3	0.0002	mg/kg		----	<0.0002	<0.0002	<0.0002	<0.0002
Perfluorohexanoic acid (PFHxA)	307-24-4	0.0002	mg/kg		----	<0.0002	<0.0002	<0.0002	<0.0002
Perfluoroheptanoic acid (PFHpA)	375-85-9	0.0002	mg/kg		----	<0.0002	<0.0002	<0.0002	<0.0002

Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH118_20.0_220119	SOP_BH118_25.0_220119	SOP_BH142_0.4_220119	SOP_BH142_4.0_220119	SOP_BH143_0.3_220119
				Sampling date / time	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00
					ES2202264-006	ES2202264-007	ES2202264-008	ES2202264-009	ES2202264-010
					Result	Result	Result	Result	Result
EP231B: Perfluoroalkyl Carboxylic Acids - Continued									
Perfluorooctanoic acid (PFOA)	335-67-1	0.0002	mg/kg		----	<0.0002	<0.0002	<0.0002	<0.0002
Perfluorononanoic acid (PFNA)	375-95-1	0.0002	mg/kg		----	<0.0002	<0.0002	<0.0002	<0.0002
Perfluorodecanoic acid (PFDA)	335-76-2	0.0002	mg/kg		----	<0.0002	<0.0002	<0.0002	<0.0002
Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.0002	mg/kg		----	<0.0002	<0.0002	<0.0002	<0.0002
Perfluorododecanoic acid (PFDoDA)	307-55-1	0.0002	mg/kg		----	<0.0002	<0.0002	<0.0002	<0.0002
Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.0002	mg/kg		----	<0.0002	<0.0002	<0.0002	<0.0002
Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.0005	mg/kg		----	<0.0005	<0.0005	<0.0005	<0.0005
EP231C: Perfluoroalkyl Sulfonamides									
Perfluorooctane sulfonamide (FOSA)	754-91-6	0.0002	mg/kg		----	<0.0002	<0.0002	<0.0002	<0.0002
N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.0005	mg/kg		----	<0.0005	<0.0005	<0.0005	<0.0005
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.0005	mg/kg		----	<0.0005	<0.0005	<0.0005	<0.0005
N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.0005	mg/kg		----	<0.0005	<0.0005	<0.0005	<0.0005
N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.0005	mg/kg		----	<0.0005	<0.0005	<0.0005	<0.0005
N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.0002	mg/kg		----	<0.0002	<0.0002	<0.0002	<0.0002
N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.0002	mg/kg		----	<0.0002	<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	<0.0005
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.0005	mg/kg		----	<0.0005	<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	<0.0005

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	SOP_BH118_20.0_22011919	SOP_BH118_25.0_22011919	SOP_BH142_0.4_220119	SOP_BH142_4.0_220119	SOP_BH143_0.3_220119
			Sampling date / time	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00
Compound	CAS Number	LOR	Unit	ES2202264-006	ES2202264-007	ES2202264-008	ES2202264-009	ES2202264-010
				Result	Result	Result	Result	Result
EP231D: (n:2) Fluorotelomer Sulfonic Acids - Continued								
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.0005	mg/kg	----	<0.0005	<0.0005	<0.0005	<0.0005
EP231P: PFAS Sums								
Sum of PFAS	----	0.0002	mg/kg	----	<0.0002	<0.0002	<0.0002	<0.0002
Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.0002	mg/kg	----	<0.0002	<0.0002	<0.0002	<0.0002
Sum of PFAS (WA DER List)	----	0.0002	mg/kg	----	<0.0002	<0.0002	<0.0002	<0.0002
EP066S: PCB Surrogate								
Decachlorobiphenyl	2051-24-3	0.1	%	124	126	109	104	118
EP068S: Organochlorine Pesticide Surrogate								
Dibromo-DDE	21655-73-2	0.05	%	114	126	122	129	110
EP068T: Organophosphorus Pesticide Surrogate								
DEF	78-48-8	0.05	%	99.6	112	101	107	89.9
EP074S: VOC Surrogates								
1.2-Dichloroethane-D4	17060-07-0	0.5	%	----	85.5	84.7	----	----
Toluene-D8	2037-26-5	0.5	%	----	91.9	85.3	----	----
4-Bromofluorobenzene	460-00-4	0.5	%	----	87.7	85.8	----	----
EP075(SIM)S: Phenolic Compound Surrogates								
Phenol-d6	13127-88-3	0.5	%	98.5	87.2	96.1	91.8	94.7
2-Chlorophenol-D4	93951-73-6	0.5	%	97.2	87.1	95.5	90.0	93.4
2.4.6-Tribromophenol	118-79-6	0.5	%	79.8	68.3	77.2	71.4	70.8
EP075(SIM)T: PAH Surrogates								
2-Fluorobiphenyl	321-60-8	0.5	%	102	92.6	100	93.5	97.3
Anthracene-d10	1719-06-8	0.5	%	115	104	114	107	109
4-Terphenyl-d14	1718-51-0	0.5	%	98.4	90.5	97.6	92.1	93.4
EP075S: Acid Extractable Surrogates								
2-Fluorophenol	367-12-4	0.5	%	----	99.2	98.3	----	----
Phenol-d6	13127-88-3	0.5	%	----	96.2	94.6	----	----
2-Chlorophenol-D4	93951-73-6	0.5	%	----	99.1	93.8	----	----
2.4.6-Tribromophenol	118-79-6	0.5	%	----	64.9	65.0	----	----
EP075T: Base/Neutral Extractable Surrogates								
Nitrobenzene-D5	4165-60-0	0.5	%	----	85.3	97.8	----	----
1.2-Dichlorobenzene-D4	2199-69-1	0.5	%	----	89.1	89.9	----	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	SOP_BH118_20.0_22011919	SOP_BH118_25.0_22011919	SOP_BH142_0.4_220119	SOP_BH142_4.0_220119	SOP_BH143_0.3_220119
			Sampling date / time	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00
Compound	CAS Number	LOR	Unit	ES2202264-006	ES2202264-007	ES2202264-008	ES2202264-009	ES2202264-010
				Result	Result	Result	Result	Result
EP075T: Base/Neutral Extractable Surrogates - Continued								
2-Fluorobiphenyl	321-60-8	0.5	%	----	96.1	90.3	----	----
Anthracene-d10	1719-06-8	0.5	%	----	121	122	----	----
4-Terphenyl-d14	1718-51-0	0.5	%	----	90.5	101	----	----
EP080S: TPH(V)/BTEX Surrogates								
1.2-Dichloroethane-D4	17060-07-0	0.2	%	83.3	85.1	82.3	96.8	86.8
Toluene-D8	2037-26-5	0.2	%	90.4	86.2	86.1	104	80.2
4-Bromofluorobenzene	460-00-4	0.2	%	92.1	83.0	87.0	104	95.7
EP231S: PFAS Surrogate								
13C4-PFOS	----	0.0002	%	----	102	114	104	108
13C8-PFOA	----	0.0002	%	----	106	97.5	100	102

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	SOP_BH143_1.0_220119	SOP_BH144_0.3_220119	SOP_BH144_0.6_220119	SOP_BH145_0.3_220119	SOP_BH145_1.0_220119
			Sampling date / time	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00
Compound	CAS Number	LOR	Unit	ES2202264-011	ES2202264-012	ES2202264-013	ES2202264-014	ES2202264-015
				Result	Result	Result	Result	Result
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	----	1.0	%	19.5	8.5	21.7	21.9	22.8
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	-	--	----	-	----	-	----
Synthetic Mineral Fibre	----	0.1	g/kg	----	No	----	No	----
Organic Fibre	----	0.1	g/kg	----	No	----	No	----
Sample weight (dry)	----	0.01	g	----	472	----	124	----
APPROVED IDENTIFIER:	----	-	--	----	A. SMYLIE	----	A. SMYLIE	----
EG005(ED093)T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	8	<5	6	6	10
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	<1	<1
Chromium	7440-47-3	2	mg/kg	18	4	4	10	15
Copper	7440-50-8	5	mg/kg	16	<5	8	9	14
Lead	7439-92-1	5	mg/kg	17	6	9	12	15
Nickel	7440-02-0	2	mg/kg	3	<2	<2	<2	<2
Zinc	7440-66-6	5	mg/kg	9	<5	<5	<5	<5
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	<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	<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	0.56	<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

Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH143_1.0_220119	SOP_BH144_0.3_220119	SOP_BH144_0.6_220119	SOP_BH145_0.3_220119	SOP_BH145_1.0_220119
				Sampling date / time	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00
					ES2202264-011	ES2202264-012	ES2202264-013	ES2202264-014	ES2202264-015
					Result	Result	Result	Result	Result
EP068A: Organochlorine Pesticides (OC) - Continued									
Dieldrin	60-57-1	0.05	mg/kg		<0.05	**0.16**	<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	**0.72**	<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

Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH143_1.0_220119	SOP_BH144_0.3_220119	SOP_BH144_0.6_220119	SOP_BH145_0.3_220119	SOP_BH145_1.0_220119
				Sampling date / time	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00
					ES2202264-011	ES2202264-012	ES2202264-013	ES2202264-014	ES2202264-015
					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	SOP_BH143_1.0_220119	SOP_BH144_0.3_220119	SOP_BH144_0.6_220119	SOP_BH145_0.3_220119	SOP_BH145_1.0_220119
				Sampling date / time	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00
Compound	CAS Number	LOR	Unit		ES2202264-011	ES2202264-012	ES2202264-013	ES2202264-014	ES2202264-015
					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)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		<0.5	<0.5	<0.5	<0.5	<0.5
Anthracene	120-12-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5

Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH143_1.0_220119	SOP_BH144_0.3_220119	SOP_BH144_0.6_220119	SOP_BH145_0.3_220119	SOP_BH145_1.0_220119
				Sampling date / time	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00
					ES2202264-011	ES2202264-012	ES2202264-013	ES2202264-014	ES2202264-015
					Result	Result	Result	Result	Result
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued									
Fluoranthene	206-44-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Pyrene	129-00-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benz(a)anthracene	56-55-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Chrysene	218-01-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg		<0.5	<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		<0.5	<0.5	<0.5	<0.5	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ **Sum of polycyclic aromatic hydrocarbons**	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ **Benzo(a)pyrene TEQ (zero)**	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ **Benzo(a)pyrene TEQ (half LOR)**	----	0.5	mg/kg		**0.6**	**0.6**	**0.6**	**0.6**	**0.6**
^ **Benzo(a)pyrene TEQ (LOR)**	----	0.5	mg/kg		**1.2**	**1.2**	**1.2**	**1.2**	**1.2**
EP075A: 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	0.5	mg/kg		<0.5	----	<0.5	----	<0.5
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	1	mg/kg		<1	----	<1	----	<1
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**)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH143_1.0_220119	SOP_BH144_0.3_220119	SOP_BH144_0.6_220119	SOP_BH145_0.3_220119	SOP_BH145_1.0_220119
				Sampling date / time	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00
					ES2202264-011	ES2202264-012	ES2202264-013	ES2202264-014	ES2202264-015
					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

Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH143_1.0_220119	SOP_BH144_0.3_220119	SOP_BH144_0.6_220119	SOP_BH145_0.3_220119	SOP_BH145_1.0_220119
				Sampling date / time	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00
					ES2202264-011	ES2202264-012	ES2202264-013	ES2202264-014	ES2202264-015
					Result	Result	Result	Result	Result
EP075E: Nitroaromatics and Ketones - Continued									
Chlorobenzilate	510-15-6	0.5	mg/kg		<0.5	----	<0.5	----	<0.5
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	<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	<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	SOP_BH143_1.0_220119	SOP_BH144_0.3_220119	SOP_BH144_0.6_220119	SOP_BH145_0.3_220119	SOP_BH145_1.0_220119
			Sampling date / time	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00
Compound	CAS Number	LOR	Unit	ES2202264-011	ES2202264-012	ES2202264-013	ES2202264-014	ES2202264-015
				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	<100	<100	<100	<100
>C34 - C40 Fraction	----	100	mg/kg	<100	<100	<100	<100	<100
^ >C10 - C40 Fraction (sum)	----	50	mg/kg	<50	<50	<50	<50	<50
^ >C10 - C16 Fraction minus Naphthalene (F2)	----	50	mg/kg	<50	<50	<50	<50	<50
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	<0.0002	----
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.0002	mg/kg	<0.0002	<0.0002	<0.0002	<0.0002	----
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.0002	mg/kg	<0.0002	<0.0002	<0.0002	<0.0002	----
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.0002	mg/kg	<0.0002	<0.0002	<0.0002	<0.0002	----
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.0002	mg/kg	<0.0002	<0.0002	<0.0002	<0.0002	----
Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.0002	mg/kg	<0.0002	<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	<0.001	----
Perfluoropentanoic acid (PFPeA)	2706-90-3	0.0002	mg/kg	<0.0002	<0.0002	<0.0002	<0.0002	----
Perfluorohexanoic acid (PFHxA)	307-24-4	0.0002	mg/kg	<0.0002	<0.0002	<0.0002	<0.0002	----
Perfluoroheptanoic acid (PFHpA)	375-85-9	0.0002	mg/kg	<0.0002	<0.0002	<0.0002	<0.0002	----

Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH143_1.0_220119	SOP_BH144_0.3_220119	SOP_BH144_0.6_220119	SOP_BH145_0.3_220119	SOP_BH145_1.0_220119
				Sampling date / time	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00
					ES2202264-011	ES2202264-012	ES2202264-013	ES2202264-014	ES2202264-015
					Result	Result	Result	Result	Result
EP231B: Perfluoroalkyl Carboxylic Acids - Continued									
Perfluorooctanoic acid (PFOA)	335-67-1	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	<0.0002	----
Perfluorononanoic acid (PFNA)	375-95-1	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	<0.0002	----
Perfluorodecanoic acid (PFDA)	335-76-2	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	<0.0002	----
Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	<0.0002	----
Perfluorododecanoic acid (PFDoDA)	307-55-1	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	<0.0002	----
Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	<0.0002	----
Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.0005	mg/kg		<0.0005	<0.0005	<0.0005	<0.0005	----
EP231C: Perfluoroalkyl Sulfonamides									
Perfluorooctane sulfonamide (FOSA)	754-91-6	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	<0.0002	----
N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.0005	mg/kg		<0.0005	<0.0005	<0.0005	<0.0005	----
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.0005	mg/kg		<0.0005	<0.0005	<0.0005	<0.0005	----
N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.0005	mg/kg		<0.0005	<0.0005	<0.0005	<0.0005	----
N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.0005	mg/kg		<0.0005	<0.0005	<0.0005	<0.0005	----
N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	<0.0002	----
N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.0002	mg/kg		<0.0002	<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	<0.0005	----
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.0005	mg/kg		<0.0005	<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	<0.0005	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	SOP_BH143_1.0_220119	SOP_BH144_0.3_220119	SOP_BH144_0.6_220119	SOP_BH145_0.3_220119	SOP_BH145_1.0_220119
			Sampling date / time	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00
Compound	CAS Number	LOR	Unit	ES2202264-011	ES2202264-012	ES2202264-013	ES2202264-014	ES2202264-015
				Result	Result	Result	Result	Result
EP231D: (n:2) Fluorotelomer Sulfonic Acids - Continued								
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.0005	mg/kg	<0.0005	<0.0005	<0.0005	<0.0005	----
EP231P: PFAS Sums								
Sum of PFAS	----	0.0002	mg/kg	<0.0002	<0.0002	<0.0002	<0.0002	----
Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.0002	mg/kg	<0.0002	<0.0002	<0.0002	<0.0002	----
Sum of PFAS (WA DER List)	----	0.0002	mg/kg	<0.0002	<0.0002	<0.0002	<0.0002	----
EP066S: PCB Surrogate								
Decachlorobiphenyl	2051-24-3	0.1	%	106	115	117	116	116
EP068S: Organochlorine Pesticide Surrogate								
Dibromo-DDE	21655-73-2	0.05	%	100	113	117	121	116
EP068T: Organophosphorus Pesticide Surrogate								
DEF	78-48-8	0.05	%	77.1	76.4	77.6	91.8	84.4
EP074S: VOC Surrogates								
1.2-Dichloroethane-D4	17060-07-0	0.5	%	85.9	----	81.1	----	87.4
Toluene-D8	2037-26-5	0.5	%	85.2	----	80.9	----	87.7
4-Bromofluorobenzene	460-00-4	0.5	%	83.5	----	81.3	----	88.0
EP075(SIM)S: Phenolic Compound Surrogates								
Phenol-d6	13127-88-3	0.5	%	92.2	92.4	96.3	91.2	95.0
2-Chlorophenol-D4	93951-73-6	0.5	%	90.2	91.3	94.0	89.6	91.2
2.4.6-Tribromophenol	118-79-6	0.5	%	69.0	63.1	69.0	65.4	69.1
EP075(SIM)T: PAH Surrogates								
2-Fluorobiphenyl	321-60-8	0.5	%	95.0	95.8	100	94.6	100
Anthracene-d10	1719-06-8	0.5	%	106	105	111	106	111
4-Terphenyl-d14	1718-51-0	0.5	%	91.4	92.2	98.5	93.2	98.4
EP075S: Acid Extractable Surrogates								
2-Fluorophenol	367-12-4	0.5	%	103	----	113	----	97.3
Phenol-d6	13127-88-3	0.5	%	99.3	----	111	----	93.1
2-Chlorophenol-D4	93951-73-6	0.5	%	103	----	109	----	95.1
2.4.6-Tribromophenol	118-79-6	0.5	%	80.6	----	75.9	----	82.0
EP075T: Base/Neutral Extractable Surrogates								
Nitrobenzene-D5	4165-60-0	0.5	%	88.7	----	105	----	81.3
1.2-Dichlorobenzene-D4	2199-69-1	0.5	%	87.3	----	93.4	----	84.7

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	SOP_BH143_1.0_220119	SOP_BH144_0.3_220119	SOP_BH144_0.6_220119	SOP_BH145_0.3_220119	SOP_BH145_1.0_220119
			Sampling date / time	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00
Compound	CAS Number	LOR	Unit	ES2202264-011	ES2202264-012	ES2202264-013	ES2202264-014	ES2202264-015
				Result	Result	Result	Result	Result
EP075T: Base/Neutral Extractable Surrogates - Continued								
2-Fluorobiphenyl	321-60-8	0.5	%	98.8	----	94.0	----	96.1
Anthracene-d10	1719-06-8	0.5	%	112	----	119	----	114
4-Terphenyl-d14	1718-51-0	0.5	%	92.0	----	92.6	----	85.4
EP080S: TPH(V)/BTEX Surrogates								
1.2-Dichloroethane-D4	17060-07-0	0.2	%	83.5	94.1	78.7	100	84.9
Toluene-D8	2037-26-5	0.2	%	86.0	83.8	82.0	92.4	88.6
4-Bromofluorobenzene	460-00-4	0.2	%	85.0	89.0	82.7	111	89.6
EP231S: PFAS Surrogate								
13C4-PFOS	----	0.0002	%	106	104	106	104	----
13C8-PFOA	----	0.0002	%	101	102	100	102	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	SOP_BH145_5.0_220119	DUP02_220119	DUP03_220119	TRIP03_220119	DUP04_220119
			Sampling date / time	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00
Compound	CAS Number	LOR	Unit	ES2202264-016	ES2202264-017	ES2202264-018	ES2202264-019	ES2202264-020
				Result	Result	Result	Result	Result
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	----	0.1	%	8.3	9.2	10.3	11.0	8.4
EG005(ED093)T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	9	8	----	----	8
Cadmium	7440-43-9	1	mg/kg	<1	<1	----	----	<1
Chromium	7440-47-3	2	mg/kg	8	8	----	----	7
Copper	7440-50-8	5	mg/kg	46	39	----	----	48
Lead	7439-92-1	5	mg/kg	16	16	----	----	16
Nickel	7440-02-0	2	mg/kg	46	25	----	----	42
Zinc	7440-66-6	5	mg/kg	280	176	----	----	270
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
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

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	SOP_BH145_5.0_220119	DUP02_220119	DUP03_220119	TRIP03_220119	DUP04_220119
			Sampling date / time	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00
Compound	CAS Number	LOR	Unit	ES2202264-016	ES2202264-017	ES2202264-018	ES2202264-019	ES2202264-020
				Result	Result	Result	Result	Result
EP068A: Organochlorine Pesticides (OC) - Continued								
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
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	----	----	----
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	----	0.6	----	----	----
tert-Butylbenzene	98-06-6	0.5	mg/kg	----	<0.5	----	----	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	SOP_BH145_5.0_220119	DUP02_220119	DUP03_220119	TRIP03_220119	DUP04_220119
			Sampling date / time	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00
Compound	CAS Number	LOR	Unit	ES2202264-016	ES2202264-017	ES2202264-018	ES2202264-019	ES2202264-020
				Result	Result	Result	Result	Result
EP074A: Monocyclic Aromatic Hydrocarbons - Continued								
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	----	----	----
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	----	----	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	SOP_BH145_5.0_220119	DUP02_220119	DUP03_220119	TRIP03_220119	DUP04_220119
			Sampling date / time	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00
Compound	CAS Number	LOR	Unit	ES2202264-016	ES2202264-017	ES2202264-018	ES2202264-019	ES2202264-020
				Result	Result	Result	Result	Result
EP074E: Halogenated Aliphatic Compounds - Continued								
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)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

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	SOP_BH145_5.0_220119	DUP02_220119	DUP03_220119	TRIP03_220119	DUP04_220119
				Sampling date / time	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00
Compound	CAS Number	LOR	Unit		ES2202264-016	ES2202264-017	ES2202264-018	ES2202264-019	ES2202264-020
					Result	Result	Result	Result	Result
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued									
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg		<0.5	<0.5	----	----	<0.5
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg		<0.5	<0.5	----	----	<0.5
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg		<0.5	<0.5	----	----	<0.5
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg		<0.5	**0.5**	----	----	<0.5
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg		<0.5	<0.5	----	----	<0.5
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg		**0.6**	**0.6**	----	----	**0.6**
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg		**1.2**	**1.2**	----	----	**1.2**
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	----	----	----
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									
2-Methylnaphthalene	91-57-6	0.5	mg/kg		----	**1.4**	----	----	----
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									

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	SOP_BH145_5.0_220119	DUP02_220119	DUP03_220119	TRIP03_220119	DUP04_220119
				Sampling date / time	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00
Compound	CAS Number	LOR	Unit		ES2202264-016	ES2202264-017	ES2202264-018	ES2202264-019	ES2202264-020
					Result	Result	Result	Result	Result
EP075D: Nitrosamines - Continued									
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									
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									

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	SOP_BH145_5.0_220119	DUP02_220119	DUP03_220119	TRIP03_220119	DUP04_220119
			Sampling date / time	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00
Compound	CAS Number	LOR	Unit	ES2202264-016	ES2202264-017	ES2202264-018	ES2202264-019	ES2202264-020
				Result	Result	Result	Result	Result
EP075G: Chlorinated Hydrocarbons - Continued								
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	25	----	----	<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	31	----	----	<10
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg	<10	31	----	----	<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

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	SOP_BH145_5.0_220119	DUP02_220119	DUP03_220119	TRIP03_220119	DUP04_220119
			Sampling date / time	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00
Compound	CAS Number	LOR	Unit	ES2202264-016	ES2202264-017	ES2202264-018	ES2202264-019	ES2202264-020
				Result	Result	Result	Result	Result
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions - Continued								
^ >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	<0.0002	<0.0002
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.0002	mg/kg	<0.0002	----	<0.0002	<0.0002	<0.0002
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.0002	mg/kg	<0.0002	----	<0.0002	<0.0002	<0.0002
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.0002	mg/kg	<0.0002	----	<0.0002	<0.0002	<0.0002
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.0002	mg/kg	<0.0002	----	<0.0002	<0.0002	<0.0002
Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.0002	mg/kg	<0.0002	----	<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	<0.001
Perfluoropentanoic acid (PFPeA)	2706-90-3	0.0002	mg/kg	<0.0002	----	<0.0002	<0.0002	<0.0002
Perfluorohexanoic acid (PFHxA)	307-24-4	0.0002	mg/kg	<0.0002	----	<0.0002	<0.0002	<0.0002
Perfluoroheptanoic acid (PFHpA)	375-85-9	0.0002	mg/kg	<0.0002	----	<0.0002	<0.0002	<0.0002
Perfluorooctanoic acid (PFOA)	335-67-1	0.0002	mg/kg	<0.0002	----	<0.0002	<0.0002	<0.0002
Perfluorononanoic acid (PFNA)	375-95-1	0.0002	mg/kg	<0.0002	----	<0.0002	<0.0002	<0.0002
Perfluorodecanoic acid (PFDA)	335-76-2	0.0002	mg/kg	<0.0002	----	<0.0002	<0.0002	<0.0002
Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.0002	mg/kg	<0.0002	----	<0.0002	<0.0002	<0.0002

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	SOP_BH145_5.0_220119	DUP02_220119	DUP03_220119	TRIP03_220119	DUP04_220119
			Sampling date / time	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00
Compound	CAS Number	LOR	Unit	ES2202264-016	ES2202264-017	ES2202264-018	ES2202264-019	ES2202264-020
				Result	Result	Result	Result	Result
EP231B: Perfluoroalkyl Carboxylic Acids - Continued								
Perfluorododecanoic acid (PFDoDA)	307-55-1	0.0002	mg/kg	<0.0002	----	<0.0002	<0.0002	<0.0002
Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.0002	mg/kg	<0.0002	----	<0.0002	<0.0002	<0.0002
Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.0005	mg/kg	<0.0005	----	<0.0005	<0.0005	<0.0005
EP231C: Perfluoroalkyl Sulfonamides								
Perfluorooctane sulfonamide (FOSA)	754-91-6	0.0002	mg/kg	<0.0002	----	<0.0002	<0.0002	<0.0002
N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.0005	mg/kg	<0.0005	----	<0.0005	<0.0005	<0.0005
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.0005	mg/kg	<0.0005	----	<0.0005	<0.0005	<0.0005
N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.0005	mg/kg	<0.0005	----	<0.0005	<0.0005	<0.0005
N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.0005	mg/kg	<0.0005	----	<0.0005	<0.0005	<0.0005
N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.0002	mg/kg	<0.0002	----	<0.0002	<0.0002	<0.0002
N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.0002	mg/kg	<0.0002	----	<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	<0.0005
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.0005	mg/kg	<0.0005	----	<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	<0.0005
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.0005	mg/kg	<0.0005	----	<0.0005	<0.0005	<0.0005
EP231P: PFAS Sums								
Sum of PFAS	----	0.0002	mg/kg	<0.0002	----	<0.0002	<0.0002	<0.0002
Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.0002	mg/kg	<0.0002	----	<0.0002	<0.0002	<0.0002

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	SOP_BH145_5.0_220119	DUP02_220119	DUP03_220119	TRIP03_220119	DUP04_220119
			Sampling date / time	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00
Compound	CAS Number	LOR	Unit	ES2202264-016	ES2202264-017	ES2202264-018	ES2202264-019	ES2202264-020
				Result	Result	Result	Result	Result
EP231P: PFAS Sums - Continued								
Sum of PFAS (WA DER List)	----	0.0002	mg/kg	<0.0002	----	<0.0002	<0.0002	<0.0002
EP066S: PCB Surrogate								
Decachlorobiphenyl	2051-24-3	0.1	%	103	116	----	----	114
EP068S: Organochlorine Pesticide Surrogate								
Dibromo-DDE	21655-73-2	0.05	%	124	126	----	----	132
EP068T: Organophosphorus Pesticide Surrogate								
DEF	78-48-8	0.05	%	84.9	85.8	----	----	85.2
EP074S: VOC Surrogates								
1.2-Dichloroethane-D4	17060-07-0	0.5	%	----	108	----	----	----
Toluene-D8	2037-26-5	0.5	%	----	108	----	----	----
4-Bromofluorobenzene	460-00-4	0.5	%	----	108	----	----	----
EP075(SIM)S: Phenolic Compound Surrogates								
Phenol-d6	13127-88-3	0.5	%	102	94.9	----	----	91.7
2-Chlorophenol-D4	93951-73-6	0.5	%	101	93.8	----	----	92.2
2.4.6-Tribromophenol	118-79-6	0.5	%	77.0	68.4	----	----	64.4
EP075(SIM)T: PAH Surrogates								
2-Fluorobiphenyl	321-60-8	0.5	%	108	99.1	----	----	95.8
Anthracene-d10	1719-06-8	0.5	%	119	109	----	----	104
4-Terphenyl-d14	1718-51-0	0.5	%	105	97.4	----	----	93.7
EP075S: Acid Extractable Surrogates								
2-Fluorophenol	367-12-4	0.5	%	----	89.5	----	----	----
Phenol-d6	13127-88-3	0.5	%	----	89.4	----	----	----
2-Chlorophenol-D4	93951-73-6	0.5	%	----	91.3	----	----	----
2.4.6-Tribromophenol	118-79-6	0.5	%	----	51.4	----	----	----
EP075T: Base/Neutral Extractable Surrogates								
Nitrobenzene-D5	4165-60-0	0.5	%	----	78.8	----	----	----
1.2-Dichlorobenzene-D4	2199-69-1	0.5	%	----	89.9	----	----	----
2-Fluorobiphenyl	321-60-8	0.5	%	----	99.6	----	----	----
Anthracene-d10	1719-06-8	0.5	%	----	117	----	----	----
4-Terphenyl-d14	1718-51-0	0.5	%	----	83.8	----	----	----
EP080S: TPH(V)/BTEX Surrogates								
1.2-Dichloroethane-D4	17060-07-0	0.2	%	91.1	105	----	----	98.8
Toluene-D8	2037-26-5	0.2	%	93.0	110	----	----	93.4

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	SOP_BH145_5.0_220119	DUP02_220119	DUP03_220119	TRIP03_220119	DUP04_220119
				Sampling date / time	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00
Compound	CAS Number	LOR	Unit		ES2202264-016	ES2202264-017	ES2202264-018	ES2202264-019	ES2202264-020
					Result	Result	Result	Result	Result
EP080S: TPH(V)/BTEX Surrogates - Continued									
4-Bromofluorobenzene	460-00-4	0.2	%		98.8	110	----	----	105
EP231S: PFAS Surrogate									
13C4-PFOS	----	0.0002	%		106	----	112	106	108
13C8-PFOA	----	0.0002	%		104	----	101	99.0	106

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	SOP_BH102_0.7_220120	SOP_BH102_3.0_220120	SOP_BH107_1.0_220120	SOP_BH107_2.0_220120	SOP_BH108_0.4_220120
			Sampling date / time	20-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00	19-Jan-2022 00:00
Compound	CAS Number	LOR	Unit	ES2202264-022	ES2202264-023	ES2202264-024	ES2202264-025	ES2202264-026
				Result	Result	Result	Result	Result
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	----	1.0	%	10.9	9.9	11.2	11.2	19.9
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	480	----	234	----	151
APPROVED IDENTIFIER:	----	-	--	A. SMYLIE	----	A. SMYLIE	----	A. SMYLIE
EG005(ED093)T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	<5	6	<5	7	<5
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	<1	<1
Chromium	7440-47-3	2	mg/kg	12	5	4	5	5
Copper	7440-50-8	5	mg/kg	<5	24	24	41	50
Lead	7439-92-1	5	mg/kg	15	10	14	14	<5
Nickel	7440-02-0	2	mg/kg	2	3	4	14	68
Zinc	7440-66-6	5	mg/kg	9	28	36	98	27
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	<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	<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

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	SOP_BH102_0.7_220120	SOP_BH102_3.0_220120	SOP_BH107_1.0_220120	SOP_BH107_2.0_220120	SOP_BH108_0.4_220120
				Sampling date / time	20-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00	19-Jan-2022 00:00
Compound	CAS Number	LOR	Unit		ES2202264-022	ES2202264-023	ES2202264-024	ES2202264-025	ES2202264-026
					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

Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH102_0.7_220120	SOP_BH102_3.0_220120	SOP_BH107_1.0_220120	SOP_BH107_2.0_220120	SOP_BH108_0.4_220120
				Sampling date / time	20-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00	19-Jan-2022 00:00
					ES2202264-022	ES2202264-023	ES2202264-024	ES2202264-025	ES2202264-026
					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**)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH102_0.7_220120	SOP_BH102_3.0_220120	SOP_BH107_1.0_220120	SOP_BH107_2.0_220120	SOP_BH108_0.4_220120
				Sampling date / time	20-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00	19-Jan-2022 00:00
					ES2202264-022	ES2202264-023	ES2202264-024	ES2202264-025	ES2202264-026
					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)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		<0.5	<0.5	<0.5	<0.5	<0.5
Anthracene	120-12-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5

Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH102_0.7_220120	SOP_BH102_3.0_220120	SOP_BH107_1.0_220120	SOP_BH107_2.0_220120	SOP_BH108_0.4_220120
				Sampling date / time	20-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00	19-Jan-2022 00:00
					ES2202264-022	ES2202264-023	ES2202264-024	ES2202264-025	ES2202264-026
					Result	Result	Result	Result	Result
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued									
Fluoranthene	206-44-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Pyrene	129-00-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benz(a)anthracene	56-55-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Chrysene	218-01-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg		<0.5	<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		<0.5	<0.5	<0.5	<0.5	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ **Sum of polycyclic aromatic hydrocarbons**	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ **Benzo(a)pyrene TEQ (zero)**	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ **Benzo(a)pyrene TEQ (half LOR)**	----	0.5	mg/kg		**0.6**	**0.6**	**0.6**	**0.6**	**0.6**
^ **Benzo(a)pyrene TEQ (LOR)**	----	0.5	mg/kg		**1.2**	**1.2**	**1.2**	**1.2**	**1.2**
EP075A: 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	0.5	mg/kg		<0.5	----	<0.5	----	<0.5
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	1	mg/kg		<1	----	<1	----	<1
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	SOP_BH102_0.7_220120	SOP_BH102_3.0_220120	SOP_BH107_1.0_220120	SOP_BH107_2.0_220120	SOP_BH108_0.4_220120
				Sampling date / time	20-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00	19-Jan-2022 00:00
Compound	CAS Number	LOR	Unit		ES2202264-022	ES2202264-023	ES2202264-024	ES2202264-025	ES2202264-026
					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

Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH102_0.7_220120	SOP_BH102_3.0_220120	SOP_BH107_1.0_220120	SOP_BH107_2.0_220120	SOP_BH108_0.4_220120
				Sampling date / time	20-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00	19-Jan-2022 00:00
					ES2202264-022	ES2202264-023	ES2202264-024	ES2202264-025	ES2202264-026
					Result	Result	Result	Result	Result
EP075E: Nitroaromatics and Ketones - Continued									
Chlorobenzilate	510-15-6	0.5	mg/kg		<0.5	----	<0.5	----	<0.5
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	<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	<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	SOP_BH102_0.7_220120	SOP_BH102_3.0_220120	SOP_BH107_1.0_220120	SOP_BH107_2.0_220120	SOP_BH108_0.4_220120
			Sampling date / time	20-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00	19-Jan-2022 00:00
Compound	CAS Number	LOR	Unit	ES2202264-022	ES2202264-023	ES2202264-024	ES2202264-025	ES2202264-026
				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	<100	<100	<100	<100
>C34 - C40 Fraction	----	100	mg/kg	<100	<100	<100	<100	<100
^ >C10 - C40 Fraction (sum)	----	50	mg/kg	<50	<50	<50	<50	<50
^ >C10 - C16 Fraction minus Naphthalene (F2)	----	50	mg/kg	<50	<50	<50	<50	<50
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
EP066S: PCB Surrogate								
Decachlorobiphenyl	2051-24-3	0.1	%	**126**	**101**	**114**	**117**	**108**
EP068S: Organochlorine Pesticide Surrogate								
Dibromo-DDE	21655-73-2	0.05	%	**130**	**124**	**108**	**114**	**106**
EP068T: Organophosphorus Pesticide Surrogate								
DEF	78-48-8	0.05	%	**79.3**	**59.9**	**94.9**	**91.6**	**92.8**
EP074S: VOC Surrogates								
1.2-Dichloroethane-D4	17060-07-0	0.5	%	**97.7**	----	**115**	----	**92.1**
Toluene-D8	2037-26-5	0.5	%	**94.9**	----	**114**	----	**90.8**
4-Bromofluorobenzene	460-00-4	0.5	%	**97.8**	----	**112**	----	**86.3**
EP075(SIM)S: Phenolic Compound Surrogates								
Phenol-d6	13127-88-3	0.5	%	**96.7**	**91.0**	**80.2**	**83.9**	**84.4**
2-Chlorophenol-D4	93951-73-6	0.5	%	**95.2**	**89.3**	**81.7**	**85.8**	**84.7**
2.4.6-Tribromophenol	118-79-6	0.5	%	**66.8**	**62.2**	**58.8**	**59.7**	**57.2**
EP075(SIM)T: PAH Surrogates								
2-Fluorobiphenyl	321-60-8	0.5	%	**98.7**	**94.4**	**101**	**99.4**	**103**
Anthracene-d10	1719-06-8	0.5	%	**107**	**96.9**	**102**	**108**	**109**

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	SOP_BH102_0.7_220120	SOP_BH102_3.0_220120	SOP_BH107_1.0_220120	SOP_BH107_2.0_220120	SOP_BH108_0.4_220120
				Sampling date / time	20-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00	19-Jan-2022 00:00
Compound	CAS Number	LOR	Unit		ES2202264-022	ES2202264-023	ES2202264-024	ES2202264-025	ES2202264-026
					Result	Result	Result	Result	Result
EP075(SIM)T: PAH Surrogates - Continued									
4-Terphenyl-d14	1718-51-0	0.5	%		95.5	94.7	94.1	99.9	102
EP075S: Acid Extractable Surrogates									
2-Fluorophenol	367-12-4	0.5	%		105	----	101	----	109
Phenol-d6	13127-88-3	0.5	%		103	----	93.0	----	97.7
2-Chlorophenol-D4	93951-73-6	0.5	%		107	----	96.0	----	105
2.4.6-Tribromophenol	118-79-6	0.5	%		77.4	----	70.9	----	80.1
EP075T: Base/Neutral Extractable Surrogates									
Nitrobenzene-D5	4165-60-0	0.5	%		98.2	----	103	----	100
1.2-Dichlorobenzene-D4	2199-69-1	0.5	%		95.2	----	86.0	----	91.5
2-Fluorobiphenyl	321-60-8	0.5	%		95.0	----	89.1	----	97.8
Anthracene-d10	1719-06-8	0.5	%		115	----	116	----	116
4-Terphenyl-d14	1718-51-0	0.5	%		78.2	----	97.4	----	97.4
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	0.2	%		95.6	122	113	120	90.0
Toluene-D8	2037-26-5	0.2	%		89.8	120	108	117	86.1
4-Bromofluorobenzene	460-00-4	0.2	%		97.6	124	111	108	84.8

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	SOP_BH108_3.0_220120	SOP_BH109_0.3_220120	SOP_BH109_1.0_220120	SOP_BH120_0.5_220120	SOP_BH120_3.0_220120
			Sampling date / time	19-Jan-2022 00:00	19-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00
Compound	CAS Number	LOR	Unit	ES2202264-027	ES2202264-028	ES2202264-029	ES2202264-030	ES2202264-031
				Result	Result	Result	Result	Result
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	----	1.0	%	9.0	18.3	22.3	11.8	7.0
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	----	458	----	159	----
APPROVED IDENTIFIER:	----	-	--	----	A. SMYLIE	----	A. SMYLIE	----
EG005(ED093)T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	7	9	7	<5	5
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	<1	<1
Chromium	7440-47-3	2	mg/kg	5	12	14	6	5
Copper	7440-50-8	5	mg/kg	44	19	14	43	39
Lead	7439-92-1	5	mg/kg	16	12	15	9	18
Nickel	7440-02-0	2	mg/kg	15	14	<2	5	32
Zinc	7440-66-6	5	mg/kg	115	7	<5	9	117
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	<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	<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

Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH108_3.0_220120	SOP_BH109_0.3_220120	SOP_BH109_1.0_220120	SOP_BH120_0.5_220120	SOP_BH120_3.0_220120
				Sampling date / time	19-Jan-2022 00:00	19-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00
					ES2202264-027	ES2202264-028	ES2202264-029	ES2202264-030	ES2202264-031
					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

Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH108_3.0_220120	SOP_BH109_0.3_220120	SOP_BH109_1.0_220120	SOP_BH120_0.5_220120	SOP_BH120_3.0_220120
				Sampling date / time	19-Jan-2022 00:00	19-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00
					ES2202264-027	ES2202264-028	ES2202264-029	ES2202264-030	ES2202264-031
					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	SOP_BH108_3.0_220120	SOP_BH109_0.3_220120	SOP_BH109_1.0_220120	SOP_BH120_0.5_220120	SOP_BH120_3.0_220120
				Sampling date / time	19-Jan-2022 00:00	19-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00
Compound	CAS Number	LOR	Unit		ES2202264-027	ES2202264-028	ES2202264-029	ES2202264-030	ES2202264-031
					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)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		<0.5	<0.5	<0.5	<0.5	<0.5
Anthracene	120-12-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5

Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH108_3.0_220120	SOP_BH109_0.3_220120	SOP_BH109_1.0_220120	SOP_BH120_0.5_220120	SOP_BH120_3.0_220120
				Sampling date / time	19-Jan-2022 00:00	19-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00
					ES2202264-027	ES2202264-028	ES2202264-029	ES2202264-030	ES2202264-031
					Result	Result	Result	Result	Result
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued									
Fluoranthene	206-44-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Pyrene	129-00-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benz(a)anthracene	56-55-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Chrysene	218-01-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg		<0.5	<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		<0.5	<0.5	<0.5	<0.5	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ **Sum of polycyclic aromatic hydrocarbons**	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ **Benzo(a)pyrene TEQ (zero)**	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ **Benzo(a)pyrene TEQ (half LOR)**	----	0.5	mg/kg		**0.6**	**0.6**	**0.6**	**0.6**	**0.6**
^ **Benzo(a)pyrene TEQ (LOR)**	----	0.5	mg/kg		**1.2**	**1.2**	**1.2**	**1.2**	**1.2**
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									
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**)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH108_3.0_220120	SOP_BH109_0.3_220120	SOP_BH109_1.0_220120	SOP_BH120_0.5_220120	SOP_BH120_3.0_220120
				Sampling date / time	19-Jan-2022 00:00	19-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00
					ES2202264-027	ES2202264-028	ES2202264-029	ES2202264-030	ES2202264-031
					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

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	SOP_BH108_3.0_220120	SOP_BH109_0.3_220120	SOP_BH109_1.0_220120	SOP_BH120_0.5_220120	SOP_BH120_3.0_220120
			Sampling date / time	19-Jan-2022 00:00	19-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00
Compound	CAS Number	LOR	Unit	ES2202264-027	ES2202264-028	ES2202264-029	ES2202264-030	ES2202264-031
				Result	Result	Result	Result	Result
EP075E: Nitroaromatics and Ketones - Continued								
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
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	<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	SOP_BH108_3.0_220120	SOP_BH109_0.3_220120	SOP_BH109_1.0_220120	SOP_BH120_0.5_220120	SOP_BH120_3.0_220120
			Sampling date / time	19-Jan-2022 00:00	19-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00
Compound	CAS Number	LOR	Unit	ES2202264-027	ES2202264-028	ES2202264-029	ES2202264-030	ES2202264-031
				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	<100	<100	<100	<100
>C34 - C40 Fraction	----	100	mg/kg	<100	<100	<100	<100	<100
^ >C10 - C40 Fraction (sum)	----	50	mg/kg	<50	<50	<50	<50	<50
^ >C10 - C16 Fraction minus Naphthalene (F2)	----	50	mg/kg	<50	<50	<50	<50	<50
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
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.0002	mg/kg	----	----	----	<0.0002	<0.0002
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.0002	mg/kg	----	----	----	<0.0002	<0.0002
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.0002	mg/kg	----	----	----	<0.0002	<0.0002
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.0002	mg/kg	----	----	----	<0.0002	<0.0002
Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.0002	mg/kg	----	----	----	<0.0002	<0.0002
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

Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH108_3.0_220120	SOP_BH109_0.3_220120	SOP_BH109_1.0_220120	SOP_BH120_0.5_220120	SOP_BH120_3.0_220120
				Sampling date / time	19-Jan-2022 00:00	19-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00
					ES2202264-027	ES2202264-028	ES2202264-029	ES2202264-030	ES2202264-031
					Result	Result	Result	Result	Result
EP231B: Perfluoroalkyl Carboxylic Acids - Continued									
Perfluorooctanoic acid (PFOA)	335-67-1	0.0002	mg/kg		----	----	----	<0.0002	<0.0002
Perfluorononanoic acid (PFNA)	375-95-1	0.0002	mg/kg		----	----	----	<0.0002	<0.0002
Perfluorodecanoic acid (PFDA)	335-76-2	0.0002	mg/kg		----	----	----	<0.0002	<0.0002
Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.0002	mg/kg		----	----	----	<0.0002	<0.0002
Perfluorododecanoic acid (PFDoDA)	307-55-1	0.0002	mg/kg		----	----	----	<0.0002	<0.0002
Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.0002	mg/kg		----	----	----	<0.0002	<0.0002
Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.0005	mg/kg		----	----	----	<0.0005	<0.0005
EP231C: Perfluoroalkyl Sulfonamides									
Perfluorooctane sulfonamide (FOSA)	754-91-6	0.0002	mg/kg		----	----	----	<0.0002	<0.0002
N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.0005	mg/kg		----	----	----	<0.0005	<0.0005
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.0005	mg/kg		----	----	----	<0.0005	<0.0005
N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.0005	mg/kg		----	----	----	<0.0005	<0.0005
N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.0005	mg/kg		----	----	----	<0.0005	<0.0005
N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.0002	mg/kg		----	----	----	<0.0002	<0.0002
N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.0002	mg/kg		----	----	----	<0.0002	<0.0002
EP231D: (n:2) Fluorotelomer Sulfonic Acids									
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

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	SOP_BH108_3.0_220120	SOP_BH109_0.3_220120	SOP_BH109_1.0_220120	SOP_BH120_0.5_220120	SOP_BH120_3.0_220120
			Sampling date / time	19-Jan-2022 00:00	19-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00
Compound	CAS Number	LOR	Unit	ES2202264-027	ES2202264-028	ES2202264-029	ES2202264-030	ES2202264-031
				Result	Result	Result	Result	Result
EP231D: (n:2) Fluorotelomer Sulfonic Acids - Continued								
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.0005	mg/kg	----	----	----	<0.0005	<0.0005
EP231P: PFAS Sums								
Sum of PFAS	----	0.0002	mg/kg	----	----	----	<0.0002	<0.0002
Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.0002	mg/kg	----	----	----	<0.0002	<0.0002
Sum of PFAS (WA DER List)	----	0.0002	mg/kg	----	----	----	<0.0002	<0.0002
EP066S: PCB Surrogate								
Decachlorobiphenyl	2051-24-3	0.1	%	120	122	103	121	116
EP068S: Organochlorine Pesticide Surrogate								
Dibromo-DDE	21655-73-2	0.05	%	110	111	114	126	114
EP068T: Organophosphorus Pesticide Surrogate								
DEF	78-48-8	0.05	%	95.6	99.6	103	102	99.3
EP074S: VOC Surrogates								
1.2-Dichloroethane-D4	17060-07-0	0.5	%	----	----	88.2	----	100
Toluene-D8	2037-26-5	0.5	%	----	----	86.6	----	92.6
4-Bromofluorobenzene	460-00-4	0.5	%	----	----	83.7	----	91.9
EP075(SIM)S: Phenolic Compound Surrogates								
Phenol-d6	13127-88-3	0.5	%	84.1	80.3	80.9	81.7	80.8
2-Chlorophenol-D4	93951-73-6	0.5	%	85.9	79.3	80.6	81.9	82.1
2.4.6-Tribromophenol	118-79-6	0.5	%	55.6	53.6	52.7	53.1	52.9
EP075(SIM)T: PAH Surrogates								
2-Fluorobiphenyl	321-60-8	0.5	%	97.9	102	102	101	102
Anthracene-d10	1719-06-8	0.5	%	106	101	101	107	105
4-Terphenyl-d14	1718-51-0	0.5	%	99.2	95.4	95.8	99.6	98.9
EP075S: Acid Extractable Surrogates								
2-Fluorophenol	367-12-4	0.5	%	----	----	107	----	112
Phenol-d6	13127-88-3	0.5	%	----	----	93.9	----	105
2-Chlorophenol-D4	93951-73-6	0.5	%	----	----	103	----	107
2.4.6-Tribromophenol	118-79-6	0.5	%	----	----	88.3	----	82.6
EP075T: Base/Neutral Extractable Surrogates								
Nitrobenzene-D5	4165-60-0	0.5	%	----	----	96.5	----	106
1.2-Dichlorobenzene-D4	2199-69-1	0.5	%	----	----	88.6	----	94.4

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	SOP_BH108_3.0_220120	SOP_BH109_0.3_220120	SOP_BH109_1.0_220120	SOP_BH120_0.5_220120	SOP_BH120_3.0_220120
				Sampling date / time	19-Jan-2022 00:00	19-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00
Compound	CAS Number	LOR	Unit		ES2202264-027	ES2202264-028	ES2202264-029	ES2202264-030	ES2202264-031
					Result	Result	Result	Result	Result
EP075T: Base/Neutral Extractable Surrogates - Continued									
2-Fluorobiphenyl	321-60-8	0.5	%		----	----	91.8	----	92.0
Anthracene-d10	1719-06-8	0.5	%		----	----	116	----	117
4-Terphenyl-d14	1718-51-0	0.5	%		----	----	101	----	106
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	0.2	%		102	90.6	86.3	98.1	97.8
Toluene-D8	2037-26-5	0.2	%		98.7	86.2	82.1	93.2	87.7
4-Bromofluorobenzene	460-00-4	0.2	%		97.8	88.5	83.4	93.1	91.4
EP231S: PFAS Surrogate									
13C4-PFOS	----	0.0002	%		----	----	----	100	112
13C8-PFOA	----	0.0002	%		----	----	----	98.5	98.5

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	SOP_BH121_1.0_220120	SOP_BH121_5.0_220120	SOP_BH101_0.5_220120	SOP_BH101_1.3_220120	SOP_BH101_2.0_220120
			Sampling date / time	20-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00
Compound	CAS Number	LOR	Unit	ES2202264-032	ES2202264-033	ES2202264-034	ES2202264-035	ES2202264-036
				Result	Result	Result	Result	Result
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	----	1.0	%	9.8	5.3	20.6	8.1	20.6
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	133	----	340	----	----
APPROVED IDENTIFIER:	----	-	--	A. SMYLIE	----	A. SMYLIE	----	----
EG005(ED093)T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	6	<5	6	<5	6
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	<1	<1
Chromium	7440-47-3	2	mg/kg	4	6	10	2	11
Copper	7440-50-8	5	mg/kg	21	37	19	<5	12
Lead	7439-92-1	5	mg/kg	6	17	14	<5	15
Nickel	7440-02-0	2	mg/kg	<2	25	8	2	<2
Zinc	7440-66-6	5	mg/kg	15	100	16	6	<5
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	<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	<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

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	SOP_BH121_1.0_220120	SOP_BH121_5.0_220120	SOP_BH101_0.5_220120	SOP_BH101_1.3_220120	SOP_BH101_2.0_220120
			Sampling date / time	20-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00
Compound	CAS Number	LOR	Unit	ES2202264-032	ES2202264-033	ES2202264-034	ES2202264-035	ES2202264-036
				Result	Result	Result	Result	Result
EP068A: Organochlorine Pesticides (OC) - Continued								
Dieldrin	60-57-1	0.05	mg/kg	<0.05	<0.05	**0.08**	**0.67**	**0.06**
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	**0.08**	**0.67**	**0.06**
^ **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

Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH121_1.0_220120	SOP_BH121_5.0_220120	SOP_BH101_0.5_220120	SOP_BH101_1.3_220120	SOP_BH101_2.0_220120
				Sampling date / time	20-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00
					ES2202264-032	ES2202264-033	ES2202264-034	ES2202264-035	ES2202264-036
					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**)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH121_1.0_220120	SOP_BH121_5.0_220120	SOP_BH101_0.5_220120	SOP_BH101_1.3_220120	SOP_BH101_2.0_220120
				Sampling date / time	20-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00
					ES2202264-032	ES2202264-033	ES2202264-034	ES2202264-035	ES2202264-036
					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)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		<0.5	<0.5	<0.5	<0.5	<0.5
Anthracene	120-12-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	SOP_BH121_1.0_220120	SOP_BH121_5.0_220120	SOP_BH101_0.5_220120	SOP_BH101_1.3_220120	SOP_BH101_2.0_220120
				Sampling date / time	20-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00
Compound	CAS Number	LOR	Unit		ES2202264-032	ES2202264-033	ES2202264-034	ES2202264-035	ES2202264-036
					Result	Result	Result	Result	Result
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued									
Fluoranthene	206-44-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Pyrene	129-00-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benz(a)anthracene	56-55-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Chrysene	218-01-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg		<0.5	<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		<0.5	<0.5	<0.5	<0.5	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg		**0.6**	**0.6**	**0.6**	**0.6**	**0.6**
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg		**1.2**	**1.2**	**1.2**	**1.2**	**1.2**
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									
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**)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH121_1.0_220120	SOP_BH121_5.0_220120	SOP_BH101_0.5_220120	SOP_BH101_1.3_220120	SOP_BH101_2.0_220120
				Sampling date / time	20-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00
					ES2202264-032	ES2202264-033	ES2202264-034	ES2202264-035	ES2202264-036
					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	----	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	SOP_BH121_1.0_220120	SOP_BH121_5.0_220120	SOP_BH101_0.5_220120	SOP_BH101_1.3_220120	SOP_BH101_2.0_220120
			Sampling date / time	20-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00
Compound	CAS Number	LOR	Unit	ES2202264-032	ES2202264-033	ES2202264-034	ES2202264-035	ES2202264-036
				Result	Result	Result	Result	Result
EP075E: Nitroaromatics and Ketones - Continued								
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	----	----
EP080/071: Total Petroleum Hydrocarbons								
C6 - C9 Fraction	----	10	mg/kg	<10	**11**	<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	<50	<50
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions								
C6 - C10 Fraction	C6_C10	10	mg/kg	<10	**14**	<10	<10	<10

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	SOP_BH121_1.0_220120	SOP_BH121_5.0_220120	SOP_BH101_0.5_220120	SOP_BH101_1.3_220120	SOP_BH101_2.0_220120
				Sampling date / time	20-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00
Compound	CAS Number	LOR	Unit		ES2202264-032	ES2202264-033	ES2202264-034	ES2202264-035	ES2202264-036
					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	14	<10	<10	<10
>C10 - C16 Fraction	----	50	mg/kg		<50	<50	<50	<50	<50
>C16 - C34 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
>C34 - C40 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
^ >C10 - C40 Fraction (sum)	----	50	mg/kg		<50	<50	<50	<50	<50
^ >C10 - C16 Fraction minus Naphthalene (F2)	----	50	mg/kg		<50	<50	<50	<50	<50
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	----	----
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	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	----	----
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	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	----	----
Perfluorodecane sulfonic acid (PFDS)	335-77-3	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	----	----

Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH121_1.0_220120	SOP_BH121_5.0_220120	SOP_BH101_0.5_220120	SOP_BH101_1.3_220120	SOP_BH101_2.0_220120
				Sampling date / time	20-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00
					ES2202264-032	ES2202264-033	ES2202264-034	ES2202264-035	ES2202264-036
					Result	Result	Result	Result	Result
EP231B: Perfluoroalkyl Carboxylic Acids - Continued									
Perfluorooctanoic acid (PFOA)	335-67-1	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	----	----
Perfluorononanoic acid (PFNA)	375-95-1	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	----	----
Perfluorodecanoic acid (PFDA)	335-76-2	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	----	----
Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	----	----
Perfluorododecanoic acid (PFDoDA)	307-55-1	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	----	----
Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	----	----
Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.0005	mg/kg		<0.0005	<0.0005	<0.0005	----	----
EP231C: Perfluoroalkyl Sulfonamides									
Perfluorooctane sulfonamide (FOSA)	754-91-6	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	----	----
N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.0005	mg/kg		<0.0005	<0.0005	<0.0005	----	----
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.0005	mg/kg		<0.0005	<0.0005	<0.0005	----	----
N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.0005	mg/kg		<0.0005	<0.0005	<0.0005	----	----
N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.0005	mg/kg		<0.0005	<0.0005	<0.0005	----	----
N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	----	----
N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	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	----	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	SOP_BH121_1.0_220120	SOP_BH121_5.0_220120	SOP_BH101_0.5_220120	SOP_BH101_1.3_220120	SOP_BH101_2.0_220120
			Sampling date / time	20-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00
Compound	CAS Number	LOR	Unit	ES2202264-032	ES2202264-033	ES2202264-034	ES2202264-035	ES2202264-036
				Result	Result	Result	Result	Result
EP231D: (n:2) Fluorotelomer Sulfonic Acids - Continued								
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 PFAS	----	0.0002	mg/kg	<0.0002	<0.0002	<0.0002	----	----
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	%	108	103	116	106	111
EP068S: Organochlorine Pesticide Surrogate								
Dibromo-DDE	21655-73-2	0.05	%	102	95.6	126	119	124
EP068T: Organophosphorus Pesticide Surrogate								
DEF	78-48-8	0.05	%	89.0	86.2	113	97.5	102
EP074S: VOC Surrogates								
1.2-Dichloroethane-D4	17060-07-0	0.5	%	96.5	----	89.2	----	----
Toluene-D8	2037-26-5	0.5	%	95.9	----	82.2	----	----
4-Bromofluorobenzene	460-00-4	0.5	%	90.9	----	83.0	----	----
EP075(SIM)S: Phenolic Compound Surrogates								
Phenol-d6	13127-88-3	0.5	%	80.4	79.9	79.7	84.4	79.8
2-Chlorophenol-D4	93951-73-6	0.5	%	81.1	79.4	80.8	84.2	79.9
2.4.6-Tribromophenol	118-79-6	0.5	%	48.0	48.2	48.9	58.4	51.7
EP075(SIM)T: PAH Surrogates								
2-Fluorobiphenyl	321-60-8	0.5	%	104	104	95.4	102	105
Anthracene-d10	1719-06-8	0.5	%	102	104	106	108	103
4-Terphenyl-d14	1718-51-0	0.5	%	96.7	96.6	98.1	101	97.6
EP075S: Acid Extractable Surrogates								
2-Fluorophenol	367-12-4	0.5	%	101	----	112	----	----
Phenol-d6	13127-88-3	0.5	%	97.0	----	102	----	----
2-Chlorophenol-D4	93951-73-6	0.5	%	106	----	111	----	----
2.4.6-Tribromophenol	118-79-6	0.5	%	70.8	----	90.0	----	----
EP075T: Base/Neutral Extractable Surrogates								
Nitrobenzene-D5	4165-60-0	0.5	%	96.8	----	105	----	----
1.2-Dichlorobenzene-D4	2199-69-1	0.5	%	96.9	----	95.0	----	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	SOP_BH121_1.0_220120	SOP_BH121_5.0_220120	SOP_BH101_0.5_220120	SOP_BH101_1.3_220120	SOP_BH101_2.0_220120
				Sampling date / time	20-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00
Compound	CAS Number	LOR	Unit		ES2202264-032	ES2202264-033	ES2202264-034	ES2202264-035	ES2202264-036
					Result	Result	Result	Result	Result
EP075T: Base/Neutral Extractable Surrogates - Continued									
2-Fluorobiphenyl	321-60-8	0.5	%		92.2	----	92.1	----	----
Anthracene-d10	1719-06-8	0.5	%		119	----	120	----	----
4-Terphenyl-d14	1718-51-0	0.5	%		106	----	103	----	----
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	0.2	%		94.4	89.6	87.2	94.0	95.6
Toluene-D8	2037-26-5	0.2	%		90.7	86.1	77.7	88.8	91.0
4-Bromofluorobenzene	460-00-4	0.2	%		90.3	87.1	81.2	88.7	91.1
EP231S: PFAS Surrogate									
13C4-PFOS	----	0.0002	%		98.0	101	106	----	----
13C8-PFOA	----	0.0002	%		102	100	104	----	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	DUP05_220120	SOP_BH124_0.5_220120	SOP_BH124_3.0_220120	DUP06_220121	SOP_BH125_0.5_220121
			Sampling date / time	20-Jan-2022 00:00	21-Jan-2022 00:00	21-Jan-2022 00:00	21-Jan-2022 00:00	21-Jan-2022 00:00
Compound	CAS Number	LOR	Unit	ES2202264-037	ES2202264-039	ES2202264-040	ES2202264-041	ES2202264-042
				Result	Result	Result	Result	Result
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	----	1.0	%	9.0	20.5	7.9	8.0	11.9
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	----	377	----	----	343
APPROVED IDENTIFIER:	----	-	--	----	A. SMYLIE	----	----	A. SMYLIE
EG005(ED093)T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	7	<5	6	7	<5
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	<1	<1
Chromium	7440-47-3	2	mg/kg	6	4	4	4	4
Copper	7440-50-8	5	mg/kg	46	8	47	44	17
Lead	7439-92-1	5	mg/kg	18	14	16	17	7
Nickel	7440-02-0	2	mg/kg	30	<2	26	21	<2
Zinc	7440-66-6	5	mg/kg	140	<5	261	197	<5
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	<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	<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

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	DUP05_220120	SOP_BH124_0.5_220120	SOP_BH124_3.0_220120	DUP06_220121	SOP_BH125_0.5_220121
			Sampling date / time	20-Jan-2022 00:00	21-Jan-2022 00:00	21-Jan-2022 00:00	21-Jan-2022 00:00	21-Jan-2022 00:00
Compound	CAS Number	LOR	Unit	ES2202264-037	ES2202264-039	ES2202264-040	ES2202264-041	ES2202264-042
				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

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	DUP05_220120	SOP_BH124_0.5_220120	SOP_BH124_3.0_220120	DUP06_220121	SOP_BH125_0.5_220121
			Sampling date / time	20-Jan-2022 00:00	21-Jan-2022 00:00	21-Jan-2022 00:00	21-Jan-2022 00:00	21-Jan-2022 00:00
Compound	CAS Number	LOR	Unit	ES2202264-037	ES2202264-039	ES2202264-040	ES2202264-041	ES2202264-042
				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	DUP05_220120	SOP_BH124_0.5_220120	SOP_BH124_3.0_220120	DUP06_220121	SOP_BH125_0.5_220121
				Sampling date / time	20-Jan-2022 00:00	21-Jan-2022 00:00	21-Jan-2022 00:00	21-Jan-2022 00:00	21-Jan-2022 00:00
Compound	CAS Number	LOR	Unit		ES2202264-037	ES2202264-039	ES2202264-040	ES2202264-041	ES2202264-042
					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)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		<0.5	<0.5	<0.5	<0.5	<0.5
Anthracene	120-12-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	DUP05_220120	SOP_BH124_0.5_220120	SOP_BH124_3.0_220120	DUP06_220121	SOP_BH125_0.5_220121
			Sampling date / time	20-Jan-2022 00:00	21-Jan-2022 00:00	21-Jan-2022 00:00	21-Jan-2022 00:00	21-Jan-2022 00:00
Compound	CAS Number	LOR	Unit	ES2202264-037	ES2202264-039	ES2202264-040	ES2202264-041	ES2202264-042
				Result	Result	Result	Result	Result
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued								
Fluoranthene	206-44-0	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	<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	<0.5	<0.5	<0.5	<0.5	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg	**0.6**	**0.6**	**0.6**	**0.6**	**0.6**
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg	**1.2**	**1.2**	**1.2**	**1.2**	**1.2**
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								
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	DUP05_220120	SOP_BH124_0.5_220120	SOP_BH124_3.0_220120	DUP06_220121	SOP_BH125_0.5_220121
				Sampling date / time	20-Jan-2022 00:00	21-Jan-2022 00:00	21-Jan-2022 00:00	21-Jan-2022 00:00	21-Jan-2022 00:00
Compound	CAS Number	LOR	Unit		ES2202264-037	ES2202264-039	ES2202264-040	ES2202264-041	ES2202264-042
					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	----	----	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	DUP05_220120	SOP_BH124_0.5_220120	SOP_BH124_3.0_220120	DUP06_220121	SOP_BH125_0.5_220121
			Sampling date / time	20-Jan-2022 00:00	21-Jan-2022 00:00	21-Jan-2022 00:00	21-Jan-2022 00:00	21-Jan-2022 00:00
Compound	CAS Number	LOR	Unit	ES2202264-037	ES2202264-039	ES2202264-040	ES2202264-041	ES2202264-042
				Result	Result	Result	Result	Result
EP075E: Nitroaromatics and Ketones - Continued								
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	----	----	----
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	<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	DUP05_220120	SOP_BH124_0.5_220120	SOP_BH124_3.0_220120	DUP06_220121	SOP_BH125_0.5_220121
			Sampling date / time	20-Jan-2022 00:00	21-Jan-2022 00:00	21-Jan-2022 00:00	21-Jan-2022 00:00	21-Jan-2022 00:00
Compound	CAS Number	LOR	Unit	ES2202264-037	ES2202264-039	ES2202264-040	ES2202264-041	ES2202264-042
				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	<100	<100	<100	<100
>C34 - C40 Fraction	----	100	mg/kg	<100	<100	<100	<100	<100
^ >C10 - C40 Fraction (sum)	----	50	mg/kg	<50	<50	<50	<50	<50
^ >C10 - C16 Fraction minus Naphthalene (F2)	----	50	mg/kg	<50	<50	<50	<50	<50
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	<0.0002	<0.0002
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.0002	mg/kg	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.0002	mg/kg	<0.0002	<0.0002	<0.0002	<0.0002	**0.0012**
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.0002	mg/kg	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.0002	mg/kg	<0.0002	<0.0002	<0.0002	<0.0002	**0.0002**
Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.0002	mg/kg	<0.0002	<0.0002	<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	<0.001	<0.001
Perfluoropentanoic acid (PFPeA)	2706-90-3	0.0002	mg/kg	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Perfluorohexanoic acid (PFHxA)	307-24-4	0.0002	mg/kg	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Perfluoroheptanoic acid (PFHpA)	375-85-9	0.0002	mg/kg	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	DUP05_220120	SOP_BH124_0.5_220120	SOP_BH124_3.0_220120	DUP06_220121	SOP_BH125_0.5_220121
			Sampling date / time	20-Jan-2022 00:00	21-Jan-2022 00:00	21-Jan-2022 00:00	21-Jan-2022 00:00	21-Jan-2022 00:00
Compound	CAS Number	LOR	Unit	ES2202264-037	ES2202264-039	ES2202264-040	ES2202264-041	ES2202264-042
				Result	Result	Result	Result	Result
EP231B: Perfluoroalkyl Carboxylic Acids - Continued								
Perfluorooctanoic acid (PFOA)	335-67-1	0.0002	mg/kg	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Perfluorononanoic acid (PFNA)	375-95-1	0.0002	mg/kg	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Perfluorodecanoic acid (PFDA)	335-76-2	0.0002	mg/kg	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.0002	mg/kg	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Perfluorododecanoic acid (PFDoDA)	307-55-1	0.0002	mg/kg	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.0002	mg/kg	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.0005	mg/kg	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
EP231C: Perfluoroalkyl Sulfonamides								
Perfluorooctane sulfonamide (FOSA)	754-91-6	0.0002	mg/kg	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.0005	mg/kg	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.0005	mg/kg	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.0005	mg/kg	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.0005	mg/kg	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.0002	mg/kg	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.0002	mg/kg	<0.0002	<0.0002	<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	<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	<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	<0.0005	<0.0005

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	DUP05_220120	SOP_BH124_0.5_220120	SOP_BH124_3.0_220120	DUP06_220121	SOP_BH125_0.5_220121
				Sampling date / time	20-Jan-2022 00:00	21-Jan-2022 00:00	21-Jan-2022 00:00	21-Jan-2022 00:00	21-Jan-2022 00:00
Compound	CAS Number	LOR	Unit		ES2202264-037	ES2202264-039	ES2202264-040	ES2202264-041	ES2202264-042
					Result	Result	Result	Result	Result
EP231D: (n:2) Fluorotelomer Sulfonic Acids - Continued									
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.0005	mg/kg		<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
EP231P: PFAS Sums									
Sum of PFAS	----	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	<0.0002	**0.0014**
Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	<0.0002	**0.0014**
Sum of PFAS (WA DER List)	----	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	<0.0002	**0.0014**
EP066S: PCB Surrogate									
Decachlorobiphenyl	2051-24-3	0.1	%		**115**	**110**	**119**	**116**	**122**
EP068S: Organochlorine Pesticide Surrogate									
Dibromo-DDE	21655-73-2	0.05	%		**121**	**133**	**140**	**127**	**112**
EP068T: Organophosphorus Pesticide Surrogate									
DEF	78-48-8	0.05	%		**98.2**	**101**	**88.2**	**79.6**	**73.2**
EP074S: VOC Surrogates									
1.2-Dichloroethane-D4	17060-07-0	0.5	%		**97.4**	**93.3**	----	----	----
Toluene-D8	2037-26-5	0.5	%		**94.2**	**92.7**	----	----	----
4-Bromofluorobenzene	460-00-4	0.5	%		**91.4**	**90.1**	----	----	----
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	0.5	%		**81.2**	**81.4**	**101**	**97.4**	**96.6**
2-Chlorophenol-D4	93951-73-6	0.5	%		**78.1**	**81.4**	**102**	**98.3**	**96.0**
2.4.6-Tribromophenol	118-79-6	0.5	%		**56.7**	**52.3**	**74.0**	**67.7**	**67.3**
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	0.5	%		**97.3**	**101**	**106**	**102**	**102**
Anthracene-d10	1719-06-8	0.5	%		**99.6**	**106**	**105**	**99.5**	**101**
4-Terphenyl-d14	1718-51-0	0.5	%		**96.0**	**101**	**97.5**	**94.3**	**94.7**
EP075S: Acid Extractable Surrogates									
2-Fluorophenol	367-12-4	0.5	%		**110**	**106**	----	----	----
Phenol-d6	13127-88-3	0.5	%		**100**	**100**	----	----	----
2-Chlorophenol-D4	93951-73-6	0.5	%		**96.9**	**109**	----	----	----
2.4.6-Tribromophenol	118-79-6	0.5	%		**95.6**	**90.6**	----	----	----
EP075T: Base/Neutral Extractable Surrogates									
Nitrobenzene-D5	4165-60-0	0.5	%		**89.5**	**100**	----	----	----
1.2-Dichlorobenzene-D4	2199-69-1	0.5	%		**81.9**	**90.5**	----	----	----
2-Fluorobiphenyl	321-60-8	0.5	%		**92.0**	**93.7**	----	----	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	DUP05_220120	SOP_BH124_0.5_220120	SOP_BH124_3.0_220120	DUP06_220121	SOP_BH125_0.5_220121
				Sampling date / time	20-Jan-2022 00:00	21-Jan-2022 00:00	21-Jan-2022 00:00	21-Jan-2022 00:00	21-Jan-2022 00:00
Compound	CAS Number	LOR	Unit		ES2202264-037	ES2202264-039	ES2202264-040	ES2202264-041	ES2202264-042
					Result	Result	Result	Result	Result
EP075T: Base/Neutral Extractable Surrogates - Continued									
Anthracene-d10	1719-06-8	0.5	%		**112**	**119**	**----**	**----**	**----**
4-Terphenyl-d14	1718-51-0	0.5	%		**96.6**	**104**	**----**	**----**	**----**
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	0.2	%		**95.3**	**91.3**	**98.5**	**97.1**	**92.8**
Toluene-D8	2037-26-5	0.2	%		**89.2**	**88.0**	**95.6**	**90.0**	**89.0**
4-Bromofluorobenzene	460-00-4	0.2	%		**90.3**	**89.0**	**93.3**	**89.5**	**89.8**
EP231S: PFAS Surrogate									
13C4-PFOS	----	0.0002	%		**106**	**100**	**102**	**104**	**107**
13C8-PFOA	----	0.0002	%		**102**	**112**	**112**	**108**	**114**

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	SOP_BH125_5.0_220121	SOP_BH125_10.0_220121	SOP_BH125_15.0_220121	SOP_BH125_20.0_220121	SOP_BH125_25.0_220121
			Sampling date / time	21-Jan-2022 00:00	21-Jan-2022 00:00	21-Jan-2022 00:00	21-Jan-2022 00:00	21-Jan-2022 00:00
Compound	CAS Number	LOR	Unit	ES2202264-043	ES2202264-044	ES2202264-045	ES2202264-046	ES2202264-047
				Result	Result	Result	Result	Result
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	----	1.0	%	6.1	3.8	2.8	3.2	2.4
EG005(ED093)T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	6	9	5	6	<5
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	<1	<1
Chromium	7440-47-3	2	mg/kg	7	14	15	14	10
Copper	7440-50-8	5	mg/kg	40	37	40	35	47
Lead	7439-92-1	5	mg/kg	16	18	18	17	22
Nickel	7440-02-0	2	mg/kg	23	21	21	20	22
Zinc	7440-66-6	5	mg/kg	83	81	80	78	84
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	<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	<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
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

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	SOP_BH125_5.0_220121	SOP_BH125_10.0_220121	SOP_BH125_15.0_220121	SOP_BH125_20.0_220121	SOP_BH125_25.0_220121
				Sampling date / time	21-Jan-2022 00:00	21-Jan-2022 00:00	21-Jan-2022 00:00	21-Jan-2022 00:00	21-Jan-2022 00:00
Compound	CAS Number	LOR	Unit		ES2202264-043	ES2202264-044	ES2202264-045	ES2202264-046	ES2202264-047
					Result	Result	Result	Result	Result
EP068A: Organochlorine Pesticides (OC) - Continued									
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									
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		**0.6**	----	<0.5	----	<0.5
tert-Butylbenzene	98-06-6	0.5	mg/kg		<0.5	----	<0.5	----	<0.5

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	SOP_BH125_5.0_220121	SOP_BH125_10.0_220121	SOP_BH125_15.0_220121	SOP_BH125_20.0_220121	SOP_BH125_25.0_220121
				Sampling date / time	21-Jan-2022 00:00	21-Jan-2022 00:00	21-Jan-2022 00:00	21-Jan-2022 00:00	21-Jan-2022 00:00
Compound	CAS Number	LOR	Unit		ES2202264-043	ES2202264-044	ES2202264-045	ES2202264-046	ES2202264-047
					Result	Result	Result	Result	Result
EP074A: Monocyclic Aromatic Hydrocarbons - Continued									
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
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

Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH125_5.0_220121	SOP_BH125_10.0_220121	SOP_BH125_15.0_220121	SOP_BH125_20.0_220121	SOP_BH125_25.0_220121
				Sampling date / time	21-Jan-2022 00:00	21-Jan-2022 00:00	21-Jan-2022 00:00	21-Jan-2022 00:00	21-Jan-2022 00:00
					ES2202264-043	ES2202264-044	ES2202264-045	ES2202264-046	ES2202264-047
					Result	Result	Result	Result	Result
EP074E: Halogenated Aliphatic Compounds - Continued									
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)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		**0.8**	**1.0**	**0.8**	**0.8**	**0.6**
Anthracene	120-12-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Fluoranthene	206-44-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Pyrene	129-00-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benz(a)anthracene	56-55-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Chrysene	218-01-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg		<0.5	<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		<0.5	<0.5	<0.5	<0.5	<0.5

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	SOP_BH125_5.0_220121	SOP_BH125_10.0_220121	SOP_BH125_15.0_220121	SOP_BH125_20.0_220121	SOP_BH125_25.0_220121
				Sampling date / time	21-Jan-2022 00:00	21-Jan-2022 00:00	21-Jan-2022 00:00	21-Jan-2022 00:00	21-Jan-2022 00:00
Compound	CAS Number	LOR	Unit		ES2202264-043	ES2202264-044	ES2202264-045	ES2202264-046	ES2202264-047
					Result	Result	Result	Result	Result
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued									
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg		**0.8**	**1.0**	**0.8**	**0.8**	**0.6**
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg		**0.6**	**0.6**	**0.6**	**0.6**	**0.6**
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg		**1.2**	**1.2**	**1.2**	**1.2**	**1.2**
EP075A: 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	0.5	mg/kg		<0.5	----	<0.5	----	<0.5
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	1	mg/kg		<1	----	<1	----	<1
EP075B: Polynuclear Aromatic Hydrocarbons									
2-Methylnaphthalene	91-57-6	0.5	mg/kg		**2.0**	----	**1.7**	----	<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									
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									

Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH125_5.0_220121	SOP_BH125_10.0_220121	SOP_BH125_15.0_220121	SOP_BH125_20.0_220121	SOP_BH125_25.0_220121
				Sampling date / time	21-Jan-2022 00:00	21-Jan-2022 00:00	21-Jan-2022 00:00	21-Jan-2022 00:00	21-Jan-2022 00:00
					ES2202264-043	ES2202264-044	ES2202264-045	ES2202264-046	ES2202264-047
					Result	Result	Result	Result	Result
EP075D: Nitrosamines - Continued									
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
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									

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	SOP_BH125_5.0_220121	SOP_BH125_10.0_220121	SOP_BH125_15.0_220121	SOP_BH125_20.0_220121	SOP_BH125_25.0_220121
			Sampling date / time	21-Jan-2022 00:00	21-Jan-2022 00:00	21-Jan-2022 00:00	21-Jan-2022 00:00	21-Jan-2022 00:00
Compound	CAS Number	LOR	Unit	ES2202264-043	ES2202264-044	ES2202264-045	ES2202264-046	ES2202264-047
				Result	Result	Result	Result	Result
EP075G: Chlorinated Hydrocarbons - Continued								
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	**21**	**24**	<10	**19**	<10
C10 - C14 Fraction	----	50	mg/kg	<50	<50	**60**	<50	**50**
C15 - C28 Fraction	----	100	mg/kg	<100	**140**	**170**	**120**	**150**
C29 - C36 Fraction	----	100	mg/kg	<100	<100	<100	<100	<100
^ C10 - C36 Fraction (sum)	----	50	mg/kg	<50	**140**	**230**	**120**	**200**
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions								
C6 - C10 Fraction	C6_C10	10	mg/kg	**26**	**33**	<10	**26**	<10
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg	**26**	**33**	<10	**26**	<10
>C10 - C16 Fraction	----	50	mg/kg	<50	**70**	**80**	**60**	**70**
>C16 - C34 Fraction	----	100	mg/kg	<100	**140**	**170**	**110**	**150**
>C34 - C40 Fraction	----	100	mg/kg	<100	<100	<100	<100	<100
^ >C10 - C40 Fraction (sum)	----	50	mg/kg	<50	**210**	**250**	**170**	**220**

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	SOP_BH125_5.0_220121	SOP_BH125_10.0_220121	SOP_BH125_15.0_220121	SOP_BH125_20.0_220121	SOP_BH125_25.0_220121
			Sampling date / time	21-Jan-2022 00:00	21-Jan-2022 00:00	21-Jan-2022 00:00	21-Jan-2022 00:00	21-Jan-2022 00:00
Compound	CAS Number	LOR	Unit	ES2202264-043	ES2202264-044	ES2202264-045	ES2202264-046	ES2202264-047
				Result	Result	Result	Result	Result
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions - Continued								
^ >C10 - C16 Fraction minus Naphthalene (F2)	----	50	mg/kg	<50	70	80	60	70
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	----	----
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	----	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	SOP_BH125_5.0_220121	SOP_BH125_10.0_220121	SOP_BH125_15.0_220121	SOP_BH125_20.0_220121	SOP_BH125_25.0_220121
				Sampling date / time	21-Jan-2022 00:00	21-Jan-2022 00:00	21-Jan-2022 00:00	21-Jan-2022 00:00	21-Jan-2022 00:00
Compound	CAS Number	LOR	Unit		ES2202264-043	ES2202264-044	ES2202264-045	ES2202264-046	ES2202264-047
					Result	Result	Result	Result	Result
EP231B: Perfluoroalkyl Carboxylic Acids - Continued									
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	----	----
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	----	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	SOP_BH125_5.0_220121	SOP_BH125_10.0_220121	SOP_BH125_15.0_220121	SOP_BH125_20.0_220121	SOP_BH125_25.0_220121
			Sampling date / time	21-Jan-2022 00:00	21-Jan-2022 00:00	21-Jan-2022 00:00	21-Jan-2022 00:00	21-Jan-2022 00:00
Compound	CAS Number	LOR	Unit	ES2202264-043	ES2202264-044	ES2202264-045	ES2202264-046	ES2202264-047
				Result	Result	Result	Result	Result
EP231P: PFAS Sums - Continued								
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	%	100.0	108	92.6	106	94.4
EP068S: Organochlorine Pesticide Surrogate								
Dibromo-DDE	21655-73-2	0.05	%	113	138	107	131	112
EP068T: Organophosphorus Pesticide Surrogate								
DEF	78-48-8	0.05	%	95.0	90.7	99.1	91.9	96.6
EP074S: VOC Surrogates								
1.2-Dichloroethane-D4	17060-07-0	0.5	%	95.9	----	78.2	----	81.8
Toluene-D8	2037-26-5	0.5	%	94.5	----	74.6	----	79.9
4-Bromofluorobenzene	460-00-4	0.5	%	92.9	----	71.6	----	80.3
EP075(SIM)S: Phenolic Compound Surrogates								
Phenol-d6	13127-88-3	0.5	%	80.8	102	81.9	89.1	81.1
2-Chlorophenol-D4	93951-73-6	0.5	%	81.8	102	81.2	90.7	81.2
2.4.6-Tribromophenol	118-79-6	0.5	%	54.1	70.9	49.6	62.6	51.6
EP075(SIM)T: PAH Surrogates								
2-Fluorobiphenyl	321-60-8	0.5	%	97.2	106	103	91.7	103
Anthracene-d10	1719-06-8	0.5	%	105	108	101	91.8	105
4-Terphenyl-d14	1718-51-0	0.5	%	97.6	99.6	93.7	85.8	95.9
EP075S: Acid Extractable Surrogates								
2-Fluorophenol	367-12-4	0.5	%	120	----	117	----	114
Phenol-d6	13127-88-3	0.5	%	104	----	101	----	99.3
2-Chlorophenol-D4	93951-73-6	0.5	%	116	----	109	----	112
2.4.6-Tribromophenol	118-79-6	0.5	%	83.5	----	75.9	----	85.8
EP075T: Base/Neutral Extractable Surrogates								
Nitrobenzene-D5	4165-60-0	0.5	%	107	----	101	----	98.5
1.2-Dichlorobenzene-D4	2199-69-1	0.5	%	101	----	97.2	----	95.9
2-Fluorobiphenyl	321-60-8	0.5	%	88.4	----	95.6	----	96.6
Anthracene-d10	1719-06-8	0.5	%	119	----	115	----	115
4-Terphenyl-d14	1718-51-0	0.5	%	100	----	106	----	96.1
EP080S: TPH(V)/BTEX Surrogates								

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	SOP_BH125_5.0_220121	SOP_BH125_10.0_220121	SOP_BH125_15.0_220121	SOP_BH125_20.0_220121	SOP_BH125_25.0_220121
				Sampling date / time	21-Jan-2022 00:00	21-Jan-2022 00:00	21-Jan-2022 00:00	21-Jan-2022 00:00	21-Jan-2022 00:00
Compound	CAS Number	LOR	Unit		ES2202264-043	ES2202264-044	ES2202264-045	ES2202264-046	ES2202264-047
					Result	Result	Result	Result	Result
EP080S: TPH(V)/BTEX Surrogates - Continued									
1.2-Dichloroethane-D4	17060-07-0	0.2	%		93.1	102	75.9	92.9	79.4
Toluene-D8	2037-26-5	0.2	%		95.2	112	75.3	106	80.8
4-Bromofluorobenzene	460-00-4	0.2	%		93.2	112	72.0	101	81.0
EP231S: PFAS Surrogate									
13C4-PFOS	----	0.0002	%		----	----	96.0	----	----
13C8-PFOA	----	0.0002	%		----	----	113	----	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	SOP_BH126_0.5_220121	SOP_BH126_2.0_220121	SOP_BH127_1.2_220121	SOP_BH127_4.0_220121	TS14
			Sampling date / time	21-Jan-2022 00:00	21-Jan-2022 00:00	21-Jan-2022 00:00	21-Jan-2022 00:00	17-Jan-2022 00:00
Compound	CAS Number	LOR	Unit	ES2202264-048	ES2202264-049	ES2202264-050	ES2202264-051	ES2202264-053
				Result	Result	Result	Result	Result
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	----	1.0	%	16.5	7.6	16.0	5.8	----
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	-	--	-	----	-	----	----
Synthetic Mineral Fibre	----	0.1	g/kg	No	----	No	----	----
Organic Fibre	----	0.1	g/kg	No	----	No	----	----
Sample weight (dry)	----	0.01	g	183	----	207	----	----
APPROVED IDENTIFIER:	----	-	--	A. SMYLIE	----	A. SMYLIE	----	----
EG005(ED093)T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	5	<5	21	9	----
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	<1	----
Chromium	7440-47-3	2	mg/kg	14	7	5	8	----
Copper	7440-50-8	5	mg/kg	20	44	17	38	----
Lead	7439-92-1	5	mg/kg	28	13	8	14	----
Nickel	7440-02-0	2	mg/kg	14	42	<2	22	----
Zinc	7440-66-6	5	mg/kg	8	130	8	77	----
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	<0.1	<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	----
cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	SOP_BH126_0.5_220121	SOP_BH126_2.0_220121	SOP_BH127_1.2_220121	SOP_BH127_4.0_220121	TS14
				Sampling date / time	21-Jan-2022 00:00	21-Jan-2022 00:00	21-Jan-2022 00:00	21-Jan-2022 00:00	17-Jan-2022 00:00
Compound	CAS Number	LOR	Unit		ES2202264-048	ES2202264-049	ES2202264-050	ES2202264-051	ES2202264-053
					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	----
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	SOP_BH126_0.5_220121	SOP_BH126_2.0_220121	SOP_BH127_1.2_220121	SOP_BH127_4.0_220121	TS14
				Sampling date / time	21-Jan-2022 00:00	21-Jan-2022 00:00	21-Jan-2022 00:00	21-Jan-2022 00:00	17-Jan-2022 00:00
Compound	CAS Number	LOR	Unit		ES2202264-048	ES2202264-049	ES2202264-050	ES2202264-051	ES2202264-053
					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	SOP_BH126_0.5_220121	SOP_BH126_2.0_220121	SOP_BH127_1.2_220121	SOP_BH127_4.0_220121	TS14
				Sampling date / time	21-Jan-2022 00:00	21-Jan-2022 00:00	21-Jan-2022 00:00	21-Jan-2022 00:00	17-Jan-2022 00:00
Compound	CAS Number	LOR	Unit		ES2202264-048	ES2202264-049	ES2202264-050	ES2202264-051	ES2202264-053
					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)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	**0.7**	<0.5	**0.6**	----
Anthracene	120-12-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	SOP_BH126_0.5_220121	SOP_BH126_2.0_220121	SOP_BH127_1.2_220121	SOP_BH127_4.0_220121	TS14
				Sampling date / time	21-Jan-2022 00:00	21-Jan-2022 00:00	21-Jan-2022 00:00	21-Jan-2022 00:00	17-Jan-2022 00:00
Compound	CAS Number	LOR	Unit		ES2202264-048	ES2202264-049	ES2202264-050	ES2202264-051	ES2202264-053
					Result	Result	Result	Result	Result
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued									
Fluoranthene	206-44-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	----
Pyrene	129-00-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	----
Benz(a)anthracene	56-55-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	----
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		<0.5	<0.5	<0.5	<0.5	----
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	----
Benzo(a)pyrene	50-32-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	----
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	----
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	----
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	----
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg		<0.5	**0.7**	<0.5	**0.6**	----
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	----
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg		**0.6**	**0.6**	**0.6**	**0.6**	----
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg		**1.2**	**1.2**	**1.2**	**1.2**	----
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									
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	SOP_BH126_0.5_220121	SOP_BH126_2.0_220121	SOP_BH127_1.2_220121	SOP_BH127_4.0_220121	TS14
				Sampling date / time	21-Jan-2022 00:00	21-Jan-2022 00:00	21-Jan-2022 00:00	21-Jan-2022 00:00	17-Jan-2022 00:00
Compound	CAS Number	LOR	Unit		ES2202264-048	ES2202264-049	ES2202264-050	ES2202264-051	ES2202264-053
					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	----	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	SOP_BH126_0.5_220121	SOP_BH126_2.0_220121	SOP_BH127_1.2_220121	SOP_BH127_4.0_220121	TS14
				Sampling date / time	21-Jan-2022 00:00	21-Jan-2022 00:00	21-Jan-2022 00:00	21-Jan-2022 00:00	17-Jan-2022 00:00
Compound	CAS Number	LOR	Unit		ES2202264-048	ES2202264-049	ES2202264-050	ES2202264-051	ES2202264-053
					Result	Result	Result	Result	Result
EP075E: Nitroaromatics and Ketones - Continued									
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	----	----
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	----	10	mg/kg		<10	<10	<10	<10	70
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	86

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	SOP_BH126_0.5_220121	SOP_BH126_2.0_220121	SOP_BH127_1.2_220121	SOP_BH127_4.0_220121	TS14
			Sampling date / time	21-Jan-2022 00:00	21-Jan-2022 00:00	21-Jan-2022 00:00	21-Jan-2022 00:00	17-Jan-2022 00:00
Compound	CAS Number	LOR	Unit	ES2202264-048	ES2202264-049	ES2202264-050	ES2202264-051	ES2202264-053
				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	**39**
>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	----
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	**18.6**
Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	**3.2**
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	**17.7**
ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	**7.2**
^ Sum of BTEX	----	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	**46.7**
^ Total Xylenes	----	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	**24.9**
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	<0.0002	----
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.0002	mg/kg	<0.0002	<0.0002	<0.0002	<0.0002	----
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.0002	mg/kg	<0.0002	<0.0002	<0.0002	<0.0002	----
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.0002	mg/kg	<0.0002	<0.0002	<0.0002	<0.0002	----
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.0002	mg/kg	<0.0002	<0.0002	<0.0002	<0.0002	----
Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.0002	mg/kg	<0.0002	<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	<0.001	----
Perfluoropentanoic acid (PFPeA)	2706-90-3	0.0002	mg/kg	<0.0002	<0.0002	<0.0002	<0.0002	----
Perfluorohexanoic acid (PFHxA)	307-24-4	0.0002	mg/kg	<0.0002	<0.0002	<0.0002	<0.0002	----
Perfluoroheptanoic acid (PFHpA)	375-85-9	0.0002	mg/kg	<0.0002	<0.0002	<0.0002	<0.0002	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	SOP_BH126_0.5_220121	SOP_BH126_2.0_220121	SOP_BH127_1.2_220121	SOP_BH127_4.0_220121	TS14
				Sampling date / time	21-Jan-2022 00:00	21-Jan-2022 00:00	21-Jan-2022 00:00	21-Jan-2022 00:00	17-Jan-2022 00:00
Compound	CAS Number	LOR	Unit		ES2202264-048	ES2202264-049	ES2202264-050	ES2202264-051	ES2202264-053
					Result	Result	Result	Result	Result
EP231B: Perfluoroalkyl Carboxylic Acids - Continued									
Perfluorooctanoic acid (PFOA)	335-67-1	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	<0.0002	----
Perfluorononanoic acid (PFNA)	375-95-1	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	<0.0002	----
Perfluorodecanoic acid (PFDA)	335-76-2	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	<0.0002	----
Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	<0.0002	----
Perfluorododecanoic acid (PFDoDA)	307-55-1	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	<0.0002	----
Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	<0.0002	----
Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.0005	mg/kg		<0.0005	<0.0005	<0.0005	<0.0005	----
EP231C: Perfluoroalkyl Sulfonamides									
Perfluorooctane sulfonamide (FOSA)	754-91-6	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	<0.0002	----
N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.0005	mg/kg		<0.0005	<0.0005	<0.0005	<0.0005	----
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.0005	mg/kg		<0.0005	<0.0005	<0.0005	<0.0005	----
N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.0005	mg/kg		<0.0005	<0.0005	<0.0005	<0.0005	----
N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.0005	mg/kg		<0.0005	<0.0005	<0.0005	<0.0005	----
N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	<0.0002	----
N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.0002	mg/kg		<0.0002	<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	<0.0005	----
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.0005	mg/kg		<0.0005	<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	<0.0005	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	SOP_BH126_0.5_220121	SOP_BH126_2.0_220121	SOP_BH127_1.2_220121	SOP_BH127_4.0_220121	TS14
			Sampling date / time	21-Jan-2022 00:00	21-Jan-2022 00:00	21-Jan-2022 00:00	21-Jan-2022 00:00	17-Jan-2022 00:00
Compound	CAS Number	LOR	Unit	ES2202264-048	ES2202264-049	ES2202264-050	ES2202264-051	ES2202264-053
				Result	Result	Result	Result	Result
EP231D: (n:2) Fluorotelomer Sulfonic Acids - Continued								
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.0005	mg/kg	<0.0005	<0.0005	<0.0005	<0.0005	----
EP231P: PFAS Sums								
Sum of PFAS	----	0.0002	mg/kg	<0.0002	<0.0002	<0.0002	<0.0002	----
Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.0002	mg/kg	<0.0002	<0.0002	<0.0002	<0.0002	----
Sum of PFAS (WA DER List)	----	0.0002	mg/kg	<0.0002	<0.0002	<0.0002	<0.0002	----
EP066S: PCB Surrogate								
Decachlorobiphenyl	2051-24-3	0.1	%	109	129	117	106	----
EP068S: Organochlorine Pesticide Surrogate								
Dibromo-DDE	21655-73-2	0.05	%	117	122	114	125	----
EP068T: Organophosphorus Pesticide Surrogate								
DEF	78-48-8	0.05	%	97.2	77.5	84.4	80.9	----
EP074S: VOC Surrogates								
1.2-Dichloroethane-D4	17060-07-0	0.5	%	102	----	95.1	----	----
Toluene-D8	2037-26-5	0.5	%	102	----	93.1	----	----
4-Bromofluorobenzene	460-00-4	0.5	%	95.6	----	94.1	----	----
EP075(SIM)S: Phenolic Compound Surrogates								
Phenol-d6	13127-88-3	0.5	%	82.3	95.7	80.4	98.3	----
2-Chlorophenol-D4	93951-73-6	0.5	%	81.7	95.3	81.2	96.1	----
2.4.6-Tribromophenol	118-79-6	0.5	%	54.5	69.0	55.9	61.8	----
EP075(SIM)T: PAH Surrogates								
2-Fluorobiphenyl	321-60-8	0.5	%	102	99.1	105	108	----
Anthracene-d10	1719-06-8	0.5	%	106	95.6	103	110	----
4-Terphenyl-d14	1718-51-0	0.5	%	98.3	87.7	98.1	103	----
EP075S: Acid Extractable Surrogates								
2-Fluorophenol	367-12-4	0.5	%	110	----	106	----	----
Phenol-d6	13127-88-3	0.5	%	97.9	----	98.7	----	----
2-Chlorophenol-D4	93951-73-6	0.5	%	110	----	108	----	----
2.4.6-Tribromophenol	118-79-6	0.5	%	86.3	----	82.7	----	----
EP075T: Base/Neutral Extractable Surrogates								
Nitrobenzene-D5	4165-60-0	0.5	%	95.1	----	98.6	----	----
1.2-Dichlorobenzene-D4	2199-69-1	0.5	%	89.4	----	92.6	----	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	SOP_BH126_0.5_220121	SOP_BH126_2.0_220121	SOP_BH127_1.2_220121	SOP_BH127_4.0_220121	TS14
				Sampling date / time	21-Jan-2022 00:00	21-Jan-2022 00:00	21-Jan-2022 00:00	21-Jan-2022 00:00	17-Jan-2022 00:00
Compound	CAS Number	LOR	Unit		ES2202264-048	ES2202264-049	ES2202264-050	ES2202264-051	ES2202264-053
					Result	Result	Result	Result	Result
EP075T: Base/Neutral Extractable Surrogates - Continued									
2-Fluorobiphenyl	321-60-8	0.5	%		90.0	----	89.8	----	----
Anthracene-d10	1719-06-8	0.5	%		111	----	114	----	----
4-Terphenyl-d14	1718-51-0	0.5	%		99.3	----	106	----	----
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	0.2	%		98.8	86.9	92.2	105	97.6
Toluene-D8	2037-26-5	0.2	%		103	96.7	94.1	102	110
4-Bromofluorobenzene	460-00-4	0.2	%		97.6	99.1	94.1	112	113
EP231S: PFAS Surrogate									
13C4-PFOS	----	0.0002	%		99.0	106	98.5	97.0	----
13C8-PFOA	----	0.0002	%		102	118	110	113	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	TSC14	TS15	TSC15	----	----
			Sampling date / time	17-Jan-2022 00:00	17-Jan-2022 00:00	17-Jan-2022 00:00	----	----
Compound	CAS Number	LOR	Unit	ES2202264-055	ES2202264-058	ES2202264-059	--------	--------
				Result	Result	Result	----	----
EP080/071: Total Petroleum Hydrocarbons								
C6 - C9 Fraction	----	10	mg/kg	80	47	55	----	----
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions								
C6 - C10 Fraction	C6_C10	10	mg/kg	98	55	64	----	----
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg	45	17	21	----	----
EP080: BTEXN								
Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	<0.2	----	----
Toluene	108-88-3	0.5	mg/kg	21.0	14.1	17.0	----	----
Ethylbenzene	100-41-4	0.5	mg/kg	3.7	2.7	3.1	----	----
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	20.3	14.7	16.2	----	----
ortho-Xylene	95-47-6	0.5	mg/kg	8.2	6.5	6.9	----	----
^ Sum of BTEX	----	0.2	mg/kg	53.2	38.0	43.2	----	----
^ Total Xylenes	----	0.5	mg/kg	28.5	21.2	23.1	----	----
Naphthalene	91-20-3	1	mg/kg	1	<1	<1	----	----
EP080S: TPH(V)/BTEX Surrogates								
1.2-Dichloroethane-D4	17060-07-0	0.2	%	103	81.7	80.9	----	----
Toluene-D8	2037-26-5	0.2	%	125	102	105	----	----
4-Bromofluorobenzene	460-00-4	0.2	%	125	100	102	----	----

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)			Sample ID	RIN03_220119	RIN03_220120	RIN05_220121	----	----
			Sampling date / time	19-Jan-2022 00:00	20-Jan-2022 00:00	21-Jan-2022 00:00	----	----
Compound	CAS Number	LOR	Unit	ES2202264-021	ES2202264-038	ES2202264-052	--------	--------
				Result	Result	Result	----	----
EG020T: Total Metals by ICP-MS								
Arsenic	7440-38-2	0.001	mg/L	<0.001	<0.001	<0.001	----	----
Cadmium	7440-43-9	0.0001	mg/L	<0.0001	<0.0001	<0.0001	----	----
Chromium	7440-47-3	0.001	mg/L	<0.001	<0.001	<0.001	----	----
Copper	7440-50-8	0.001	mg/L	<0.001	<0.001	<0.001	----	----
Nickel	7440-02-0	0.001	mg/L	<0.001	<0.001	<0.001	----	----
Lead	7439-92-1	0.001	mg/L	<0.001	<0.001	<0.001	----	----
Zinc	7440-66-6	0.005	mg/L	<0.005	<0.005	<0.005	----	----
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.0001	mg/L	<0.0001	<0.0001	<0.0001	----	----
EP066: Polychlorinated Biphenyls (PCB)								
^ Total Polychlorinated biphenyls	----	1	µg/L	<1	<1	<1	----	----
EP068A: Organochlorine Pesticides (OC)								
alpha-BHC	319-84-6	0.5	µg/L	<0.5	<0.5	<0.5	----	----
Hexachlorobenzene (HCB)	118-74-1	0.5	µg/L	<0.5	<0.5	<0.5	----	----
beta-BHC	319-85-7	0.5	µg/L	<0.5	<0.5	<0.5	----	----
gamma-BHC	58-89-9	0.5	µg/L	<0.5	<0.5	<0.5	----	----
delta-BHC	319-86-8	0.5	µg/L	<0.5	<0.5	<0.5	----	----
Heptachlor	76-44-8	0.5	µg/L	<0.5	<0.5	<0.5	----	----
Aldrin	309-00-2	0.5	µg/L	<0.5	<0.5	<0.5	----	----
Heptachlor epoxide	1024-57-3	0.5	µg/L	<0.5	<0.5	<0.5	----	----
trans-Chlordane	5103-74-2	0.5	µg/L	<0.5	<0.5	<0.5	----	----
alpha-Endosulfan	959-98-8	0.5	µg/L	<0.5	<0.5	<0.5	----	----
cis-Chlordane	5103-71-9	0.5	µg/L	<0.5	<0.5	<0.5	----	----
Dieldrin	60-57-1	0.5	µg/L	<0.5	<0.5	<0.5	----	----
4.4`-DDE	72-55-9	0.5	µg/L	<0.5	<0.5	<0.5	----	----
Endrin	72-20-8	0.5	µg/L	<0.5	<0.5	<0.5	----	----
beta-Endosulfan	33213-65-9	0.5	µg/L	<0.5	<0.5	<0.5	----	----
4.4`-DDD	72-54-8	0.5	µg/L	<0.5	<0.5	<0.5	----	----
Endrin aldehyde	7421-93-4	0.5	µg/L	<0.5	<0.5	<0.5	----	----
Endosulfan sulfate	1031-07-8	0.5	µg/L	<0.5	<0.5	<0.5	----	----
4.4`-DDT	50-29-3	2.0	µg/L	<2.0	<2.0	<2.0	----	----
Endrin ketone	53494-70-5	0.5	µg/L	<0.5	<0.5	<0.5	----	----
Methoxychlor	72-43-5	2.0	µg/L	<2.0	<2.0	<2.0	----	----
^ Total Chlordane (sum)	----	0.5	µg/L	<0.5	<0.5	<0.5	----	----

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)			Sample ID	RIN03_220119	RIN03_220120	RIN05_220121	----	----
			Sampling date / time	19-Jan-2022 00:00	20-Jan-2022 00:00	21-Jan-2022 00:00	----	----
Compound	CAS Number	LOR	Unit	ES2202264-021	ES2202264-038	ES2202264-052	--------	--------
				Result	Result	Result	----	----
EP068A: Organochlorine Pesticides (OC) - Continued								
^ Sum of DDD + DDE + DDT	72-54-8/72-55-9/50-2	0.5	µg/L	<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	----	----
EP068B: Organophosphorus Pesticides (OP)								
Dichlorvos	62-73-7	0.5	µg/L	<0.5	<0.5	<0.5	----	----
Demeton-S-methyl	919-86-8	0.5	µg/L	<0.5	<0.5	<0.5	----	----
Monocrotophos	6923-22-4	2.0	µg/L	<2.0	<2.0	<2.0	----	----
Dimethoate	60-51-5	0.5	µg/L	<0.5	<0.5	<0.5	----	----
Diazinon	333-41-5	0.5	µg/L	<0.5	<0.5	<0.5	----	----
Chlorpyrifos-methyl	5598-13-0	0.5	µg/L	<0.5	<0.5	<0.5	----	----
Parathion-methyl	298-00-0	2.0	µg/L	<2.0	<2.0	<2.0	----	----
Malathion	121-75-5	0.5	µg/L	<0.5	<0.5	<0.5	----	----
Fenthion	55-38-9	0.5	µg/L	<0.5	<0.5	<0.5	----	----
Chlorpyrifos	2921-88-2	0.5	µg/L	<0.5	<0.5	<0.5	----	----
Parathion	56-38-2	2.0	µg/L	<2.0	<2.0	<2.0	----	----
Pirimphos-ethyl	23505-41-1	0.5	µg/L	<0.5	<0.5	<0.5	----	----
Chlorfenvinphos	470-90-6	0.5	µg/L	<0.5	<0.5	<0.5	----	----
Bromophos-ethyl	4824-78-6	0.5	µg/L	<0.5	<0.5	<0.5	----	----
Fenamiphos	22224-92-6	0.5	µg/L	<0.5	<0.5	<0.5	----	----
Prothiofos	34643-46-4	0.5	µg/L	<0.5	<0.5	<0.5	----	----
Ethion	563-12-2	0.5	µg/L	<0.5	<0.5	<0.5	----	----
Carbophenothion	786-19-6	0.5	µg/L	<0.5	<0.5	<0.5	----	----
Azinphos Methyl	86-50-0	0.5	µg/L	<0.5	<0.5	<0.5	----	----
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons								
Naphthalene	91-20-3	1.0	µg/L	<1.0	<1.0	<1.0	----	----
Acenaphthylene	208-96-8	1.0	µg/L	<1.0	<1.0	<1.0	----	----
Acenaphthene	83-32-9	1.0	µg/L	<1.0	<1.0	<1.0	----	----
Fluorene	86-73-7	1.0	µg/L	<1.0	<1.0	<1.0	----	----
Phenanthrene	85-01-8	1.0	µg/L	<1.0	<1.0	<1.0	----	----
Anthracene	120-12-7	1.0	µg/L	<1.0	<1.0	<1.0	----	----
Fluoranthene	206-44-0	1.0	µg/L	<1.0	<1.0	<1.0	----	----
Pyrene	129-00-0	1.0	µg/L	<1.0	<1.0	<1.0	----	----
Benz(a)anthracene	56-55-3	1.0	µg/L	<1.0	<1.0	<1.0	----	----
Chrysene	218-01-9	1.0	µg/L	<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	----	----

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	RIN03_220119	RIN03_220120	RIN05_220121	----	----
				Sampling date / time	19-Jan-2022 00:00	20-Jan-2022 00:00	21-Jan-2022 00:00	----	----
Compound	CAS Number	LOR	Unit		ES2202264-021	ES2202264-038	ES2202264-052	--------	--------
					Result	Result	Result	----	----
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued									
Benzo(k)fluoranthene	207-08-9	1.0	µg/L		<1.0	<1.0	<1.0	----	----
Benzo(a)pyrene	50-32-8	0.5	µg/L		<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	----	----
Dibenz(a.h)anthracene	53-70-3	1.0	µg/L		<1.0	<1.0	<1.0	----	----
Benzo(g.h.i)perylene	191-24-2	1.0	µg/L		<1.0	<1.0	<1.0	----	----
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	µg/L		<0.5	<0.5	<0.5	----	----
^ Benzo(a)pyrene TEQ (zero)	----	0.5	µg/L		<0.5	<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	<50	----	----
C15 - C28 Fraction	----	100	µg/L		<100	<100	<100	----	----
C29 - C36 Fraction	----	50	µg/L		<50	<50	<50	----	----
^ C10 - C36 Fraction (sum)	----	50	µg/L		<50	<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	<100	----	----
>C16 - C34 Fraction	----	100	µg/L		<100	<100	<100	----	----
>C34 - C40 Fraction	----	100	µg/L		<100	<100	<100	----	----
^ >C10 - C40 Fraction (sum)	----	100	µg/L		<100	<100	<100	----	----
^ >C10 - C16 Fraction minus Naphthalene (F2)	----	100	µg/L		<100	<100	<100	----	----
EP080: BTEXN									
Benzene	71-43-2	1	µg/L		<1	<1	<1	----	----
Toluene	108-88-3	2	µg/L		<2	<2	<2	----	----
Ethylbenzene	100-41-4	2	µg/L		<2	<2	<2	----	----
meta- & para-Xylene	108-38-3 106-42-3	2	µg/L		<2	<2	<2	----	----
ortho-Xylene	95-47-6	2	µg/L		<2	<2	<2	----	----
^ Total Xylenes	----	2	µg/L		<2	<2	<2	----	----
^ Sum of BTEX	----	1	µg/L		<1	<1	<1	----	----
Naphthalene	91-20-3	5	µg/L		<5	<5	<5	----	----
EP066S: PCB Surrogate									
Decachlorobiphenyl	2051-24-3	1	%		**79.2**	**75.2**	**74.6**	----	----

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	RIN03_220119	RIN03_220120	RIN05_220121	----	----
				Sampling date / time	19-Jan-2022 00:00	20-Jan-2022 00:00	21-Jan-2022 00:00	----	----
Compound	CAS Number	LOR	Unit		ES2202264-021	ES2202264-038	ES2202264-052	--------	--------
					Result	Result	Result	----	----
EP068S: Organochlorine Pesticide Surrogate									
Dibromo-DDE	21655-73-2	0.5	%		68.2	70.6	73.0	----	----
EP068T: Organophosphorus Pesticide Surrogate									
DEF	78-48-8	0.5	%		78.7	67.2	70.4	----	----
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	1.0	%		20.0	19.1	20.0	----	----
2-Chlorophenol-D4	93951-73-6	1.0	%		56.2	54.5	54.9	----	----
2.4.6-Tribromophenol	118-79-6	1.0	%		48.0	47.6	42.6	----	----
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	1.0	%		72.8	68.4	70.7	----	----
Anthracene-d10	1719-06-8	1.0	%		83.6	81.5	79.4	----	----
4-Terphenyl-d14	1718-51-0	1.0	%		81.7	80.6	80.1	----	----
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	2	%		107	89.9	105	----	----
Toluene-D8	2037-26-5	2	%		110	81.7	102	----	----
4-Bromofluorobenzene	460-00-4	2	%		105	84.9	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	SOP_BH118_0.1_220119 - 19-Jan-2022 00:00	Soil sample.
EA200: Description	SOP_BH142_0.4_220119 - 19-Jan-2022 00:00	Soil sample.
EA200: Description	SOP_BH143_0.3_220119 - 19-Jan-2022 00:00	Soil sample.
EA200: Description	SOP_BH144_0.3_220119 - 19-Jan-2022 00:00	Soil sample.
EA200: Description	SOP_BH145_0.3_220119 - 19-Jan-2022 00:00	Soil sample.
EA200: Description	SOP_BH102_0.7_220120 - 20-Jan-2022 00:00	Soil sample.
EA200: Description	SOP_BH107_1.0_220120 - 20-Jan-2022 00:00	Soil sample.
EA200: Description	SOP_BH108_0.4_220120 - 19-Jan-2022 00:00	Soil sample.
EA200: Description	SOP_BH109_0.3_220120 - 19-Jan-2022 00:00	Soil sample.
EA200: Description	SOP_BH120_0.5_220120 - 20-Jan-2022 00:00	Soil sample.
EA200: Description	SOP_BH121_1.0_220120 - 20-Jan-2022 00:00	Soil sample.
EA200: Description	SOP_BH101_0.5_220120 - 20-Jan-2022 00:00	Soil sample.
EA200: Description	SOP_BH124_0.5_220120 - 21-Jan-2022 00:00	Soil sample.
EA200: Description	SOP_BH125_0.5_220121 - 21-Jan-2022 00:00	Soil sample.
EA200: Description	SOP_BH126_0.5_220121 - 21-Jan-2022 00:00	Soil sample.
EA200: Description	SOP_BH127_1.2_220121 - 21-Jan-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
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

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

ALS Environmental

QUALITY CONTROL REPORT

Work Order	: **ES2202264**	Page	: 1 of 58
Client	: **ENVIRONMENTAL RESOURCES MANAGEMENT (ERM)**	Laboratory	: Environmental Division Sydney
Contact	: NICHOLAS GRBICH	Contact	: Customer Services ES
Address	: LEVEL 15 309 KENT STREET SYDNEY NSW AUSTRALIA 2000	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
Telephone	: ----	Telephone	: +61-2-8784 8555
Project	: 0628507 SOP	Date Samples Received	: 24-Jan-2022
Order number	: ----	Date Analysis Commenced	: 27-Jan-2022
C-O-C number	: ----	Issue Date	: 03-Feb-2022
Sampler	: ANTHONY RICHARD		
Site	: ----		
Quote number	: EN/114		
No. of samples received	: 57		
No. of samples analysed	: 56		

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

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

This Quality Control Report contains the following information:

- Laboratory Duplicate (DUP) Report; Relative Percentage Difference (RPD) and Acceptance Limits
- Method Blank (MB) and Laboratory Control Spike (LCS) Report; Recovery and Acceptance Limits
- Matrix Spike (MS) Report; Recovery and Acceptance Limits

Signatories

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

Signatories	*Position*	*Accreditation Category*
Alana Smylie	Asbestos Identifier	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.

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: 4143507)									
ES2202264-001	SOP_BH118_0.1_220119	EG005T: Cadmium	7440-43-9	1	mg/kg	<1	<1	0.0	No Limit
		EG005T: Chromium	7440-47-3	2	mg/kg	13	14	10.2	No Limit
		EG005T: Nickel	7440-02-0	2	mg/kg	109	115	5.1	0% - 20%
		EG005T: Arsenic	7440-38-2	5	mg/kg	<5	<5	0.0	No Limit
		EG005T: Copper	7440-50-8	5	mg/kg	57	69	19.7	0% - 50%
		EG005T: Lead	7439-92-1	5	mg/kg	<5	<5	0.0	No Limit
		EG005T: Zinc	7440-66-6	5	mg/kg	42	47	11.3	No Limit
ES2202264-011	SOP_BH143_1.0_220119	EG005T: Cadmium	7440-43-9	1	mg/kg	<1	<1	0.0	No Limit
		EG005T: Chromium	7440-47-3	2	mg/kg	18	17	0.0	No Limit
		EG005T: Nickel	7440-02-0	2	mg/kg	3	2	0.0	No Limit
		EG005T: Arsenic	7440-38-2	5	mg/kg	8	8	0.0	No Limit
		EG005T: Copper	7440-50-8	5	mg/kg	16	15	11.9	No Limit
		EG005T: Lead	7439-92-1	5	mg/kg	17	18	6.9	No Limit
		EG005T: Zinc	7440-66-6	5	mg/kg	9	7	16.7	No Limit
EG005(ED093)T: Total Metals by ICP-AES (QC Lot: 4143510)									
ES2202264-024	SOP_BH107_1.0_220120	EG005T: Cadmium	7440-43-9	1	mg/kg	<1	<1	0.0	No Limit
		EG005T: Chromium	7440-47-3	2	mg/kg	4	3	34.0	No Limit
		EG005T: Nickel	7440-02-0	2	mg/kg	4	3	0.0	No Limit
		EG005T: Arsenic	7440-38-2	5	mg/kg	<5	<5	0.0	No Limit
		EG005T: Copper	7440-50-8	5	mg/kg	24	19	22.9	No Limit
		EG005T: Lead	7439-92-1	5	mg/kg	14	12	14.5	No Limit
		EG005T: Zinc	7440-66-6	5	mg/kg	36	27	26.9	No Limit
ES2202264-034	SOP_BH101_0.5_220120	EG005T: Cadmium	7440-43-9	1	mg/kg	<1	<1	0.0	No Limit
		EG005T: Chromium	7440-47-3	2	mg/kg	10	10	0.0	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Acceptable RPD (%)*
EG005(ED093)T: Total Metals by ICP-AES (QC Lot: 4143510) - continued									
ES2202264-034	SOP_BH101_0.5_220120	EG005T: Nickel	7440-02-0	2	mg/kg	8	5	37.3	No Limit
		EG005T: Arsenic	7440-38-2	5	mg/kg	6	8	21.0	No Limit
		EG005T: Copper	7440-50-8	5	mg/kg	19	15	20.8	No Limit
		EG005T: Lead	7439-92-1	5	mg/kg	14	14	0.0	No Limit
		EG005T: Zinc	7440-66-6	5	mg/kg	16	7	75.1	No Limit
EG005(ED093)T: Total Metals by ICP-AES (QC Lot: 4146604)									
ES2202264-044	SOP_BH125_10.0_220121	EG005T: Cadmium	7440-43-9	1	mg/kg	<1	<1	0.0	No Limit
		EG005T: Chromium	7440-47-3	2	mg/kg	14	13	8.2	No Limit
		EG005T: Nickel	7440-02-0	2	mg/kg	21	19	9.3	0% - 50%
		EG005T: Arsenic	7440-38-2	5	mg/kg	9	8	16.4	No Limit
		EG005T: Copper	7440-50-8	5	mg/kg	37	34	7.9	No Limit
		EG005T: Lead	7439-92-1	5	mg/kg	18	17	0.0	No Limit
		EG005T: Zinc	7440-66-6	5	mg/kg	81	74	8.8	0% - 50%
ES2202463-011	Anonymous	EG005T: Cadmium	7440-43-9	1	mg/kg	<1	<1	0.0	No Limit
		EG005T: Chromium	7440-47-3	2	mg/kg	<2	<2	0.0	No Limit
		EG005T: Nickel	7440-02-0	2	mg/kg	<2	<2	0.0	No Limit
		EG005T: Arsenic	7440-38-2	5	mg/kg	<5	<5	0.0	No Limit
		EG005T: Copper	7440-50-8	5	mg/kg	<5	<5	0.0	No Limit
		EG005T: Lead	7439-92-1	5	mg/kg	<5	<5	0.0	No Limit
		EG005T: Zinc	7440-66-6	5	mg/kg	<5	7	28.7	No Limit
EA055: Moisture Content (Dried @ 105-110°C) (QC Lot: 4141452)									
ES2202264-022	SOP_BH102_0.7_220120	EA055: Moisture Content	----	0.1	%	10.9	11.4	4.4	0% - 50%
EA055: Moisture Content (Dried @ 105-110°C) (QC Lot: 4143512)									
ES2202264-004	SOP_BH118_10.0_220119	EA055: Moisture Content	----	0.1	%	7.3	7.6	4.2	No Limit
ES2202264-015	SOP_BH145_1.0_220119	EA055: Moisture Content	----	0.1	%	22.8	22.8	0.0	0% - 20%
EA055: Moisture Content (Dried @ 105-110°C) (QC Lot: 4143513)									
ES2202264-028	SOP_BH109_0.3_220120	EA055: Moisture Content	----	0.1	%	18.3	19.4	5.4	0% - 50%
ES2202264-041	DUP06_220121	EA055: Moisture Content	----	0.1	%	8.0	8.0	0.0	No Limit
EA055: Moisture Content (Dried @ 105-110°C) (QC Lot: 4146607)									
ES2202264-046	SOP_BH125_20.0_220121	EA055: Moisture Content	----	0.1	%	3.2	3.2	0.0	No Limit
ES2202463-071	Anonymous	EA055: Moisture Content	----	0.1	%	5.9	6.8	12.8	No Limit
EA055: Moisture Content (Dried @ 105-110°C) (QC Lot: 4148040)									
ES2202264-018	DUP03_220119	EA055: Moisture Content	----	0.1	%	10.3	10.7	3.2	0% - 20%
ES2202525-001	Anonymous	EA055: Moisture Content	----	0.1	%	15.4	18.0	15.7	0% - 20%
EG035T: Total Recoverable Mercury by FIMS (QC Lot: 4143508)									
ES2202264-001	SOP_BH118_0.1_220119	EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	0.0	No Limit
ES2202264-011	SOP_BH143_1.0_220119	EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	0.0	No Limit
EG035T: Total Recoverable Mercury by FIMS (QC Lot: 4143509)									
ES2202264-024	SOP_BH107_1.0_220120	EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	0.0	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Acceptable RPD (%)*
EG035T: Total Recoverable Mercury by FIMS (QC Lot: 4143509) - continued									
ES2202264-034	SOP_BH101_0.5_220120	EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	0.0	No Limit
EG035T: Total Recoverable Mercury by FIMS (QC Lot: 4146603)									
ES2202264-044	SOP_BH125_10.0_220121	EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	0.0	No Limit
ES2202463-011	Anonymous	EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	0.0	No Limit
EP066: Polychlorinated Biphenyls (PCB) (QC Lot: 4139637)									
ES2202264-011	SOP_BH143_1.0_220119	EP066: Total Polychlorinated biphenyls	----	0.1	mg/kg	<0.1	<0.1	0.0	No Limit
ES2202264-001	SOP_BH118_0.1_220119	EP066: Total Polychlorinated biphenyls	----	0.1	mg/kg	<0.1	<0.1	0.0	No Limit
EP066: Polychlorinated Biphenyls (PCB) (QC Lot: 4139638)									
ES2202264-024	SOP_BH107_1.0_220120	EP066: Total Polychlorinated biphenyls	----	0.1	mg/kg	<0.1	<0.1	0.0	No Limit
ES2202264-034	SOP_BH101_0.5_220120	EP066: Total Polychlorinated biphenyls	----	0.1	mg/kg	<0.1	<0.1	0.0	No Limit
EP066: Polychlorinated Biphenyls (PCB) (QC Lot: 4139644)									
ES2202264-040	SOP_BH124_3.0_220120	EP066: Total Polychlorinated biphenyls	----	0.1	mg/kg	<0.1	<0.1	0.0	No Limit
EP068A: Organochlorine Pesticides (OC) (QC Lot: 4139635)									
ES2202264-011	SOP_BH143_1.0_220119	EP068: alpha-BHC	319-84-6	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: beta-BHC	319-85-7	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: gamma-BHC	58-89-9	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: delta-BHC	319-86-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Heptachlor	76-44-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Aldrin	309-00-2	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Dieldrin	60-57-1	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: 4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Endrin	72-20-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: 4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: 4.4`-DDT	50-29-3	0.2	mg/kg	<0.2	<0.2	0.0	No Limit
		EP068: Methoxychlor	72-43-5	0.2	mg/kg	<0.2	<0.2	0.0	No Limit
ES2202264-001	SOP_BH118_0.1_220119	EP068: alpha-BHC	319-84-6	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: beta-BHC	319-85-7	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: gamma-BHC	58-89-9	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: delta-BHC	319-86-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Acceptable RPD (%)*
EP068A: Organochlorine Pesticides (OC) (QC Lot: 4139635) - continued									
ES2202264-001	SOP_BH118_0.1_220119	EP068: Heptachlor	76-44-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Aldrin	309-00-2	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Dieldrin	60-57-1	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: 4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Endrin	72-20-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: 4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: 4.4`-DDT	50-29-3	0.2	mg/kg	<0.2	<0.2	0.0	No Limit
		EP068: Methoxychlor	72-43-5	0.2	mg/kg	<0.2	<0.2	0.0	No Limit
EP068A: Organochlorine Pesticides (OC) (QC Lot: 4139641)									
ES2202264-024	SOP_BH107_1.0_220120	EP068: alpha-BHC	319-84-6	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: beta-BHC	319-85-7	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: gamma-BHC	58-89-9	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: delta-BHC	319-86-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Heptachlor	76-44-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Aldrin	309-00-2	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Dieldrin	60-57-1	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: 4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Endrin	72-20-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: 4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: 4.4`-DDT	50-29-3	0.2	mg/kg	<0.2	<0.2	0.0	No Limit
		EP068: Methoxychlor	72-43-5	0.2	mg/kg	<0.2	<0.2	0.0	No Limit
ES2202264-034	SOP_BH101_0.5_220120	EP068: alpha-BHC	319-84-6	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	<0.05	0.0	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Acceptable RPD (%)*
EP068A: Organochlorine Pesticides (OC) (QC Lot: 4139641) - continued									
ES2202264-034	SOP_BH101_0.5_220120	EP068: beta-BHC	319-85-7	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: gamma-BHC	58-89-9	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: delta-BHC	319-86-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Heptachlor	76-44-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Aldrin	309-00-2	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Dieldrin	60-57-1	0.05	mg/kg	0.08	0.11	33.6	No Limit
		EP068: 4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Endrin	72-20-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: 4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: 4.4`-DDT	50-29-3	0.2	mg/kg	<0.2	<0.2	0.0	No Limit
		EP068: Methoxychlor	72-43-5	0.2	mg/kg	<0.2	<0.2	0.0	No Limit
EP068A: Organochlorine Pesticides (OC) (QC Lot: 4139647)									
ES2202264-040	SOP_BH124_3.0_220120	EP068: alpha-BHC	319-84-6	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: beta-BHC	319-85-7	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: gamma-BHC	58-89-9	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: delta-BHC	319-86-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Heptachlor	76-44-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Aldrin	309-00-2	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Dieldrin	60-57-1	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: 4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Endrin	72-20-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: 4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: 4.4`-DDT	50-29-3	0.2	mg/kg	<0.2	<0.2	0.0	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Acceptable RPD (%)*
EP068A: Organochlorine Pesticides (OC) (QC Lot: 4139647) - continued									
ES2202264-040	SOP_BH124_3.0_220120	EP068: Methoxychlor	72-43-5	0.2	mg/kg	<0.2	<0.2	0.0	No Limit
EP068B: Organophosphorus Pesticides (OP) (QC Lot: 4139635)									
ES2202264-011	SOP_BH143_1.0_220119	EP068: Dichlorvos	62-73-7	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Dimethoate	60-51-5	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Diazinon	333-41-5	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Malathion	121-75-5	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Fenthion	55-38-9	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Chlorfenvinphos	470-90-6	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Prothiofos	34643-46-4	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Ethion	563-12-2	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Carbophenothion	786-19-6	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Azinphos Methyl	86-50-0	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	<0.2	0.0	No Limit
		EP068: Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	<0.2	0.0	No Limit
		EP068: Parathion	56-38-2	0.2	mg/kg	<0.2	<0.2	0.0	No Limit
ES2202264-001	SOP_BH118_0.1_220119	EP068: Dichlorvos	62-73-7	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Dimethoate	60-51-5	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Diazinon	333-41-5	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Malathion	121-75-5	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Fenthion	55-38-9	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Chlorfenvinphos	470-90-6	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Prothiofos	34643-46-4	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Ethion	563-12-2	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Carbophenothion	786-19-6	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Azinphos Methyl	86-50-0	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	<0.2	0.0	No Limit
		EP068: Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	<0.2	0.0	No Limit
		EP068: Parathion	56-38-2	0.2	mg/kg	<0.2	<0.2	0.0	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Acceptable RPD (%)*
EP068B: Organophosphorus Pesticides (OP) (QC Lot: 4139641)									
ES2202264-024	SOP_BH107_1.0_220120	EP068: Dichlorvos	62-73-7	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Dimethoate	60-51-5	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Diazinon	333-41-5	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Malathion	121-75-5	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Fenthion	55-38-9	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Chlorfenvinphos	470-90-6	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Prothiofos	34643-46-4	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Ethion	563-12-2	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Carbophenothion	786-19-6	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Azinphos Methyl	86-50-0	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	<0.2	0.0	No Limit
		EP068: Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	<0.2	0.0	No Limit
		EP068: Parathion	56-38-2	0.2	mg/kg	<0.2	<0.2	0.0	No Limit
ES2202264-034	SOP_BH101_0.5_220120	EP068: Dichlorvos	62-73-7	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Dimethoate	60-51-5	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Diazinon	333-41-5	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Malathion	121-75-5	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Fenthion	55-38-9	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Chlorfenvinphos	470-90-6	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Prothiofos	34643-46-4	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Ethion	563-12-2	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Carbophenothion	786-19-6	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Azinphos Methyl	86-50-0	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	<0.2	0.0	No Limit
		EP068: Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	<0.2	0.0	No Limit
		EP068: Parathion	56-38-2	0.2	mg/kg	<0.2	<0.2	0.0	No Limit
EP068B: Organophosphorus Pesticides (OP) (QC Lot: 4139647)									
ES2202264-040	SOP_BH124_3.0_220120	EP068: Dichlorvos	62-73-7	0.05	mg/kg	<0.05	<0.05	0.0	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Acceptable RPD (%)*
EP068B: Organophosphorus Pesticides (OP) (QC Lot: 4139647) - continued									
ES2202264-040	SOP_BH124_3.0_220120	EP068: Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Dimethoate	60-51-5	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Diazinon	333-41-5	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Malathion	121-75-5	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Fenthion	55-38-9	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Chlorfenvinphos	470-90-6	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Prothiofos	34643-46-4	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Ethion	563-12-2	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Carbophenothion	786-19-6	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Azinphos Methyl	86-50-0	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	<0.2	0.0	No Limit
		EP068: Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	<0.2	0.0	No Limit
		EP068: Parathion	56-38-2	0.2	mg/kg	<0.2	<0.2	0.0	No Limit
EP074A: Monocyclic Aromatic Hydrocarbons (QC Lot: 4139178)									
ES2202264-022	SOP_BH102_0.7_220120	EP074: Styrene	100-42-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: Isopropylbenzene	98-82-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: n-Propylbenzene	103-65-1	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: 1.3.5-Trimethylbenzene	108-67-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: sec-Butylbenzene	135-98-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: 1.2.4-Trimethylbenzene	95-63-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: tert-Butylbenzene	98-06-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: p-Isopropyltoluene	99-87-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: n-Butylbenzene	104-51-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
EP074A: Monocyclic Aromatic Hydrocarbons (QC Lot: 4139230)									
ES2202264-001	SOP_BH118_0.1_220119	EP074: Styrene	100-42-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: Isopropylbenzene	98-82-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: n-Propylbenzene	103-65-1	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: 1.3.5-Trimethylbenzene	108-67-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: sec-Butylbenzene	135-98-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: 1.2.4-Trimethylbenzene	95-63-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: tert-Butylbenzene	98-06-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: p-Isopropyltoluene	99-87-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: n-Butylbenzene	104-51-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
ES2202334-001	Anonymous	EP074: Styrene	100-42-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: Isopropylbenzene	98-82-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Acceptable RPD (%)*
EP074A: Monocyclic Aromatic Hydrocarbons (QC Lot: 4139230) - continued									
ES2202334-001	Anonymous	EP074: n-Propylbenzene	103-65-1	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: 1.3.5-Trimethylbenzene	108-67-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: sec-Butylbenzene	135-98-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: 1.2.4-Trimethylbenzene	95-63-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: tert-Butylbenzene	98-06-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: p-Isopropyltoluene	99-87-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: n-Butylbenzene	104-51-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
EP074B: Oxygenated Compounds (QC Lot: 4139178)									
ES2202264-022	SOP_BH102_0.7_220120	EP074: Vinyl Acetate	108-05-4	5	mg/kg	<5	<5	0.0	No Limit
		EP074: 2-Butanone (MEK)	78-93-3	5	mg/kg	<5	<5	0.0	No Limit
		EP074: 4-Methyl-2-pentanone (MIBK)	108-10-1	5	mg/kg	<5	<5	0.0	No Limit
		EP074: 2-Hexanone (MBK)	591-78-6	5	mg/kg	<5	<5	0.0	No Limit
EP074B: Oxygenated Compounds (QC Lot: 4139230)									
ES2202264-001	SOP_BH118_0.1_220119	EP074: Vinyl Acetate	108-05-4	5	mg/kg	<5	<5	0.0	No Limit
		EP074: 2-Butanone (MEK)	78-93-3	5	mg/kg	<5	<5	0.0	No Limit
		EP074: 4-Methyl-2-pentanone (MIBK)	108-10-1	5	mg/kg	<5	<5	0.0	No Limit
		EP074: 2-Hexanone (MBK)	591-78-6	5	mg/kg	<5	<5	0.0	No Limit
ES2202334-001	Anonymous	EP074: Vinyl Acetate	108-05-4	5	mg/kg	<5	<5	0.0	No Limit
		EP074: 2-Butanone (MEK)	78-93-3	5	mg/kg	<5	<5	0.0	No Limit
		EP074: 4-Methyl-2-pentanone (MIBK)	108-10-1	5	mg/kg	<5	<5	0.0	No Limit
		EP074: 2-Hexanone (MBK)	591-78-6	5	mg/kg	<5	<5	0.0	No Limit
EP074C: Sulfonated Compounds (QC Lot: 4139178)									
ES2202264-022	SOP_BH102_0.7_220120	EP074: Carbon disulfide	75-15-0	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
EP074C: Sulfonated Compounds (QC Lot: 4139230)									
ES2202264-001	SOP_BH118_0.1_220119	EP074: Carbon disulfide	75-15-0	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
ES2202334-001	Anonymous	EP074: Carbon disulfide	75-15-0	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
EP074D: Fumigants (QC Lot: 4139178)									
ES2202264-022	SOP_BH102_0.7_220120	EP074: 2.2-Dichloropropane	594-20-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: 1.2-Dichloropropane	78-87-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: cis-1.3-Dichloropropylene	10061-01-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: trans-1.3-Dichloropropylene	10061-02-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: 1.2-Dibromoethane (EDB)	106-93-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
EP074D: Fumigants (QC Lot: 4139230)									
ES2202264-001	SOP_BH118_0.1_220119	EP074: 2.2-Dichloropropane	594-20-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: 1.2-Dichloropropane	78-87-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: cis-1.3-Dichloropropylene	10061-01-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: trans-1.3-Dichloropropylene	10061-02-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: 1.2-Dibromoethane (EDB)	106-93-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
ES2202334-001	Anonymous	EP074: 2.2-Dichloropropane	594-20-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Acceptable RPD (%)*
EP074D: Fumigants (QC Lot: 4139230) - continued									
ES2202334-001	Anonymous	EP074: 1.2-Dichloropropane	78-87-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: cis-1.3-Dichloropropylene	10061-01-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: trans-1.3-Dichloropropylene	10061-02-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: 1.2-Dibromoethane (EDB)	106-93-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
EP074E: Halogenated Aliphatic Compounds (QC Lot: 4139178)									
ES2202264-022	SOP_BH102_0.7_220120	EP074: 1.1-Dichloroethene	75-35-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: Iodomethane	74-88-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: trans-1.2-Dichloroethene	156-60-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: 1.1-Dichloroethane	75-34-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: cis-1.2-Dichloroethene	156-59-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: 1.1.1-Trichloroethane	71-55-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: 1.1-Dichloropropylene	563-58-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: Carbon Tetrachloride	56-23-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: 1.2-Dichloroethane	107-06-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: Trichloroethene	79-01-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: Dibromomethane	74-95-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: 1.1.2-Trichloroethane	79-00-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: 1.3-Dichloropropane	142-28-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: Tetrachloroethene	127-18-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: 1.1.1.2-Tetrachloroethane	630-20-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: trans-1.4-Dichloro-2-butene	110-57-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: cis-1.4-Dichloro-2-butene	1476-11-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: 1.1.2.2-Tetrachloroethane	79-34-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: 1.2.3-Trichloropropane	96-18-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: Pentachloroethane	76-01-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: 1.2-Dibromo-3-chloropropane	96-12-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: Dichlorodifluoromethane	75-71-8	5	mg/kg	<5	<5	0.0	No Limit
		EP074: Chloromethane	74-87-3	5	mg/kg	<5	<5	0.0	No Limit
		EP074: Vinyl chloride	75-01-4	5	mg/kg	<5	<5	0.0	No Limit
		EP074: Bromomethane	74-83-9	5	mg/kg	<5	<5	0.0	No Limit
		EP074: Chloroethane	75-00-3	5	mg/kg	<5	<5	0.0	No Limit
		EP074: Trichlorofluoromethane	75-69-4	5	mg/kg	<5	<5	0.0	No Limit
EP074E: Halogenated Aliphatic Compounds (QC Lot: 4139230)									
ES2202264-001	SOP_BH118_0.1_220119	EP074: 1.1-Dichloroethene	75-35-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: Iodomethane	74-88-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: trans-1.2-Dichloroethene	156-60-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: 1.1-Dichloroethane	75-34-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: cis-1.2-Dichloroethene	156-59-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: 1.1.1-Trichloroethane	71-55-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: 1.1-Dichloropropylene	563-58-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Acceptable RPD (%)*
EP074E: Halogenated Aliphatic Compounds (QC Lot: 4139230) - continued									
ES2202264-001	SOP_BH118_0.1_220119	EP074: Carbon Tetrachloride	56-23-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: 1.2-Dichloroethane	107-06-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: Trichloroethene	79-01-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: Dibromomethane	74-95-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: 1.1.2-Trichloroethane	79-00-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: 1.3-Dichloropropane	142-28-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: Tetrachloroethene	127-18-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: 1.1.1.2-Tetrachloroethane	630-20-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: trans-1.4-Dichloro-2-butene	110-57-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: cis-1.4-Dichloro-2-butene	1476-11-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: 1.1.2.2-Tetrachloroethane	79-34-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: 1.2.3-Trichloropropane	96-18-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: Pentachloroethane	76-01-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: 1.2-Dibromo-3-chloropropane	96-12-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: Dichlorodifluoromethane	75-71-8	5	mg/kg	<5	<5	0.0	No Limit
		EP074: Chloromethane	74-87-3	5	mg/kg	<5	<5	0.0	No Limit
		EP074: Vinyl chloride	75-01-4	5	mg/kg	<5	<5	0.0	No Limit
		EP074: Bromomethane	74-83-9	5	mg/kg	<5	<5	0.0	No Limit
		EP074: Chloroethane	75-00-3	5	mg/kg	<5	<5	0.0	No Limit
		EP074: Trichlorofluoromethane	75-69-4	5	mg/kg	<5	<5	0.0	No Limit
ES2202334-001	Anonymous	EP074: 1.1-Dichloroethene	75-35-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: Iodomethane	74-88-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: trans-1.2-Dichloroethene	156-60-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: 1.1-Dichloroethane	75-34-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: cis-1.2-Dichloroethene	156-59-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: 1.1.1-Trichloroethane	71-55-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: 1.1-Dichloropropylene	563-58-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: Carbon Tetrachloride	56-23-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: 1.2-Dichloroethane	107-06-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: Trichloroethene	79-01-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: Dibromomethane	74-95-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: 1.1.2-Trichloroethane	79-00-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: 1.3-Dichloropropane	142-28-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: Tetrachloroethene	127-18-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: 1.1.1.2-Tetrachloroethane	630-20-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: trans-1.4-Dichloro-2-butene	110-57-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: cis-1.4-Dichloro-2-butene	1476-11-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: 1.1.2.2-Tetrachloroethane	79-34-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: 1.2.3-Trichloropropane	96-18-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: Pentachloroethane	76-01-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Acceptable RPD (%)*
EP074E: Halogenated Aliphatic Compounds (QC Lot: 4139230) - continued									
ES2202334-001	Anonymous	EP074: 1.2-Dibromo-3-chloropropane	96-12-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: Dichlorodifluoromethane	75-71-8	5	mg/kg	<5	<5	0.0	No Limit
		EP074: Chloromethane	74-87-3	5	mg/kg	<5	<5	0.0	No Limit
		EP074: Vinyl chloride	75-01-4	5	mg/kg	<5	<5	0.0	No Limit
		EP074: Bromomethane	74-83-9	5	mg/kg	<5	<5	0.0	No Limit
		EP074: Chloroethane	75-00-3	5	mg/kg	<5	<5	0.0	No Limit
		EP074: Trichlorofluoromethane	75-69-4	5	mg/kg	<5	<5	0.0	No Limit
EP074F: Halogenated Aromatic Compounds (QC Lot: 4139178)									
ES2202264-022	SOP_BH102_0.7_220120	EP074: Chlorobenzene	108-90-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: Bromobenzene	108-86-1	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: 2-Chlorotoluene	95-49-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: 4-Chlorotoluene	106-43-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: 1.2.3-Trichlorobenzene	87-61-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
EP074F: Halogenated Aromatic Compounds (QC Lot: 4139230)									
ES2202264-001	SOP_BH118_0.1_220119	EP074: Chlorobenzene	108-90-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: Bromobenzene	108-86-1	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: 2-Chlorotoluene	95-49-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: 4-Chlorotoluene	106-43-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: 1.2.3-Trichlorobenzene	87-61-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
ES2202334-001	Anonymous	EP074: Chlorobenzene	108-90-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: Bromobenzene	108-86-1	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: 2-Chlorotoluene	95-49-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: 4-Chlorotoluene	106-43-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: 1.2.3-Trichlorobenzene	87-61-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
EP074G: Trihalomethanes (QC Lot: 4139178)									
ES2202264-022	SOP_BH102_0.7_220120	EP074: Chloroform	67-66-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: Bromodichloromethane	75-27-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: Dibromochloromethane	124-48-1	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: Bromoform	75-25-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
EP074G: Trihalomethanes (QC Lot: 4139230)									
ES2202264-001	SOP_BH118_0.1_220119	EP074: Chloroform	67-66-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: Bromodichloromethane	75-27-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: Dibromochloromethane	124-48-1	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: Bromoform	75-25-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
ES2202334-001	Anonymous	EP074: Chloroform	67-66-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: Bromodichloromethane	75-27-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: Dibromochloromethane	124-48-1	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: Bromoform	75-25-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QC Lot: 4139634)									

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 (%)*
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QC Lot: 4139634) - continued									
ES2202264-011	SOP_BH143_1.0_220119	EP075(SIM): Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Phenanthrene	85-01-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Fluoranthene	206-44-0	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
ES2202264-001	SOP_BH118_0.1_220119	EP075(SIM): Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Phenanthrene	85-01-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Fluoranthene	206-44-0	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg	<0.5	<0.5	0.0	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Acceptable RPD (%)*
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QC Lot: 4139640)									
ES2202264-024	SOP_BH107_1.0_220120	EP075(SIM): Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Phenanthrene	85-01-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Fluoranthene	206-44-0	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
ES2202264-034	SOP_BH101_0.5_220120	EP075(SIM): Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Phenanthrene	85-01-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Fluoranthene	206-44-0	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg	<0.5	<0.5	0.0	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Acceptable RPD (%)*
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QC Lot: 4139646)									
ES2202264-040	SOP_BH124_3.0_220120	EP075(SIM): Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Phenanthrene	85-01-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Fluoranthene	206-44-0	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
EP075A: Phenolic Compounds (QC Lot: 4139636)									
ES2202264-001	SOP_BH118_0.1_220119	EP075: Phenol	108-95-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 2-Chlorophenol	95-57-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 2-Methylphenol	95-48-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 3- & 4-Methylphenol	1319-77-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 2-Nitrophenol	88-75-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 2.4-Dimethylphenol	105-67-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 2.4-Dichlorophenol	120-83-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 2.6-Dichlorophenol	87-65-0	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 4-Chloro-3-methylphenol	59-50-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 2.4.6-Trichlorophenol	88-06-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 2.4.5-Trichlorophenol	95-95-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Pentachlorophenol	87-86-5	1	mg/kg	<1	<1	0.0	No Limit
EP075A: Phenolic Compounds (QC Lot: 4139642)									
ES2202264-024	SOP_BH107_1.0_220120	EP075: Phenol	108-95-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 2-Chlorophenol	95-57-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 2-Methylphenol	95-48-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 3- & 4-Methylphenol	1319-77-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 2-Nitrophenol	88-75-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 2.4-Dimethylphenol	105-67-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Acceptable RPD (%)*
EP075A: Phenolic Compounds (QC Lot: 4139642) - continued									
ES2202264-024	SOP_BH107_1.0_220120	EP075: 2.4-Dichlorophenol	120-83-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 2.6-Dichlorophenol	87-65-0	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 4-Chloro-3-methylphenol	59-50-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 2.4.6-Trichlorophenol	88-06-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 2.4.5-Trichlorophenol	95-95-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Pentachlorophenol	87-86-5	1	mg/kg	<1	<1	0.0	No Limit
ES2202264-034	SOP_BH101_0.5_220120	EP075: Phenol	108-95-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 2-Chlorophenol	95-57-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 2-Methylphenol	95-48-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 3- & 4-Methylphenol	1319-77-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 2-Nitrophenol	88-75-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 2.4-Dimethylphenol	105-67-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 2.4-Dichlorophenol	120-83-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 2.6-Dichlorophenol	87-65-0	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 4-Chloro-3-methylphenol	59-50-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 2.4.6-Trichlorophenol	88-06-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 2.4.5-Trichlorophenol	95-95-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Pentachlorophenol	87-86-5	1	mg/kg	<1	<1	0.0	No Limit
EP075B: Polynuclear Aromatic Hydrocarbons (QC Lot: 4139636)									
ES2202264-001	SOP_BH118_0.1_220119	EP075: 2-Methylnaphthalene	91-57-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 2-Chloronaphthalene	91-58-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: N-2-Fluorenyl Acetamide	53-96-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 7.12-Dimethylbenz(a)anthracene	57-97-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 3-Methylcholanthrene	56-49-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
EP075B: Polynuclear Aromatic Hydrocarbons (QC Lot: 4139642)									
ES2202264-024	SOP_BH107_1.0_220120	EP075: 2-Methylnaphthalene	91-57-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 2-Chloronaphthalene	91-58-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: N-2-Fluorenyl Acetamide	53-96-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 7.12-Dimethylbenz(a)anthracene	57-97-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 3-Methylcholanthrene	56-49-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
ES2202264-034	SOP_BH101_0.5_220120	EP075: 2-Methylnaphthalene	91-57-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 2-Chloronaphthalene	91-58-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: N-2-Fluorenyl Acetamide	53-96-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 7.12-Dimethylbenz(a)anthracene	57-97-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 3-Methylcholanthrene	56-49-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
EP075C: Phthalate Esters (QC Lot: 4139636)									
ES2202264-001	SOP_BH118_0.1_220119	EP075: Dimethyl phthalate	131-11-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Diethyl phthalate	84-66-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Di-n-butyl phthalate	84-74-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Butyl benzyl phthalate	85-68-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Acceptable RPD (%)*
EP075C: Phthalate Esters (QC Lot: 4139636) - continued									
ES2202264-001	SOP_BH118_0.1_220119	EP075: Di-n-octylphthalate	117-84-0	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
EP075C: Phthalate Esters (QC Lot: 4139642)									
ES2202264-024	SOP_BH107_1.0_220120	EP075: Dimethyl phthalate	131-11-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Diethyl phthalate	84-66-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Di-n-butyl phthalate	84-74-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Butyl benzyl phthalate	85-68-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Di-n-octylphthalate	117-84-0	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
ES2202264-034	SOP_BH101_0.5_220120	EP075: Dimethyl phthalate	131-11-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Diethyl phthalate	84-66-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Di-n-butyl phthalate	84-74-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Butyl benzyl phthalate	85-68-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Di-n-octylphthalate	117-84-0	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
EP075D: Nitrosamines (QC Lot: 4139636)									
ES2202264-001	SOP_BH118_0.1_220119	EP075: N-Nitrosomethylethylamine	10595-95-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: N-Nitrosodiethylamine	55-18-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: N-Nitrosopyrrolidine	930-55-2	0.5	mg/kg	<1.0	<1.0	0.0	No Limit
		EP075: N-Nitrosomorpholine	59-89-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: N-Nitrosodi-n-propylamine	621-64-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: N-Nitrosopiperidine	100-75-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: N-Nitrosodibutylamine	924-16-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: N-Nitrosodiphenyl & Diphenylamine	86-30-6 122-39-4	0.5	mg/kg	<1.0	<1.0	0.0	No Limit
		EP075: Methapyrilene	91-80-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
EP075D: Nitrosamines (QC Lot: 4139642)									
ES2202264-024	SOP_BH107_1.0_220120	EP075: N-Nitrosomethylethylamine	10595-95-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: N-Nitrosodiethylamine	55-18-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: N-Nitrosopyrrolidine	930-55-2	0.5	mg/kg	<1.0	<1.0	0.0	No Limit
		EP075: N-Nitrosomorpholine	59-89-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: N-Nitrosodi-n-propylamine	621-64-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: N-Nitrosopiperidine	100-75-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: N-Nitrosodibutylamine	924-16-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: N-Nitrosodiphenyl & Diphenylamine	86-30-6 122-39-4	0.5	mg/kg	<1.0	<1.0	0.0	No Limit
		EP075: Methapyrilene	91-80-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
ES2202264-034	SOP_BH101_0.5_220120	EP075: N-Nitrosomethylethylamine	10595-95-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: N-Nitrosodiethylamine	55-18-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: N-Nitrosopyrrolidine	930-55-2	0.5	mg/kg	<1.0	<1.0	0.0	No Limit
		EP075: N-Nitrosomorpholine	59-89-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: N-Nitrosodi-n-propylamine	621-64-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: N-Nitrosopiperidine	100-75-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Acceptable RPD (%)*
EP075D: Nitrosamines (QC Lot: 4139642) - continued									
ES2202264-034	SOP_BH101_0.5_220120	EP075: N-Nitrosodibutylamine	924-16-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: N-Nitrosodiphenyl & Diphenylamine	86-30-6 122-39-4	0.5	mg/kg	<1.0	<1.0	0.0	No Limit
		EP075: Methapyrilene	91-80-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
EP075E: Nitroaromatics and Ketones (QC Lot: 4139636)									
ES2202264-001	SOP_BH118_0.1_220119	EP075: 2-Picoline	109-06-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Acetophenone	98-86-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Nitrobenzene	98-95-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Isophorone	78-59-1	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 2.6-Dinitrotoluene	606-20-2	0.5	mg/kg	<1.0	<1.0	0.0	No Limit
		EP075: 2.4-Dinitrotoluene	121-14-2	0.5	mg/kg	<1.0	<1.0	0.0	No Limit
		EP075: 1-Naphthylamine	134-32-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 4-Nitroquinoline-N-oxide	56-57-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 5-Nitro-o-toluidine	99-55-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 1.3.5-Trinitrobenzene	99-35-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Phenacetin	62-44-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 4-Aminobiphenyl	92-67-1	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Pentachloronitrobenzene	82-68-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Pronamide	23950-58-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Dimethylaminoazobenzene	60-11-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Chlorobenzilate	510-15-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Azobenzene	103-33-3	1	mg/kg	<1	<1	0.0	No Limit
EP075E: Nitroaromatics and Ketones (QC Lot: 4139642)									
ES2202264-024	SOP_BH107_1.0_220120	EP075: 2-Picoline	109-06-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Acetophenone	98-86-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Nitrobenzene	98-95-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Isophorone	78-59-1	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 2.6-Dinitrotoluene	606-20-2	0.5	mg/kg	<1.0	<1.0	0.0	No Limit
		EP075: 2.4-Dinitrotoluene	121-14-2	0.5	mg/kg	<1.0	<1.0	0.0	No Limit
		EP075: 1-Naphthylamine	134-32-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 4-Nitroquinoline-N-oxide	56-57-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 5-Nitro-o-toluidine	99-55-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 1.3.5-Trinitrobenzene	99-35-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Phenacetin	62-44-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 4-Aminobiphenyl	92-67-1	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Pentachloronitrobenzene	82-68-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Pronamide	23950-58-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Dimethylaminoazobenzene	60-11-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Chlorobenzilate	510-15-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Azobenzene	103-33-3	1	mg/kg	<1	<1	0.0	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Acceptable RPD (%)*
EP075E: Nitroaromatics and Ketones (QC Lot: 4139642) - continued									
ES2202264-034	SOP_BH101_0.5_220120	EP075: 2-Picoline	109-06-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Acetophenone	98-86-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Nitrobenzene	98-95-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Isophorone	78-59-1	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 2.6-Dinitrotoluene	606-20-2	0.5	mg/kg	<1.0	<1.0	0.0	No Limit
		EP075: 2.4-Dinitrotoluene	121-14-2	0.5	mg/kg	<1.0	<1.0	0.0	No Limit
		EP075: 1-Naphthylamine	134-32-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 4-Nitroquinoline-N-oxide	56-57-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 5-Nitro-o-toluidine	99-55-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 1.3.5-Trinitrobenzene	99-35-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Phenacetin	62-44-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 4-Aminobiphenyl	92-67-1	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Pentachloronitrobenzene	82-68-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Pronamide	23950-58-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Dimethylaminoazobenzene	60-11-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Chlorobenzilate	510-15-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Azobenzene	103-33-3	1	mg/kg	<1	<1	0.0	No Limit
EP075F: Haloethers (QC Lot: 4139636)									
ES2202264-001	SOP_BH118_0.1_220119	EP075: Bis(2-chloroethyl) ether	111-44-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Bis(2-chloroethoxy) methane	111-91-1	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 4-Chlorophenyl phenyl ether	7005-72-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 4-Bromophenyl phenyl ether	101-55-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
EP075F: Haloethers (QC Lot: 4139642)									
ES2202264-024	SOP_BH107_1.0_220120	EP075: Bis(2-chloroethyl) ether	111-44-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Bis(2-chloroethoxy) methane	111-91-1	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 4-Chlorophenyl phenyl ether	7005-72-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 4-Bromophenyl phenyl ether	101-55-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
ES2202264-034	SOP_BH101_0.5_220120	EP075: Bis(2-chloroethyl) ether	111-44-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Bis(2-chloroethoxy) methane	111-91-1	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 4-Chlorophenyl phenyl ether	7005-72-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 4-Bromophenyl phenyl ether	101-55-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
EP075G: Chlorinated Hydrocarbons (QC Lot: 4139636)									
ES2202264-001	SOP_BH118_0.1_220119	EP075: 1.3-Dichlorobenzene	541-73-1	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 1.4-Dichlorobenzene	106-46-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 1.2-Dichlorobenzene	95-50-1	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Hexachloroethane	67-72-1	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 1.2.4-Trichlorobenzene	120-82-1	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Hexachloropropylene	1888-71-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Hexachlorobutadiene	87-68-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Pentachlorobenzene	608-93-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Acceptable RPD (%)*
EP075G: Chlorinated Hydrocarbons (QC Lot: 4139636) - continued									
ES2202264-001	SOP_BH118_0.1_220119	EP075: Hexachlorobenzene (HCB)	118-74-1	0.5	mg/kg	<1.0	<1.0	0.0	No Limit
		EP075: Hexachlorocyclopentadiene	77-47-4	2.5	mg/kg	<2.5	<2.5	0.0	No Limit
EP075G: Chlorinated Hydrocarbons (QC Lot: 4139642)									
ES2202264-024	SOP_BH107_1.0_220120	EP075: 1.3-Dichlorobenzene	541-73-1	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 1.4-Dichlorobenzene	106-46-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 1.2-Dichlorobenzene	95-50-1	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Hexachloroethane	67-72-1	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 1.2.4-Trichlorobenzene	120-82-1	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Hexachloropropylene	1888-71-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Hexachlorobutadiene	87-68-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Pentachlorobenzene	608-93-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Hexachlorobenzene (HCB)	118-74-1	0.5	mg/kg	<1.0	<1.0	0.0	No Limit
		EP075: Hexachlorocyclopentadiene	77-47-4	2.5	mg/kg	<2.5	<2.5	0.0	No Limit
ES2202264-034	SOP_BH101_0.5_220120	EP075: 1.3-Dichlorobenzene	541-73-1	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 1.4-Dichlorobenzene	106-46-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 1.2-Dichlorobenzene	95-50-1	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Hexachloroethane	67-72-1	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 1.2.4-Trichlorobenzene	120-82-1	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Hexachloropropylene	1888-71-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Hexachlorobutadiene	87-68-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Pentachlorobenzene	608-93-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Hexachlorobenzene (HCB)	118-74-1	0.5	mg/kg	<1.0	<1.0	0.0	No Limit
		EP075: Hexachlorocyclopentadiene	77-47-4	2.5	mg/kg	<2.5	<2.5	0.0	No Limit
EP075H: Anilines and Benzidines (QC Lot: 4139636)									
ES2202264-001	SOP_BH118_0.1_220119	EP075: Aniline	62-53-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 4-Chloroaniline	106-47-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 2-Nitroaniline	88-74-4	0.5	mg/kg	<1.0	<1.0	0.0	No Limit
		EP075: 3-Nitroaniline	99-09-2	0.5	mg/kg	<1.0	<1.0	0.0	No Limit
		EP075: Dibenzofuran	132-64-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 4-Nitroaniline	100-01-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Carbazole	86-74-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 3.3`-Dichlorobenzidine	91-94-1	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
EP075H: Anilines and Benzidines (QC Lot: 4139642)									
ES2202264-024	SOP_BH107_1.0_220120	EP075: Aniline	62-53-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 4-Chloroaniline	106-47-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 2-Nitroaniline	88-74-4	0.5	mg/kg	<1.0	<1.0	0.0	No Limit
		EP075: 3-Nitroaniline	99-09-2	0.5	mg/kg	<1.0	<1.0	0.0	No Limit
		EP075: Dibenzofuran	132-64-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 4-Nitroaniline	100-01-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Carbazole	86-74-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Acceptable RPD (%)*
EP075H: Anilines and Benzidines (QC Lot: 4139642) - continued									
ES2202264-024	SOP_BH107_1.0_220120	EP075: 3.3`-Dichlorobenzidine	91-94-1	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
ES2202264-034	SOP_BH101_0.5_220120	EP075: Aniline	62-53-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 4-Chloroaniline	106-47-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 2-Nitroaniline	88-74-4	0.5	mg/kg	<1.0	<1.0	0.0	No Limit
		EP075: 3-Nitroaniline	99-09-2	0.5	mg/kg	<1.0	<1.0	0.0	No Limit
		EP075: Dibenzofuran	132-64-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 4-Nitroaniline	100-01-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Carbazole	86-74-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 3.3`-Dichlorobenzidine	91-94-1	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 4139177)									
ES2202264-032	SOP_BH121_1.0_220120	EP080: C6 - C9 Fraction	----	10	mg/kg	<10	<10	0.0	No Limit
ES2202264-022	SOP_BH102_0.7_220120	EP080: C6 - C9 Fraction	----	10	mg/kg	<10	<10	0.0	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 4139231)									
ES2202264-001	SOP_BH118_0.1_220119	EP080: C6 - C9 Fraction	----	10	mg/kg	<10	<10	0.0	No Limit
ES2202334-001	Anonymous	EP080: C6 - C9 Fraction	----	10	mg/kg	<10	<10	0.0	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 4139633)									
ES2202264-011	SOP_BH143_1.0_220119	EP071: C15 - C28 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071: C29 - C36 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071: C10 - C14 Fraction	----	50	mg/kg	<50	<50	0.0	No Limit
ES2202264-001	SOP_BH118_0.1_220119	EP071: C15 - C28 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071: C29 - C36 Fraction	----	100	mg/kg	160	210	25.3	No Limit
		EP071: C10 - C14 Fraction	----	50	mg/kg	<50	<50	0.0	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 4139639)									
ES2202264-024	SOP_BH107_1.0_220120	EP071: C15 - C28 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071: C29 - C36 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071: C10 - C14 Fraction	----	50	mg/kg	<50	<50	0.0	No Limit
ES2202264-034	SOP_BH101_0.5_220120	EP071: C15 - C28 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071: C29 - C36 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071: C10 - C14 Fraction	----	50	mg/kg	<50	<50	0.0	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 4139645)									
ES2202264-040	SOP_BH124_3.0_220120	EP071: C15 - C28 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071: C29 - C36 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071: C10 - C14 Fraction	----	50	mg/kg	<50	<50	0.0	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 4142203)									
ES2202319-001	Anonymous	EP080: C6 - C9 Fraction	----	10	mg/kg	<10	<10	0.0	No Limit
ES2202670-001	Anonymous	EP080: C6 - C9 Fraction	----	10	mg/kg	<10	<10	0.0	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 4146318)									
ES2202264-002	SOP_BH118_1.0_220119	EP080: C6 - C9 Fraction	----	10	mg/kg	<10	<10	0.0	No Limit
ES2202342-001	Anonymous	EP080: C6 - C9 Fraction	----	10	mg/kg	<10	<10	0.0	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Acceptable RPD (%)*
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 4148455)									
ES2202477-001	Anonymous	EP080: C6 - C9 Fraction	----	10	mg/kg	<10	<10	0.0	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 4139177)									
ES2202264-032	SOP_BH121_1.0_220120	EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	<10	0.0	No Limit
ES2202264-022	SOP_BH102_0.7_220120	EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	<10	0.0	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 4139231)									
ES2202264-001	SOP_BH118_0.1_220119	EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	<10	0.0	No Limit
ES2202334-001	Anonymous	EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	<10	0.0	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 4139633)									
ES2202264-011	SOP_BH143_1.0_220119	EP071: >C16 - C34 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071: >C34 - C40 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071: >C10 - C16 Fraction	----	50	mg/kg	<50	<50	0.0	No Limit
ES2202264-001	SOP_BH118_0.1_220119	EP071: >C16 - C34 Fraction	----	100	mg/kg	160	160	0.0	No Limit
		EP071: >C34 - C40 Fraction	----	100	mg/kg	180	240	28.1	No Limit
		EP071: >C10 - C16 Fraction	----	50	mg/kg	<50	<50	0.0	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 4139639)									
ES2202264-024	SOP_BH107_1.0_220120	EP071: >C16 - C34 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071: >C34 - C40 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071: >C10 - C16 Fraction	----	50	mg/kg	<50	<50	0.0	No Limit
ES2202264-034	SOP_BH101_0.5_220120	EP071: >C16 - C34 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071: >C34 - C40 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071: >C10 - C16 Fraction	----	50	mg/kg	<50	<50	0.0	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 4139645)									
ES2202264-040	SOP_BH124_3.0_220120	EP071: >C16 - C34 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071: >C34 - C40 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071: >C10 - C16 Fraction	----	50	mg/kg	<50	<50	0.0	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 4142203)									
ES2202319-001	Anonymous	EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	<10	0.0	No Limit
ES2202670-001	Anonymous	EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	<10	0.0	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 4146318)									
ES2202264-002	SOP_BH118_1.0_220119	EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	<10	0.0	No Limit
ES2202342-001	Anonymous	EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	<10	0.0	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 4148455)									
ES2202477-001	Anonymous	EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	<10	0.0	No Limit
EP080: BTEXN (QC Lot: 4139177)									
ES2202264-032	SOP_BH121_1.0_220120	EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	0.0	No Limit
		EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Acceptable RPD (%)*
EP080: BTEXN (QC Lot: 4139177) - continued									
ES2202264-032	SOP_BH121_1.0_220120	EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: Naphthalene	91-20-3	1	mg/kg	<1	<1	0.0	No Limit
ES2202264-022	SOP_BH102_0.7_220120	EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	0.0	No Limit
		EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: Naphthalene	91-20-3	1	mg/kg	<1	<1	0.0	No Limit
EP080: BTEXN (QC Lot: 4139231)									
ES2202264-001	SOP_BH118_0.1_220119	EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	0.0	No Limit
		EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: Naphthalene	91-20-3	1	mg/kg	<1	<1	0.0	No Limit
ES2202334-001	Anonymous	EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	0.0	No Limit
		EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: Naphthalene	91-20-3	1	mg/kg	<1	<1	0.0	No Limit
EP080: BTEXN (QC Lot: 4142203)									
ES2202319-001	Anonymous	EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	0.0	No Limit
		EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: Naphthalene	91-20-3	1	mg/kg	<1	<1	0.0	No Limit
ES2202670-001	Anonymous	EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	0.0	No Limit
		EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Acceptable RPD (%)*
EP080: BTEXN (QC Lot: 4142203) - continued									
ES2202670-001	Anonymous	EP080: Naphthalene	91-20-3	1	mg/kg	<1	<1	0.0	No Limit
EP080: BTEXN (QC Lot: 4146318)									
ES2202264-002	SOP_BH118_1.0_220119	EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	0.0	No Limit
		EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: Naphthalene	91-20-3	1	mg/kg	<1	<1	0.0	No Limit
ES2202342-001	Anonymous	EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	0.0	No Limit
		EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: Naphthalene	91-20-3	1	mg/kg	3	8	95.4	No Limit
EP080: BTEXN (QC Lot: 4148455)									
ES2202477-001	Anonymous	EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	0.0	No Limit
		EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: Naphthalene	91-20-3	1	mg/kg	<1	<1	0.0	No Limit
EP231A: Perfluoroalkyl Sulfonic Acids (QC Lot: 4141334)									
ES2202264-002	SOP_BH118_1.0_220119	EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
ES2202264-016	SOP_BH145_5.0_220119	EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
EP231A: Perfluoroalkyl Sulfonic Acids (QC Lot: 4143107)									
ES2202264-039	SOP_BH124_0.5_220120	EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Acceptable RPD (%)*
EP231A: Perfluoroalkyl Sulfonic Acids (QC Lot: 4143107) - continued									
ES2202264-039	SOP_BH124_0.5_220120	EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
EP231B: Perfluoroalkyl Carboxylic Acids (QC Lot: 4141334)									
ES2202264-002	SOP_BH118_1.0_220119	EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.001	mg/kg	<0.001	<0.001	0.0	No Limit
ES2202264-016	SOP_BH145_5.0_220119	EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.001	mg/kg	<0.001	<0.001	0.0	No Limit
EP231B: Perfluoroalkyl Carboxylic Acids (QC Lot: 4143107)									
ES2202264-039	SOP_BH124_0.5_220120	EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.001	mg/kg	<0.001	<0.001	0.0	No Limit
EP231C: Perfluoroalkyl Sulfonamides (QC Lot: 4141334)									

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Acceptable RPD (%)*
EP231C: Perfluoroalkyl Sulfonamides (QC Lot: 4141334) - continued									
ES2202264-002	SOP_BH118_1.0_220119	EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
ES2202264-016	SOP_BH145_5.0_220119	EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
EP231C: Perfluoroalkyl Sulfonamides (QC Lot: 4143107)									
ES2202264-039	SOP_BH124_0.5_220120	EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QC Lot: 4141334)									

Sub-Matrix: **SOIL**

Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Laboratory Duplicate (DUP) Report					
				LOR	Unit	Original Result	Duplicate Result	RPD (%)	Acceptable RPD (%)
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QC Lot: 4141334) - continued									
ES2202264-002	SOP_BH118_1.0_220119	EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
ES2202264-016	SOP_BH145_5.0_220119	EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QC Lot: 4143107)									
ES2202264-039	SOP_BH124_0.5_220120	EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit

Sub-Matrix: **WATER**

Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Laboratory Duplicate (DUP) Report					
				LOR	Unit	Original Result	Duplicate Result	RPD (%)	Acceptable RPD (%)
EG020T: Total Metals by ICP-MS (QC Lot: 4144071)									
EN2200505-001	Anonymous	EG020A-T: Cadmium	7440-43-9	0.0001	mg/L	<0.0001	<0.0001	0.0	No Limit
		EG020A-T: Arsenic	7440-38-2	0.001	mg/L	<0.001	<0.001	0.0	No Limit
		EG020A-T: Chromium	7440-47-3	0.001	mg/L	<0.001	<0.001	0.0	No Limit
		EG020A-T: Copper	7440-50-8	0.001	mg/L	6.86	6.76	1.4	0% - 20%
		EG020A-T: Lead	7439-92-1	0.001	mg/L	0.003	0.003	0.0	No Limit
		EG020A-T: Nickel	7440-02-0	0.001	mg/L	<0.001	<0.001	0.0	No Limit
		EG020A-T: Zinc	7440-66-6	0.005	mg/L	0.030	0.029	3.6	No Limit
ES2202301-001	Anonymous	EG020A-T: Cadmium	7440-43-9	0.0001	mg/L	<0.0001	<0.0001	0.0	No Limit
		EG020A-T: Arsenic	7440-38-2	0.001	mg/L	<0.001	<0.001	0.0	No Limit
		EG020A-T: Chromium	7440-47-3	0.001	mg/L	<0.001	<0.001	0.0	No Limit
		EG020A-T: Copper	7440-50-8	0.001	mg/L	<0.001	<0.001	0.0	No Limit
		EG020A-T: Lead	7439-92-1	0.001	mg/L	<0.001	<0.001	0.0	No Limit

Sub-Matrix: **WATER**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Acceptable RPD (%)*
EG020T: Total Metals by ICP-MS (QC Lot: 4144071) - continued									
ES2202301-001	Anonymous	EG020A-T: Nickel	7440-02-0	0.001	mg/L	<0.001	<0.001	0.0	No Limit
		EG020A-T: Zinc	7440-66-6	0.005	mg/L	<0.005	<0.005	0.0	No Limit
EG035T: Total Recoverable Mercury by FIMS (QC Lot: 4140039)									
ES2201683-020	Anonymous	EG035T: Mercury	7439-97-6	0.0001	mg/L	<0.0001	<0.0001	0.0	No Limit
ES2202305-005	Anonymous	EG035T: Mercury	7439-97-6	0.0001	mg/L	<0.0001	<0.0001	0.0	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 4143480)									
ES2202162-013	Anonymous	EP080: C6 - C9 Fraction	----	20	µg/L	<20	<20	0.0	No Limit
ES2202228-007	Anonymous	EP080: C6 - C9 Fraction	----	20	µg/L	<20	<20	0.0	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 4143480)									
ES2202162-013	Anonymous	EP080: C6 - C10 Fraction	C6_C10	20	µg/L	<20	<20	0.0	No Limit
ES2202228-007	Anonymous	EP080: C6 - C10 Fraction	C6_C10	20	µg/L	<20	<20	0.0	No Limit
EP080: BTEXN (QC Lot: 4143480)									
ES2202162-013	Anonymous	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	108-38-3 106-42-3	2	µg/L	<2	<2	0.0	No Limit
		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
ES2202228-007	Anonymous	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	108-38-3 106-42-3	2	µg/L	<2	<2	0.0	No Limit
		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

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

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

Sub-Matrix: **SOIL**

				Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Acceptable Limits (%)	
Method: Compound	CAS Number	LOR	Unit	Result	Concentration	LCS	Low	High
EG005(ED093)T: Total Metals by ICP-AES (QCLot: 4143507)								
EG005T: Arsenic	7440-38-2	5	mg/kg	<5	121.1 mg/kg	93.0	88.0	113
EG005T: Cadmium	7440-43-9	1	mg/kg	<1	0.74 mg/kg	89.1	70.0	130
EG005T: Chromium	7440-47-3	2	mg/kg	<2	19.6 mg/kg	101	68.0	132
EG005T: Copper	7440-50-8	5	mg/kg	<5	52.9 mg/kg	95.1	89.0	111
EG005T: Lead	7439-92-1	5	mg/kg	<5	60.8 mg/kg	92.6	82.0	119
EG005T: Nickel	7440-02-0	2	mg/kg	<2	15.3 mg/kg	95.8	80.0	120
EG005T: Zinc	7440-66-6	5	mg/kg	<5	139.3 mg/kg	87.5	66.0	133
EG005(ED093)T: Total Metals by ICP-AES (QCLot: 4143510)								
EG005T: Arsenic	7440-38-2	5	mg/kg	<5	121.1 mg/kg	94.3	88.0	113
EG005T: Cadmium	7440-43-9	1	mg/kg	<1	0.74 mg/kg	103	70.0	130
EG005T: Chromium	7440-47-3	2	mg/kg	<2	19.6 mg/kg	106	68.0	132
EG005T: Copper	7440-50-8	5	mg/kg	<5	52.9 mg/kg	111	89.0	111
EG005T: Lead	7439-92-1	5	mg/kg	<5	60.8 mg/kg	99.6	82.0	119
EG005T: Nickel	7440-02-0	2	mg/kg	<2	15.3 mg/kg	98.2	80.0	120
EG005T: Zinc	7440-66-6	5	mg/kg	<5	139.3 mg/kg	93.0	66.0	133
EG005(ED093)T: Total Metals by ICP-AES (QCLot: 4146604)								
EG005T: Arsenic	7440-38-2	5	mg/kg	<5	121.1 mg/kg	97.5	88.0	113
EG005T: Cadmium	7440-43-9	1	mg/kg	<1	0.74 mg/kg	80.7	70.0	130
EG005T: Chromium	7440-47-3	2	mg/kg	<2	19.6 mg/kg	109	68.0	132
EG005T: Copper	7440-50-8	5	mg/kg	<5	52.9 mg/kg	98.9	89.0	111
EG005T: Lead	7439-92-1	5	mg/kg	<5	60.8 mg/kg	95.0	82.0	119
EG005T: Nickel	7440-02-0	2	mg/kg	<2	15.3 mg/kg	95.6	80.0	120
EG005T: Zinc	7440-66-6	5	mg/kg	<5	139.3 mg/kg	82.6	66.0	133
EG035T: Total Recoverable Mercury by FIMS (QCLot: 4143508)								
EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	0.087 mg/kg	95.4	70.0	125
EG035T: Total Recoverable Mercury by FIMS (QCLot: 4143509)								
EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	0.087 mg/kg	109	70.0	125
EG035T: Total Recoverable Mercury by FIMS (QCLot: 4146603)								
EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	0.087 mg/kg	78.2	70.0	125
EP066: Polychlorinated Biphenyls (PCB) (QCLot: 4139637)								
EP066: Total Polychlorinated biphenyls	----	0.1	mg/kg	<0.1	1 mg/kg	89.5	62.0	126
EP066: Polychlorinated Biphenyls (PCB) (QCLot: 4139638)								
EP066: Total Polychlorinated biphenyls	----	0.1	mg/kg	<0.1	1 mg/kg	81.7	62.0	126

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Acceptable Limits (%)	
				Result	Concentration	LCS	Low	High
EP066: Polychlorinated Biphenyls (PCB) (QCLot: 4139644)								
EP066: Total Polychlorinated biphenyls	----	0.1	mg/kg	<0.1	1 mg/kg	122	62.0	126
EP068A: Organochlorine Pesticides (OC) (QCLot: 4139635)								
EP068: alpha-BHC	319-84-6	0.05	mg/kg	<0.05	0.5 mg/kg	106	69.0	113
EP068: Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	0.5 mg/kg	101	65.0	117
EP068: beta-BHC	319-85-7	0.05	mg/kg	<0.05	0.5 mg/kg	103	67.0	119
EP068: gamma-BHC	58-89-9	0.05	mg/kg	<0.05	0.5 mg/kg	106	68.0	116
EP068: delta-BHC	319-86-8	0.05	mg/kg	<0.05	0.5 mg/kg	104	65.0	117
EP068: Heptachlor	76-44-8	0.05	mg/kg	<0.05	0.5 mg/kg	104	67.0	115
EP068: Aldrin	309-00-2	0.05	mg/kg	<0.05	0.5 mg/kg	106	69.0	115
EP068: Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	0.5 mg/kg	108	62.0	118
EP068: trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	0.5 mg/kg	106	63.0	117
EP068: alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	0.5 mg/kg	84.1	66.0	116
EP068: cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	0.5 mg/kg	106	64.0	116
EP068: Dieldrin	60-57-1	0.05	mg/kg	<0.05	0.5 mg/kg	103	66.0	116
EP068: 4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	0.5 mg/kg	104	67.0	115
EP068: Endrin	72-20-8	0.05	mg/kg	<0.05	0.5 mg/kg	106	67.0	123
EP068: beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	0.5 mg/kg	92.5	69.0	115
EP068: 4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	0.5 mg/kg	106	69.0	121
EP068: Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	0.5 mg/kg	106	56.0	120
EP068: Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	0.5 mg/kg	101	62.0	124
EP068: 4.4`-DDT	50-29-3	0.2	mg/kg	<0.2	0.5 mg/kg	99.6	66.0	120
EP068: Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	0.5 mg/kg	107	64.0	122
EP068: Methoxychlor	72-43-5	0.2	mg/kg	<0.2	0.5 mg/kg	97.8	54.0	130
EP068A: Organochlorine Pesticides (OC) (QCLot: 4139641)								
EP068: alpha-BHC	319-84-6	0.05	mg/kg	<0.05	0.5 mg/kg	86.7	69.0	113
EP068: Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	0.5 mg/kg	84.2	65.0	117
EP068: beta-BHC	319-85-7	0.05	mg/kg	<0.05	0.5 mg/kg	85.2	67.0	119
EP068: gamma-BHC	58-89-9	0.05	mg/kg	<0.05	0.5 mg/kg	85.0	68.0	116
EP068: delta-BHC	319-86-8	0.05	mg/kg	<0.05	0.5 mg/kg	84.4	65.0	117
EP068: Heptachlor	76-44-8	0.05	mg/kg	<0.05	0.5 mg/kg	85.6	67.0	115
EP068: Aldrin	309-00-2	0.05	mg/kg	<0.05	0.5 mg/kg	80.7	69.0	115
EP068: Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	0.5 mg/kg	89.0	62.0	118
EP068: trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	0.5 mg/kg	87.1	63.0	117
EP068: alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	0.5 mg/kg	84.0	66.0	116
EP068: cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	0.5 mg/kg	88.8	64.0	116
EP068: Dieldrin	60-57-1	0.05	mg/kg	<0.05	0.5 mg/kg	85.5	66.0	116
EP068: 4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	0.5 mg/kg	84.9	67.0	115
EP068: Endrin	72-20-8	0.05	mg/kg	<0.05	0.5 mg/kg	84.4	67.0	123
EP068: beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	0.5 mg/kg	88.9	69.0	115

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Acceptable Limits (%)	
				Result	Concentration	LCS	Low	High
EP068A: Organochlorine Pesticides (OC) (QCLot: 4139641) - continued								
EP068: 4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	0.5 mg/kg	84.8	69.0	121
EP068: Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	0.5 mg/kg	86.2	56.0	120
EP068: Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	0.5 mg/kg	85.8	62.0	124
EP068: 4.4`-DDT	50-29-3	0.2	mg/kg	<0.2	0.5 mg/kg	83.8	66.0	120
EP068: Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	0.5 mg/kg	88.3	64.0	122
EP068: Methoxychlor	72-43-5	0.2	mg/kg	<0.2	0.5 mg/kg	80.1	54.0	130
EP068A: Organochlorine Pesticides (OC) (QCLot: 4139647)								
EP068: alpha-BHC	319-84-6	0.05	mg/kg	<0.05	0.5 mg/kg	86.0	69.0	113
EP068: Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	0.5 mg/kg	84.8	65.0	117
EP068: beta-BHC	319-85-7	0.05	mg/kg	<0.05	0.5 mg/kg	82.0	67.0	119
EP068: gamma-BHC	58-89-9	0.05	mg/kg	<0.05	0.5 mg/kg	99.1	68.0	116
EP068: delta-BHC	319-86-8	0.05	mg/kg	<0.05	0.5 mg/kg	95.0	65.0	117
EP068: Heptachlor	76-44-8	0.05	mg/kg	<0.05	0.5 mg/kg	81.5	67.0	115
EP068: Aldrin	309-00-2	0.05	mg/kg	<0.05	0.5 mg/kg	80.0	69.0	115
EP068: Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	0.5 mg/kg	81.1	62.0	118
EP068: trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	0.5 mg/kg	80.3	63.0	117
EP068: alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	0.5 mg/kg	80.1	66.0	116
EP068: cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	0.5 mg/kg	77.3	64.0	116
EP068: Dieldrin	60-57-1	0.05	mg/kg	<0.05	0.5 mg/kg	83.4	66.0	116
EP068: 4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	0.5 mg/kg	76.0	67.0	115
EP068: Endrin	72-20-8	0.05	mg/kg	<0.05	0.5 mg/kg	80.3	67.0	123
EP068: beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	0.5 mg/kg	77.9	69.0	115
EP068: 4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	0.5 mg/kg	78.5	69.0	121
EP068: Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	0.5 mg/kg	77.7	56.0	120
EP068: Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	0.5 mg/kg	84.0	62.0	124
EP068: 4.4`-DDT	50-29-3	0.2	mg/kg	<0.2	0.5 mg/kg	82.1	66.0	120
EP068: Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	0.5 mg/kg	92.1	64.0	122
EP068: Methoxychlor	72-43-5	0.2	mg/kg	<0.2	0.5 mg/kg	87.9	54.0	130
EP068B: Organophosphorus Pesticides (OP) (QCLot: 4139635)								
EP068: Dichlorvos	62-73-7	0.05	mg/kg	<0.05	0.5 mg/kg	83.9	59.0	119
EP068: Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	0.5 mg/kg	105	62.0	128
EP068: Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	0.5 mg/kg	87.8	54.0	126
EP068: Dimethoate	60-51-5	0.05	mg/kg	<0.05	0.5 mg/kg	93.6	67.0	119
EP068: Diazinon	333-41-5	0.05	mg/kg	<0.05	0.5 mg/kg	106	70.0	120
EP068: Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	0.5 mg/kg	102	72.0	120
EP068: Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	0.5 mg/kg	94.8	68.0	120
EP068: Malathion	121-75-5	0.05	mg/kg	<0.05	0.5 mg/kg	96.9	68.0	122
EP068: Fenthion	55-38-9	0.05	mg/kg	<0.05	0.5 mg/kg	101	69.0	117
EP068: Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	0.5 mg/kg	103	76.0	118

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Acceptable Limits (%)	
				Result	Concentration	LCS	Low	High
EP068B: Organophosphorus Pesticides (OP) (QCLot: 4139635) - continued								
EP068: Parathion	56-38-2	0.2	mg/kg	<0.2	0.5 mg/kg	98.8	64.0	122
EP068: Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	0.5 mg/kg	103	70.0	116
EP068: Chlorfenvinphos	470-90-6	0.05	mg/kg	<0.05	0.5 mg/kg	90.9	69.0	121
EP068: Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	0.5 mg/kg	97.0	66.0	118
EP068: Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	0.5 mg/kg	91.0	68.0	124
EP068: Prothiofos	34643-46-4	0.05	mg/kg	<0.05	0.5 mg/kg	104	62.0	112
EP068: Ethion	563-12-2	0.05	mg/kg	<0.05	0.5 mg/kg	95.5	68.0	120
EP068: Carbophenothion	786-19-6	0.05	mg/kg	<0.05	0.5 mg/kg	97.4	65.0	127
EP068: Azinphos Methyl	86-50-0	0.05	mg/kg	<0.05	0.5 mg/kg	79.8	41.0	123
EP068B: Organophosphorus Pesticides (OP) (QCLot: 4139641)								
EP068: Dichlorvos	62-73-7	0.05	mg/kg	<0.05	0.5 mg/kg	88.9	59.0	119
EP068: Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	0.5 mg/kg	79.6	62.0	128
EP068: Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	0.5 mg/kg	84.3	54.0	126
EP068: Dimethoate	60-51-5	0.05	mg/kg	<0.05	0.5 mg/kg	92.1	67.0	119
EP068: Diazinon	333-41-5	0.05	mg/kg	<0.05	0.5 mg/kg	95.2	70.0	120
EP068: Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	0.5 mg/kg	81.9	72.0	120
EP068: Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	0.5 mg/kg	82.2	68.0	120
EP068: Malathion	121-75-5	0.05	mg/kg	<0.05	0.5 mg/kg	78.6	68.0	122
EP068: Fenthion	55-38-9	0.05	mg/kg	<0.05	0.5 mg/kg	82.2	69.0	117
EP068: Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	0.5 mg/kg	84.7	76.0	118
EP068: Parathion	56-38-2	0.2	mg/kg	<0.2	0.5 mg/kg	84.6	64.0	122
EP068: Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	0.5 mg/kg	82.1	70.0	116
EP068: Chlorfenvinphos	470-90-6	0.05	mg/kg	<0.05	0.5 mg/kg	92.5	69.0	121
EP068: Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	0.5 mg/kg	78.2	66.0	118
EP068: Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	0.5 mg/kg	84.6	68.0	124
EP068: Prothiofos	34643-46-4	0.05	mg/kg	<0.05	0.5 mg/kg	86.2	62.0	112
EP068: Ethion	563-12-2	0.05	mg/kg	<0.05	0.5 mg/kg	79.6	68.0	120
EP068: Carbophenothion	786-19-6	0.05	mg/kg	<0.05	0.5 mg/kg	83.0	65.0	127
EP068: Azinphos Methyl	86-50-0	0.05	mg/kg	<0.05	0.5 mg/kg	57.0	41.0	123
EP068B: Organophosphorus Pesticides (OP) (QCLot: 4139647)								
EP068: Dichlorvos	62-73-7	0.05	mg/kg	<0.05	0.5 mg/kg	103	59.0	119
EP068: Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	0.5 mg/kg	92.1	62.0	128
EP068: Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	0.5 mg/kg	77.6	54.0	126
EP068: Dimethoate	60-51-5	0.05	mg/kg	<0.05	0.5 mg/kg	87.8	67.0	119
EP068: Diazinon	333-41-5	0.05	mg/kg	<0.05	0.5 mg/kg	88.2	70.0	120
EP068: Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	0.5 mg/kg	76.2	72.0	120
EP068: Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	0.5 mg/kg	76.6	68.0	120
EP068: Malathion	121-75-5	0.05	mg/kg	<0.05	0.5 mg/kg	77.6	68.0	122
EP068: Fenthion	55-38-9	0.05	mg/kg	<0.05	0.5 mg/kg	76.6	69.0	117

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Acceptable Limits (%)	
				Result	Concentration	LCS	Low	High
EP068B: Organophosphorus Pesticides (OP) (QCLot: 4139647) - continued								
EP068: Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	0.5 mg/kg	78.1	76.0	118
EP068: Parathion	56-38-2	0.2	mg/kg	<0.2	0.5 mg/kg	78.1	64.0	122
EP068: Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	0.5 mg/kg	92.0	70.0	116
EP068: Chlorfenvinphos	470-90-6	0.05	mg/kg	<0.05	0.5 mg/kg	84.6	69.0	121
EP068: Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	0.5 mg/kg	78.0	66.0	118
EP068: Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	0.5 mg/kg	85.4	68.0	124
EP068: Prothiofos	34643-46-4	0.05	mg/kg	<0.05	0.5 mg/kg	82.8	62.0	112
EP068: Ethion	563-12-2	0.05	mg/kg	<0.05	0.5 mg/kg	83.1	68.0	120
EP068: Carbophenothion	786-19-6	0.05	mg/kg	<0.05	0.5 mg/kg	76.5	65.0	127
EP068: Azinphos Methyl	86-50-0	0.05	mg/kg	<0.05	0.5 mg/kg	96.7	41.0	123
EP074A: Monocyclic Aromatic Hydrocarbons (QCLot: 4139178)								
EP074: Styrene	100-42-5	0.5	mg/kg	<0.5	1 mg/kg	92.1	67.0	113
EP074: Isopropylbenzene	98-82-8	0.5	mg/kg	<0.5	1 mg/kg	93.1	65.0	117
EP074: n-Propylbenzene	103-65-1	0.5	mg/kg	<0.5	1 mg/kg	94.7	66.0	122
EP074: 1.3.5-Trimethylbenzene	108-67-8	0.5	mg/kg	<0.5	1 mg/kg	95.5	68.0	118
EP074: sec-Butylbenzene	135-98-8	0.5	mg/kg	<0.5	1 mg/kg	95.7	69.0	119
EP074: 1.2.4-Trimethylbenzene	95-63-6	0.5	mg/kg	<0.5	1 mg/kg	94.6	69.0	117
EP074: tert-Butylbenzene	98-06-6	0.5	mg/kg	<0.5	1 mg/kg	96.1	69.0	115
EP074: p-Isopropyltoluene	99-87-6	0.5	mg/kg	<0.5	1 mg/kg	94.2	66.0	118
EP074: n-Butylbenzene	104-51-8	0.5	mg/kg	<0.5	1 mg/kg	91.8	59.0	125
EP074A: Monocyclic Aromatic Hydrocarbons (QCLot: 4139230)								
EP074: Styrene	100-42-5	0.5	mg/kg	<0.5	1 mg/kg	106	67.0	113
EP074: Isopropylbenzene	98-82-8	0.5	mg/kg	<0.5	1 mg/kg	108	65.0	117
EP074: n-Propylbenzene	103-65-1	0.5	mg/kg	<0.5	1 mg/kg	110	66.0	122
EP074: 1.3.5-Trimethylbenzene	108-67-8	0.5	mg/kg	<0.5	1 mg/kg	107	68.0	118
EP074: sec-Butylbenzene	135-98-8	0.5	mg/kg	<0.5	1 mg/kg	110	69.0	119
EP074: 1.2.4-Trimethylbenzene	95-63-6	0.5	mg/kg	<0.5	1 mg/kg	109	69.0	117
EP074: tert-Butylbenzene	98-06-6	0.5	mg/kg	<0.5	1 mg/kg	108	69.0	115
EP074: p-Isopropyltoluene	99-87-6	0.5	mg/kg	<0.5	1 mg/kg	109	66.0	118
EP074: n-Butylbenzene	104-51-8	0.5	mg/kg	<0.5	1 mg/kg	110	59.0	125
EP074B: Oxygenated Compounds (QCLot: 4139178)								
EP074: Vinyl Acetate	108-05-4	5	mg/kg	<5	10 mg/kg	95.3	29.6	156
EP074: 2-Butanone (MEK)	78-93-3	5	mg/kg	<5	10 mg/kg	100.0	58.0	136
EP074: 4-Methyl-2-pentanone (MIBK)	108-10-1	5	mg/kg	<5	10 mg/kg	94.1	62.0	132
EP074: 2-Hexanone (MBK)	591-78-6	5	mg/kg	<5	10 mg/kg	86.7	54.0	136
EP074B: Oxygenated Compounds (QCLot: 4139230)								
EP074: Vinyl Acetate	108-05-4	5	mg/kg	<5	10 mg/kg	101	29.6	156
EP074: 2-Butanone (MEK)	78-93-3	5	mg/kg	<5	10 mg/kg	100	58.0	136

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Acceptable Limits (%)	
				Result	Concentration	LCS	Low	High
EP074B: Oxygenated Compounds (QCLot: 4139230) - continued								
EP074: 4-Methyl-2-pentanone (MIBK)	108-10-1	5	mg/kg	<5	10 mg/kg	95.3	62.0	132
EP074: 2-Hexanone (MBK)	591-78-6	5	mg/kg	<5	10 mg/kg	97.3	54.0	136
EP074C: Sulfonated Compounds (QCLot: 4139178)								
EP074: Carbon disulfide	75-15-0	0.5	mg/kg	<0.5	1 mg/kg	94.1	54.0	126
EP074C: Sulfonated Compounds (QCLot: 4139230)								
EP074: Carbon disulfide	75-15-0	0.5	mg/kg	<0.5	1 mg/kg	111	54.0	126
EP074D: Fumigants (QCLot: 4139178)								
EP074: 2.2-Dichloropropane	594-20-7	0.5	mg/kg	<0.5	1 mg/kg	91.7	60.0	126
EP074: 1.2-Dichloropropane	78-87-5	0.5	mg/kg	<0.5	1 mg/kg	95.7	68.0	124
EP074: cis-1.3-Dichloropropylene	10061-01-5	0.5	mg/kg	<0.5	1 mg/kg	89.0	51.0	119
EP074: trans-1.3-Dichloropropylene	10061-02-6	0.5	mg/kg	<0.5	1 mg/kg	89.3	52.0	114
EP074: 1.2-Dibromoethane (EDB)	106-93-4	0.5	mg/kg	<0.5	1 mg/kg	92.4	63.0	115
EP074D: Fumigants (QCLot: 4139230)								
EP074: 2.2-Dichloropropane	594-20-7	0.5	mg/kg	<0.5	1 mg/kg	109	60.0	126
EP074: 1.2-Dichloropropane	78-87-5	0.5	mg/kg	<0.5	1 mg/kg	104	68.0	124
EP074: cis-1.3-Dichloropropylene	10061-01-5	0.5	mg/kg	<0.5	1 mg/kg	102	51.0	119
EP074: trans-1.3-Dichloropropylene	10061-02-6	0.5	mg/kg	<0.5	1 mg/kg	102	52.0	114
EP074: 1.2-Dibromoethane (EDB)	106-93-4	0.5	mg/kg	<0.5	1 mg/kg	102	63.0	115
EP074E: Halogenated Aliphatic Compounds (QCLot: 4139178)								
EP074: Dichlorodifluoromethane	75-71-8	5	mg/kg	<5	10 mg/kg	103	30.0	148
EP074: Chloromethane	74-87-3	5	mg/kg	<5	10 mg/kg	106	41.0	141
EP074: Vinyl chloride	75-01-4	5	mg/kg	<5	10 mg/kg	92.3	43.0	147
EP074: Bromomethane	74-83-9	5	mg/kg	<5	10 mg/kg	90.5	47.0	141
EP074: Chloroethane	75-00-3	5	mg/kg	<5	10 mg/kg	89.1	49.0	143
EP074: Trichlorofluoromethane	75-69-4	5	mg/kg	<5	10 mg/kg	91.3	49.0	135
EP074: 1.1-Dichloroethene	75-35-4	0.5	mg/kg	<0.5	1 mg/kg	91.1	54.0	126
EP074: Iodomethane	74-88-4	0.5	mg/kg	<0.5	1 mg/kg	101	43.0	129
EP074: trans-1.2-Dichloroethene	156-60-5	0.5	mg/kg	<0.5	1 mg/kg	92.4	64.0	120
EP074: 1.1-Dichloroethane	75-34-3	0.5	mg/kg	<0.5	1 mg/kg	94.3	67.0	125
EP074: cis-1.2-Dichloroethene	156-59-2	0.5	mg/kg	<0.5	1 mg/kg	95.3	69.0	121
EP074: 1.1.1-Trichloroethane	71-55-6	0.5	mg/kg	<0.5	1 mg/kg	91.8	65.0	117
EP074: 1.1-Dichloropropylene	563-58-6	0.5	mg/kg	<0.5	1 mg/kg	93.6	65.0	123
EP074: Carbon Tetrachloride	56-23-5	0.5	mg/kg	<0.5	1 mg/kg	100.0	59.0	125
EP074: 1.2-Dichloroethane	107-06-2	0.5	mg/kg	<0.5	1 mg/kg	97.5	65.0	125
EP074: Trichloroethene	79-01-6	0.5	mg/kg	<0.5	1 mg/kg	94.3	70.0	118
EP074: Dibromomethane	74-95-3	0.5	mg/kg	<0.5	1 mg/kg	93.5	68.0	118
EP074: 1.1.2-Trichloroethane	79-00-5	0.5	mg/kg	<0.5	1 mg/kg	96.4	64.0	126
EP074: 1.3-Dichloropropane	142-28-9	0.5	mg/kg	<0.5	1 mg/kg	94.7	68.0	122

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Acceptable Limits (%)	
				Result	Concentration	LCS	Low	High
EP074E: Halogenated Aliphatic Compounds (QCLot: 4139178) - continued								
EP074: Tetrachloroethene	127-18-4	0.5	mg/kg	<0.5	1 mg/kg	92.3	67.0	143
EP074: 1.1.1.2-Tetrachloroethane	630-20-6	0.5	mg/kg	<0.5	1 mg/kg	87.1	62.0	122
EP074: trans-1.4-Dichloro-2-butene	110-57-6	0.5	mg/kg	<0.5	1 mg/kg	94.2	54.0	128
EP074: cis-1.4-Dichloro-2-butene	1476-11-5	0.5	mg/kg	<0.5	1 mg/kg	90.7	55.0	129
EP074: 1.1.2.2-Tetrachloroethane	79-34-5	0.5	mg/kg	<0.5	1 mg/kg	93.1	65.0	121
EP074: 1.2.3-Trichloropropane	96-18-4	0.5	mg/kg	<0.5	1 mg/kg	93.1	61.0	125
EP074: Pentachloroethane	76-01-7	0.5	mg/kg	<0.5	1 mg/kg	96.8	19.8	134
EP074: 1.2-Dibromo-3-chloropropane	96-12-8	0.5	mg/kg	<0.5	1 mg/kg	93.0	53.0	129
EP074E: Halogenated Aliphatic Compounds (QCLot: 4139230)								
EP074: Dichlorodifluoromethane	75-71-8	5	mg/kg	<5	10 mg/kg	115	30.0	148
EP074: Chloromethane	74-87-3	5	mg/kg	<5	10 mg/kg	112	41.0	141
EP074: Vinyl chloride	75-01-4	5	mg/kg	<5	10 mg/kg	120	43.0	147
EP074: Bromomethane	74-83-9	5	mg/kg	<5	10 mg/kg	108	47.0	141
EP074: Chloroethane	75-00-3	5	mg/kg	<5	10 mg/kg	108	49.0	143
EP074: Trichlorofluoromethane	75-69-4	5	mg/kg	<5	10 mg/kg	110	49.0	135
EP074: 1.1-Dichloroethene	75-35-4	0.5	mg/kg	<0.5	1 mg/kg	107	54.0	126
EP074: Iodomethane	74-88-4	0.5	mg/kg	<0.5	1 mg/kg	109	43.0	129
EP074: trans-1.2-Dichloroethene	156-60-5	0.5	mg/kg	<0.5	1 mg/kg	108	64.0	120
EP074: 1.1-Dichloroethane	75-34-3	0.5	mg/kg	<0.5	1 mg/kg	110	67.0	125
EP074: cis-1.2-Dichloroethene	156-59-2	0.5	mg/kg	<0.5	1 mg/kg	106	69.0	121
EP074: 1.1.1-Trichloroethane	71-55-6	0.5	mg/kg	<0.5	1 mg/kg	110	65.0	117
EP074: 1.1-Dichloropropylene	563-58-6	0.5	mg/kg	<0.5	1 mg/kg	108	65.0	123
EP074: Carbon Tetrachloride	56-23-5	0.5	mg/kg	<0.5	1 mg/kg	110	59.0	125
EP074: 1.2-Dichloroethane	107-06-2	0.5	mg/kg	<0.5	1 mg/kg	105	65.0	125
EP074: Trichloroethene	79-01-6	0.5	mg/kg	<0.5	1 mg/kg	106	70.0	118
EP074: Dibromomethane	74-95-3	0.5	mg/kg	<0.5	1 mg/kg	101	68.0	118
EP074: 1.1.2-Trichloroethane	79-00-5	0.5	mg/kg	<0.5	1 mg/kg	102	64.0	126
EP074: 1.3-Dichloropropane	142-28-9	0.5	mg/kg	<0.5	1 mg/kg	106	68.0	122
EP074: Tetrachloroethene	127-18-4	0.5	mg/kg	<0.5	1 mg/kg	110	67.0	143
EP074: 1.1.1.2-Tetrachloroethane	630-20-6	0.5	mg/kg	<0.5	1 mg/kg	104	62.0	122
EP074: trans-1.4-Dichloro-2-butene	110-57-6	0.5	mg/kg	<0.5	1 mg/kg	95.3	54.0	128
EP074: cis-1.4-Dichloro-2-butene	1476-11-5	0.5	mg/kg	<0.5	1 mg/kg	97.1	55.0	129
EP074: 1.1.2.2-Tetrachloroethane	79-34-5	0.5	mg/kg	<0.5	1 mg/kg	97.2	65.0	121
EP074: 1.2.3-Trichloropropane	96-18-4	0.5	mg/kg	<0.5	1 mg/kg	95.0	61.0	125
EP074: Pentachloroethane	76-01-7	0.5	mg/kg	<0.5	1 mg/kg	106	19.8	134
EP074: 1.2-Dibromo-3-chloropropane	96-12-8	0.5	mg/kg	<0.5	1 mg/kg	88.8	53.0	129
EP074F: Halogenated Aromatic Compounds (QCLot: 4139178)								
EP074: Chlorobenzene	108-90-7	0.5	mg/kg	<0.5	1 mg/kg	93.8	68.0	116
EP074: Bromobenzene	108-86-1	0.5	mg/kg	<0.5	1 mg/kg	95.9	70.0	114

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Acceptable Limits (%)	
				Result	Concentration	LCS	Low	High
EP074F: Halogenated Aromatic Compounds (QCLot: 4139178) - continued								
EP074: 2-Chlorotoluene	95-49-8	0.5	mg/kg	<0.5	1 mg/kg	96.8	68.0	122
EP074: 4-Chlorotoluene	106-43-4	0.5	mg/kg	<0.5	1 mg/kg	98.1	67.0	123
EP074: 1.2.3-Trichlorobenzene	87-61-6	0.5	mg/kg	<0.5	1 mg/kg	92.8	52.0	122
EP074F: Halogenated Aromatic Compounds (QCLot: 4139230)								
EP074: Chlorobenzene	108-90-7	0.5	mg/kg	<0.5	1 mg/kg	107	68.0	116
EP074: Bromobenzene	108-86-1	0.5	mg/kg	<0.5	1 mg/kg	104	70.0	114
EP074: 2-Chlorotoluene	95-49-8	0.5	mg/kg	<0.5	1 mg/kg	108	68.0	122
EP074: 4-Chlorotoluene	106-43-4	0.5	mg/kg	<0.5	1 mg/kg	108	67.0	123
EP074: 1.2.3-Trichlorobenzene	87-61-6	0.5	mg/kg	<0.5	1 mg/kg	106	52.0	122
EP074G: Trihalomethanes (QCLot: 4139178)								
EP074: Chloroform	67-66-3	0.5	mg/kg	<0.5	1 mg/kg	95.3	66.0	124
EP074: Bromodichloromethane	75-27-4	0.5	mg/kg	<0.5	1 mg/kg	86.7	61.0	121
EP074: Dibromochloromethane	124-48-1	0.5	mg/kg	<0.5	1 mg/kg	93.0	63.0	121
EP074: Bromoform	75-25-2	0.5	mg/kg	<0.5	1 mg/kg	99.2	60.0	126
EP074G: Trihalomethanes (QCLot: 4139230)								
EP074: Chloroform	67-66-3	0.5	mg/kg	<0.5	1 mg/kg	107	66.0	124
EP074: Bromodichloromethane	75-27-4	0.5	mg/kg	<0.5	1 mg/kg	107	61.0	121
EP074: Dibromochloromethane	124-48-1	0.5	mg/kg	<0.5	1 mg/kg	103	63.0	121
EP074: Bromoform	75-25-2	0.5	mg/kg	<0.5	1 mg/kg	101	60.0	126
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 4139634)								
EP075(SIM): Naphthalene	91-20-3	0.5	mg/kg	<0.5	6 mg/kg	102	77.0	125
EP075(SIM): Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	6 mg/kg	92.9	72.0	124
EP075(SIM): Acenaphthene	83-32-9	0.5	mg/kg	<0.5	6 mg/kg	97.6	73.0	127
EP075(SIM): Fluorene	86-73-7	0.5	mg/kg	<0.5	6 mg/kg	100	72.0	126
EP075(SIM): Phenanthrene	85-01-8	0.5	mg/kg	<0.5	6 mg/kg	102	75.0	127
EP075(SIM): Anthracene	120-12-7	0.5	mg/kg	<0.5	6 mg/kg	98.6	77.0	127
EP075(SIM): Fluoranthene	206-44-0	0.5	mg/kg	<0.5	6 mg/kg	104	73.0	127
EP075(SIM): Pyrene	129-00-0	0.5	mg/kg	<0.5	6 mg/kg	104	74.0	128
EP075(SIM): Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	6 mg/kg	94.3	69.0	123
EP075(SIM): Chrysene	218-01-9	0.5	mg/kg	<0.5	6 mg/kg	98.6	75.0	127
EP075(SIM): Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	6 mg/kg	92.3	68.0	116
EP075(SIM): Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	6 mg/kg	102	74.0	126
EP075(SIM): Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	6 mg/kg	87.8	70.0	126
EP075(SIM): Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	6 mg/kg	98.8	61.0	121
EP075(SIM): Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	6 mg/kg	97.8	62.0	118
EP075(SIM): Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	6 mg/kg	95.8	63.0	121
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 4139640)								

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Acceptable Limits (%)	
				Result	Concentration	LCS	Low	High
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 4139640) - continued								
EP075(SIM): Naphthalene	91-20-3	0.5	mg/kg	<0.5	6 mg/kg	91.8	77.0	125
EP075(SIM): Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	6 mg/kg	95.4	72.0	124
EP075(SIM): Acenaphthene	83-32-9	0.5	mg/kg	<0.5	6 mg/kg	93.1	73.0	127
EP075(SIM): Fluorene	86-73-7	0.5	mg/kg	<0.5	6 mg/kg	97.1	72.0	126
EP075(SIM): Phenanthrene	85-01-8	0.5	mg/kg	<0.5	6 mg/kg	98.7	75.0	127
EP075(SIM): Anthracene	120-12-7	0.5	mg/kg	<0.5	6 mg/kg	99.3	77.0	127
EP075(SIM): Fluoranthene	206-44-0	0.5	mg/kg	<0.5	6 mg/kg	99.9	73.0	127
EP075(SIM): Pyrene	129-00-0	0.5	mg/kg	<0.5	6 mg/kg	99.0	74.0	128
EP075(SIM): Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	6 mg/kg	88.9	69.0	123
EP075(SIM): Chrysene	218-01-9	0.5	mg/kg	<0.5	6 mg/kg	94.9	75.0	127
EP075(SIM): Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	6 mg/kg	91.5	68.0	116
EP075(SIM): Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	6 mg/kg	96.4	74.0	126
EP075(SIM): Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	6 mg/kg	85.0	70.0	126
EP075(SIM): Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	6 mg/kg	86.4	61.0	121
EP075(SIM): Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	6 mg/kg	72.3	62.0	118
EP075(SIM): Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	6 mg/kg	77.2	63.0	121
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 4139646)								
EP075(SIM): Naphthalene	91-20-3	0.5	mg/kg	<0.5	6 mg/kg	118	77.0	125
EP075(SIM): Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	6 mg/kg	107	72.0	124
EP075(SIM): Acenaphthene	83-32-9	0.5	mg/kg	<0.5	6 mg/kg	113	73.0	127
EP075(SIM): Fluorene	86-73-7	0.5	mg/kg	<0.5	6 mg/kg	116	72.0	126
EP075(SIM): Phenanthrene	85-01-8	0.5	mg/kg	<0.5	6 mg/kg	119	75.0	127
EP075(SIM): Anthracene	120-12-7	0.5	mg/kg	<0.5	6 mg/kg	111	77.0	127
EP075(SIM): Fluoranthene	206-44-0	0.5	mg/kg	<0.5	6 mg/kg	119	73.0	127
EP075(SIM): Pyrene	129-00-0	0.5	mg/kg	<0.5	6 mg/kg	117	74.0	128
EP075(SIM): Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	6 mg/kg	101	69.0	123
EP075(SIM): Chrysene	218-01-9	0.5	mg/kg	<0.5	6 mg/kg	105	75.0	127
EP075(SIM): Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	6 mg/kg	96.2	68.0	116
EP075(SIM): Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	6 mg/kg	101	74.0	126
EP075(SIM): Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	6 mg/kg	93.3	70.0	126
EP075(SIM): Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	6 mg/kg	89.8	61.0	121
EP075(SIM): Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	6 mg/kg	88.3	62.0	118
EP075(SIM): Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	6 mg/kg	88.1	63.0	121
EP075A: Phenolic Compounds (QCLot: 4139636)								
EP075: Phenol	108-95-2	0.5	mg/kg	<0.5	1.5 mg/kg	103	64.0	114
EP075: 2-Chlorophenol	95-57-8	0.5	mg/kg	<0.5	1.5 mg/kg	102	57.0	115
EP075: 2-Methylphenol	95-48-7	0.5	mg/kg	<0.5	1.5 mg/kg	99.3	55.0	117

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Acceptable Limits (%)	
				Result	Concentration	LCS	Low	High
EP075A: Phenolic Compounds (QCLot: 4139636) - continued								
EP075: 3- & 4-Methylphenol	1319-77-3	0.5	mg/kg	<0.5	1.5 mg/kg	105	46.0	122
EP075: 2-Nitrophenol	88-75-5	0.5	mg/kg	<0.5	1.5 mg/kg	99.2	47.0	117
EP075: 2.4-Dimethylphenol	105-67-9	0.5	mg/kg	<0.5	1.5 mg/kg	# 109	13.7	108
EP075: 2.4-Dichlorophenol	120-83-2	0.5	mg/kg	<0.5	1.5 mg/kg	98.5	47.0	105
EP075: 2.6-Dichlorophenol	87-65-0	0.5	mg/kg	<0.5	1.5 mg/kg	102	48.0	110
EP075: 4-Chloro-3-methylphenol	59-50-7	0.5	mg/kg	<0.5	1.5 mg/kg	101	57.0	113
EP075: 2.4.6-Trichlorophenol	88-06-2	0.5	mg/kg	<0.5	1.5 mg/kg	96.7	49.0	109
EP075: 2.4.5-Trichlorophenol	95-95-4	0.5	mg/kg	<0.5	1.5 mg/kg	96.0	49.0	107
EP075: Pentachlorophenol	87-86-5	1	mg/kg	<1	3 mg/kg	47.0	12.0	76.0
EP075A: Phenolic Compounds (QCLot: 4139642)								
EP075: Phenol	108-95-2	0.5	mg/kg	<0.5	1.5 mg/kg	102	64.0	114
EP075: 2-Chlorophenol	95-57-8	0.5	mg/kg	<0.5	1.5 mg/kg	105	57.0	115
EP075: 2-Methylphenol	95-48-7	0.5	mg/kg	<0.5	1.5 mg/kg	101	55.0	117
EP075: 3- & 4-Methylphenol	1319-77-3	0.5	mg/kg	<0.5	1.5 mg/kg	104	46.0	122
EP075: 2-Nitrophenol	88-75-5	0.5	mg/kg	<0.5	1.5 mg/kg	105	47.0	117
EP075: 2.4-Dimethylphenol	105-67-9	0.5	mg/kg	<0.5	1.5 mg/kg	# 116	13.7	108
EP075: 2.4-Dichlorophenol	120-83-2	0.5	mg/kg	<0.5	1.5 mg/kg	# 110	47.0	105
EP075: 2.6-Dichlorophenol	87-65-0	0.5	mg/kg	<0.5	1.5 mg/kg	93.2	48.0	110
EP075: 4-Chloro-3-methylphenol	59-50-7	0.5	mg/kg	<0.5	1.5 mg/kg	97.8	57.0	113
EP075: 2.4.6-Trichlorophenol	88-06-2	0.5	mg/kg	<0.5	1.5 mg/kg	84.5	49.0	109
EP075: 2.4.5-Trichlorophenol	95-95-4	0.5	mg/kg	<0.5	1.5 mg/kg	85.1	49.0	107
EP075: Pentachlorophenol	87-86-5	1	mg/kg	<1	3 mg/kg	53.2	12.0	76.0
EP075B: Polynuclear Aromatic Hydrocarbons (QCLot: 4139636)								
EP075: 2-Methylnaphthalene	91-57-6	0.5	mg/kg	<0.5	1.5 mg/kg	95.4	58.0	116
EP075: 2-Chloronaphthalene	91-58-7	0.5	mg/kg	<0.5	1.5 mg/kg	91.1	54.0	112
EP075: N-2-Fluorenyl Acetamide	53-96-3	0.5	mg/kg	<0.5	1.5 mg/kg	105	58.0	114
EP075: 7.12-Dimethylbenz(a)anthracene	57-97-6	0.5	mg/kg	<0.5	1.5 mg/kg	102	48.1	106
EP075: 3-Methylcholanthrene	56-49-5	0.5	mg/kg	<0.5	1.5 mg/kg	83.4	50.0	116
EP075B: Polynuclear Aromatic Hydrocarbons (QCLot: 4139642)								
EP075: 2-Methylnaphthalene	91-57-6	0.5	mg/kg	<0.5	1.5 mg/kg	92.1	58.0	116
EP075: 2-Chloronaphthalene	91-58-7	0.5	mg/kg	<0.5	1.5 mg/kg	88.9	54.0	112
EP075: N-2-Fluorenyl Acetamide	53-96-3	0.5	mg/kg	<0.5	1.5 mg/kg	101	58.0	114
EP075: 7.12-Dimethylbenz(a)anthracene	57-97-6	0.5	mg/kg	<0.5	1.5 mg/kg	104	48.1	106
EP075: 3-Methylcholanthrene	56-49-5	0.5	mg/kg	<0.5	1.5 mg/kg	86.7	50.0	116
EP075C: Phthalate Esters (QCLot: 4139636)								
EP075: Dimethyl phthalate	131-11-3	0.5	mg/kg	<0.5	1.5 mg/kg	104	60.0	118
EP075: Diethyl phthalate	84-66-2	0.5	mg/kg	<0.5	1.5 mg/kg	96.4	65.0	115
EP075: Di-n-butyl phthalate	84-74-2	0.5	mg/kg	<0.5	1.5 mg/kg	97.3	65.0	121

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Acceptable Limits (%)	
				Result	Concentration	LCS	Low	High
EP075C: Phthalate Esters (QCLot: 4139636) - continued								
EP075: Butyl benzyl phthalate	85-68-7	0.5	mg/kg	<0.5	1.5 mg/kg	89.8	62.0	116
EP075: bis(2-ethylhexyl) phthalate	117-81-7	----	mg/kg	----	1.5 mg/kg	96.3	69.0	133
EP075: Di-n-octylphthalate	117-84-0	0.5	mg/kg	<0.5	1.5 mg/kg	84.6	62.0	124
EP075C: Phthalate Esters (QCLot: 4139642)								
EP075: Dimethyl phthalate	131-11-3	0.5	mg/kg	<0.5	1.5 mg/kg	95.4	60.0	118
EP075: Diethyl phthalate	84-66-2	0.5	mg/kg	<0.5	1.5 mg/kg	85.2	65.0	115
EP075: Di-n-butyl phthalate	84-74-2	0.5	mg/kg	<0.5	1.5 mg/kg	93.8	65.0	121
EP075: Butyl benzyl phthalate	85-68-7	0.5	mg/kg	<0.5	1.5 mg/kg	106	62.0	116
EP075: bis(2-ethylhexyl) phthalate	117-81-7	----	mg/kg	----	1.5 mg/kg	85.9	69.0	133
EP075: Di-n-octylphthalate	117-84-0	0.5	mg/kg	<0.5	1.5 mg/kg	85.0	62.0	124
EP075D: Nitrosamines (QCLot: 4139636)								
EP075: N-Nitrosomethylethylamine	10595-95-6	0.5	mg/kg	<0.5	1.5 mg/kg	97.8	39.4	124
EP075: N-Nitrosodiethylamine	55-18-5	0.5	mg/kg	<0.5	1.5 mg/kg	100	59.0	117
EP075: N-Nitrosopyrrolidine	930-55-2	0.5	mg/kg	<0.5	1.5 mg/kg	74.7	53.0	125
EP075: N-Nitrosomorpholine	59-89-2	0.5	mg/kg	<0.5	1.5 mg/kg	110	65.0	121
EP075: N-Nitrosodi-n-propylamine	621-64-7	0.5	mg/kg	<0.5	1.5 mg/kg	102	59.0	123
EP075: N-Nitrosopiperidine	100-75-4	0.5	mg/kg	<0.5	1.5 mg/kg	100	57.0	115
EP075: N-Nitrosodibutylamine	924-16-3	0.5	mg/kg	<0.5	1.5 mg/kg	98.6	57.0	119
EP075: N-Nitrosodiphenyl & Diphenylamine	86-30-6 122-39-4	0.5	mg/kg	<0.6	3 mg/kg	103	42.0	112
EP075: Methapyrilene	91-80-5	0.5	mg/kg	<0.5	1.5 mg/kg	42.1	16.3	123
EP075D: Nitrosamines (QCLot: 4139642)								
EP075: N-Nitrosomethylethylamine	10595-95-6	0.5	mg/kg	<0.5	1.5 mg/kg	101	39.4	124
EP075: N-Nitrosodiethylamine	55-18-5	0.5	mg/kg	<0.5	1.5 mg/kg	99.2	59.0	117
EP075: N-Nitrosopyrrolidine	930-55-2	0.5	mg/kg	<0.5	1.5 mg/kg	115	53.0	125
EP075: N-Nitrosomorpholine	59-89-2	0.5	mg/kg	<0.5	1.5 mg/kg	111	65.0	121
EP075: N-Nitrosodi-n-propylamine	621-64-7	0.5	mg/kg	<0.5	1.5 mg/kg	103	59.0	123
EP075: N-Nitrosopiperidine	100-75-4	0.5	mg/kg	<0.5	1.5 mg/kg	# 116	57.0	115
EP075: N-Nitrosodibutylamine	924-16-3	0.5	mg/kg	<0.5	1.5 mg/kg	104	57.0	119
EP075: N-Nitrosodiphenyl & Diphenylamine	86-30-6 122-39-4	0.5	mg/kg	<0.6	3 mg/kg	91.2	42.0	112
EP075: Methapyrilene	91-80-5	0.5	mg/kg	<0.5	1.5 mg/kg	76.0	16.3	123
EP075E: Nitroaromatics and Ketones (QCLot: 4139636)								
EP075: 2-Picoline	109-06-8	0.5	mg/kg	<0.5	1.5 mg/kg	88.8	27.3	129
EP075: Acetophenone	98-86-2	0.5	mg/kg	<0.5	1.5 mg/kg	104	60.0	116
EP075: Nitrobenzene	98-95-3	0.5	mg/kg	<0.5	1.5 mg/kg	105	65.0	119
EP075: Isophorone	78-59-1	0.5	mg/kg	<0.5	1.5 mg/kg	98.6	62.0	116
EP075: 2.6-Dinitrotoluene	606-20-2	0.5	mg/kg	<0.5	1.5 mg/kg	104	58.0	118

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Acceptable Limits (%)	
				Result	Concentration	LCS	Low	High
EP075E: Nitroaromatics and Ketones (QCLot: 4139636) - continued								
EP075: 2.4-Dinitrotoluene	121-14-2	0.5	mg/kg	<0.5	1.5 mg/kg	106	59.0	115
EP075: 1-Naphthylamine	134-32-7	0.5	mg/kg	<0.5	1.5 mg/kg	65.4	18.0	112
EP075: 4-Nitroquinoline-N-oxide	56-57-5	0.5	mg/kg	<0.5	1.5 mg/kg	# 97.9	10.0	87.0
EP075: 5-Nitro-o-toluidine	99-55-8	0.5	mg/kg	<0.5	1.5 mg/kg	# 104	48.3	98.5
EP075: Azobenzene	103-33-3	1	mg/kg	<1	1.5 mg/kg	95.6	62.0	118
EP075: 1.3.5-Trinitrobenzene	99-35-4	0.5	mg/kg	<0.5	1.5 mg/kg	87.4	36.0	114
EP075: Phenacetin	62-44-2	0.5	mg/kg	<0.5	1.5 mg/kg	98.0	62.0	114
EP075: 4-Aminobiphenyl	92-67-1	0.5	mg/kg	<0.5	1.5 mg/kg	91.0	36.1	102
EP075: Pentachloronitrobenzene	82-68-8	0.5	mg/kg	<0.5	1.5 mg/kg	106	56.0	110
EP075: Pronamide	23950-58-5	0.5	mg/kg	<0.5	1.5 mg/kg	103	54.0	110
EP075: Dimethylaminoazobenzene	60-11-7	0.5	mg/kg	<0.5	1.5 mg/kg	96.7	48.0	108
EP075: Chlorobenzilate	510-15-6	0.5	mg/kg	<0.5	1.5 mg/kg	91.9	57.4	112
EP075E: Nitroaromatics and Ketones (QCLot: 4139642)								
EP075: 2-Picoline	109-06-8	0.5	mg/kg	<0.5	1.5 mg/kg	97.0	27.3	129
EP075: Acetophenone	98-86-2	0.5	mg/kg	<0.5	1.5 mg/kg	106	60.0	116
EP075: Nitrobenzene	98-95-3	0.5	mg/kg	<0.5	1.5 mg/kg	112	65.0	119
EP075: Isophorone	78-59-1	0.5	mg/kg	<0.5	1.5 mg/kg	110	62.0	116
EP075: 2.6-Dinitrotoluene	606-20-2	0.5	mg/kg	<0.5	1.5 mg/kg	93.2	58.0	118
EP075: 2.4-Dinitrotoluene	121-14-2	0.5	mg/kg	<0.5	1.5 mg/kg	92.9	59.0	115
EP075: 1-Naphthylamine	134-32-7	0.5	mg/kg	<0.5	1.5 mg/kg	45.4	18.0	112
EP075: 4-Nitroquinoline-N-oxide	56-57-5	0.5	mg/kg	<0.5	1.5 mg/kg	61.2	10.0	87.0
EP075: 5-Nitro-o-toluidine	99-55-8	0.5	mg/kg	<0.5	1.5 mg/kg	83.5	48.3	98.5
EP075: Azobenzene	103-33-3	1	mg/kg	<1	1.5 mg/kg	90.0	62.0	118
EP075: 1.3.5-Trinitrobenzene	99-35-4	0.5	mg/kg	<0.5	1.5 mg/kg	70.9	36.0	114
EP075: Phenacetin	62-44-2	0.5	mg/kg	<0.5	1.5 mg/kg	104	62.0	114
EP075: 4-Aminobiphenyl	92-67-1	0.5	mg/kg	<0.5	1.5 mg/kg	72.7	36.1	102
EP075: Pentachloronitrobenzene	82-68-8	0.5	mg/kg	<0.5	1.5 mg/kg	80.3	56.0	110
EP075: Pronamide	23950-58-5	0.5	mg/kg	<0.5	1.5 mg/kg	92.2	54.0	110
EP075: Dimethylaminoazobenzene	60-11-7	0.5	mg/kg	<0.5	1.5 mg/kg	107	48.0	108
EP075: Chlorobenzilate	510-15-6	0.5	mg/kg	<0.5	1.5 mg/kg	103	57.4	112
EP075F: Haloethers (QCLot: 4139636)								
EP075: Bis(2-chloroethyl) ether	111-44-4	0.5	mg/kg	<0.5	1.5 mg/kg	84.0	63.0	121
EP075: Bis(2-chloroethoxy) methane	111-91-1	0.5	mg/kg	<0.5	1.5 mg/kg	102	59.0	115
EP075: 4-Chlorophenyl phenyl ether	7005-72-3	0.5	mg/kg	<0.5	1.5 mg/kg	101	58.0	112
EP075: 4-Bromophenyl phenyl ether	101-55-3	0.5	mg/kg	<0.5	1.5 mg/kg	107	58.0	110
EP075F: Haloethers (QCLot: 4139642)								
EP075: Bis(2-chloroethyl) ether	111-44-4	0.5	mg/kg	<0.5	1.5 mg/kg	95.9	63.0	121
EP075: Bis(2-chloroethoxy) methane	111-91-1	0.5	mg/kg	<0.5	1.5 mg/kg	# 116	59.0	115

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Acceptable Limits (%)	
				Result	Concentration	LCS	Low	High
EP075F: Haloethers (QCLot: 4139642) - continued								
EP075: 4-Chlorophenyl phenyl ether	7005-72-3	0.5	mg/kg	<0.5	1.5 mg/kg	88.0	58.0	112
EP075: 4-Bromophenyl phenyl ether	101-55-3	0.5	mg/kg	<0.5	1.5 mg/kg	86.6	58.0	110
EP075G: Chlorinated Hydrocarbons (QCLot: 4139636)								
EP075: 1.3-Dichlorobenzene	541-73-1	0.5	mg/kg	<0.5	1.5 mg/kg	94.6	58.0	112
EP075: 1.4-Dichlorobenzene	106-46-7	0.5	mg/kg	<0.5	1.5 mg/kg	97.7	58.0	116
EP075: 1.2-Dichlorobenzene	95-50-1	0.5	mg/kg	<0.5	1.5 mg/kg	96.3	57.0	115
EP075: Hexachloroethane	67-72-1	0.5	mg/kg	<0.5	1.5 mg/kg	97.3	54.0	116
EP075: 1.2.4-Trichlorobenzene	120-82-1	0.5	mg/kg	<0.5	1.5 mg/kg	98.7	62.9	108
EP075: Hexachloropropylene	1888-71-7	0.5	mg/kg	<0.5	1.5 mg/kg	100	39.1	110
EP075: Hexachlorobutadiene	87-68-3	0.5	mg/kg	<0.5	1.5 mg/kg	100.0	59.0	117
EP075: Hexachlorocyclopentadiene	77-47-4	2.5	mg/kg	<2.5	1.5 mg/kg	90.8	24.3	108
EP075: Pentachlorobenzene	608-93-5	0.5	mg/kg	<0.5	1.5 mg/kg	99.4	57.0	109
EP075: Hexachlorobenzene (HCB)	118-74-1	0.5	mg/kg	<0.5	1.5 mg/kg	106	59.0	111
EP075G: Chlorinated Hydrocarbons (QCLot: 4139642)								
EP075: 1.3-Dichlorobenzene	541-73-1	0.5	mg/kg	<0.5	1.5 mg/kg	98.7	58.0	112
EP075: 1.4-Dichlorobenzene	106-46-7	0.5	mg/kg	<0.5	1.5 mg/kg	94.5	58.0	116
EP075: 1.2-Dichlorobenzene	95-50-1	0.5	mg/kg	<0.5	1.5 mg/kg	101	57.0	115
EP075: Hexachloroethane	67-72-1	0.5	mg/kg	<0.5	1.5 mg/kg	93.5	54.0	116
EP075: 1.2.4-Trichlorobenzene	120-82-1	0.5	mg/kg	<0.5	1.5 mg/kg	106	62.9	108
EP075: Hexachloropropylene	1888-71-7	0.5	mg/kg	<0.5	1.5 mg/kg	87.3	39.1	110
EP075: Hexachlorobutadiene	87-68-3	0.5	mg/kg	<0.5	1.5 mg/kg	88.3	59.0	117
EP075: Hexachlorocyclopentadiene	77-47-4	2.5	mg/kg	<2.5	1.5 mg/kg	75.5	24.3	108
EP075: Pentachlorobenzene	608-93-5	0.5	mg/kg	<0.5	1.5 mg/kg	88.5	57.0	109
EP075: Hexachlorobenzene (HCB)	118-74-1	0.5	mg/kg	<0.5	1.5 mg/kg	86.7	59.0	111
EP075H: Anilines and Benzidines (QCLot: 4139636)								
EP075: Aniline	62-53-3	0.5	mg/kg	<0.5	1.5 mg/kg	103	13.2	108
EP075: 4-Chloroaniline	106-47-8	0.5	mg/kg	<0.5	1.5 mg/kg	33.9	20.5	99.0
EP075: 2-Nitroaniline	88-74-4	0.5	mg/kg	<0.5	1.5 mg/kg	106	52.0	112
EP075: 3-Nitroaniline	99-09-2	0.5	mg/kg	<0.5	1.5 mg/kg	# 102	31.5	93.7
EP075: Dibenzofuran	132-64-9	0.5	mg/kg	<0.5	1.5 mg/kg	99.7	60.0	110
EP075: 4-Nitroaniline	100-01-6	0.5	mg/kg	<0.5	1.5 mg/kg	# 114	42.0	112
EP075: Carbazole	86-74-8	0.5	mg/kg	<0.5	1.5 mg/kg	100	59.0	111
EP075: 3.3`-Dichlorobenzidine	91-94-1	0.5	mg/kg	<0.5	1.5 mg/kg	95.5	23.1	113
EP075H: Anilines and Benzidines (QCLot: 4139642)								
EP075: Aniline	62-53-3	0.5	mg/kg	<0.5	1.5 mg/kg	92.5	13.2	108
EP075: 4-Chloroaniline	106-47-8	0.5	mg/kg	<0.5	1.5 mg/kg	41.2	20.5	99.0
EP075: 2-Nitroaniline	88-74-4	0.5	mg/kg	<0.5	1.5 mg/kg	92.6	52.0	112
EP075: 3-Nitroaniline	99-09-2	0.5	mg/kg	<0.5	1.5 mg/kg	89.9	31.5	93.7

Sub-Matrix: **SOIL**

				Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Acceptable Limits (%)	
Method: Compound	CAS Number	LOR	Unit	Result	Concentration	LCS	Low	High
EP075H: Anilines and Benzidines (QCLot: 4139642) - continued								
EP075: Dibenzofuran	132-64-9	0.5	mg/kg	<0.5	1.5 mg/kg	91.8	60.0	110
EP075: 4-Nitroaniline	100-01-6	0.5	mg/kg	<0.5	1.5 mg/kg	110	42.0	112
EP075: Carbazole	86-74-8	0.5	mg/kg	<0.5	1.5 mg/kg	95.6	59.0	111
EP075: 3.3`-Dichlorobenzidine	91-94-1	0.5	mg/kg	<0.5	1.5 mg/kg	92.4	23.1	113
EP080/071: Total Petroleum Hydrocarbons (QCLot: 4139177)								
EP080: C6 - C9 Fraction	----	10	mg/kg	<10	26 mg/kg	91.3	68.4	128
EP080/071: Total Petroleum Hydrocarbons (QCLot: 4139231)								
EP080: C6 - C9 Fraction	----	10	mg/kg	<10	26 mg/kg	82.6	68.4	128
EP080/071: Total Petroleum Hydrocarbons (QCLot: 4139633)								
EP071: C10 - C14 Fraction	----	50	mg/kg	<50	300 mg/kg	87.6	75.0	129
EP071: C15 - C28 Fraction	----	100	mg/kg	<100	450 mg/kg	92.6	77.0	131
EP071: C29 - C36 Fraction	----	100	mg/kg	<100	300 mg/kg	88.3	71.0	129
EP080/071: Total Petroleum Hydrocarbons (QCLot: 4139639)								
EP071: C10 - C14 Fraction	----	50	mg/kg	<50	300 mg/kg	109	75.0	129
EP071: C15 - C28 Fraction	----	100	mg/kg	<100	450 mg/kg	106	77.0	131
EP071: C29 - C36 Fraction	----	100	mg/kg	<100	300 mg/kg	106	71.0	129
EP080/071: Total Petroleum Hydrocarbons (QCLot: 4139645)								
EP071: C10 - C14 Fraction	----	50	mg/kg	<50	300 mg/kg	97.4	75.0	129
EP071: C15 - C28 Fraction	----	100	mg/kg	<100	450 mg/kg	93.8	77.0	131
EP071: C29 - C36 Fraction	----	100	mg/kg	<100	300 mg/kg	91.4	71.0	129
EP080/071: Total Petroleum Hydrocarbons (QCLot: 4142203)								
EP080: C6 - C9 Fraction	----	10	mg/kg	<10	26 mg/kg	83.1	68.4	128
EP080/071: Total Petroleum Hydrocarbons (QCLot: 4146318)								
EP080: C6 - C9 Fraction	----	10	mg/kg	<10	26 mg/kg	76.1	68.4	128
EP080/071: Total Petroleum Hydrocarbons (QCLot: 4148455)								
EP080: C6 - C9 Fraction	----	10	mg/kg	<10	26 mg/kg	84.0	68.4	128
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 4139177)								
EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	31 mg/kg	93.4	68.4	128
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 4139231)								
EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	31 mg/kg	83.9	68.4	128
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 4139633)								
EP071: >C10 - C16 Fraction	----	50	mg/kg	<50	375 mg/kg	93.9	77.0	125
EP071: >C16 - C34 Fraction	----	100	mg/kg	<100	525 mg/kg	89.7	74.0	138
EP071: >C34 - C40 Fraction	----	100	mg/kg	<100	225 mg/kg	80.5	63.0	131
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 4139639)								
EP071: >C10 - C16 Fraction	----	50	mg/kg	<50	375 mg/kg	109	77.0	125
EP071: >C16 - C34 Fraction	----	100	mg/kg	<100	525 mg/kg	110	74.0	138

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Acceptable Limits (%)	
				Result	Concentration	LCS	Low	High
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 4139639) - continued								
EP071: >C34 - C40 Fraction	----	100	mg/kg	<100	225 mg/kg	100	63.0	131
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 4139645)								
EP071: >C10 - C16 Fraction	----	50	mg/kg	<50	375 mg/kg	90.7	77.0	125
EP071: >C16 - C34 Fraction	----	100	mg/kg	<100	525 mg/kg	94.5	74.0	138
EP071: >C34 - C40 Fraction	----	100	mg/kg	<100	225 mg/kg	87.6	63.0	131
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 4142203)								
EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	31 mg/kg	82.8	68.4	128
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 4146318)								
EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	31 mg/kg	78.2	68.4	128
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 4148455)								
EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	31 mg/kg	82.3	68.4	128
EP080: BTEXN (QCLot: 4139177)								
EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	1 mg/kg	101	62.0	116
EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	1 mg/kg	101	67.0	121
EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	1 mg/kg	102	65.0	117
EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	2 mg/kg	99.9	66.0	118
EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	1 mg/kg	99.9	68.0	120
EP080: Naphthalene	91-20-3	1	mg/kg	<1	1 mg/kg	85.5	63.0	119
EP080: BTEXN (QCLot: 4139231)								
EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	1 mg/kg	93.4	62.0	116
EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	1 mg/kg	96.2	67.0	121
EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	1 mg/kg	90.7	65.0	117
EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	2 mg/kg	88.4	66.0	118
EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	1 mg/kg	92.7	68.0	120
EP080: Naphthalene	91-20-3	1	mg/kg	<1	1 mg/kg	92.7	63.0	119
EP080: BTEXN (QCLot: 4142203)								
EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	1 mg/kg	99.2	62.0	116
EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	1 mg/kg	89.0	67.0	121
EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	1 mg/kg	87.4	65.0	117
EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	2 mg/kg	89.6	66.0	118
EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	1 mg/kg	92.4	68.0	120
EP080: Naphthalene	91-20-3	1	mg/kg	<1	1 mg/kg	80.4	63.0	119
EP080: BTEXN (QCLot: 4146318)								
EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	1 mg/kg	83.8	62.0	116
EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	1 mg/kg	86.4	67.0	121

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Acceptable Limits (%)	
				Result	Concentration	LCS	Low	High
EP080: BTEXN (QCLot: 4146318) - continued								
EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	1 mg/kg	91.5	65.0	117
EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	2 mg/kg	93.1	66.0	118
EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	1 mg/kg	98.7	68.0	120
EP080: Naphthalene	91-20-3	1	mg/kg	<1	1 mg/kg	99.6	63.0	119
EP080: BTEXN (QCLot: 4148455)								
EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	1 mg/kg	89.3	62.0	116
EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	1 mg/kg	97.1	67.0	121
EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	1 mg/kg	95.2	65.0	117
EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	2 mg/kg	94.8	66.0	118
EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	1 mg/kg	96.4	68.0	120
EP080: Naphthalene	91-20-3	1	mg/kg	<1	1 mg/kg	88.5	63.0	119
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 4141334)								
EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.0002	mg/kg	<0.0002	0.00125 mg/kg	81.6	72.0	128
EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.0002	mg/kg	<0.0002	0.00125 mg/kg	80.0	73.0	123
EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.0002	mg/kg	<0.0002	0.00125 mg/kg	74.0	67.0	130
EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.0002	mg/kg	<0.0002	0.00125 mg/kg	74.4	70.0	132
EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.0002	mg/kg	<0.0002	0.00125 mg/kg	81.6	68.0	136
EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.0002	mg/kg	<0.0002	0.00125 mg/kg	72.4	59.0	134
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 4143107)								
EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.0002	mg/kg	<0.0002	0.00125 mg/kg	92.8	72.0	128
EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.0002	mg/kg	<0.0002	0.00125 mg/kg	73.6	73.0	123
EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.0002	mg/kg	<0.0002	0.00125 mg/kg	74.0	67.0	130
EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.0002	mg/kg	<0.0002	0.00125 mg/kg	79.2	70.0	132
EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.0002	mg/kg	<0.0002	0.00125 mg/kg	82.4	68.0	136
EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.0002	mg/kg	<0.0002	0.00125 mg/kg	83.6	59.0	134
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4141334)								
EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.001	mg/kg	<0.001	0.00625 mg/kg	79.0	71.0	135
EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.0002	mg/kg	<0.0002	0.00125 mg/kg	82.0	69.0	132
EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.0002	mg/kg	<0.0002	0.00125 mg/kg	98.8	70.0	132
EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.0002	mg/kg	<0.0002	0.00125 mg/kg	81.6	71.0	131
EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.0002	mg/kg	<0.0002	0.00125 mg/kg	85.2	69.0	133
EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.0002	mg/kg	<0.0002	0.00125 mg/kg	77.6	72.0	129
EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.0002	mg/kg	<0.0002	0.00125 mg/kg	83.6	69.0	133
EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.0002	mg/kg	<0.0002	0.00125 mg/kg	78.4	64.0	136
EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.0002	mg/kg	<0.0002	0.00125 mg/kg	83.6	69.0	135
EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.0002	mg/kg	<0.0002	0.00125 mg/kg	75.2	66.0	139

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Acceptable Limits (%)	
				Result	Concentration	LCS	Low	High
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4141334) - continued								
EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.0005	mg/kg	<0.0005	0.00312 mg/kg	87.7	69.0	133
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4143107)								
EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.001	mg/kg	<0.001	0.00625 mg/kg	78.8	71.0	135
EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.0002	mg/kg	<0.0002	0.00125 mg/kg	75.6	69.0	132
EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.0002	mg/kg	<0.0002	0.00125 mg/kg	94.4	70.0	132
EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.0002	mg/kg	<0.0002	0.00125 mg/kg	85.6	71.0	131
EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.0002	mg/kg	<0.0002	0.00125 mg/kg	82.4	69.0	133
EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.0002	mg/kg	<0.0002	0.00125 mg/kg	79.2	72.0	129
EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.0002	mg/kg	<0.0002	0.00125 mg/kg	78.4	69.0	133
EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.0002	mg/kg	<0.0002	0.00125 mg/kg	81.2	64.0	136
EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.0002	mg/kg	<0.0002	0.00125 mg/kg	83.6	69.0	135
EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.0002	mg/kg	<0.0002	0.00125 mg/kg	74.4	66.0	139
EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.0005	mg/kg	<0.0005	0.00312 mg/kg	80.9	69.0	133
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 4141334)								
EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.0002	mg/kg	<0.0002	0.00125 mg/kg	82.0	67.0	137
EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.0005	mg/kg	<0.0005	0.00312 mg/kg	88.8	71.6	129
EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.0005	mg/kg	<0.0005	0.00312 mg/kg	86.0	69.8	131
EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.0005	mg/kg	<0.0005	0.00312 mg/kg	92.3	68.7	130
EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.0005	mg/kg	<0.0005	0.00312 mg/kg	84.1	65.1	134
EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.0002	mg/kg	<0.0002	0.00125 mg/kg	75.2	63.0	144
EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.0002	mg/kg	<0.0002	0.00125 mg/kg	81.2	61.0	139
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 4143107)								
EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.0002	mg/kg	<0.0002	0.00125 mg/kg	81.6	67.0	137
EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.0005	mg/kg	<0.0005	0.00312 mg/kg	95.5	71.6	129
EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.0005	mg/kg	<0.0005	0.00312 mg/kg	88.8	69.8	131
EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.0005	mg/kg	<0.0005	0.00312 mg/kg	84.1	68.7	130
EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.0005	mg/kg	<0.0005	0.00312 mg/kg	78.8	65.1	134
EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.0002	mg/kg	<0.0002	0.00125 mg/kg	74.0	63.0	144
EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.0002	mg/kg	<0.0002	0.00125 mg/kg	81.2	61.0	139
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 4141334)								
EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.0005	mg/kg	<0.0005	0.00125 mg/kg	78.8	62.0	145

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report: Result	Laboratory Control Spike (LCS) Report: Spike Concentration	Spike Recovery (%): LCS	Acceptable Limits (%): Low	Acceptable Limits (%): High
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 4141334) - continued								
EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.0005	mg/kg	<0.0005	0.00125 mg/kg	78.0	64.0	140
EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.0005	mg/kg	<0.0005	0.00125 mg/kg	83.2	65.0	137
EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.0005	mg/kg	<0.0005	0.00125 mg/kg	88.0	69.2	143
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 4143107)								
EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.0005	mg/kg	<0.0005	0.00125 mg/kg	76.0	62.0	145
EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.0005	mg/kg	<0.0005	0.00125 mg/kg	73.6	64.0	140
EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.0005	mg/kg	<0.0005	0.00125 mg/kg	82.8	65.0	137
EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.0005	mg/kg	<0.0005	0.00125 mg/kg	76.0	69.2	143

Sub-Matrix: **WATER**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report: Result	Laboratory Control Spike (LCS) Report: Spike Concentration	Spike Recovery (%): LCS	Acceptable Limits (%): Low	Acceptable Limits (%): High
EG020T: Total Metals by ICP-MS (QCLot: 4144071)								
EG020A-T: Arsenic	7440-38-2	0.001	mg/L	<0.001	0.1 mg/L	95.0	82.0	114
EG020A-T: Cadmium	7440-43-9	0.0001	mg/L	<0.0001	0.1 mg/L	92.8	84.0	112
EG020A-T: Chromium	7440-47-3	0.001	mg/L	<0.001	0.1 mg/L	92.1	86.0	116
EG020A-T: Copper	7440-50-8	0.001	mg/L	<0.001	0.1 mg/L	91.0	83.0	118
EG020A-T: Lead	7439-92-1	0.001	mg/L	<0.001	0.1 mg/L	94.1	85.0	115
EG020A-T: Nickel	7440-02-0	0.001	mg/L	<0.001	0.1 mg/L	90.4	84.0	116
EG020A-T: Zinc	7440-66-6	0.005	mg/L	<0.005	0.1 mg/L	90.9	79.0	117
EG035T: Total Recoverable Mercury by FIMS (QCLot: 4140039)								
EG035T: Mercury	7439-97-6	0.0001	mg/L	<0.0001	0.01 mg/L	101	77.0	111
EP066: Polychlorinated Biphenyls (PCB) (QCLot: 4139268)								
EP066: Total Polychlorinated biphenyls	----	1	µg/L	<1	10 µg/L	96.0	68.9	113
EP068A: Organochlorine Pesticides (OC) (QCLot: 4139266)								
EP068: alpha-BHC	319-84-6	0.5	µg/L	<0.5	5 µg/L	91.8	64.9	107
EP068: Hexachlorobenzene (HCB)	118-74-1	0.5	µg/L	<0.5	5 µg/L	82.2	58.3	111
EP068: beta-BHC	319-85-7	0.5	µg/L	<0.5	5 µg/L	92.8	69.0	117
EP068: gamma-BHC	58-89-9	0.5	µg/L	<0.5	5 µg/L	93.5	70.0	112
EP068: delta-BHC	319-86-8	0.5	µg/L	<0.5	5 µg/L	91.2	68.9	110
EP068: Heptachlor	76-44-8	0.5	µg/L	<0.5	5 µg/L	88.6	65.2	108
EP068: Aldrin	309-00-2	0.5	µg/L	<0.5	5 µg/L	88.6	65.8	109
EP068: Heptachlor epoxide	1024-57-3	0.5	µg/L	<0.5	5 µg/L	85.0	67.1	107
EP068: trans-Chlordane	5103-74-2	0.5	µg/L	<0.5	5 µg/L	86.6	64.1	110
EP068: alpha-Endosulfan	959-98-8	0.5	µg/L	<0.5	5 µg/L	93.2	66.7	112
EP068: cis-Chlordane	5103-71-9	0.5	µg/L	<0.5	5 µg/L	79.5	63.2	111
EP068: Dieldrin	60-57-1	0.5	µg/L	<0.5	5 µg/L	90.9	65.2	113
EP068: 4.4`-DDE	72-55-9	0.5	µg/L	<0.5	5 µg/L	87.6	66.0	112
EP068: Endrin	72-20-8	0.5	µg/L	<0.5	5 µg/L	93.0	65.2	113

Sub-Matrix: **WATER**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Acceptable Limits (%)	
				Result	Concentration	LCS	Low	High
EP068A: Organochlorine Pesticides (OC) (QCLot: 4139266) - continued								
EP068: beta-Endosulfan	33213-65-9	0.5	µg/L	<0.5	5 µg/L	90.7	67.3	114
EP068: 4.4`-DDD	72-54-8	0.5	µg/L	<0.5	5 µg/L	90.4	72.0	122
EP068: Endrin aldehyde	7421-93-4	0.5	µg/L	<0.5	5 µg/L	88.1	66.9	109
EP068: Endosulfan sulfate	1031-07-8	0.5	µg/L	<0.5	5 µg/L	99.0	65.2	112
EP068: 4.4`-DDT	50-29-3	2	µg/L	<2.0	5 µg/L	102	65.2	112
EP068: Endrin ketone	53494-70-5	0.5	µg/L	<0.5	5 µg/L	88.7	63.8	110
EP068: Methoxychlor	72-43-5	2	µg/L	<2.0	5 µg/L	104	61.1	114
EP068B: Organophosphorus Pesticides (OP) (QCLot: 4139266)								
EP068: Dichlorvos	62-73-7	0.5	µg/L	<0.5	5 µg/L	80.7	65.6	114
EP068: Demeton-S-methyl	919-86-8	0.5	µg/L	<0.5	5 µg/L	94.0	63.7	113
EP068: Monocrotophos	6923-22-4	2	µg/L	<2.0	5 µg/L	24.9	19.7	48.0
EP068: Dimethoate	60-51-5	0.5	µg/L	<0.5	5 µg/L	90.9	69.5	110
EP068: Diazinon	333-41-5	0.5	µg/L	<0.5	5 µg/L	102	71.1	110
EP068: Chlorpyrifos-methyl	5598-13-0	0.5	µg/L	<0.5	5 µg/L	88.2	77.0	119
EP068: Parathion-methyl	298-00-0	2	µg/L	<2.0	5 µg/L	90.8	70.0	124
EP068: Malathion	121-75-5	0.5	µg/L	<0.5	5 µg/L	96.7	68.4	116
EP068: Fenthion	55-38-9	0.5	µg/L	<0.5	5 µg/L	88.7	68.6	112
EP068: Chlorpyrifos	2921-88-2	0.5	µg/L	<0.5	5 µg/L	88.6	75.0	119
EP068: Parathion	56-38-2	2	µg/L	<2.0	5 µg/L	88.9	67.0	121
EP068: Pirimphos-ethyl	23505-41-1	0.5	µg/L	<0.5	5 µg/L	84.8	69.0	121
EP068: Chlorfenvinphos	470-90-6	0.5	µg/L	<0.5	5 µg/L	104	71.8	110
EP068: Bromophos-ethyl	4824-78-6	0.5	µg/L	<0.5	5 µg/L	82.5	67.5	112
EP068: Fenamiphos	22224-92-6	0.5	µg/L	<0.5	5 µg/L	95.5	64.1	116
EP068: Prothiofos	34643-46-4	0.5	µg/L	<0.5	5 µg/L	93.1	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	85.1	66.2	114
EP068: Azinphos Methyl	86-50-0	0.5	µg/L	<0.5	5 µg/L	95.3	51.6	128
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 4139267)								
EP075(SIM): Naphthalene	91-20-3	1	µg/L	<1.0	5 µg/L	74.6	50.0	94.0
EP075(SIM): Acenaphthylene	208-96-8	1	µg/L	<1.0	5 µg/L	67.4	63.6	114
EP075(SIM): Acenaphthene	83-32-9	1	µg/L	<1.0	5 µg/L	68.3	62.2	113
EP075(SIM): Fluorene	86-73-7	1	µg/L	<1.0	5 µg/L	70.0	63.9	115
EP075(SIM): Phenanthrene	85-01-8	1	µg/L	<1.0	5 µg/L	68.6	62.6	116
EP075(SIM): Anthracene	120-12-7	1	µg/L	<1.0	5 µg/L	70.3	64.3	116
EP075(SIM): Fluoranthene	206-44-0	1	µg/L	<1.0	5 µg/L	75.1	63.6	118
EP075(SIM): Pyrene	129-00-0	1	µg/L	<1.0	5 µg/L	85.9	63.1	118
EP075(SIM): Benz(a)anthracene	56-55-3	1	µg/L	<1.0	5 µg/L	72.1	64.1	117
EP075(SIM): Chrysene	218-01-9	1	µg/L	<1.0	5 µg/L	77.1	62.5	116

Sub-Matrix: **WATER**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report: Result	Laboratory Control Spike (LCS) Report: Spike Concentration	Spike Recovery (%): LCS	Acceptable Limits (%): Low	Acceptable Limits (%): High
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 4139267) - continued								
EP075(SIM): Benzo(b+j)fluoranthene	205-99-2 205-82-3	1	µg/L	<1.0	5 µg/L	72.3	61.7	119
EP075(SIM): Benzo(k)fluoranthene	207-08-9	1	µg/L	<1.0	5 µg/L	88.7	63.0	115
EP075(SIM): Benzo(a)pyrene	50-32-8	0.5	µg/L	<0.5	5 µg/L	76.3	63.3	117
EP075(SIM): Indeno(1.2.3.cd)pyrene	193-39-5	1	µg/L	<1.0	5 µg/L	78.3	59.9	118
EP075(SIM): Dibenz(a.h)anthracene	53-70-3	1	µg/L	<1.0	5 µg/L	74.4	61.2	117
EP075(SIM): Benzo(g.h.i)perylene	191-24-2	1	µg/L	<1.0	5 µg/L	78.6	59.1	118
EP080/071: Total Petroleum Hydrocarbons (QCLot: 4139265)								
EP071: C10 - C14 Fraction	----	50	µg/L	<50	400 µg/L	75.7	55.8	112
EP071: C15 - C28 Fraction	----	100	µg/L	<100	600 µg/L	82.7	71.6	113
EP071: C29 - C36 Fraction	----	50	µg/L	<50	400 µg/L	79.4	56.0	121
EP080/071: Total Petroleum Hydrocarbons (QCLot: 4143480)								
EP080: C6 - C9 Fraction	----	20	µg/L	<20	260 µg/L	89.6	75.0	127
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 4139265)								
EP071: >C10 - C16 Fraction	----	100	µg/L	<100	500 µg/L	65.8	57.9	119
EP071: >C16 - C34 Fraction	----	100	µg/L	<100	700 µg/L	76.7	62.5	110
EP071: >C34 - C40 Fraction	----	100	µg/L	<100	300 µg/L	87.4	61.5	121
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 4143480)								
EP080: C6 - C10 Fraction	C6_C10	20	µg/L	<20	310 µg/L	91.6	75.0	127
EP080: BTEXN (QCLot: 4143480)								
EP080: Benzene	71-43-2	1	µg/L	<1	10 µg/L	94.4	70.0	122
EP080: Toluene	108-88-3	2	µg/L	<2	10 µg/L	95.8	69.0	123
EP080: Ethylbenzene	100-41-4	2	µg/L	<2	10 µg/L	98.7	70.0	120
EP080: meta- & para-Xylene	108-38-3 106-42-3	2	µg/L	<2	10 µg/L	96.4	69.0	121
EP080: ortho-Xylene	95-47-6	2	µg/L	<2	10 µg/L	97.1	72.0	122
EP080: Naphthalene	91-20-3	5	µg/L	<5	10 µg/L	91.4	70.0	120

Matrix Spike (MS) Report

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

Sub-Matrix: **SOIL**

Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Matrix Spike (MS) Report: Spike Concentration	SpikeRecovery(%): MS	Acceptable Limits (%): Low	Acceptable Limits (%): High
EG005(ED093)T: Total Metals by ICP-AES (QCLot: 4143507)							
ES2202264-001	SOP_BH118_0.1_220119	EG005T: Arsenic	7440-38-2	50 mg/kg	115	70.0	130
		EG005T: Cadmium	7440-43-9	50 mg/kg	106	70.0	130

Sub-Matrix: **SOIL**

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Acceptable Limits (%)	
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Concentration	MS	Low	High
EG005(ED093)T: Total Metals by ICP-AES (QCLot: 4143507) - continued							
ES2202264-001	SOP_BH118_0.1_220119	EG005T: Chromium	7440-47-3	50 mg/kg	108	68.0	132
		EG005T: Copper	7440-50-8	250 mg/kg	116	70.0	130
		EG005T: Lead	7439-92-1	250 mg/kg	108	70.0	130
		EG005T: Nickel	7440-02-0	50 mg/kg	102	70.0	130
		EG005T: Zinc	7440-66-6	250 mg/kg	103	66.0	133
EG005(ED093)T: Total Metals by ICP-AES (QCLot: 4143510)							
ES2202264-024	SOP_BH107_1.0_220120	EG005T: Arsenic	7440-38-2	50 mg/kg	101	70.0	130
		EG005T: Cadmium	7440-43-9	50 mg/kg	106	70.0	130
		EG005T: Chromium	7440-47-3	50 mg/kg	103	68.0	132
		EG005T: Copper	7440-50-8	250 mg/kg	97.8	70.0	130
		EG005T: Lead	7439-92-1	250 mg/kg	105	70.0	130
		EG005T: Nickel	7440-02-0	50 mg/kg	104	70.0	130
		EG005T: Zinc	7440-66-6	250 mg/kg	101	66.0	133
EG005(ED093)T: Total Metals by ICP-AES (QCLot: 4146604)							
ES2202264-044	SOP_BH125_10.0_220121	EG005T: Arsenic	7440-38-2	50 mg/kg	90.2	70.0	130
		EG005T: Cadmium	7440-43-9	50 mg/kg	91.8	70.0	130
		EG005T: Chromium	7440-47-3	50 mg/kg	90.6	68.0	132
		EG005T: Copper	7440-50-8	250 mg/kg	93.3	70.0	130
		EG005T: Lead	7439-92-1	250 mg/kg	91.5	70.0	130
		EG005T: Nickel	7440-02-0	50 mg/kg	88.3	70.0	130
		EG005T: Zinc	7440-66-6	250 mg/kg	85.3	66.0	133
EG035T: Total Recoverable Mercury by FIMS (QCLot: 4143508)							
ES2202264-001	SOP_BH118_0.1_220119	EG035T: Mercury	7439-97-6	5 mg/kg	125	70.0	130
EG035T: Total Recoverable Mercury by FIMS (QCLot: 4143509)							
ES2202264-024	SOP_BH107_1.0_220120	EG035T: Mercury	7439-97-6	5 mg/kg	117	70.0	130
EG035T: Total Recoverable Mercury by FIMS (QCLot: 4146603)							
ES2202264-044	SOP_BH125_10.0_220121	EG035T: Mercury	7439-97-6	5 mg/kg	91.3	70.0	130
EP066: Polychlorinated Biphenyls (PCB) (QCLot: 4139637)							
ES2202264-001	SOP_BH118_0.1_220119	EP066: Total Polychlorinated biphenyls	----	1 mg/kg	99.2	70.0	130
EP066: Polychlorinated Biphenyls (PCB) (QCLot: 4139638)							
ES2202264-024	SOP_BH107_1.0_220120	EP066: Total Polychlorinated biphenyls	----	1 mg/kg	107	70.0	130
EP066: Polychlorinated Biphenyls (PCB) (QCLot: 4139644)							
ES2202264-040	SOP_BH124_3.0_220120	EP066: Total Polychlorinated biphenyls	----	1 mg/kg	93.1	70.0	130
EP068A: Organochlorine Pesticides (OC) (QCLot: 4139635)							
ES2202264-001	SOP_BH118_0.1_220119	EP068: gamma-BHC	58-89-9	0.5 mg/kg	86.1	70.0	130
		EP068: Heptachlor	76-44-8	0.5 mg/kg	90.5	70.0	130

Sub-Matrix: **SOIL**

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Acceptable Limits (%)	
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Concentration	MS	Low	High
EP068A: Organochlorine Pesticides (OC) (QCLot: 4139635) - continued							
ES2202264-001	SOP_BH118_0.1_220119	EP068: Aldrin	309-00-2	0.5 mg/kg	92.1	70.0	130
		EP068: Dieldrin	60-57-1	0.5 mg/kg	90.5	70.0	130
		EP068: Endrin	72-20-8	2 mg/kg	88.8	70.0	130
		EP068: 4.4`-DDT	50-29-3	2 mg/kg	78.2	70.0	130
EP068A: Organochlorine Pesticides (OC) (QCLot: 4139641)							
ES2202264-024	SOP_BH107_1.0_220120	EP068: gamma-BHC	58-89-9	0.5 mg/kg	105	70.0	130
		EP068: Heptachlor	76-44-8	0.5 mg/kg	99.0	70.0	130
		EP068: Aldrin	309-00-2	0.5 mg/kg	91.2	70.0	130
		EP068: Dieldrin	60-57-1	0.5 mg/kg	116	70.0	130
		EP068: Endrin	72-20-8	2 mg/kg	85.4	70.0	130
		EP068: 4.4`-DDT	50-29-3	2 mg/kg	85.0	70.0	130
EP068A: Organochlorine Pesticides (OC) (QCLot: 4139647)							
ES2202264-040	SOP_BH124_3.0_220120	EP068: gamma-BHC	58-89-9	0.5 mg/kg	97.7	70.0	130
		EP068: Heptachlor	76-44-8	0.5 mg/kg	90.6	70.0	130
		EP068: Aldrin	309-00-2	0.5 mg/kg	99.2	70.0	130
		EP068: Dieldrin	60-57-1	0.5 mg/kg	107	70.0	130
		EP068: Endrin	72-20-8	2 mg/kg	115	70.0	130
		EP068: 4.4`-DDT	50-29-3	2 mg/kg	90.1	70.0	130
EP068B: Organophosphorus Pesticides (OP) (QCLot: 4139635)							
ES2202264-001	SOP_BH118_0.1_220119	EP068: Diazinon	333-41-5	0.5 mg/kg	107	70.0	130
		EP068: Chlorpyrifos-methyl	5598-13-0	0.5 mg/kg	89.9	70.0	130
		EP068: Pirimphos-ethyl	23505-41-1	0.5 mg/kg	83.2	70.0	130
		EP068: Bromophos-ethyl	4824-78-6	0.5 mg/kg	86.5	70.0	130
		EP068: Prothiofos	34643-46-4	0.5 mg/kg	102	70.0	130
EP068B: Organophosphorus Pesticides (OP) (QCLot: 4139641)							
ES2202264-024	SOP_BH107_1.0_220120	EP068: Diazinon	333-41-5	0.5 mg/kg	104	70.0	130
		EP068: Chlorpyrifos-methyl	5598-13-0	0.5 mg/kg	110	70.0	130
		EP068: Pirimphos-ethyl	23505-41-1	0.5 mg/kg	102	70.0	130
		EP068: Bromophos-ethyl	4824-78-6	0.5 mg/kg	106	70.0	130
		EP068: Prothiofos	34643-46-4	0.5 mg/kg	96.6	70.0	130
EP068B: Organophosphorus Pesticides (OP) (QCLot: 4139647)							
ES2202264-040	SOP_BH124_3.0_220120	EP068: Diazinon	333-41-5	0.5 mg/kg	92.6	70.0	130
		EP068: Chlorpyrifos-methyl	5598-13-0	0.5 mg/kg	85.1	70.0	130
		EP068: Pirimphos-ethyl	23505-41-1	0.5 mg/kg	91.1	70.0	130
		EP068: Bromophos-ethyl	4824-78-6	0.5 mg/kg	89.2	70.0	130
		EP068: Prothiofos	34643-46-4	0.5 mg/kg	79.9	70.0	130
EP074E: Halogenated Aliphatic Compounds (QCLot: 4139178)							

Sub-Matrix: **SOIL**

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Acceptable Limits (%)	
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Concentration	MS	Low	High
EP074E: Halogenated Aliphatic Compounds (QCLot: 4139178) - continued							
ES2202264-022	SOP_BH102_0.7_220120	EP074: 1.1-Dichloroethene	75-35-4	2.5 mg/kg	94.2	70.0	130
		EP074: Trichloroethene	79-01-6	2.5 mg/kg	81.9	70.0	130
EP074E: Halogenated Aliphatic Compounds (QCLot: 4139230)							
ES2202334-001	Anonymous	EP074: 1.1-Dichloroethene	75-35-4	5 mg/kg	110	70.0	130
		EP074: Trichloroethene	79-01-6	5 mg/kg	91.6	70.0	130
EP074F: Halogenated Aromatic Compounds (QCLot: 4139178)							
ES2202264-022	SOP_BH102_0.7_220120	EP074: Chlorobenzene	108-90-7	2.5 mg/kg	86.5	70.0	130
EP074F: Halogenated Aromatic Compounds (QCLot: 4139230)							
ES2202334-001	Anonymous	EP074: Chlorobenzene	108-90-7	5 mg/kg	90.4	70.0	130
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 4139634)							
ES2202264-001	SOP_BH118_0.1_220119	EP075(SIM): Acenaphthene	83-32-9	10 mg/kg	96.2	70.0	130
		EP075(SIM): Pyrene	129-00-0	10 mg/kg	104	70.0	130
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 4139640)							
ES2202264-024	SOP_BH107_1.0_220120	EP075(SIM): Acenaphthene	83-32-9	10 mg/kg	87.8	70.0	130
		EP075(SIM): Pyrene	129-00-0	10 mg/kg	97.8	70.0	130
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 4139646)							
ES2202264-040	SOP_BH124_3.0_220120	EP075(SIM): Acenaphthene	83-32-9	10 mg/kg	105	70.0	130
		EP075(SIM): Pyrene	129-00-0	10 mg/kg	110	70.0	130
EP075A: Phenolic Compounds (QCLot: 4139636)							
ES2202264-001	SOP_BH118_0.1_220119	EP075: Phenol	108-95-2	10 mg/kg	90.5	60.0	130
		EP075: 2-Chlorophenol	95-57-8	10 mg/kg	94.9	60.0	130
		EP075: 2-Nitrophenol	88-75-5	10 mg/kg	91.0	50.0	130
		EP075: 4-Chloro-3-methylphenol	59-50-7	10 mg/kg	102	50.0	130
		EP075: Pentachlorophenol	87-86-5	10 mg/kg	42.8	10.0	130
EP075A: Phenolic Compounds (QCLot: 4139642)							
ES2202264-024	SOP_BH107_1.0_220120	EP075: Phenol	108-95-2	10 mg/kg	94.4	60.0	130
		EP075: 2-Chlorophenol	95-57-8	10 mg/kg	94.3	60.0	130
		EP075: 2-Nitrophenol	88-75-5	10 mg/kg	110	50.0	130
		EP075: 4-Chloro-3-methylphenol	59-50-7	10 mg/kg	96.0	50.0	130
		EP075: Pentachlorophenol	87-86-5	10 mg/kg	98.6	10.0	130
EP075D: Nitrosamines (QCLot: 4139636)							
ES2202264-001	SOP_BH118_0.1_220119	EP075: N-Nitrosodi-n-propylamine	621-64-7	10 mg/kg	97.0	50.0	130
EP075D: Nitrosamines (QCLot: 4139642)							
ES2202264-024	SOP_BH107_1.0_220120	EP075: N-Nitrosodi-n-propylamine	621-64-7	10 mg/kg	96.6	50.0	130
EP075E: Nitroaromatics and Ketones (QCLot: 4139636)							

Sub-Matrix: **SOIL**

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Acceptable Limits (%)	
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Concentration	MS	Low	High
EP075E: Nitroaromatics and Ketones (QCLot: 4139636) - continued							
ES2202264-001	SOP_BH118_0.1_220119	EP075: 2.4-Dinitrotoluene	121-14-2	10 mg/kg	80.2	40.0	130
EP075E: Nitroaromatics and Ketones (QCLot: 4139642)							
ES2202264-024	SOP_BH107_1.0_220120	EP075: 2.4-Dinitrotoluene	121-14-2	10 mg/kg	101	40.0	130
EP075G: Chlorinated Hydrocarbons (QCLot: 4139636)							
ES2202264-001	SOP_BH118_0.1_220119	EP075: 1.4-Dichlorobenzene	106-46-7	10 mg/kg	94.6	60.0	130
		EP075: 1.2.4-Trichlorobenzene	120-82-1	10 mg/kg	89.2	50.0	130
EP075G: Chlorinated Hydrocarbons (QCLot: 4139642)							
ES2202264-024	SOP_BH107_1.0_220120	EP075: 1.4-Dichlorobenzene	106-46-7	10 mg/kg	97.7	60.0	130
		EP075: 1.2.4-Trichlorobenzene	120-82-1	10 mg/kg	110	50.0	130
EP080/071: Total Petroleum Hydrocarbons (QCLot: 4139177)							
ES2202264-022	SOP_BH102_0.7_220120	EP080: C6 - C9 Fraction	----	32.5 mg/kg	92.1	70.0	130
EP080/071: Total Petroleum Hydrocarbons (QCLot: 4139231)							
ES2202334-001	Anonymous	EP080: C6 - C9 Fraction	----	32.5 mg/kg	88.4	70.0	130
EP080/071: Total Petroleum Hydrocarbons (QCLot: 4139633)							
ES2202264-001	SOP_BH118_0.1_220119	EP071: C10 - C14 Fraction	----	480 mg/kg	102	73.0	137
		EP071: C15 - C28 Fraction	----	3100 mg/kg	109	53.0	131
		EP071: C29 - C36 Fraction	----	2060 mg/kg	113	52.0	132
EP080/071: Total Petroleum Hydrocarbons (QCLot: 4139639)							
ES2202264-024	SOP_BH107_1.0_220120	EP071: C10 - C14 Fraction	----	480 mg/kg	91.9	73.0	137
		EP071: C15 - C28 Fraction	----	3100 mg/kg	97.9	53.0	131
		EP071: C29 - C36 Fraction	----	2060 mg/kg	96.0	52.0	132
EP080/071: Total Petroleum Hydrocarbons (QCLot: 4139645)							
ES2202264-040	SOP_BH124_3.0_220120	EP071: C10 - C14 Fraction	----	480 mg/kg	97.0	73.0	137
		EP071: C15 - C28 Fraction	----	3100 mg/kg	106	53.0	131
		EP071: C29 - C36 Fraction	----	2060 mg/kg	108	52.0	132
EP080/071: Total Petroleum Hydrocarbons (QCLot: 4142203)							
ES2202670-001	Anonymous	EP080: C6 - C9 Fraction	----	32.5 mg/kg	83.2	70.0	130
EP080/071: Total Petroleum Hydrocarbons (QCLot: 4146318)							
ES2202264-002	SOP_BH118_1.0_220119	EP080: C6 - C9 Fraction	----	32.5 mg/kg	87.9	70.0	130
EP080/071: Total Petroleum Hydrocarbons (QCLot: 4148455)							
ES2202477-001	Anonymous	EP080: C6 - C9 Fraction	----	32.5 mg/kg	94.3	70.0	130
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 4139177)							
ES2202264-022	SOP_BH102_0.7_220120	EP080: C6 - C10 Fraction	C6_C10	37.5 mg/kg	97.4	70.0	130
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 4139231)							

Sub-Matrix: **SOIL**

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Acceptable Limits (%)	
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Concentration	MS	Low	High
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 4139231) - continued							
ES2202334-001	Anonymous	EP080: C6 - C10 Fraction	C6_C10	37.5 mg/kg	89.2	70.0	130
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 4139633)							
ES2202264-001	SOP_BH118_0.1_220119	EP071: >C10 - C16 Fraction	----	860 mg/kg	92.5	73.0	137
		EP071: >C16 - C34 Fraction	----	4320 mg/kg	114	53.0	131
		EP071: >C34 - C40 Fraction	----	890 mg/kg	111	52.0	132
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 4139639)							
ES2202264-024	SOP_BH107_1.0_220120	EP071: >C10 - C16 Fraction	----	860 mg/kg	83.9	73.0	137
		EP071: >C16 - C34 Fraction	----	4320 mg/kg	99.6	53.0	131
		EP071: >C34 - C40 Fraction	----	890 mg/kg	89.1	52.0	132
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 4139645)							
ES2202264-040	SOP_BH124_3.0_220120	EP071: >C10 - C16 Fraction	----	860 mg/kg	104	73.0	137
		EP071: >C16 - C34 Fraction	----	4320 mg/kg	108	53.0	131
		EP071: >C34 - C40 Fraction	----	890 mg/kg	96.4	52.0	132
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 4142203)							
ES2202670-001	Anonymous	EP080: C6 - C10 Fraction	C6_C10	37.5 mg/kg	81.4	70.0	130
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 4146318)							
ES2202264-002	SOP_BH118_1.0_220119	EP080: C6 - C10 Fraction	C6_C10	37.5 mg/kg	90.2	70.0	130
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 4148455)							
ES2202477-001	Anonymous	EP080: C6 - C10 Fraction	C6_C10	37.5 mg/kg	86.4	70.0	130
EP080: BTEXN (QCLot: 4139177)							
ES2202264-022	SOP_BH102_0.7_220120	EP080: Benzene	71-43-2	2.5 mg/kg	86.6	70.0	130
		EP080: Toluene	108-88-3	2.5 mg/kg	89.9	70.0	130
		EP080: Ethylbenzene	100-41-4	2.5 mg/kg	94.3	70.0	130
		EP080: meta- & para-Xylene	108-38-3 106-42-3	2.5 mg/kg	86.8	70.0	130
		EP080: ortho-Xylene	95-47-6	2.5 mg/kg	92.6	70.0	130
		EP080: Naphthalene	91-20-3	2.5 mg/kg	81.9	70.0	130
EP080: BTEXN (QCLot: 4139231)							
ES2202334-001	Anonymous	EP080: Benzene	71-43-2	2.5 mg/kg	82.7	70.0	130
		EP080: Toluene	108-88-3	2.5 mg/kg	85.8	70.0	130
		EP080: Ethylbenzene	100-41-4	2.5 mg/kg	84.8	70.0	130
		EP080: meta- & para-Xylene	108-38-3 106-42-3	2.5 mg/kg	84.1	70.0	130
		EP080: ortho-Xylene	95-47-6	2.5 mg/kg	86.8	70.0	130
		EP080: Naphthalene	91-20-3	2.5 mg/kg	80.2	70.0	130
EP080: BTEXN (QCLot: 4142203)							

Sub-Matrix: **SOIL**

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Acceptable Limits (%)	
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Concentration	MS	Low	High
EP080: BTEXN (QCLot: 4142203) - continued							
ES2202670-001	Anonymous	EP080: Benzene	71-43-2	2.5 mg/kg	84.9	70.0	130
		EP080: Toluene	108-88-3	2.5 mg/kg	81.4	70.0	130
		EP080: Ethylbenzene	100-41-4	2.5 mg/kg	84.9	70.0	130
		EP080: meta- & para-Xylene	108-38-3 106-42-3	2.5 mg/kg	82.2	70.0	130
		EP080: ortho-Xylene	95-47-6	2.5 mg/kg	89.1	70.0	130
		EP080: Naphthalene	91-20-3	2.5 mg/kg	76.8	70.0	130
EP080: BTEXN (QCLot: 4146318)							
ES2202264-002	SOP_BH118_1.0_220119	EP080: Benzene	71-43-2	2.5 mg/kg	73.4	70.0	130
		EP080: Toluene	108-88-3	2.5 mg/kg	79.7	70.0	130
		EP080: Ethylbenzene	100-41-4	2.5 mg/kg	82.3	70.0	130
		EP080: meta- & para-Xylene	108-38-3 106-42-3	2.5 mg/kg	79.9	70.0	130
		EP080: ortho-Xylene	95-47-6	2.5 mg/kg	82.0	70.0	130
		EP080: Naphthalene	91-20-3	2.5 mg/kg	87.7	70.0	130
EP080: BTEXN (QCLot: 4148455)							
ES2202477-001	Anonymous	EP080: Benzene	71-43-2	2.5 mg/kg	82.1	70.0	130
		EP080: Toluene	108-88-3	2.5 mg/kg	90.0	70.0	130
		EP080: Ethylbenzene	100-41-4	2.5 mg/kg	90.6	70.0	130
		EP080: meta- & para-Xylene	108-38-3 106-42-3	2.5 mg/kg	88.4	70.0	130
		EP080: ortho-Xylene	95-47-6	2.5 mg/kg	92.8	70.0	130
		EP080: Naphthalene	91-20-3	2.5 mg/kg	84.3	70.0	130
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 4141334)							
ES2202264-002	SOP_BH118_1.0_220119	EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.00125 mg/kg	82.8	72.0	128
		EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.00125 mg/kg	73.2	73.0	123
		EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.00125 mg/kg	77.2	67.0	130
		EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.00125 mg/kg	80.0	70.0	132
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.00125 mg/kg	79.2	68.0	136
		EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.00125 mg/kg	86.4	59.0	134
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 4143107)							
ES2202264-039	SOP_BH124_0.5_220120	EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.00125 mg/kg	98.0	72.0	128
		EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.00125 mg/kg	88.0	73.0	123
		EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.00125 mg/kg	81.6	67.0	130
		EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.00125 mg/kg	88.4	70.0	132
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.00125 mg/kg	86.8	68.0	136
		EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.00125 mg/kg	104	59.0	134
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4141334)							

Sub-Matrix: **SOIL**

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Acceptable Limits (%)	
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Concentration	MS	Low	High
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4141334) - continued							
ES2202264-002	SOP_BH118_1.0_220119	EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.00625 mg/kg	81.0	71.0	135
		EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.00125 mg/kg	84.4	69.0	132
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.00125 mg/kg	108	70.0	132
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.00125 mg/kg	85.6	71.0	131
		EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.00125 mg/kg	78.4	69.0	133
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.00125 mg/kg	84.8	72.0	129
		EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.00125 mg/kg	86.8	69.0	133
		EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.00125 mg/kg	80.4	64.0	136
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.00125 mg/kg	85.2	69.0	135
		EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.00125 mg/kg	78.4	66.0	139
		EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.00312 mg/kg	91.5	69.0	133
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4143107)							
ES2202264-039	SOP_BH124_0.5_220120	EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.00625 mg/kg	79.3	71.0	135
		EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.00125 mg/kg	78.4	69.0	132
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.00125 mg/kg	114	70.0	132
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.00125 mg/kg	87.2	71.0	131
		EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.00125 mg/kg	92.8	69.0	133
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.00125 mg/kg	86.4	72.0	129
		EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.00125 mg/kg	82.8	69.0	133
		EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.00125 mg/kg	94.0	64.0	136
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.00125 mg/kg	86.8	69.0	135
		EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.00125 mg/kg	87.2	66.0	139
		EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.00312 mg/kg	90.5	69.0	133
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 4141334)							
ES2202264-002	SOP_BH118_1.0_220119	EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.00125 mg/kg	82.0	67.0	137
		EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.00312 mg/kg	99.8	71.6	129
		EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.00312 mg/kg	87.7	69.8	131
		EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.00312 mg/kg	90.2	68.7	130
		EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.00312 mg/kg	89.1	65.1	134
		EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.00125 mg/kg	80.0	63.0	144
		EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.00125 mg/kg	81.2	61.0	139
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 4143107)							
ES2202264-039	SOP_BH124_0.5_220120	EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.00125 mg/kg	87.6	67.0	137

Sub-Matrix: **SOIL**

Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Matrix Spike (MS) Report: Spike Concentration	Matrix Spike (MS) Report: SpikeRecovery(%) MS	Acceptable Limits (%) Low	Acceptable Limits (%) High
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 4143107) - continued							
ES2202264-039	SOP_BH124_0.5_220120	EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.00312 mg/kg	113	71.6	129
		EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.00312 mg/kg	96.0	69.8	131
		EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.00312 mg/kg	110	68.7	130
		EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.00312 mg/kg	92.3	65.1	134
		EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.00125 mg/kg	89.6	63.0	144
		EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.00125 mg/kg	89.2	61.0	139
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 4141334)							
ES2202264-002	SOP_BH118_1.0_220119	EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.00125 mg/kg	85.2	62.0	145
		EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.00125 mg/kg	74.0	64.0	140
		EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.00125 mg/kg	80.8	65.0	137
		EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.00125 mg/kg	87.6	69.2	143
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 4143107)							
ES2202264-039	SOP_BH124_0.5_220120	EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.00125 mg/kg	78.4	62.0	145
		EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.00125 mg/kg	80.4	64.0	140
		EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.00125 mg/kg	98.8	65.0	137
		EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.00125 mg/kg	86.8	69.2	143

Sub-Matrix: **WATER**

Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Matrix Spike (MS) Report: Spike Concentration	Matrix Spike (MS) Report: SpikeRecovery(%) MS	Acceptable Limits (%) Low	Acceptable Limits (%) High
EG020T: Total Metals by ICP-MS (QCLot: 4144071)							
EN2200505-002	Anonymous	EG020A-T: Arsenic	7440-38-2	1 mg/L	98.1	70.0	130
		EG020A-T: Cadmium	7440-43-9	0.25 mg/L	94.9	70.0	130
		EG020A-T: Chromium	7440-47-3	1 mg/L	92.9	70.0	130
		EG020A-T: Copper	7440-50-8	1 mg/L	# Not Determined	70.0	130
		EG020A-T: Lead	7439-92-1	1 mg/L	95.2	70.0	130
		EG020A-T: Nickel	7440-02-0	1 mg/L	96.9	70.0	130
		EG020A-T: Zinc	7440-66-6	1 mg/L	96.1	70.0	130
EG035T: Total Recoverable Mercury by FIMS (QCLot: 4140039)							
ES2201683-035	Anonymous	EG035T: Mercury	7439-97-6	0.01 mg/L	97.6	70.0	130
EP080/071: Total Petroleum Hydrocarbons (QCLot: 4143480)							
ES2202162-013	Anonymous	EP080: C6 - C9 Fraction	----	325 µg/L	97.0	70.0	130

Sub-Matrix: **WATER**

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Acceptable Limits (%)	
Laboratory sample ID	*Sample ID*	*Method: Compound*	*CAS Number*	*Concentration*	*MS*	*Low*	*High*
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 4143480)							
ES2202162-013	Anonymous	EP080: C6 - C10 Fraction	C6_C10	375 µg/L	96.8	70.0	130
EP080: BTEXN (QCLot: 4143480)							
ES2202162-013	Anonymous	EP080: Benzene	71-43-2	25 µg/L	93.5	70.0	130
		EP080: Toluene	108-88-3	25 µg/L	96.5	70.0	130
		EP080: Ethylbenzene	100-41-4	25 µg/L	99.3	70.0	130
		EP080: meta- & para-Xylene	108-38-3 106-42-3	25 µg/L	98.1	70.0	130
		EP080: ortho-Xylene	95-47-6	25 µg/L	101	70.0	130
		EP080: Naphthalene	91-20-3	25 µg/L	89.3	70.0	130

ALS Environmental

QA/QC Compliance Assessment to assist with Quality Review

Work Order	: **ES2202264**	Page	: 1 of 36
Client	: **ENVIRONMENTAL RESOURCES MANAGEMENT (ERM)**	Laboratory	: Environmental Division Sydney
Contact	: NICHOLAS GRBICH	Telephone	: +61-2-8784 8555
Project	: 0628507 SOP	Date Samples Received	: 24-Jan-2022
Site	: ----	Issue Date	: 03-Feb-2022
Sampler	: ANTHONY RICHARD	No. of samples received	: 57
Order number	: ----	No. of samples analysed	: 56

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

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

Summary of Outliers

Outliers : Quality Control Samples

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

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

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

Outliers : Quality Control Samples

Duplicates, Method Blanks, Laboratory Control Samples and Matrix Spikes

Matrix: **SOIL**

Compound Group Name	Laboratory Sample ID	Client Sample ID	Analyte	CAS Number	Data	Limits	Comment
Laboratory Control Spike (LCS) Recoveries							
EP075A: Phenolic Compounds	QC-4139636-002	----	**2.4-Dimethylphenol**	105-67-9	109 %	13.7-108%	**Recovery greater than upper control limit**
EP075A: Phenolic Compounds	QC-4139642-002	----	**2.4-Dimethylphenol**	105-67-9	116 %	13.7-108%	**Recovery greater than upper control limit**
EP075A: Phenolic Compounds	QC-4139642-002	----	**2.4-Dichlorophenol**	120-83-2	110 %	47.0-105%	**Recovery greater than upper control limit**
EP075D: Nitrosamines	QC-4139642-002	----	**N-Nitrosopiperidine**	100-75-4	116 %	57.0-115%	**Recovery greater than upper control limit**
EP075E: Nitroaromatics and Ketones	QC-4139636-002	----	**4-Nitroquinoline-N-oxide**	56-57-5	97.9 %	10.0-87.0%	**Recovery greater than upper control limit**
EP075E: Nitroaromatics and Ketones	QC-4139636-002	----	**5-Nitro-o-toluidine**	99-55-8	104 %	48.3-98.5%	**Recovery greater than upper control limit**
EP075F: Haloethers	QC-4139642-002	----	**Bis(2-chloroethoxy) methane**	111-91-1	116 %	59.0-115%	**Recovery greater than upper control limit**
EP075H: Anilines and Benzidines	QC-4139636-002	----	**3-Nitroaniline**	99-09-2	102 %	31.5-93.7%	**Recovery greater than upper control limit**
EP075H: Anilines and Benzidines	QC-4139636-002	----	**4-Nitroaniline**	100-01-6	114 %	42.0-112%	**Recovery greater than upper control limit**

Matrix: **WATER**

Compound Group Name	Laboratory Sample ID	Client Sample ID	Analyte	CAS Number	Data	Limits	Comment
Matrix Spike (MS) Recoveries							
EG020T: Total Metals by ICP-MS	EN2200505--002	Anonymous	**Copper**	7440-50-8	Not Determined	----	**MS recovery not determined, background level greater than or equal to 4x spike level.**

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
EP074A: Monocyclic Aromatic Hydrocarbons							
Soil Glass Jar - Unpreserved							
SOP_BH108_0.4_220120		27-Jan-2022	26-Jan-2022	**1**	27-Jan-2022	26-Jan-2022	**1**
Soil Glass Jar - Unpreserved							
SOP_BH118_0.1_220119,	SOP_BH118_5.0_220119,	27-Jan-2022	26-Jan-2022	**1**	28-Jan-2022	26-Jan-2022	**2**
SOP_BH118_15.0_220119,	SOP_BH118_25.0_220119,						
SOP_BH142_0.4_220119,	SOP_BH143_1.0_220119,						
SOP_BH144_0.6_220119,	SOP_BH145_1.0_220119,						
DUP02_220119							

Matrix: **SOIL**

Method / Container / Client Sample ID(s)	Extraction / Preparation: Date extracted	Extraction / Preparation: Due for extraction	Extraction / Preparation: Days overdue	Analysis: Date analysed	Analysis: Due for analysis	Analysis: Days overdue
EP074B: Oxygenated Compounds						
Soil Glass Jar - Unpreserved						
SOP_BH108_0.4_220120	27-Jan-2022	26-Jan-2022	1	27-Jan-2022	26-Jan-2022	1
Soil Glass Jar - Unpreserved						
SOP_BH118_0.1_220119, SOP_BH118_5.0_220119, SOP_BH118_15.0_220119, SOP_BH118_25.0_220119, SOP_BH142_0.4_220119, SOP_BH143_1.0_220119, SOP_BH144_0.6_220119, SOP_BH145_1.0_220119, DUP02_220119	27-Jan-2022	26-Jan-2022	1	28-Jan-2022	26-Jan-2022	2
EP074C: Sulfonated Compounds						
Soil Glass Jar - Unpreserved						
SOP_BH108_0.4_220120	27-Jan-2022	26-Jan-2022	1	27-Jan-2022	26-Jan-2022	1
Soil Glass Jar - Unpreserved						
SOP_BH118_0.1_220119, SOP_BH118_5.0_220119, SOP_BH118_15.0_220119, SOP_BH118_25.0_220119, SOP_BH142_0.4_220119, SOP_BH143_1.0_220119, SOP_BH144_0.6_220119, SOP_BH145_1.0_220119, DUP02_220119	27-Jan-2022	26-Jan-2022	1	28-Jan-2022	26-Jan-2022	2
EP074D: Fumigants						
Soil Glass Jar - Unpreserved						
SOP_BH108_0.4_220120	27-Jan-2022	26-Jan-2022	1	27-Jan-2022	26-Jan-2022	1
Soil Glass Jar - Unpreserved						
SOP_BH118_0.1_220119, SOP_BH118_5.0_220119, SOP_BH118_15.0_220119, SOP_BH118_25.0_220119, SOP_BH142_0.4_220119, SOP_BH143_1.0_220119, SOP_BH144_0.6_220119, SOP_BH145_1.0_220119, DUP02_220119	27-Jan-2022	26-Jan-2022	1	28-Jan-2022	26-Jan-2022	2
EP074E: Halogenated Aliphatic Compounds						
Soil Glass Jar - Unpreserved						
SOP_BH108_0.4_220120	27-Jan-2022	26-Jan-2022	1	27-Jan-2022	26-Jan-2022	1
Soil Glass Jar - Unpreserved						
SOP_BH118_0.1_220119, SOP_BH118_5.0_220119, SOP_BH118_15.0_220119, SOP_BH118_25.0_220119, SOP_BH142_0.4_220119, SOP_BH143_1.0_220119, SOP_BH144_0.6_220119, SOP_BH145_1.0_220119, DUP02_220119	27-Jan-2022	26-Jan-2022	1	28-Jan-2022	26-Jan-2022	2
EP074F: Halogenated Aromatic Compounds						
Soil Glass Jar - Unpreserved						
SOP_BH108_0.4_220120	27-Jan-2022	26-Jan-2022	1	27-Jan-2022	26-Jan-2022	1

Matrix: **SOIL**

Method / Container / Client Sample ID(s)	Extraction / Preparation: Date extracted	Extraction / Preparation: Due for extraction	Extraction / Preparation: Days overdue	Analysis: Date analysed	Analysis: Due for analysis	Analysis: Days overdue
EP074F: Halogenated Aromatic Compounds - Analysis Holding Time Compliance						
Soil Glass Jar - Unpreserved SOP_BH118_0.1_220119, SOP_BH118_5.0_220119, SOP_BH118_15.0_220119, SOP_BH118_25.0_220119, SOP_BH142_0.4_220119, SOP_BH143_1.0_220119, SOP_BH144_0.6_220119, SOP_BH145_1.0_220119, DUP02_220119	27-Jan-2022	26-Jan-2022	1	28-Jan-2022	26-Jan-2022	2
EP074G: Trihalomethanes						
Soil Glass Jar - Unpreserved SOP_BH108_0.4_220120	27-Jan-2022	26-Jan-2022	1	27-Jan-2022	26-Jan-2022	1
Soil Glass Jar - Unpreserved SOP_BH118_0.1_220119, SOP_BH118_5.0_220119, SOP_BH118_15.0_220119, SOP_BH118_25.0_220119, SOP_BH142_0.4_220119, SOP_BH143_1.0_220119, SOP_BH144_0.6_220119, SOP_BH145_1.0_220119, DUP02_220119	27-Jan-2022	26-Jan-2022	1	28-Jan-2022	26-Jan-2022	2
EP080/071: Total Petroleum Hydrocarbons						
Soil Glass Jar - Unpreserved TS15, TSC15	01-Feb-2022	31-Jan-2022	1	01-Feb-2022	31-Jan-2022	1
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions						
Soil Glass Jar - Unpreserved TS15, TSC15	01-Feb-2022	31-Jan-2022	1	01-Feb-2022	31-Jan-2022	1
EP080: BTEXN						
Soil Glass Jar - Unpreserved TS15, TSC15	01-Feb-2022	31-Jan-2022	1	01-Feb-2022	31-Jan-2022	1

Matrix: **WATER**

Method / Container / Client Sample ID(s)	Extraction / Preparation: Date extracted	Extraction / Preparation: Due for extraction	Extraction / Preparation: Days overdue	Analysis: Date analysed	Analysis: Due for analysis	Analysis: Days overdue
EP066: Polychlorinated Biphenyls (PCB)						
Amber Glass Bottle - Unpreserved RIN03_220119	27-Jan-2022	26-Jan-2022	1	----	----	----
EP068A: Organochlorine Pesticides (OC)						
Amber Glass Bottle - Unpreserved RIN03_220119	27-Jan-2022	26-Jan-2022	1	----	----	----
EP068B: Organophosphorus Pesticides (OP)						
Amber Glass Bottle - Unpreserved RIN03_220119	27-Jan-2022	26-Jan-2022	1	----	----	----
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons						

Matrix: **WATER**

Method / Container / Client Sample ID(s)	Extraction / Preparation: Date extracted	Extraction / Preparation: Due for extraction	Extraction / Preparation: Days overdue	Analysis: Date analysed	Analysis: Due for analysis	Analysis: Days overdue
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Analysis Holding Time Compliance						
Amber Glass Bottle - Unpreserved						
RIN03_220119	27-Jan-2022	26-Jan-2022	**1**	----	----	----
EP080/071: Total Petroleum Hydrocarbons						
Amber Glass Bottle - Unpreserved						
RIN03_220119	27-Jan-2022	26-Jan-2022	**1**	----	----	----
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions						
Amber Glass Bottle - Unpreserved						
RIN03_220119	27-Jan-2022	26-Jan-2022	**1**	----	----	----

Outliers : Frequency of Quality Control Samples

Matrix: **WATER**

Quality Control Sample Type / Method	Count: QC	Count: Regular	Rate (%): Actual	Rate (%): Expected	Quality Control Specification
Laboratory Duplicates (DUP)					
PAH/Phenols (GC/MS - SIM)	0	3	0.00	10.00	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	0	3	0.00	10.00	NEPM 2013 B3 & ALS QC Standard
Polychlorinated Biphenyls (PCB)	0	3	0.00	10.00	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	0	5	0.00	10.00	NEPM 2013 B3 & ALS QC Standard
Matrix Spikes (MS)					
PAH/Phenols (GC/MS - SIM)	0	3	0.00	5.00	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	0	3	0.00	5.00	NEPM 2013 B3 & ALS QC Standard
Polychlorinated Biphenyls (PCB)	0	3	0.00	5.00	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	0	5	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: **SOIL**

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

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

Matrix: **SOIL**

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

Method / Container / Client Sample ID(s)		Sample Date	Extraction / Preparation			Analysis		
			Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EA055: Moisture Content (Dried @ 105-110°C)								
HDPE Soil Jar (EA055)								
DUP03_220119,	TRIP03_220119	**19-Jan-2022**	**----**	----	----	**01-Feb-2022**	02-Feb-2022	✓
Soil Glass Jar - Unpreserved (EA055)								
SOP_BH118_0.1_220119		**19-Jan-2022**	**----**	----	----	**27-Jan-2022**	02-Feb-2022	✓
Soil Glass Jar - Unpreserved (EA055)								
SOP_BH118_1.0_220119,	SOP_BH118_5.0_220119,	**19-Jan-2022**	**----**	----	----	**28-Jan-2022**	02-Feb-2022	✓
SOP_BH118_10.0_220119,	SOP_BH118_15.0_220119,							
SOP_BH118_20.0_220119,	SOP_BH118_25.0_220119,							
SOP_BH142_0.4_220119,	SOP_BH142_4.0_220119,							
SOP_BH143_0.3_220119,	SOP_BH143_1.0_220119,							
SOP_BH144_0.3_220119,	SOP_BH144_0.6_220119,							
SOP_BH145_0.3_220119,	SOP_BH145_1.0_220119,							
SOP_BH145_5.0_220119,	DUP02_220119,							
DUP04_220119,	SOP_BH108_0.4_220120,							
SOP_BH108_3.0_220120,	SOP_BH109_0.3_220120							
Soil Glass Jar - Unpreserved (EA055)								
SOP_BH102_0.7_220120,	SOP_BH121_1.0_220120	**20-Jan-2022**	**----**	----	----	**27-Jan-2022**	03-Feb-2022	✓
Soil Glass Jar - Unpreserved (EA055)								
SOP_BH102_3.0_220120,	SOP_BH107_1.0_220120,	**20-Jan-2022**	**----**	----	----	**28-Jan-2022**	03-Feb-2022	✓
SOP_BH107_2.0_220120,	SOP_BH109_1.0_220120,							
SOP_BH120_0.5_220120,	SOP_BH120_3.0_220120,							
SOP_BH121_5.0_220120,	SOP_BH101_0.5_220120,							
SOP_BH101_1.3_220120,	SOP_BH101_2.0_220120,							
DUP05_220120								
Soil Glass Jar - Unpreserved (EA055)								
SOP_BH124_0.5_220120,	SOP_BH124_3.0_220120,	**21-Jan-2022**	**----**	----	----	**28-Jan-2022**	04-Feb-2022	✓
DUP06_220121,	SOP_BH125_0.5_220121,							
SOP_BH125_5.0_220121								
Soil Glass Jar - Unpreserved (EA055)								
SOP_BH125_10.0_220121,	SOP_BH125_15.0_220121,	**21-Jan-2022**	**----**	----	----	**31-Jan-2022**	04-Feb-2022	✓
SOP_BH125_20.0_220121,	SOP_BH125_25.0_220121,							
SOP_BH126_0.5_220121,	SOP_BH126_2.0_220121,							
SOP_BH127_1.2_220121,	SOP_BH127_4.0_220121							

Matrix: **SOIL**

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

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EA200: AS 4964 - 2004 Identification of Asbestos in Soils							
Snap Lock Bag - Friable Asbestos/PSD Bag (EA200)							
SOP_BH118_0.1_220119, SOP_BH142_0.4_220119, SOP_BH143_0.3_220119, SOP_BH144_0.3_220119, SOP_BH145_0.3_220119, SOP_BH108_0.4_220120, SOP_BH109_0.3_220120	**19-Jan-2022**	**----**	----	----	**27-Jan-2022**	18-Jul-2022	✓
Snap Lock Bag - Friable Asbestos/PSD Bag (EA200)							
SOP_BH102_0.7_220120, SOP_BH107_1.0_220120, SOP_BH120_0.5_220120, SOP_BH121_1.0_220120, SOP_BH101_0.5_220120	**20-Jan-2022**	**----**	----	----	**27-Jan-2022**	19-Jul-2022	✓
Snap Lock Bag - Friable Asbestos/PSD Bag (EA200)							
SOP_BH124_0.5_220120, SOP_BH125_0.5_220121, SOP_BH126_0.5_220121, SOP_BH127_1.2_220121	**21-Jan-2022**	**----**	----	----	**27-Jan-2022**	20-Jul-2022	✓
EG005(ED093)T: Total Metals by ICP-AES							
Soil Glass Jar - Unpreserved (EG005T)							
SOP_BH118_0.1_220119, SOP_BH118_1.0_220119, SOP_BH118_5.0_220119, SOP_BH118_10.0_220119, SOP_BH118_15.0_220119, SOP_BH118_20.0_220119, SOP_BH118_25.0_220119, SOP_BH142_0.4_220119, SOP_BH142_4.0_220119, SOP_BH143_0.3_220119, SOP_BH143_1.0_220119, SOP_BH144_0.3_220119, SOP_BH144_0.6_220119, SOP_BH145_0.3_220119, SOP_BH145_1.0_220119, SOP_BH145_5.0_220119, DUP02_220119, DUP04_220119, SOP_BH108_0.4_220120, SOP_BH108_3.0_220120, SOP_BH109_0.3_220120	**19-Jan-2022**	**28-Jan-2022**	18-Jul-2022	✓	**31-Jan-2022**	18-Jul-2022	✓
Soil Glass Jar - Unpreserved (EG005T)							
SOP_BH102_0.7_220120, SOP_BH102_3.0_220120, SOP_BH107_1.0_220120, SOP_BH107_2.0_220120, SOP_BH109_1.0_220120, SOP_BH120_0.5_220120, SOP_BH120_3.0_220120, SOP_BH121_1.0_220120, SOP_BH121_5.0_220120, SOP_BH101_0.5_220120, SOP_BH101_1.3_220120, SOP_BH101_2.0_220120, DUP05_220120	**20-Jan-2022**	**28-Jan-2022**	19-Jul-2022	✓	**31-Jan-2022**	19-Jul-2022	✓
Soil Glass Jar - Unpreserved (EG005T)							
SOP_BH124_0.5_220120, SOP_BH124_3.0_220120, DUP06_220121, SOP_BH125_0.5_220121, SOP_BH125_5.0_220121	**21-Jan-2022**	**28-Jan-2022**	20-Jul-2022	✓	**31-Jan-2022**	20-Jul-2022	✓
Soil Glass Jar - Unpreserved (EG005T)							
SOP_BH125_10.0_220121, SOP_BH125_15.0_220121, SOP_BH125_20.0_220121, SOP_BH125_25.0_220121, SOP_BH126_0.5_220121, SOP_BH126_2.0_220121, SOP_BH127_1.2_220121, SOP_BH127_4.0_220121	**21-Jan-2022**	**31-Jan-2022**	20-Jul-2022	✓	**01-Feb-2022**	20-Jul-2022	✓

Matrix: **SOIL**

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

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EG035T: Total Recoverable Mercury by FIMS							
Soil Glass Jar - Unpreserved (EG035T)							
SOP_BH118_0.1_220119, SOP_BH118_1.0_220119, SOP_BH118_5.0_220119, SOP_BH118_10.0_220119, SOP_BH118_15.0_220119, SOP_BH118_20.0_220119, SOP_BH118_25.0_220119, SOP_BH142_0.4_220119, SOP_BH142_4.0_220119, SOP_BH143_0.3_220119, SOP_BH143_1.0_220119, SOP_BH144_0.3_220119, SOP_BH144_0.6_220119, SOP_BH145_0.3_220119, SOP_BH145_1.0_220119, SOP_BH145_5.0_220119, DUP02_220119, DUP04_220119, SOP_BH108_0.4_220120, SOP_BH108_3.0_220120, SOP_BH109_0.3_220120	**19-Jan-2022**	**28-Jan-2022**	16-Feb-2022	✓	**31-Jan-2022**	16-Feb-2022	✓
Soil Glass Jar - Unpreserved (EG035T)							
SOP_BH102_0.7_220120, SOP_BH102_3.0_220120, SOP_BH107_1.0_220120, SOP_BH107_2.0_220120, SOP_BH109_1.0_220120, SOP_BH120_0.5_220120, SOP_BH120_3.0_220120, SOP_BH121_1.0_220120, SOP_BH121_5.0_220120, SOP_BH101_0.5_220120, SOP_BH101_1.3_220120, SOP_BH101_2.0_220120, DUP05_220120	**20-Jan-2022**	**28-Jan-2022**	17-Feb-2022	✓	**31-Jan-2022**	17-Feb-2022	✓
Soil Glass Jar - Unpreserved (EG035T)							
SOP_BH124_0.5_220120, SOP_BH124_3.0_220120, DUP06_220121, SOP_BH125_0.5_220121, SOP_BH125_5.0_220121	**21-Jan-2022**	**28-Jan-2022**	18-Feb-2022	✓	**31-Jan-2022**	18-Feb-2022	✓
Soil Glass Jar - Unpreserved (EG035T)							
SOP_BH125_10.0_220121, SOP_BH125_15.0_220121, SOP_BH125_20.0_220121, SOP_BH125_25.0_220121, SOP_BH126_0.5_220121, SOP_BH126_2.0_220121, SOP_BH127_1.2_220121, SOP_BH127_4.0_220121	**21-Jan-2022**	**31-Jan-2022**	18-Feb-2022	✓	**01-Feb-2022**	18-Feb-2022	✓

Matrix: **SOIL**

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

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP066: Polychlorinated Biphenyls (PCB)							
Soil Glass Jar - Unpreserved (EP066) SOP_BH118_0.1_220119, SOP_BH118_1.0_220119, SOP_BH118_5.0_220119, SOP_BH118_10.0_220119, SOP_BH118_15.0_220119, SOP_BH118_20.0_220119, SOP_BH118_25.0_220119, SOP_BH142_0.4_220119, SOP_BH142_4.0_220119, SOP_BH143_0.3_220119, SOP_BH143_1.0_220119, SOP_BH144_0.3_220119, SOP_BH144_0.6_220119, SOP_BH145_0.3_220119, SOP_BH145_1.0_220119, SOP_BH145_5.0_220119, DUP02_220119, DUP04_220119, SOP_BH108_0.4_220120, SOP_BH108_3.0_220120, SOP_BH109_0.3_220120	**19-Jan-2022**	**28-Jan-2022**	02-Feb-2022	✓	**02-Feb-2022**	09-Mar-2022	✓
Soil Glass Jar - Unpreserved (EP066) SOP_BH102_0.7_220120, SOP_BH102_3.0_220120, SOP_BH107_1.0_220120, SOP_BH107_2.0_220120, SOP_BH109_1.0_220120, SOP_BH120_0.5_220120, SOP_BH120_3.0_220120, SOP_BH121_1.0_220120, SOP_BH121_5.0_220120, SOP_BH101_0.5_220120, SOP_BH101_1.3_220120, SOP_BH101_2.0_220120, DUP05_220120	**20-Jan-2022**	**28-Jan-2022**	03-Feb-2022	✓	**02-Feb-2022**	09-Mar-2022	✓
Soil Glass Jar - Unpreserved (EP066) SOP_BH124_3.0_220120, DUP06_220121, SOP_BH125_0.5_220121, SOP_BH125_10.0_220121, SOP_BH125_20.0_220121, SOP_BH126_2.0_220121, SOP_BH127_4.0_220121	**21-Jan-2022**	**28-Jan-2022**	04-Feb-2022	✓	**01-Feb-2022**	09-Mar-2022	✓
Soil Glass Jar - Unpreserved (EP066) SOP_BH124_0.5_220120, SOP_BH125_5.0_220121, SOP_BH125_15.0_220121, SOP_BH125_25.0_220121, SOP_BH126_0.5_220121, SOP_BH127_1.2_220121	**21-Jan-2022**	**28-Jan-2022**	04-Feb-2022	✓	**02-Feb-2022**	09-Mar-2022	✓

Matrix: **SOIL**

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

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP068A: Organochlorine Pesticides (OC)							
Soil Glass Jar - Unpreserved (EP068) SOP_BH118_0.1_220119, SOP_BH118_1.0_220119, SOP_BH118_5.0_220119, SOP_BH118_10.0_220119, SOP_BH118_15.0_220119, SOP_BH118_20.0_220119, SOP_BH118_25.0_220119, SOP_BH142_0.4_220119, SOP_BH142_4.0_220119, SOP_BH143_0.3_220119, SOP_BH143_1.0_220119, SOP_BH144_0.3_220119, SOP_BH144_0.6_220119, SOP_BH145_0.3_220119, SOP_BH145_1.0_220119, SOP_BH145_5.0_220119, DUP02_220119, DUP04_220119, SOP_BH108_0.4_220120, SOP_BH108_3.0_220120, SOP_BH109_0.3_220120	**19-Jan-2022**	**28-Jan-2022**	02-Feb-2022	✓	**02-Feb-2022**	09-Mar-2022	✓
Soil Glass Jar - Unpreserved (EP068) SOP_BH102_0.7_220120, SOP_BH102_3.0_220120, SOP_BH107_1.0_220120, SOP_BH107_2.0_220120, SOP_BH109_1.0_220120, SOP_BH120_0.5_220120, SOP_BH120_3.0_220120, SOP_BH121_1.0_220120, SOP_BH121_5.0_220120, SOP_BH101_0.5_220120, SOP_BH101_1.3_220120, SOP_BH101_2.0_220120, DUP05_220120	**20-Jan-2022**	**28-Jan-2022**	03-Feb-2022	✓	**02-Feb-2022**	09-Mar-2022	✓
Soil Glass Jar - Unpreserved (EP068) SOP_BH124_3.0_220120, DUP06_220121, SOP_BH125_0.5_220121, SOP_BH125_10.0_220121, SOP_BH125_20.0_220121, SOP_BH126_2.0_220121, SOP_BH127_4.0_220121	**21-Jan-2022**	**28-Jan-2022**	04-Feb-2022	✓	**01-Feb-2022**	09-Mar-2022	✓
Soil Glass Jar - Unpreserved (EP068) SOP_BH124_0.5_220120, SOP_BH125_5.0_220121, SOP_BH125_15.0_220121, SOP_BH125_25.0_220121, SOP_BH126_0.5_220121, SOP_BH127_1.2_220121	**21-Jan-2022**	**28-Jan-2022**	04-Feb-2022	✓	**02-Feb-2022**	09-Mar-2022	✓

Matrix: **SOIL**

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

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP068B: Organophosphorus Pesticides (OP)							
Soil Glass Jar - Unpreserved (EP068)							
SOP_BH118_0.1_220119, SOP_BH118_1.0_220119, SOP_BH118_5.0_220119, SOP_BH118_10.0_220119, SOP_BH118_15.0_220119, SOP_BH118_20.0_220119, SOP_BH118_25.0_220119, SOP_BH142_0.4_220119, SOP_BH142_4.0_220119, SOP_BH143_0.3_220119, SOP_BH143_1.0_220119, SOP_BH144_0.3_220119, SOP_BH144_0.6_220119, SOP_BH145_0.3_220119, SOP_BH145_1.0_220119, SOP_BH145_5.0_220119, DUP02_220119, DUP04_220119, SOP_BH108_0.4_220120, SOP_BH108_3.0_220120, SOP_BH109_0.3_220120	**19-Jan-2022**	**28-Jan-2022**	02-Feb-2022	✓	**02-Feb-2022**	09-Mar-2022	✓
Soil Glass Jar - Unpreserved (EP068)							
SOP_BH102_0.7_220120, SOP_BH102_3.0_220120, SOP_BH107_1.0_220120, SOP_BH107_2.0_220120, SOP_BH109_1.0_220120, SOP_BH120_0.5_220120, SOP_BH120_3.0_220120, SOP_BH121_1.0_220120, SOP_BH121_5.0_220120, SOP_BH101_0.5_220120, SOP_BH101_1.3_220120, SOP_BH101_2.0_220120, DUP05_220120	**20-Jan-2022**	**28-Jan-2022**	03-Feb-2022	✓	**02-Feb-2022**	09-Mar-2022	✓
Soil Glass Jar - Unpreserved (EP068)							
SOP_BH124_3.0_220120, DUP06_220121, SOP_BH125_0.5_220121, SOP_BH125_10.0_220121, SOP_BH125_20.0_220121, SOP_BH126_2.0_220121, SOP_BH127_4.0_220121	**21-Jan-2022**	**28-Jan-2022**	04-Feb-2022	✓	**01-Feb-2022**	09-Mar-2022	✓
Soil Glass Jar - Unpreserved (EP068)							
SOP_BH124_0.5_220120, SOP_BH125_5.0_220121, SOP_BH125_15.0_220121, SOP_BH125_25.0_220121, SOP_BH126_0.5_220121, SOP_BH127_1.2_220121	**21-Jan-2022**	**28-Jan-2022**	04-Feb-2022	✓	**02-Feb-2022**	09-Mar-2022	✓

Matrix: **SOIL**

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

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP074A: Monocyclic Aromatic Hydrocarbons							
Soil Glass Jar - Unpreserved (EP074) SOP_BH108_0.4_220120	**19-Jan-2022**	**27-Jan-2022**	26-Jan-2022	×	**27-Jan-2022**	26-Jan-2022	×
Soil Glass Jar - Unpreserved (EP074) SOP_BH118_0.1_220119, SOP_BH118_5.0_220119, SOP_BH118_15.0_220119, SOP_BH118_25.0_220119, SOP_BH142_0.4_220119, SOP_BH143_1.0_220119, SOP_BH144_0.6_220119, SOP_BH145_1.0_220119, DUP02_220119	**19-Jan-2022**	**27-Jan-2022**	26-Jan-2022	×	**28-Jan-2022**	26-Jan-2022	×
Soil Glass Jar - Unpreserved (EP074) SOP_BH102_0.7_220120, SOP_BH107_1.0_220120, SOP_BH109_1.0_220120, SOP_BH120_3.0_220120, SOP_BH121_1.0_220120, SOP_BH101_0.5_220120, DUP05_220120	**20-Jan-2022**	**27-Jan-2022**	27-Jan-2022	✓	**27-Jan-2022**	27-Jan-2022	✓
Soil Glass Jar - Unpreserved (EP074) SOP_BH124_0.5_220120	**21-Jan-2022**	**27-Jan-2022**	28-Jan-2022	✓	**27-Jan-2022**	28-Jan-2022	✓
Soil Glass Jar - Unpreserved (EP074) SOP_BH125_5.0_220121, SOP_BH125_15.0_220121, SOP_BH125_25.0_220121, SOP_BH126_0.5_220121, SOP_BH127_1.2_220121	**21-Jan-2022**	**27-Jan-2022**	28-Jan-2022	✓	**28-Jan-2022**	28-Jan-2022	✓
EP074B: Oxygenated Compounds							
Soil Glass Jar - Unpreserved (EP074) SOP_BH108_0.4_220120	**19-Jan-2022**	**27-Jan-2022**	26-Jan-2022	×	**27-Jan-2022**	26-Jan-2022	×
Soil Glass Jar - Unpreserved (EP074) SOP_BH118_0.1_220119, SOP_BH118_5.0_220119, SOP_BH118_15.0_220119, SOP_BH118_25.0_220119, SOP_BH142_0.4_220119, SOP_BH143_1.0_220119, SOP_BH144_0.6_220119, SOP_BH145_1.0_220119, DUP02_220119	**19-Jan-2022**	**27-Jan-2022**	26-Jan-2022	×	**28-Jan-2022**	26-Jan-2022	×
Soil Glass Jar - Unpreserved (EP074) SOP_BH102_0.7_220120, SOP_BH107_1.0_220120, SOP_BH109_1.0_220120, SOP_BH120_3.0_220120, SOP_BH121_1.0_220120, SOP_BH101_0.5_220120, DUP05_220120	**20-Jan-2022**	**27-Jan-2022**	27-Jan-2022	✓	**27-Jan-2022**	27-Jan-2022	✓
Soil Glass Jar - Unpreserved (EP074) SOP_BH124_0.5_220120	**21-Jan-2022**	**27-Jan-2022**	28-Jan-2022	✓	**27-Jan-2022**	28-Jan-2022	✓
Soil Glass Jar - Unpreserved (EP074) SOP_BH125_5.0_220121, SOP_BH125_15.0_220121, SOP_BH125_25.0_220121, SOP_BH126_0.5_220121, SOP_BH127_1.2_220121	**21-Jan-2022**	**27-Jan-2022**	28-Jan-2022	✓	**28-Jan-2022**	28-Jan-2022	✓

Matrix: **SOIL**

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

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP074C: Sulfonated Compounds							
Soil Glass Jar - Unpreserved (EP074) SOP_BH108_0.4_220120	**19-Jan-2022**	**27-Jan-2022**	26-Jan-2022	×	**27-Jan-2022**	26-Jan-2022	×
Soil Glass Jar - Unpreserved (EP074) SOP_BH118_0.1_220119, SOP_BH118_5.0_220119, SOP_BH118_15.0_220119, SOP_BH118_25.0_220119, SOP_BH142_0.4_220119, SOP_BH143_1.0_220119, SOP_BH144_0.6_220119, SOP_BH145_1.0_220119, DUP02_220119	**19-Jan-2022**	**27-Jan-2022**	26-Jan-2022	×	**28-Jan-2022**	26-Jan-2022	×
Soil Glass Jar - Unpreserved (EP074) SOP_BH102_0.7_220120, SOP_BH107_1.0_220120, SOP_BH109_1.0_220120, SOP_BH120_3.0_220120, SOP_BH121_1.0_220120, SOP_BH101_0.5_220120, DUP05_220120	**20-Jan-2022**	**27-Jan-2022**	27-Jan-2022	✓	**27-Jan-2022**	27-Jan-2022	✓
Soil Glass Jar - Unpreserved (EP074) SOP_BH124_0.5_220120	**21-Jan-2022**	**27-Jan-2022**	28-Jan-2022	✓	**27-Jan-2022**	28-Jan-2022	✓
Soil Glass Jar - Unpreserved (EP074) SOP_BH125_5.0_220121, SOP_BH125_15.0_220121, SOP_BH125_25.0_220121, SOP_BH126_0.5_220121, SOP_BH127_1.2_220121	**21-Jan-2022**	**27-Jan-2022**	28-Jan-2022	✓	**28-Jan-2022**	28-Jan-2022	✓
EP074D: Fumigants							
Soil Glass Jar - Unpreserved (EP074) SOP_BH108_0.4_220120	**19-Jan-2022**	**27-Jan-2022**	26-Jan-2022	×	**27-Jan-2022**	26-Jan-2022	×
Soil Glass Jar - Unpreserved (EP074) SOP_BH118_0.1_220119, SOP_BH118_5.0_220119, SOP_BH118_15.0_220119, SOP_BH118_25.0_220119, SOP_BH142_0.4_220119, SOP_BH143_1.0_220119, SOP_BH144_0.6_220119, SOP_BH145_1.0_220119, DUP02_220119	**19-Jan-2022**	**27-Jan-2022**	26-Jan-2022	×	**28-Jan-2022**	26-Jan-2022	×
Soil Glass Jar - Unpreserved (EP074) SOP_BH102_0.7_220120, SOP_BH107_1.0_220120, SOP_BH109_1.0_220120, SOP_BH120_3.0_220120, SOP_BH121_1.0_220120, SOP_BH101_0.5_220120, DUP05_220120	**20-Jan-2022**	**27-Jan-2022**	27-Jan-2022	✓	**27-Jan-2022**	27-Jan-2022	✓
Soil Glass Jar - Unpreserved (EP074) SOP_BH124_0.5_220120	**21-Jan-2022**	**27-Jan-2022**	28-Jan-2022	✓	**27-Jan-2022**	28-Jan-2022	✓
Soil Glass Jar - Unpreserved (EP074) SOP_BH125_5.0_220121, SOP_BH125_15.0_220121, SOP_BH125_25.0_220121, SOP_BH126_0.5_220121, SOP_BH127_1.2_220121	**21-Jan-2022**	**27-Jan-2022**	28-Jan-2022	✓	**28-Jan-2022**	28-Jan-2022	✓

Matrix: **SOIL**

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

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP074E: Halogenated Aliphatic Compounds							
Soil Glass Jar - Unpreserved (EP074) SOP_BH108_0.4_220120	**19-Jan-2022**	**27-Jan-2022**	26-Jan-2022	×	**27-Jan-2022**	26-Jan-2022	×
Soil Glass Jar - Unpreserved (EP074) SOP_BH118_0.1_220119, SOP_BH118_5.0_220119, SOP_BH118_15.0_220119, SOP_BH118_25.0_220119, SOP_BH142_0.4_220119, SOP_BH143_1.0_220119, SOP_BH144_0.6_220119, SOP_BH145_1.0_220119, DUP02_220119	**19-Jan-2022**	**27-Jan-2022**	26-Jan-2022	×	**28-Jan-2022**	26-Jan-2022	×
Soil Glass Jar - Unpreserved (EP074) SOP_BH102_0.7_220120, SOP_BH107_1.0_220120, SOP_BH109_1.0_220120, SOP_BH120_3.0_220120, SOP_BH121_1.0_220120, SOP_BH101_0.5_220120, DUP05_220120	**20-Jan-2022**	**27-Jan-2022**	27-Jan-2022	✓	**27-Jan-2022**	27-Jan-2022	✓
Soil Glass Jar - Unpreserved (EP074) SOP_BH124_0.5_220120	**21-Jan-2022**	**27-Jan-2022**	28-Jan-2022	✓	**27-Jan-2022**	28-Jan-2022	✓
Soil Glass Jar - Unpreserved (EP074) SOP_BH125_5.0_220121, SOP_BH125_15.0_220121, SOP_BH125_25.0_220121, SOP_BH126_0.5_220121, SOP_BH127_1.2_220121	**21-Jan-2022**	**27-Jan-2022**	28-Jan-2022	✓	**28-Jan-2022**	28-Jan-2022	✓
EP074F: Halogenated Aromatic Compounds							
Soil Glass Jar - Unpreserved (EP074) SOP_BH108_0.4_220120	**19-Jan-2022**	**27-Jan-2022**	26-Jan-2022	×	**27-Jan-2022**	26-Jan-2022	×
Soil Glass Jar - Unpreserved (EP074) SOP_BH118_0.1_220119, SOP_BH118_5.0_220119, SOP_BH118_15.0_220119, SOP_BH118_25.0_220119, SOP_BH142_0.4_220119, SOP_BH143_1.0_220119, SOP_BH144_0.6_220119, SOP_BH145_1.0_220119, DUP02_220119	**19-Jan-2022**	**27-Jan-2022**	26-Jan-2022	×	**28-Jan-2022**	26-Jan-2022	×
Soil Glass Jar - Unpreserved (EP074) SOP_BH102_0.7_220120, SOP_BH107_1.0_220120, SOP_BH109_1.0_220120, SOP_BH120_3.0_220120, SOP_BH121_1.0_220120, SOP_BH101_0.5_220120, DUP05_220120	**20-Jan-2022**	**27-Jan-2022**	27-Jan-2022	✓	**27-Jan-2022**	27-Jan-2022	✓
Soil Glass Jar - Unpreserved (EP074) SOP_BH124_0.5_220120	**21-Jan-2022**	**27-Jan-2022**	28-Jan-2022	✓	**27-Jan-2022**	28-Jan-2022	✓
Soil Glass Jar - Unpreserved (EP074) SOP_BH125_5.0_220121, SOP_BH125_15.0_220121, SOP_BH125_25.0_220121, SOP_BH126_0.5_220121, SOP_BH127_1.2_220121	**21-Jan-2022**	**27-Jan-2022**	28-Jan-2022	✓	**28-Jan-2022**	28-Jan-2022	✓

Matrix: **SOIL**

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

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP074G: Trihalomethanes							
Soil Glass Jar - Unpreserved (EP074)							
SOP_BH108_0.4_220120	**19-Jan-2022**	**27-Jan-2022**	26-Jan-2022	×	**27-Jan-2022**	26-Jan-2022	×
Soil Glass Jar - Unpreserved (EP074)							
SOP_BH118_0.1_220119, SOP_BH118_5.0_220119, SOP_BH118_15.0_220119, SOP_BH118_25.0_220119, SOP_BH142_0.4_220119, SOP_BH143_1.0_220119, SOP_BH144_0.6_220119, SOP_BH145_1.0_220119, DUP02_220119	**19-Jan-2022**	**27-Jan-2022**	26-Jan-2022	×	**28-Jan-2022**	26-Jan-2022	×
Soil Glass Jar - Unpreserved (EP074)							
SOP_BH102_0.7_220120, SOP_BH107_1.0_220120, SOP_BH109_1.0_220120, SOP_BH120_3.0_220120, SOP_BH121_1.0_220120, SOP_BH101_0.5_220120, DUP05_220120	**20-Jan-2022**	**27-Jan-2022**	27-Jan-2022	✓	**27-Jan-2022**	27-Jan-2022	✓
Soil Glass Jar - Unpreserved (EP074)							
SOP_BH124_0.5_220120	**21-Jan-2022**	**27-Jan-2022**	28-Jan-2022	✓	**27-Jan-2022**	28-Jan-2022	✓
Soil Glass Jar - Unpreserved (EP074)							
SOP_BH125_5.0_220121, SOP_BH125_15.0_220121, SOP_BH125_25.0_220121, SOP_BH126_0.5_220121, SOP_BH127_1.2_220121	**21-Jan-2022**	**27-Jan-2022**	28-Jan-2022	✓	**28-Jan-2022**	28-Jan-2022	✓

Matrix: **SOIL**

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

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons							
Soil Glass Jar - Unpreserved (EP075(SIM))							
SOP_BH118_0.1_220119, SOP_BH118_1.0_220119, SOP_BH118_5.0_220119, SOP_BH118_10.0_220119, SOP_BH118_15.0_220119, SOP_BH118_20.0_220119, SOP_BH118_25.0_220119, SOP_BH142_0.4_220119, SOP_BH142_4.0_220119, SOP_BH143_0.3_220119, SOP_BH143_1.0_220119, SOP_BH144_0.3_220119, SOP_BH144_0.6_220119, SOP_BH145_0.3_220119, SOP_BH145_1.0_220119, SOP_BH145_5.0_220119, DUP02_220119, DUP04_220119, SOP_BH108_0.4_220120, SOP_BH108_3.0_220120, SOP_BH109_0.3_220120	**19-Jan-2022**	**28-Jan-2022**	02-Feb-2022	✓	**01-Feb-2022**	09-Mar-2022	✓
Soil Glass Jar - Unpreserved (EP075(SIM))							
SOP_BH102_0.7_220120, SOP_BH102_3.0_220120, SOP_BH107_1.0_220120, SOP_BH107_2.0_220120, SOP_BH109_1.0_220120, SOP_BH120_0.5_220120, SOP_BH120_3.0_220120, SOP_BH121_1.0_220120, SOP_BH121_5.0_220120, SOP_BH101_0.5_220120, SOP_BH101_1.3_220120, SOP_BH101_2.0_220120, DUP05_220120	**20-Jan-2022**	**28-Jan-2022**	03-Feb-2022	✓	**01-Feb-2022**	09-Mar-2022	✓
Soil Glass Jar - Unpreserved (EP075(SIM))							
SOP_BH124_0.5_220120, SOP_BH124_3.0_220120, DUP06_220121, SOP_BH125_0.5_220121, SOP_BH125_5.0_220121, SOP_BH125_10.0_220121, SOP_BH125_15.0_220121, SOP_BH125_20.0_220121, SOP_BH125_25.0_220121, SOP_BH126_0.5_220121, SOP_BH126_2.0_220121, SOP_BH127_1.2_220121, SOP_BH127_4.0_220121	**21-Jan-2022**	**28-Jan-2022**	04-Feb-2022	✓	**01-Feb-2022**	09-Mar-2022	✓

Matrix: **SOIL**

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

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP075A: Phenolic Compounds							
Soil Glass Jar - Unpreserved (EP075)							
SOP_BH118_0.1_220119, SOP_BH118_5.0_220119, SOP_BH118_15.0_220119, SOP_BH118_25.0_220119, SOP_BH142_0.4_220119, SOP_BH143_1.0_220119, SOP_BH144_0.6_220119, SOP_BH145_1.0_220119, DUP02_220119, SOP_BH108_0.4_220120	**19-Jan-2022**	**28-Jan-2022**	02-Feb-2022	✓	**31-Jan-2022**	09-Mar-2022	✓
Soil Glass Jar - Unpreserved (EP075)							
SOP_BH102_0.7_220120, SOP_BH107_1.0_220120, SOP_BH109_1.0_220120, SOP_BH120_3.0_220120, SOP_BH121_1.0_220120, SOP_BH101_0.5_220120, DUP05_220120	**20-Jan-2022**	**28-Jan-2022**	03-Feb-2022	✓	**31-Jan-2022**	09-Mar-2022	✓
Soil Glass Jar - Unpreserved (EP075)							
SOP_BH124_0.5_220120, SOP_BH125_5.0_220121, SOP_BH125_15.0_220121, SOP_BH125_25.0_220121, SOP_BH126_0.5_220121, SOP_BH127_1.2_220121	**21-Jan-2022**	**28-Jan-2022**	04-Feb-2022	✓	**31-Jan-2022**	09-Mar-2022	✓
EP075B: Polynuclear Aromatic Hydrocarbons							
Soil Glass Jar - Unpreserved (EP075)							
SOP_BH118_0.1_220119, SOP_BH118_5.0_220119, SOP_BH118_15.0_220119, SOP_BH118_25.0_220119, SOP_BH142_0.4_220119, SOP_BH143_1.0_220119, SOP_BH144_0.6_220119, SOP_BH145_1.0_220119, DUP02_220119, SOP_BH108_0.4_220120	**19-Jan-2022**	**28-Jan-2022**	02-Feb-2022	✓	**31-Jan-2022**	09-Mar-2022	✓
Soil Glass Jar - Unpreserved (EP075)							
SOP_BH102_0.7_220120, SOP_BH107_1.0_220120, SOP_BH109_1.0_220120, SOP_BH120_3.0_220120, SOP_BH121_1.0_220120, SOP_BH101_0.5_220120, DUP05_220120	**20-Jan-2022**	**28-Jan-2022**	03-Feb-2022	✓	**31-Jan-2022**	09-Mar-2022	✓
Soil Glass Jar - Unpreserved (EP075)							
SOP_BH124_0.5_220120, SOP_BH125_5.0_220121, SOP_BH125_15.0_220121, SOP_BH125_25.0_220121, SOP_BH126_0.5_220121, SOP_BH127_1.2_220121	**21-Jan-2022**	**28-Jan-2022**	04-Feb-2022	✓	**31-Jan-2022**	09-Mar-2022	✓

Matrix: **SOIL**

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

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP075C: Phthalate Esters							
Soil Glass Jar - Unpreserved (EP075)							
SOP_BH118_0.1_220119, SOP_BH118_5.0_220119, SOP_BH118_15.0_220119, SOP_BH118_25.0_220119, SOP_BH142_0.4_220119, SOP_BH143_1.0_220119, SOP_BH144_0.6_220119, SOP_BH145_1.0_220119, DUP02_220119, SOP_BH108_0.4_220120	**19-Jan-2022**	**28-Jan-2022**	02-Feb-2022	✓	**31-Jan-2022**	09-Mar-2022	✓
Soil Glass Jar - Unpreserved (EP075)							
SOP_BH102_0.7_220120, SOP_BH107_1.0_220120, SOP_BH109_1.0_220120, SOP_BH120_3.0_220120, SOP_BH121_1.0_220120, SOP_BH101_0.5_220120, DUP05_220120	**20-Jan-2022**	**28-Jan-2022**	03-Feb-2022	✓	**31-Jan-2022**	09-Mar-2022	✓
Soil Glass Jar - Unpreserved (EP075)							
SOP_BH124_0.5_220120, SOP_BH125_5.0_220121, SOP_BH125_15.0_220121, SOP_BH125_25.0_220121, SOP_BH126_0.5_220121, SOP_BH127_1.2_220121	**21-Jan-2022**	**28-Jan-2022**	04-Feb-2022	✓	**31-Jan-2022**	09-Mar-2022	✓
EP075D: Nitrosamines							
Soil Glass Jar - Unpreserved (EP075)							
SOP_BH118_0.1_220119, SOP_BH118_5.0_220119, SOP_BH118_15.0_220119, SOP_BH118_25.0_220119, SOP_BH142_0.4_220119, SOP_BH143_1.0_220119, SOP_BH144_0.6_220119, SOP_BH145_1.0_220119, DUP02_220119, SOP_BH108_0.4_220120	**19-Jan-2022**	**28-Jan-2022**	02-Feb-2022	✓	**31-Jan-2022**	09-Mar-2022	✓
Soil Glass Jar - Unpreserved (EP075)							
SOP_BH102_0.7_220120, SOP_BH107_1.0_220120, SOP_BH109_1.0_220120, SOP_BH120_3.0_220120, SOP_BH121_1.0_220120, SOP_BH101_0.5_220120, DUP05_220120	**20-Jan-2022**	**28-Jan-2022**	03-Feb-2022	✓	**31-Jan-2022**	09-Mar-2022	✓
Soil Glass Jar - Unpreserved (EP075)							
SOP_BH124_0.5_220120, SOP_BH125_5.0_220121, SOP_BH125_15.0_220121, SOP_BH125_25.0_220121, SOP_BH126_0.5_220121, SOP_BH127_1.2_220121	**21-Jan-2022**	**28-Jan-2022**	04-Feb-2022	✓	**31-Jan-2022**	09-Mar-2022	✓

Matrix: **SOIL**

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

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP075E: Nitroaromatics and Ketones							
Soil Glass Jar - Unpreserved (EP075) SOP_BH118_0.1_220119, SOP_BH118_5.0_220119, SOP_BH118_15.0_220119, SOP_BH118_25.0_220119, SOP_BH142_0.4_220119, SOP_BH143_1.0_220119, SOP_BH144_0.6_220119, SOP_BH145_1.0_220119, DUP02_220119, SOP_BH108_0.4_220120	**19-Jan-2022**	**28-Jan-2022**	02-Feb-2022	✓	**31-Jan-2022**	09-Mar-2022	✓
Soil Glass Jar - Unpreserved (EP075) SOP_BH102_0.7_220120, SOP_BH107_1.0_220120, SOP_BH109_1.0_220120, SOP_BH120_3.0_220120, SOP_BH121_1.0_220120, SOP_BH101_0.5_220120, DUP05_220120	**20-Jan-2022**	**28-Jan-2022**	03-Feb-2022	✓	**31-Jan-2022**	09-Mar-2022	✓
Soil Glass Jar - Unpreserved (EP075) SOP_BH124_0.5_220120, SOP_BH125_5.0_220121, SOP_BH125_15.0_220121, SOP_BH125_25.0_220121, SOP_BH126_0.5_220121, SOP_BH127_1.2_220121	**21-Jan-2022**	**28-Jan-2022**	04-Feb-2022	✓	**31-Jan-2022**	09-Mar-2022	✓
EP075F: Haloethers							
Soil Glass Jar - Unpreserved (EP075) SOP_BH118_0.1_220119, SOP_BH118_5.0_220119, SOP_BH118_15.0_220119, SOP_BH118_25.0_220119, SOP_BH142_0.4_220119, SOP_BH143_1.0_220119, SOP_BH144_0.6_220119, SOP_BH145_1.0_220119, DUP02_220119, SOP_BH108_0.4_220120	**19-Jan-2022**	**28-Jan-2022**	02-Feb-2022	✓	**31-Jan-2022**	09-Mar-2022	✓
Soil Glass Jar - Unpreserved (EP075) SOP_BH102_0.7_220120, SOP_BH107_1.0_220120, SOP_BH109_1.0_220120, SOP_BH120_3.0_220120, SOP_BH121_1.0_220120, SOP_BH101_0.5_220120, DUP05_220120	**20-Jan-2022**	**28-Jan-2022**	03-Feb-2022	✓	**31-Jan-2022**	09-Mar-2022	✓
Soil Glass Jar - Unpreserved (EP075) SOP_BH124_0.5_220120, SOP_BH125_5.0_220121, SOP_BH125_15.0_220121, SOP_BH125_25.0_220121, SOP_BH126_0.5_220121, SOP_BH127_1.2_220121	**21-Jan-2022**	**28-Jan-2022**	04-Feb-2022	✓	**31-Jan-2022**	09-Mar-2022	✓

Matrix: **SOIL**

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

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP075G: Chlorinated Hydrocarbons							
Soil Glass Jar - Unpreserved (EP075) SOP_BH118_0.1_220119, SOP_BH118_5.0_220119, SOP_BH118_15.0_220119, SOP_BH118_25.0_220119, SOP_BH142_0.4_220119, SOP_BH143_1.0_220119, SOP_BH144_0.6_220119, SOP_BH145_1.0_220119, DUP02_220119, SOP_BH108_0.4_220120	**19-Jan-2022**	**28-Jan-2022**	02-Feb-2022	✓	**31-Jan-2022**	09-Mar-2022	✓
Soil Glass Jar - Unpreserved (EP075) SOP_BH102_0.7_220120, SOP_BH107_1.0_220120, SOP_BH109_1.0_220120, SOP_BH120_3.0_220120, SOP_BH121_1.0_220120, SOP_BH101_0.5_220120, DUP05_220120	**20-Jan-2022**	**28-Jan-2022**	03-Feb-2022	✓	**31-Jan-2022**	09-Mar-2022	✓
Soil Glass Jar - Unpreserved (EP075) SOP_BH124_0.5_220120, SOP_BH125_5.0_220121, SOP_BH125_15.0_220121, SOP_BH125_25.0_220121, SOP_BH126_0.5_220121, SOP_BH127_1.2_220121	**21-Jan-2022**	**28-Jan-2022**	04-Feb-2022	✓	**31-Jan-2022**	09-Mar-2022	✓
EP075H: Anilines and Benzidines							
Soil Glass Jar - Unpreserved (EP075) SOP_BH118_0.1_220119, SOP_BH118_5.0_220119, SOP_BH118_15.0_220119, SOP_BH118_25.0_220119, SOP_BH142_0.4_220119, SOP_BH143_1.0_220119, SOP_BH144_0.6_220119, SOP_BH145_1.0_220119, DUP02_220119, SOP_BH108_0.4_220120	**19-Jan-2022**	**28-Jan-2022**	02-Feb-2022	✓	**31-Jan-2022**	09-Mar-2022	✓
Soil Glass Jar - Unpreserved (EP075) SOP_BH102_0.7_220120, SOP_BH107_1.0_220120, SOP_BH109_1.0_220120, SOP_BH120_3.0_220120, SOP_BH121_1.0_220120, SOP_BH101_0.5_220120, DUP05_220120	**20-Jan-2022**	**28-Jan-2022**	03-Feb-2022	✓	**31-Jan-2022**	09-Mar-2022	✓
Soil Glass Jar - Unpreserved (EP075) SOP_BH124_0.5_220120, SOP_BH125_5.0_220121, SOP_BH125_15.0_220121, SOP_BH125_25.0_220121, SOP_BH126_0.5_220121, SOP_BH127_1.2_220121	**21-Jan-2022**	**28-Jan-2022**	04-Feb-2022	✓	**31-Jan-2022**	09-Mar-2022	✓

Matrix: **SOIL**

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

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP080/071: Total Petroleum Hydrocarbons							
Soil Glass Jar - Unpreserved (EP080) TS15, TSC15	**17-Jan-2022**	**01-Feb-2022**	31-Jan-2022	×	**01-Feb-2022**	31-Jan-2022	×
Soil Glass Jar - Unpreserved (EP080) TS14, TSC14	**17-Jan-2022**	**28-Jan-2022**	31-Jan-2022	✓	**28-Jan-2022**	31-Jan-2022	✓
Soil Glass Jar - Unpreserved (EP080) SOP_BH108_0.4_220120, SOP_BH108_3.0_220120, SOP_BH109_0.3_220120	**19-Jan-2022**	**27-Jan-2022**	02-Feb-2022	✓	**27-Jan-2022**	02-Feb-2022	✓
Soil Glass Jar - Unpreserved (EP080) SOP_BH118_0.1_220119, SOP_BH118_5.0_220119, SOP_BH118_15.0_220119, SOP_BH118_25.0_220119, SOP_BH142_0.4_220119, SOP_BH143_1.0_220119, SOP_BH144_0.6_220119, SOP_BH145_1.0_220119, DUP02_220119	**19-Jan-2022**	**27-Jan-2022**	02-Feb-2022	✓	**28-Jan-2022**	02-Feb-2022	✓
Soil Glass Jar - Unpreserved (EP071) SOP_BH118_0.1_220119, SOP_BH118_1.0_220119, SOP_BH118_5.0_220119, SOP_BH118_10.0_220119, SOP_BH118_15.0_220119, SOP_BH118_20.0_220119, SOP_BH118_25.0_220119, SOP_BH142_0.4_220119, SOP_BH142_4.0_220119, SOP_BH143_0.3_220119, SOP_BH143_1.0_220119, SOP_BH144_0.3_220119, SOP_BH144_0.6_220119, SOP_BH145_0.3_220119, SOP_BH145_1.0_220119, SOP_BH145_5.0_220119, DUP02_220119, DUP04_220119, SOP_BH108_0.4_220120, SOP_BH108_3.0_220120, SOP_BH109_0.3_220120	**19-Jan-2022**	**28-Jan-2022**	02-Feb-2022	✓	**31-Jan-2022**	09-Mar-2022	✓
Soil Glass Jar - Unpreserved (EP080) SOP_BH118_1.0_220119, SOP_BH118_10.0_220119, SOP_BH118_20.0_220119, SOP_BH142_4.0_220119, SOP_BH143_0.3_220119, SOP_BH144_0.3_220119, SOP_BH145_0.3_220119, SOP_BH145_5.0_220119, DUP04_220119	**19-Jan-2022**	**31-Jan-2022**	02-Feb-2022	✓	**01-Feb-2022**	02-Feb-2022	✓
Soil Glass Jar - Unpreserved (EP080) SOP_BH102_0.7_220120, SOP_BH102_3.0_220120, SOP_BH107_1.0_220120, SOP_BH107_2.0_220120, SOP_BH109_1.0_220120, SOP_BH120_0.5_220120, SOP_BH120_3.0_220120, SOP_BH121_1.0_220120, SOP_BH121_5.0_220120, SOP_BH101_0.5_220120, SOP_BH101_1.3_220120, SOP_BH101_2.0_220120, DUP05_220120	**20-Jan-2022**	**27-Jan-2022**	03-Feb-2022	✓	**27-Jan-2022**	03-Feb-2022	✓
Soil Glass Jar - Unpreserved (EP071)							

Matrix: **SOIL**

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

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP080/071: Total Petroleum Hydrocarbons - Continued							
SOP_BH102_0.7_220120, SOP_BH102_3.0_220120, SOP_BH107_1.0_220120, SOP_BH107_2.0_220120, SOP_BH109_1.0_220120, SOP_BH120_0.5_220120, SOP_BH120_3.0_220120, SOP_BH121_1.0_220120, SOP_BH121_5.0_220120, SOP_BH101_0.5_220120, SOP_BH101_1.3_220120, SOP_BH101_2.0_220120, DUP05_220120	**20-Jan-2022**	**28-Jan-2022**	03-Feb-2022	✓	**31-Jan-2022**	09-Mar-2022	✓
Soil Glass Jar - Unpreserved (EP080) SOP_BH124_0.5_220120, SOP_BH124_3.0_220120, DUP06_220121, SOP_BH125_0.5_220121	**21-Jan-2022**	**27-Jan-2022**	04-Feb-2022	✓	**27-Jan-2022**	04-Feb-2022	✓
Soil Glass Jar - Unpreserved (EP080) SOP_BH125_5.0_220121, SOP_BH125_15.0_220121, SOP_BH125_25.0_220121, SOP_BH126_0.5_220121, SOP_BH127_1.2_220121	**21-Jan-2022**	**27-Jan-2022**	04-Feb-2022	✓	**28-Jan-2022**	04-Feb-2022	✓
Soil Glass Jar - Unpreserved (EP071) SOP_BH124_3.0_220120, DUP06_220121, SOP_BH125_0.5_220121, SOP_BH125_10.0_220121, SOP_BH125_20.0_220121, SOP_BH126_2.0_220121, SOP_BH127_4.0_220121	**21-Jan-2022**	**28-Jan-2022**	04-Feb-2022	✓	**01-Feb-2022**	09-Mar-2022	✓
Soil Glass Jar - Unpreserved (EP071) SOP_BH124_0.5_220120, SOP_BH125_5.0_220121, SOP_BH125_15.0_220121, SOP_BH125_25.0_220121, SOP_BH126_0.5_220121, SOP_BH127_1.2_220121	**21-Jan-2022**	**28-Jan-2022**	04-Feb-2022	✓	**31-Jan-2022**	09-Mar-2022	✓
Soil Glass Jar - Unpreserved (EP080) SOP_BH125_10.0_220121, SOP_BH125_20.0_220121, SOP_BH126_2.0_220121, SOP_BH127_4.0_220121	**21-Jan-2022**	**31-Jan-2022**	04-Feb-2022	✓	**01-Feb-2022**	04-Feb-2022	✓

Matrix: **SOIL**

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

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions							
Soil Glass Jar - Unpreserved (EP080) TS15, TSC15	**17-Jan-2022**	**01-Feb-2022**	31-Jan-2022	×	**01-Feb-2022**	31-Jan-2022	×
Soil Glass Jar - Unpreserved (EP080) TS14, TSC14	**17-Jan-2022**	**28-Jan-2022**	31-Jan-2022	✓	**28-Jan-2022**	31-Jan-2022	✓
Soil Glass Jar - Unpreserved (EP080) SOP_BH108_0.4_220120, SOP_BH108_3.0_220120, SOP_BH109_0.3_220120	**19-Jan-2022**	**27-Jan-2022**	02-Feb-2022	✓	**27-Jan-2022**	02-Feb-2022	✓
Soil Glass Jar - Unpreserved (EP080) SOP_BH118_0.1_220119, SOP_BH118_5.0_220119, SOP_BH118_15.0_220119, SOP_BH118_25.0_220119, SOP_BH142_0.4_220119, SOP_BH143_1.0_220119, SOP_BH144_0.6_220119, SOP_BH145_1.0_220119, DUP02_220119	**19-Jan-2022**	**27-Jan-2022**	02-Feb-2022	✓	**28-Jan-2022**	02-Feb-2022	✓
Soil Glass Jar - Unpreserved (EP071) SOP_BH118_0.1_220119, SOP_BH118_1.0_220119, SOP_BH118_5.0_220119, SOP_BH118_10.0_220119, SOP_BH118_15.0_220119, SOP_BH118_20.0_220119, SOP_BH118_25.0_220119, SOP_BH142_0.4_220119, SOP_BH142_4.0_220119, SOP_BH143_0.3_220119, SOP_BH143_1.0_220119, SOP_BH144_0.3_220119, SOP_BH144_0.6_220119, SOP_BH145_0.3_220119, SOP_BH145_1.0_220119, SOP_BH145_5.0_220119, DUP02_220119, DUP04_220119, SOP_BH108_0.4_220120, SOP_BH108_3.0_220120, SOP_BH109_0.3_220120	**19-Jan-2022**	**28-Jan-2022**	02-Feb-2022	✓	**31-Jan-2022**	09-Mar-2022	✓
Soil Glass Jar - Unpreserved (EP080) SOP_BH118_1.0_220119, SOP_BH118_10.0_220119, SOP_BH118_20.0_220119, SOP_BH142_4.0_220119, SOP_BH143_0.3_220119, SOP_BH144_0.3_220119, SOP_BH145_0.3_220119, SOP_BH145_5.0_220119, DUP04_220119	**19-Jan-2022**	**31-Jan-2022**	02-Feb-2022	✓	**01-Feb-2022**	02-Feb-2022	✓
Soil Glass Jar - Unpreserved (EP080) SOP_BH102_0.7_220120, SOP_BH102_3.0_220120, SOP_BH107_1.0_220120, SOP_BH107_2.0_220120, SOP_BH109_1.0_220120, SOP_BH120_0.5_220120, SOP_BH120_3.0_220120, SOP_BH121_1.0_220120, SOP_BH121_5.0_220120, SOP_BH101_0.5_220120, SOP_BH101_1.3_220120, SOP_BH101_2.0_220120, DUP05_220120	**20-Jan-2022**	**27-Jan-2022**	03-Feb-2022	✓	**27-Jan-2022**	03-Feb-2022	✓
Soil Glass Jar - Unpreserved (EP071)							

Matrix: **SOIL**

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

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions - Continued							
SOP_BH102_0.7_220120, SOP_BH102_3.0_220120, SOP_BH107_1.0_220120, SOP_BH107_2.0_220120, SOP_BH109_1.0_220120, SOP_BH120_0.5_220120, SOP_BH120_3.0_220120, SOP_BH121_1.0_220120, SOP_BH121_5.0_220120, SOP_BH101_0.5_220120, SOP_BH101_1.3_220120, SOP_BH101_2.0_220120, DUP05_220120	**20-Jan-2022**	**28-Jan-2022**	03-Feb-2022	✓	**31-Jan-2022**	09-Mar-2022	✓
Soil Glass Jar - Unpreserved (EP080) SOP_BH124_0.5_220120, SOP_BH124_3.0_220120, DUP06_220121, SOP_BH125_0.5_220121	**21-Jan-2022**	**27-Jan-2022**	04-Feb-2022	✓	**27-Jan-2022**	04-Feb-2022	✓
Soil Glass Jar - Unpreserved (EP080) SOP_BH125_5.0_220121, SOP_BH125_15.0_220121, SOP_BH125_25.0_220121, SOP_BH126_0.5_220121, SOP_BH127_1.2_220121	**21-Jan-2022**	**27-Jan-2022**	04-Feb-2022	✓	**28-Jan-2022**	04-Feb-2022	✓
Soil Glass Jar - Unpreserved (EP071) SOP_BH124_3.0_220120, DUP06_220121, SOP_BH125_0.5_220121, SOP_BH125_10.0_220121, SOP_BH125_20.0_220121, SOP_BH126_2.0_220121, SOP_BH127_4.0_220121	**21-Jan-2022**	**28-Jan-2022**	04-Feb-2022	✓	**01-Feb-2022**	09-Mar-2022	✓
Soil Glass Jar - Unpreserved (EP071) SOP_BH124_0.5_220120, SOP_BH125_5.0_220121, SOP_BH125_15.0_220121, SOP_BH125_25.0_220121, SOP_BH126_0.5_220121, SOP_BH127_1.2_220121	**21-Jan-2022**	**28-Jan-2022**	04-Feb-2022	✓	**31-Jan-2022**	09-Mar-2022	✓
Soil Glass Jar - Unpreserved (EP080) SOP_BH125_10.0_220121, SOP_BH125_20.0_220121, SOP_BH126_2.0_220121, SOP_BH127_4.0_220121	**21-Jan-2022**	**31-Jan-2022**	04-Feb-2022	✓	**01-Feb-2022**	04-Feb-2022	✓

Matrix: **SOIL**

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

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP080: BTEXN							
Soil Glass Jar - Unpreserved (EP080) TS15, TSC15	**17-Jan-2022**	**01-Feb-2022**	31-Jan-2022	×	**01-Feb-2022**	31-Jan-2022	×
Soil Glass Jar - Unpreserved (EP080) TS14, TSC14	**17-Jan-2022**	**28-Jan-2022**	31-Jan-2022	✓	**28-Jan-2022**	31-Jan-2022	✓
Soil Glass Jar - Unpreserved (EP080) SOP_BH108_0.4_220120, SOP_BH108_3.0_220120, SOP_BH109_0.3_220120	**19-Jan-2022**	**27-Jan-2022**	02-Feb-2022	✓	**27-Jan-2022**	02-Feb-2022	✓
Soil Glass Jar - Unpreserved (EP080) SOP_BH118_0.1_220119, SOP_BH118_5.0_220119, SOP_BH118_15.0_220119, SOP_BH118_25.0_220119, SOP_BH142_0.4_220119, SOP_BH143_1.0_220119, SOP_BH144_0.6_220119, SOP_BH145_1.0_220119, DUP02_220119	**19-Jan-2022**	**27-Jan-2022**	02-Feb-2022	✓	**28-Jan-2022**	02-Feb-2022	✓
Soil Glass Jar - Unpreserved (EP080) SOP_BH118_1.0_220119, SOP_BH118_10.0_220119, SOP_BH118_20.0_220119, SOP_BH142_4.0_220119, SOP_BH143_0.3_220119, SOP_BH144_0.3_220119, SOP_BH145_0.3_220119, SOP_BH145_5.0_220119, DUP04_220119	**19-Jan-2022**	**31-Jan-2022**	02-Feb-2022	✓	**01-Feb-2022**	02-Feb-2022	✓
Soil Glass Jar - Unpreserved (EP080) SOP_BH102_0.7_220120, SOP_BH102_3.0_220120, SOP_BH107_1.0_220120, SOP_BH107_2.0_220120, SOP_BH109_1.0_220120, SOP_BH120_0.5_220120, SOP_BH120_3.0_220120, SOP_BH121_1.0_220120, SOP_BH121_5.0_220120, SOP_BH101_0.5_220120, SOP_BH101_1.3_220120, SOP_BH101_2.0_220120, DUP05_220120	**20-Jan-2022**	**27-Jan-2022**	03-Feb-2022	✓	**27-Jan-2022**	03-Feb-2022	✓
Soil Glass Jar - Unpreserved (EP080) SOP_BH124_0.5_220120, SOP_BH124_3.0_220120, DUP06_220121, SOP_BH125_0.5_220121	**21-Jan-2022**	**27-Jan-2022**	04-Feb-2022	✓	**27-Jan-2022**	04-Feb-2022	✓
Soil Glass Jar - Unpreserved (EP080) SOP_BH125_5.0_220121, SOP_BH125_15.0_220121, SOP_BH125_25.0_220121, SOP_BH126_0.5_220121, SOP_BH127_1.2_220121	**21-Jan-2022**	**27-Jan-2022**	04-Feb-2022	✓	**28-Jan-2022**	04-Feb-2022	✓
Soil Glass Jar - Unpreserved (EP080) SOP_BH125_10.0_220121, SOP_BH125_20.0_220121, SOP_BH126_2.0_220121, SOP_BH127_4.0_220121	**21-Jan-2022**	**31-Jan-2022**	04-Feb-2022	✓	**01-Feb-2022**	04-Feb-2022	✓

Matrix: **SOIL**

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

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP231A: Perfluoroalkyl Sulfonic Acids							
HDPE Soil Jar (EP231X) SOP_BH118_1.0_220119, SOP_BH118_10.0_220119, SOP_BH118_25.0_220119, SOP_BH142_0.4_220119, SOP_BH142_4.0_220119, SOP_BH143_0.3_220119, SOP_BH143_1.0_220119, SOP_BH144_0.3_220119, SOP_BH144_0.6_220119, SOP_BH145_0.3_220119, SOP_BH145_5.0_220119, DUP03_220119, TRIP03_220119, DUP04_220119	**19-Jan-2022**	**27-Jan-2022**	18-Jul-2022	✓	**28-Jan-2022**	08-Mar-2022	✓
HDPE Soil Jar (EP231X) SOP_BH120_0.5_220120, SOP_BH120_3.0_220120, SOP_BH121_1.0_220120, SOP_BH121_5.0_220120, SOP_BH101_0.5_220120, DUP05_220120	**20-Jan-2022**	**27-Jan-2022**	19-Jul-2022	✓	**28-Jan-2022**	08-Mar-2022	✓
HDPE Soil Jar (EP231X) SOP_BH124_0.5_220120, SOP_BH124_3.0_220120, DUP06_220121, SOP_BH125_0.5_220121, SOP_BH125_15.0_220121, SOP_BH126_0.5_220121, SOP_BH126_2.0_220121, SOP_BH127_1.2_220121, SOP_BH127_4.0_220121	**21-Jan-2022**	**28-Jan-2022**	20-Jul-2022	✓	**31-Jan-2022**	09-Mar-2022	✓
EP231B: Perfluoroalkyl Carboxylic Acids							
HDPE Soil Jar (EP231X) SOP_BH118_1.0_220119, SOP_BH118_10.0_220119, SOP_BH118_25.0_220119, SOP_BH142_0.4_220119, SOP_BH142_4.0_220119, SOP_BH143_0.3_220119, SOP_BH143_1.0_220119, SOP_BH144_0.3_220119, SOP_BH144_0.6_220119, SOP_BH145_0.3_220119, SOP_BH145_5.0_220119, DUP03_220119, TRIP03_220119, DUP04_220119	**19-Jan-2022**	**27-Jan-2022**	18-Jul-2022	✓	**28-Jan-2022**	08-Mar-2022	✓
HDPE Soil Jar (EP231X) SOP_BH120_0.5_220120, SOP_BH120_3.0_220120, SOP_BH121_1.0_220120, SOP_BH121_5.0_220120, SOP_BH101_0.5_220120, DUP05_220120	**20-Jan-2022**	**27-Jan-2022**	19-Jul-2022	✓	**28-Jan-2022**	08-Mar-2022	✓
HDPE Soil Jar (EP231X) SOP_BH124_0.5_220120, SOP_BH124_3.0_220120, DUP06_220121, SOP_BH125_0.5_220121, SOP_BH125_15.0_220121, SOP_BH126_0.5_220121, SOP_BH126_2.0_220121, SOP_BH127_1.2_220121, SOP_BH127_4.0_220121	**21-Jan-2022**	**28-Jan-2022**	20-Jul-2022	✓	**31-Jan-2022**	09-Mar-2022	✓

Matrix: **SOIL**

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

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP231C: Perfluoroalkyl Sulfonamides							
HDPE Soil Jar (EP231X) SOP_BH118_1.0_220119, SOP_BH118_10.0_220119, SOP_BH118_25.0_220119, SOP_BH142_0.4_220119, SOP_BH142_4.0_220119, SOP_BH143_0.3_220119, SOP_BH143_1.0_220119, SOP_BH144_0.3_220119, SOP_BH144_0.6_220119, SOP_BH145_0.3_220119, SOP_BH145_5.0_220119, DUP03_220119, TRIP03_220119, DUP04_220119	**19-Jan-2022**	**27-Jan-2022**	18-Jul-2022	✓	**28-Jan-2022**	08-Mar-2022	✓
HDPE Soil Jar (EP231X) SOP_BH120_0.5_220120, SOP_BH120_3.0_220120, SOP_BH121_1.0_220120, SOP_BH121_5.0_220120, SOP_BH101_0.5_220120, DUP05_220120	**20-Jan-2022**	**27-Jan-2022**	19-Jul-2022	✓	**28-Jan-2022**	08-Mar-2022	✓
HDPE Soil Jar (EP231X) SOP_BH124_0.5_220120, SOP_BH124_3.0_220120, DUP06_220121, SOP_BH125_0.5_220121, SOP_BH125_15.0_220121, SOP_BH126_0.5_220121, SOP_BH126_2.0_220121, SOP_BH127_1.2_220121, SOP_BH127_4.0_220121	**21-Jan-2022**	**28-Jan-2022**	20-Jul-2022	✓	**31-Jan-2022**	09-Mar-2022	✓
EP231D: (n:2) Fluorotelomer Sulfonic Acids							
HDPE Soil Jar (EP231X) SOP_BH118_1.0_220119, SOP_BH118_10.0_220119, SOP_BH118_25.0_220119, SOP_BH142_0.4_220119, SOP_BH142_4.0_220119, SOP_BH143_0.3_220119, SOP_BH143_1.0_220119, SOP_BH144_0.3_220119, SOP_BH144_0.6_220119, SOP_BH145_0.3_220119, SOP_BH145_5.0_220119, DUP03_220119, TRIP03_220119, DUP04_220119	**19-Jan-2022**	**27-Jan-2022**	18-Jul-2022	✓	**28-Jan-2022**	08-Mar-2022	✓
HDPE Soil Jar (EP231X) SOP_BH120_0.5_220120, SOP_BH120_3.0_220120, SOP_BH121_1.0_220120, SOP_BH121_5.0_220120, SOP_BH101_0.5_220120, DUP05_220120	**20-Jan-2022**	**27-Jan-2022**	19-Jul-2022	✓	**28-Jan-2022**	08-Mar-2022	✓
HDPE Soil Jar (EP231X) SOP_BH124_0.5_220120, SOP_BH124_3.0_220120, DUP06_220121, SOP_BH125_0.5_220121, SOP_BH125_15.0_220121, SOP_BH126_0.5_220121, SOP_BH126_2.0_220121, SOP_BH127_1.2_220121, SOP_BH127_4.0_220121	**21-Jan-2022**	**28-Jan-2022**	20-Jul-2022	✓	**31-Jan-2022**	09-Mar-2022	✓

Matrix: **SOIL**

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

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP231P: PFAS Sums							
HDPE Soil Jar (EP231X) SOP_BH118_1.0_220119, SOP_BH118_10.0_220119, SOP_BH118_25.0_220119, SOP_BH142_0.4_220119, SOP_BH142_4.0_220119, SOP_BH143_0.3_220119, SOP_BH143_1.0_220119, SOP_BH144_0.3_220119, SOP_BH144_0.6_220119, SOP_BH145_0.3_220119, SOP_BH145_5.0_220119, DUP03_220119, TRIP03_220119, DUP04_220119	**19-Jan-2022**	**27-Jan-2022**	18-Jul-2022	✓	**28-Jan-2022**	08-Mar-2022	✓
HDPE Soil Jar (EP231X) SOP_BH120_0.5_220120, SOP_BH120_3.0_220120, SOP_BH121_1.0_220120, SOP_BH121_5.0_220120, SOP_BH101_0.5_220120, DUP05_220120	**20-Jan-2022**	**27-Jan-2022**	19-Jul-2022	✓	**28-Jan-2022**	08-Mar-2022	✓
HDPE Soil Jar (EP231X) SOP_BH124_0.5_220120, SOP_BH124_3.0_220120, DUP06_220121, SOP_BH125_0.5_220121, SOP_BH125_15.0_220121, SOP_BH126_0.5_220121, SOP_BH126_2.0_220121, SOP_BH127_1.2_220121, SOP_BH127_4.0_220121	**21-Jan-2022**	**28-Jan-2022**	20-Jul-2022	✓	**31-Jan-2022**	09-Mar-2022	✓

Matrix: **WATER**

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

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EG020T: Total Metals by ICP-MS							
Clear Plastic Bottle - Nitric Acid; Unfiltered (EG020A-T) RIN03_220119	**19-Jan-2022**	**29-Jan-2022**	18-Jul-2022	✓	**29-Jan-2022**	18-Jul-2022	✓
Clear Plastic Bottle - Nitric Acid; Unfiltered (EG020A-T) RIN03_220120	**20-Jan-2022**	**29-Jan-2022**	19-Jul-2022	✓	**29-Jan-2022**	19-Jul-2022	✓
Clear Plastic Bottle - Nitric Acid; Unfiltered (EG020A-T) RIN05_220121	**21-Jan-2022**	**29-Jan-2022**	20-Jul-2022	✓	**29-Jan-2022**	20-Jul-2022	✓
EG035T: Total Recoverable Mercury by FIMS							
Clear Plastic Bottle - Nitric Acid; Unfiltered (EG035T) RIN03_220119	**19-Jan-2022**	**----**	----	----	**28-Jan-2022**	16-Feb-2022	✓
Clear Plastic Bottle - Nitric Acid; Unfiltered (EG035T) RIN03_220120	**20-Jan-2022**	**----**	----	----	**28-Jan-2022**	17-Feb-2022	✓
Clear Plastic Bottle - Nitric Acid; Unfiltered (EG035T) RIN05_220121	**21-Jan-2022**	**----**	----	----	**28-Jan-2022**	18-Feb-2022	✓
EP066: Polychlorinated Biphenyls (PCB)							
Amber Glass Bottle - Unpreserved (EP066) RIN03_220119	**19-Jan-2022**	**27-Jan-2022**	26-Jan-2022	×	**31-Jan-2022**	08-Mar-2022	✓
Amber Glass Bottle - Unpreserved (EP066) RIN03_220120	**20-Jan-2022**	**27-Jan-2022**	27-Jan-2022	✓	**31-Jan-2022**	08-Mar-2022	✓
Amber Glass Bottle - Unpreserved (EP066) RIN05_220121	**21-Jan-2022**	**27-Jan-2022**	28-Jan-2022	✓	**31-Jan-2022**	08-Mar-2022	✓

Matrix: **WATER**

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

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP068A: Organochlorine Pesticides (OC)							
Amber Glass Bottle - Unpreserved (EP068) RIN03_220119	**19-Jan-2022**	**27-Jan-2022**	26-Jan-2022	×	**31-Jan-2022**	08-Mar-2022	✓
Amber Glass Bottle - Unpreserved (EP068) RIN03_220120	**20-Jan-2022**	**27-Jan-2022**	27-Jan-2022	✓	**31-Jan-2022**	08-Mar-2022	✓
Amber Glass Bottle - Unpreserved (EP068) RIN05_220121	**21-Jan-2022**	**27-Jan-2022**	28-Jan-2022	✓	**31-Jan-2022**	08-Mar-2022	✓
EP068B: Organophosphorus Pesticides (OP)							
Amber Glass Bottle - Unpreserved (EP068) RIN03_220119	**19-Jan-2022**	**27-Jan-2022**	26-Jan-2022	×	**31-Jan-2022**	08-Mar-2022	✓
Amber Glass Bottle - Unpreserved (EP068) RIN03_220120	**20-Jan-2022**	**27-Jan-2022**	27-Jan-2022	✓	**31-Jan-2022**	08-Mar-2022	✓
Amber Glass Bottle - Unpreserved (EP068) RIN05_220121	**21-Jan-2022**	**27-Jan-2022**	28-Jan-2022	✓	**31-Jan-2022**	08-Mar-2022	✓
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons							
Amber Glass Bottle - Unpreserved (EP075(SIM)) RIN03_220119	**19-Jan-2022**	**27-Jan-2022**	26-Jan-2022	×	**31-Jan-2022**	08-Mar-2022	✓
Amber Glass Bottle - Unpreserved (EP075(SIM)) RIN03_220120	**20-Jan-2022**	**27-Jan-2022**	27-Jan-2022	✓	**31-Jan-2022**	08-Mar-2022	✓
Amber Glass Bottle - Unpreserved (EP075(SIM)) RIN05_220121	**21-Jan-2022**	**27-Jan-2022**	28-Jan-2022	✓	**31-Jan-2022**	08-Mar-2022	✓
EP080/071: Total Petroleum Hydrocarbons							
Amber Glass Bottle - Unpreserved (EP071) RIN03_220119	**19-Jan-2022**	**27-Jan-2022**	26-Jan-2022	×	**31-Jan-2022**	08-Mar-2022	✓
Amber Glass Bottle - Unpreserved (EP071) RIN03_220120	**20-Jan-2022**	**27-Jan-2022**	27-Jan-2022	✓	**31-Jan-2022**	08-Mar-2022	✓
Amber Glass Bottle - Unpreserved (EP071) RIN05_220121	**21-Jan-2022**	**27-Jan-2022**	28-Jan-2022	✓	**31-Jan-2022**	08-Mar-2022	✓
Amber VOC Vial - Sulfuric Acid (EP080) RIN03_220119	**19-Jan-2022**	**31-Jan-2022**	02-Feb-2022	✓	**31-Jan-2022**	02-Feb-2022	✓
Amber VOC Vial - Sulfuric Acid (EP080) RIN03_220120	**20-Jan-2022**	**31-Jan-2022**	03-Feb-2022	✓	**31-Jan-2022**	03-Feb-2022	✓
Amber VOC Vial - Sulfuric Acid (EP080) RIN05_220121	**21-Jan-2022**	**31-Jan-2022**	04-Feb-2022	✓	**31-Jan-2022**	04-Feb-2022	✓

Matrix: **WATER**

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

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions							
Amber Glass Bottle - Unpreserved (EP071) RIN03_220119	**19-Jan-2022**	**27-Jan-2022**	26-Jan-2022	×	**31-Jan-2022**	08-Mar-2022	✓
Amber Glass Bottle - Unpreserved (EP071) RIN03_220120	**20-Jan-2022**	**27-Jan-2022**	27-Jan-2022	✓	**31-Jan-2022**	08-Mar-2022	✓
Amber Glass Bottle - Unpreserved (EP071) RIN05_220121	**21-Jan-2022**	**27-Jan-2022**	28-Jan-2022	✓	**31-Jan-2022**	08-Mar-2022	✓
Amber VOC Vial - Sulfuric Acid (EP080) RIN03_220119	**19-Jan-2022**	**31-Jan-2022**	02-Feb-2022	✓	**31-Jan-2022**	02-Feb-2022	✓
Amber VOC Vial - Sulfuric Acid (EP080) RIN03_220120	**20-Jan-2022**	**31-Jan-2022**	03-Feb-2022	✓	**31-Jan-2022**	03-Feb-2022	✓
Amber VOC Vial - Sulfuric Acid (EP080) RIN05_220121	**21-Jan-2022**	**31-Jan-2022**	04-Feb-2022	✓	**31-Jan-2022**	04-Feb-2022	✓
EP080: BTEXN							
Amber VOC Vial - Sulfuric Acid (EP080) RIN03_220119	**19-Jan-2022**	**31-Jan-2022**	02-Feb-2022	✓	**31-Jan-2022**	02-Feb-2022	✓
Amber VOC Vial - Sulfuric Acid (EP080) RIN03_220120	**20-Jan-2022**	**31-Jan-2022**	03-Feb-2022	✓	**31-Jan-2022**	03-Feb-2022	✓
Amber VOC Vial - Sulfuric Acid (EP080) RIN05_220121	**21-Jan-2022**	**31-Jan-2022**	04-Feb-2022	✓	**31-Jan-2022**	04-Feb-2022	✓

Quality Control Parameter Frequency Compliance

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

Matrix: **SOIL**

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

Quality Control Sample Type		Count		Rate (%)			Quality Control Specification
Analytical Methods	*Method*	*QC*	*Regular*	***Actual***	***Expected***	*Evaluation*	
Laboratory Duplicates (DUP)							
Moisture Content	EA055	9	81	**11.11**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
PAH/Phenols (SIM)	EP075(SIM)	5	47	**10.64**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	3	30	**10.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	EP068	5	47	**10.64**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Polychlorinated Biphenyls (PCB)	EP066	5	47	**10.64**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Semivolatile Organic Compounds	EP075	3	23	**13.04**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	6	59	**10.17**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	6	59	**10.17**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	5	48	**10.42**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	9	83	**10.84**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Volatile Organic Compounds	EP074	3	26	**11.54**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Laboratory Control Samples (LCS)							
PAH/Phenols (SIM)	EP075(SIM)	3	47	**6.38**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	2	30	**6.67**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	EP068	3	47	**6.38**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Polychlorinated Biphenyls (PCB)	EP066	3	47	**6.38**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Semivolatile Organic Compounds	EP075	2	23	**8.70**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	3	59	**5.08**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	3	59	**5.08**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	3	48	**6.25**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	5	83	**6.02**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Volatile Organic Compounds	EP074	2	26	**7.69**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Method Blanks (MB)							
PAH/Phenols (SIM)	EP075(SIM)	3	47	**6.38**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	2	30	**6.67**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	EP068	3	47	**6.38**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Polychlorinated Biphenyls (PCB)	EP066	3	47	**6.38**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Semivolatile Organic Compounds	EP075	2	23	**8.70**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	3	59	**5.08**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	3	59	**5.08**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	3	48	**6.25**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	5	83	**6.02**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Volatile Organic Compounds	EP074	2	26	**7.69**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Matrix Spikes (MS)							
PAH/Phenols (SIM)	EP075(SIM)	3	47	**6.38**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	2	30	**6.67**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard

Matrix: **SOIL**

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

Quality Control Sample Type		Count		Rate (%)			Quality Control Specification
Analytical Methods	Method	QC	Regular	Actual	Expected	Evaluation	
Matrix Spikes (MS) - Continued							
Pesticides by GCMS	EP068	3	47	6.38	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Polychlorinated Biphenyls (PCB)	EP066	3	47	6.38	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Semivolatile Organic Compounds	EP075	2	23	8.70	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	3	59	5.08	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	3	59	5.08	5.00	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	3	48	6.25	5.00	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	5	83	6.02	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Volatile Organic Compounds	EP074	2	26	7.69	5.00	✓	NEPM 2013 B3 & ALS QC Standard

Matrix: **WATER**

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

Quality Control Sample Type		Count		Rate (%)			Quality Control Specification
Analytical Methods	Method	QC	Regular	Actual	Expected	Evaluation	
Laboratory Duplicates (DUP)							
PAH/Phenols (GC/MS - SIM)	EP075(SIM)	0	3	0.00	10.00	×	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	EP068	0	3	0.00	10.00	×	NEPM 2013 B3 & ALS QC Standard
Polychlorinated Biphenyls (PCB)	EP066	0	3	0.00	10.00	×	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	2	11	18.18	10.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-MS - Suite A	EG020A-T	2	20	10.00	10.00	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	0	5	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)							
PAH/Phenols (GC/MS - SIM)	EP075(SIM)	1	3	33.33	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	EP068	1	3	33.33	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Polychlorinated Biphenyls (PCB)	EP066	1	3	33.33	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	1	11	9.09	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-MS - Suite A	EG020A-T	1	20	5.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	1	5	20.00	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)							
PAH/Phenols (GC/MS - SIM)	EP075(SIM)	1	3	33.33	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	EP068	1	3	33.33	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Polychlorinated Biphenyls (PCB)	EP066	1	3	33.33	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	1	11	9.09	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-MS - Suite A	EG020A-T	1	20	5.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	1	5	20.00	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)							
PAH/Phenols (GC/MS - SIM)	EP075(SIM)	0	3	0.00	5.00	×	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	EP068	0	3	0.00	5.00	×	NEPM 2013 B3 & ALS QC Standard
Polychlorinated Biphenyls (PCB)	EP066	0	3	0.00	5.00	×	NEPM 2013 B3 & ALS QC Standard

Matrix: **WATER**

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

Quality Control Sample Type		Count		Rate (%)			Quality Control Specification
Analytical Methods	*Method*	*QC*	*Regular*	***Actual***	***Expected***	*Evaluation*	
Matrix Spikes (MS) - Continued							
Total Mercury by FIMS	EG035T	1	11	**9.09**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-MS - Suite A	EG020A-T	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	0	5	**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
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).
Asbestos Identification in Soils	EA200	SOIL	AS 4964 Method for the qualitative identification of asbestos in bulk samples Analysis by Polarised Light Microscopy including dispersion staining
Total Metals by ICP-AES	EG005T	SOIL	In house: Referenced to APHA 3120; USEPA SW 846 - 6010. Metals are determined following an appropriate acid digestion of the soil. The ICPAES technique ionises samples in a plasma, emitting a characteristic spectrum based on metals present. Intensities at selected wavelengths are compared against those of matrix matched standards. This method is compliant with NEPM Schedule B(3)
Total Mercury by FIMS	EG035T	SOIL	In house: Referenced to APHA 3112 Hg - B (Flow-injection (SnCl2) (Cold Vapour generation) AAS) FIM-AAS is an automated flameless atomic absorption technique. Mercury in solids are determined following an appropriate acid digestion. Ionic mercury is reduced online to atomic mercury vapour by SnCl2 which is then purged into a heated quartz cell. Quantification is by comparing absorbance against a calibration curve. This method is compliant with NEPM Schedule B(3)
Polychlorinated Biphenyls (PCB)	EP066	SOIL	In house: Referenced to USEPA SW 846 - 8270 Extracts are analysed by Capillary GC/MS and quantification is by comparison against an established 5 point calibration curve. This method is compliant with NEPM Schedule B(3).
Pesticides by GCMS	EP068	SOIL	In house: Referenced to USEPA SW 846 - 8270 Extracts are analysed by Capillary GC/MS and quantification is by comparison against an established 5 point calibration curve. This technique is compliant with NEPM Schedule B(3).
TRH - Semivolatile Fraction	EP071	SOIL	In house: Referenced to USEPA SW 846 - 8015 Sample extracts are analysed by Capillary GC/FID and quantified against alkane standards over the range C10 - C40. Compliant with NEPM Schedule B(3).
Volatile Organic Compounds	EP074	SOIL	In house: Referenced to USEPA SW 846 - 8260 Extracts are analysed by Purge and Trap, Capillary GC/MS. Quantification is by comparison against an established 5 point calibration curve. This method is compliant with NEPM Schedule B(3).
Semivolatile Organic Compounds	EP075	SOIL	In house: Referenced to USEPA SW 846 - 8270 Extracts are analysed by Capillary GC/MS and quantification is by comparison against an established 5 point calibration curve. This technique is compliant with NEPM Schedule B(3).
PAH/Phenols (SIM)	EP075(SIM)	SOIL	In house: Referenced to USEPA SW 846 - 8270. Extracts are analysed by Capillary GC/MS in Selective Ion Mode (SIM) 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	SOIL	In house: Referenced to USEPA SW 846 - 8260. Extracts are analysed by Purge and Trap, Capillary GC/MS. Quantification is by comparison against an established 5 point calibration curve. Compliant with NEPM Schedule B(3) amended.

Analytical Methods	Method	Matrix	Method Descriptions
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	SOIL	In-house: Analysis of soils by solvent extraction followed by LC-Electrospray-MS-MS, Negative Mode using MRM using internal standard quantitation. Isotopically labelled analogues of target analytes used as internal standards and surrogates are added to a portion of soil which is then extracted with MTBE and an ion pairing reagent. A portion of extract is exchanged into the analytical solvent mixture, combined with an equal volume reagent water and filtered for analysis. Method procedures and data quality objectives conform to US DoD QSM 5.3, table B-15 requirements.
Total Metals by ICP-MS - Suite A	EG020A-T	WATER	In house: Referenced to APHA 3125; USEPA SW846 - 6020, ALS QWI-EN/EG020. 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.
Total Mercury by FIMS	EG035T	WATER	In house: Referenced to APHA 3112 Hg - B (Flow-injection (SnCl2)(Cold Vapour generation) AAS) FIM-AAS is an automated flameless atomic absorption technique. A bromate/bromide reagent is used to oxidise any organic mercury compounds in the unfiltered sample. The ionic mercury is reduced online to atomic mercury vapour by SnCl2 which is then purged into a heated quartz cell. Quantification is by comparing absorbance against a calibration curve. This method is compliant with NEPM Schedule B(3).
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
Hot Block Digest for metals in soils sediments and sludges	EN69	SOIL	In house: Referenced to USEPA 200.2. Hot Block Acid Digestion 1.0g of sample is heated with Nitric and Hydrochloric acids, then cooled. Peroxide is added and samples heated and cooled again before being filtered and bulked to volume for analysis. Digest is appropriate for determination of selected metals in sludge, sediments, and soils. This method is compliant with NEPM Schedule B(3).
Methanolic Extraction of Soils for Purge and Trap	ORG16	SOIL	In house: Referenced to USEPA SW 846 - 5030A. 5g of solid is shaken with surrogate and 10mL methanol prior to analysis by Purge and Trap - GC/MS.
Tumbler Extraction of Solids	ORG17	SOIL	In house: Mechanical agitation (tumbler). 10g of sample, Na2SO4 and surrogate are extracted with 30mL 1:1 DCM/Acetone by end over end tumble. The solvent is decanted, dehydrated and concentrated (by KD) to the desired volume for analysis.

Preparation Methods	Method	Matrix	Method Descriptions
QuECheRS Extraction of Solids	ORG71	SOIL	In house: Sequential extractions with Acetonitrile/Methanol by shaking. Extraction efficiency aided by the addition of salts under acidic conditions. Where relevant, interferences from co-extracted organics are removed with dispersive clean-up media (dSPE). The extract is either diluted or concentrated and exchanged into the analytical solvent.
Digestion for Total Recoverable Metals	EN25	WATER	In house: Referenced to USEPA SW846-3005. Method 3005 is a Nitric/Hydrochloric acid digestion procedure used to prepare surface and ground water samples for analysis by ICPAES or ICPMS. This method is compliant with NEPM Schedule B(3)
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.

CHAIN OF CUSTODY

ALS Laboratory: please tick →

☐ADELAIDE 21 Burma Road Pooraka SA 5095 Ph: 08 8359 0890 E: adelaide@alsglobal.com

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☐TOWNSVILLE 14-15 Desma Court Bohle QLD 4818 Ph: 07 4796 0600 E: townsville.environmental@alsglobal.com

☐WOLLONGONG 99 Kenny Street Wollongong NSW 2500 Ph: 02 4225 3125 E: wollongong@alsglobal.com

CLIENT: ERM	TURNAROUND REQUIREMENTS: (Standard TAT may be longer for some tests e.g., Ultra Trace Organics)	☒ Standard TAT (List due date):	FOR LABORATORY USE ONLY (Circle)
OFFICE: Sydney		☐ Non Standard or urgent TAT (List due date):	Custody Seal Intact? Yes / No / N/A
PROJECT: SOP PROJECT NO.: 0628507	ALS QUOTE NO.:	COC SEQUENCE NUMBER (Circle)	Free ice /frozen ice bricks present upon receipt? Yes / No / N/A
ORDER NUMBER: PURCHASE ORDER NO.:	COUNTRY OF ORIGIN: Australia	COC: (1) 2 3 4 5 6 7	Random Sample Temperature on Receipt: 8.5 °C
PROJECT MANAGER: Nick G / Jess L	CONTACT PH: 0415 833925	OF: 1 2 3 (4) 5 6 7	Other comment:
SAMPLER: ~~Tristen Rodrigues~~ Ant R	SAMPLER MOBILE: 0427 159 735	RELINQUISHED BY:	RECEIVED BY:
COC Emailed to ALS? (YES (NO)	EDD FORMAT (or default): ESDAT		
Email Reports to (will default to PM if no other addresses are listed): Nick G + JESS L		DATE/TIME:	DATE/TIME: 24/11/22 16:30
Email Invoice to (will default to PM if no other addresses are listed): Default			

COMMENTS/SPECIAL HANDLING/STORAGE OR DISPOSAL: Please issue Preliminary Report.

ALS USE ONLY	SAMPLE DETAILS MATRIX: Solid(S) Water(W)			CONTAINER INFORMATION		ANALYSIS REQUIRED including SUITES (NB. Suite Codes must be listed to attract suite price) Where Metals are required, specify Total (unfiltered bottle required) or Dissolved (field filtered bottle required).								Additional Information
LAB ID	SAMPLE ID	DATE / TIME	MATRIX	TYPE & PRESERVATIVE (refer to codes below)	TOTAL JARS	S16	S23	EA200G	EP231	BTEX/TRH				Comments on likely contaminant levels, dilutions, or samples requiring specific QC analysis etc.
1	SOP_BH118_0.1_220119	19/1	S	JJA	3	X	X	X						
2	SOP_BH118_1.0_220119			JJP	3	X			X					
3	SOP_BH118_5.0_220119			JJ	2	X	X							
4	SOP_BH118_10.0_220119			JJP	3	X			X					
5	SOP_BH118_15.0_220119			JJ	2	X	X							
6	SOP_BH118_20.0_220119			JJ	2	X								
7	SOP_BH118_25.0_220119			JP	2	X	X		X					
8	SOP_BH142_0.4_220119			JPA	3	X	X	X	X					
9	SOP_BH142_4.0_220119			JP	2	X			X					
10	SOP_BH143_0.3_220119			JPA	3	X		X	X					
11	SOP_BH143_1.0_220119			JPA	3	X	X		X					
12	SOP_BH144_0.3_220119			JPA	3	X		X	X					
13	SOP_BH144_0.6_220119			JP	2	X	X		X					
14	SOP_BH145_0.3_220119			JPA	3	X		X	X					
15	SOP_BH145_1.0_220119			JPA	3	X	X							
				TOTAL										

Environmental Division Sydney
Work Order Reference
ES2202264

Telephone : +61-2-8784 8555

Water Container Codes: P = Unpreserved Plastic; N = Nitric Preserved Plastic; ORC = Nitric Preserved ORC; SH = Sodium Hydroxide/Cd Preserved; S = Sodium Hydroxide Preserved Plastic; AG = Amber Glass Unpreserved; AP - Airfreight Unpreserved Plastic
V = VOA Vial HCl Preserved; VB = VOA Vial Sodium Bisulphate Preserved; VS = VOA Vial Sulfuric Preserved; AV = Airfreight Unpreserved Vial SG = Sulfuric Preserved Amber Glass; H = HCl preserved Plastic; HS = HCl preserved Speciation bottle; SP = Sulfuric Preserved Plastic; F = Formaldehyde Preserved Glass;
Z = Zinc Acetate Preserved Bottle; E = EDTA Preserved Bottles; ST = Sterile Bottle; ASS = Plastic Bag for Acid Sulphate Soils; B = Unpreserved Bag; LI = Lugols Iodine Preserved Bottles; STT = Sterile Sodium Thiosulfate Preserved Bottles.

CHAIN OF CUSTODY

ALS Laboratory: please tick →

ADELAIDE 21 Burma Road Pooraka SA 5095 Ph: 08 8359 0890 E: adelaide@alsglobal.com

BRISBANE 2 Byth Street Stafford QLD 4053 Ph: 07 3243 7222 E: samples.brisbane@alsglobal.com

GLADSTONE 46 Callemondah Drive Clinton QLD 4680 Ph: 07 7471 5600 E: gladstone@alsglobal.com

MACKAY 78 Harbour Road Mackay QLD 4740 Ph: 07 4944 0177 E: mackay@alsglobal.com

MELBOURNE 2-4 Westall Road Springvale VIC 3171 Ph: 03 8549 9600 E: samples.melbourne@alsglobal.com

MUDGEE 1/29 Sydney Road Mudgee NSW 2850 Ph: 02 6372 6735 E: mudgee.mail@alsglobal.com

NEWCASTLE 5/585 Maitland Road Mayfield West NSW 2304 Ph: 02 4014 2500 E: samples.newcastle@alsglobal.com

NOWRA 4/13 Geary Place North Nowra NSW 2541 Ph: 02 4423 2063 E: nowra@alsglobal.com

PERTH 10 Hod Way Malaga WA 6090 Ph: 08 9209 7655 E: samples.perth@alsglobal.com

SYDNEY 277-289 Woodpark Road Smithfield NSW 2164 Ph: 02 8784 8555 E: samples.sydney@alsglobal.com

TOWNSVILLE 14-15 Desma Court Bohle QLD 4818 Ph: 07 4796 0600 E: townesville.environmental@alsglobal.com

WOLLONGONG 99 Kenny Street Wollongong NSW 2500 Ph: 02 4225 3125 E: wollongong@alsglobal.com

CLIENT:	TURNAROUND REQUIREMENTS: ☐ Standard TAT (List due date):	FOR LABORATORY USE ONLY (Circle)	
OFFICE:	(Standard TAT may be longer for some tests e.g., Ultra Trace Organics) ☐ Non Standard or urgent TAT (List due date):	Custody Seal Intact?	Yes / No / N/A
PROJECT: PROJECT NO.:	ALS QUOTE NO.:	Free ice / frozen ice bricks present upon receipt?	Yes / No / N/A
ORDER NUMBER: PURCHASE ORDER NO.:	COUNTRY OF ORIGIN: Australia PAGE 1	Random Sample Temperature on Receipt:	°C
PROJECT MANAGER: CONTACT PH:	SEE	Other comment: 8.5	
SAMPLER: Tristan Rodrigues SAMPLER MOBILE:		COC SEQUENCE NUMBER (Circle) COC: 1 2 3 4 5 6 7 OF: 1 2 3 4 5 6 7	
COC Emailed to ALS? (YES / NO) EDD FORMAT (or default):			
Email Reports to (will default to PM if no other addresses are listed):			
Email Invoice to (will default to PM if no other addresses are listed):			

RELINQUISHED BY:	RECEIVED BY:	RELINQUISHED BY:	RECEIVED BY:
DATE/TIME:	DATE/TIME: 24/11/22 1430	DATE/TIME:	DATE/TIME:

COMMENTS/SPECIAL HANDLING/STORAGE OR DISPOSAL: Please issue Preliminary Report.

ALS USE ONLY	SAMPLE DETAILS MATRIX: Solid(S) Water(W)			CONTAINER INFORMATION		ANALYSIS REQUIRED including SUITES (NB. Suite Codes must be listed to attract suite price) Where Metals are required, specify Total (unfiltered bottle required) or Dissolved (field filtered bottle required).								Additional Information
LAB ID	SAMPLE ID	DATE / TIME	MATRIX	TYPE & PRESERVATIVE (refer to codes below)	TOTAL JARS	S16	S23	EA200G	EP231	BTEX/TRIHA				Comments on likely contaminant levels, dilutions, or samples requiring specific QC analysis etc.
16	SOP_BH105_5.0_220119	19-1	S	JPA	3	X			X					
17	DUP02_220119			JJ	2	X	X							
—	TRIP02_220119			JJ	2	X	X							Please forward to Eurofins
18	DUP03_220119			P	1				X					
19	TRIP03_220119			P	1				X					
20	DUP04_220119			JP	2	X			X					
—	TRIP04_220119			JP	2	X			X					Please forward to Eurofins
21	RIN03_220119		WATER		6	X								
22	SOP_BH102_0.7_220120	20/1	SOIL	JPA	3	X	X	X						
23	SOP_BH102_3.0_220120			J	1	X								
24	SOP_BH107_1.0_220120			JPA	3	X	X	X						
25	SOP_BH107_2.0_220120			J	1	X								
26	SOP_BH108_0.4_220120			JPA	3	X	X	X						
27	SOP_BH108_3.0_220120			J	1	X								
28	SOP_BH109_0.3_220120			JPA	3	X		X						
				TOTAL										

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V = VOA Vial HCl Preserved; VB = VOA Vial Sodium Bisulphate Preserved; VS = VOA Vial Sulfuric Preserved; AV = Airfreight Unpreserved Vial SG = Sulfuric Preserved Amber Glass; H = HCl preserved Plastic; HS = HCl preserved Speciation bottle; SP = Sulfuric Preserved Plastic; F = Formaldehyde Preserved Glass;
Z = Zinc Acetate Preserved Bottle, E = EDTA Preserved Bottles; ST = Sterile Bottle; ASS = Plastic Bag for Acid Sulphate Soils; B = Unpreserved Bag; LI = Lugols Iodine Preserved Bottles; STT = Sterile Sodium Thiosulfate Preserved Bottles.

CHAIN OF CUSTODY

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CLIENT:	TURNAROUND REQUIREMENTS: ☐ Standard TAT (List due date):	FOR LABORATORY USE ONLY (Circle)	
OFFICE:	(Standard TAT may be longer for some tests e.g., Ultra Trace Organics) ☐ Non Standard or urgent TAT (List due date):	Custody Seal Intact?	Yes / No / N/A
PROJECT: PROJECT NO.:	ALS QUOTE NO.: PAGL	Free ice / frozen ice bricks present upon receipt?	Yes / No / N/A
ORDER NUMBER: PURCHASE ORDER NO.:	COUNTRY OF ORIGIN: Australia	COC SEQUENCE NUMBER (Circle): COC: 1 2 3 4 5 6 7; OF: 1 2 3 4 5 6 7	Random Sample Temperature on Receipt: 8.5 °C
PROJECT MANAGER: CONTACT PH:			Other comment:
SAMPLER: Tristan Rodrigues SAMPLER MOBILE:	RELINQUISHED BY:	RECEIVED BY:	RELINQUISHED BY: / RECEIVED BY:
COC Emailed to ALS? (YES / NO) EDD FORMAT (or default):	DATE/TIME:	DATE/TIME: 24/1/22 14:30	DATE/TIME: / DATE/TIME:
Email Reports to (will default to PM if no other addresses are listed):			
Email Invoice to (will default to PM if no other addresses are listed):			

COMMENTS/SPECIAL HANDLING/STORAGE OR DISPOSAL: Please issue Preliminary Report.

ALS USE ONLY	SAMPLE DETAILS (MATRIX: Solid(S) Water(W))			CONTAINER INFORMATION		ANALYSIS REQUIRED including SUITES (NB. Suite Codes must be listed to attract suite price). Where Metals are required, specify Total (unfiltered bottle required) or Dissolved (field filtered bottle required).								Additional Information
LAB ID	SAMPLE ID	DATE / TIME	MATRIX	TYPE & PRESERVATIVE (refer to codes below)	TOTAL JARS	S16	S23	EA200 G	EP231	BTEX/TRH				Comments on likely contaminant levels, dilutions, or samples requiring specific QC analysis etc.
29	SOP_BH109_1.0_220120	20/1	S	JPA	3	X	X							
30	SOP_BH120_0.5_220120			JPA	3	X		X	X					
31	SOP_BH120_3.0_220120			JP	2	X	X		X					
32	SOP_BH121_1.0_220120			JPA	3	X	X	X	X					
33	SOP_BH121_5.0_220120			JP	2	X			X					
34	SOP_BH101_0.5_220120			JPA	3	X	X	X	X					
35	SOP_BH101_1.3_220120			JPA	3	X								
36	SOP_BH101_2.0_220120			JPA	3	X								
37	DUP05_220120			JP	2	X	X		X					
—	TRIP05_220120			JP	2	X	X		X					Please forward to Eurofins
38	RINSE_220120		W		6	X								
39	SOP_BH124_0.5_220120	21/1	S	JPA	3	X	X	X	X					
40	SOP_BH124_3.0_220120			JP	2	X			X					
41	DUP06_220121			JP	2	X			X					
—	TRIP06_220121			JP	2	X			X					Please forward to Eurofins
				TOTAL										

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V = VOA Vial HCl Preserved; VB = VOA Vial Sodium Bisulphate Preserved; VS = VOA Vial Sulfuric Preserved; AV = Airfreight Unpreserved Vial SG = Sulfuric Preserved Amber Glass; H = HCl preserved Plastic; HS = HCl preserved Speciation bottle; SP = Sulfuric Preserved Plastic; F = Formaldehyde Preserved Glass;
Z = Zinc Acetate Preserved Bottle; E = EDTA Preserved Bottles; ST = Sterile Bottle; ASS = Plastic Bag for Acid Sulphate Soils; B = Unpreserved Bag; LI = Lugols Iodine Preserved Bottles; STT = Sterile Sodium Thiosulfate Preserved Bottles.

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CLIENT:	**TURNAROUND REQUIREMENTS :** (Standard TAT may be longer for some tests e.g. Ultra Trace Organics)	☐ Standard TAT (List due date):	**FOR LABORATORY USE ONLY (Circle)**
OFFICE:		☐ Non Standard or urgent TAT (List due date):	Custody Seal Intact? Yes / No / N/A
PROJECT: **PROJECT NO.:**	**ALS QUOTE NO.:**	**COC SEQUENCE NUMBER (Circle)**	Free ice / frozen ice bricks present upon receipt? Yes / No / N/A
ORDER NUMBER: **PURCHASE ORDER NO.:**	**COUNTRY OF ORIGIN: Australia**	COC: 1 2 3 4 5 6 7	Random Sample Temperature on Receipt: °C
PROJECT MANAGER: **CONTACT PH:**	SEE PAGE 1	OF: 1 2 3 4 5 6 7	Other comment: 85
SAMPLER: **SAMPLER MOBILE:**			
COC Emailed to ALS? (YES / NO) **EDD FORMAT (or default):**			
Email Reports to (will default to PM if no other addresses are listed):			
Email Invoice to (will default to PM if no other addresses are listed):			

RELINQUISHED BY:	RECEIVED BY:	RELINQUISHED BY:	RECEIVED BY:
DATE/TIME:	DATE/TIME: 24/11/22 1480	DATE/TIME:	DATE/TIME:

COMMENTS/SPECIAL HANDLING/STORAGE OR DISPOSAL: Please issue Preliminary Report.

ALS USE ONLY	SAMPLE DETAILS MATRIX: Solid(S) Water(W)			CONTAINER INFORMATION		ANALYSIS REQUIRED including SUITES (NB. Suite Codes must be listed to attract suite price) Where Metals are required, specify Total (unfiltered bottle required) or Dissolved (field filtered bottle required).								Additional Information
LAB ID	SAMPLE ID	DATE / TIME	MATRIX	TYPE & PRESERVATIVE *(refer to codes below)*	TOTAL JARS	S16	S23	EA200 G	EP231	BTEX/TRH				Comments on likely contaminant levels, dilutions, or samples requiring specific QC analysis etc.
42	SOP_BH125_0.5_220121	21/1	S	JPA	3	X		X	X					
43	SOP_BH125_5.0_220121			JP	2	X	X							
44	SOP_BH125_10.0_220121			JP	2	X								
45	SOP_BH125_15.0_220121			JP	2	X	X		X					
46	SOP_BH125_20.0_220121			JP	2	X								
47	SOP_BH125_25.0_220121			JP	2	X	X							
48	SOP_BH126_0.2_220121			JPA	3	X	X	X	X					
49	SOP_BH126_2.0_220121			JP	2	X			X					
50	SOP_BH127_1.2_220121			JPA	3	X	X	X	X					
51	SOP_BH127_4.0_220121			JP	2	X			X					
-	~~SOP_BH12~~													
52	RINO5_220121		W		6	X								
53	TS		S		1					X				
54	TB		S		1					X				
55	TSC													
				TOTAL										

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V = VOA Vial HCl Preserved; VB = VOA Vial Sodium Bisulphate Preserved; VS = VOA Vial Sulfuric Preserved; AV = Airfreight Unpreserved Vial SG = Sulfuric Preserved Amber Glass; H = HCl preserved Plastic; HS = HCl preserved Speciation bottle; SP = Sulfuric Preserved Plastic; F = Formaldehyde Preserved Glass;
Z = Zinc Acetate Preserved Bottle; E = EDTA Preserved Bottles; ST = Sterile Bottle; ASS = Plastic Bag for Acid Sulphate Soils; B = Unpreserved Bag; LI = Lugols Iodine Preserved Bottles; STT = Sterile Sodium Thiosulfate Preserved Bottles.

ALS Environmental

CERTIFICATE OF ANALYSIS

Work Order	: **ES2202692**	Page	: 1 of 79
Client	: **ENVIRONMENTAL RESOURCES MANAGEMENT (ERM)**	Laboratory	: Environmental Division Sydney
Contact	: MS JESSICA LAWRENCE	Contact	: Customer Services ES
Address	: LEVEL 15 309 KENT STREET SYDNEY NSW AUSTRALIA 2000	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
Telephone	: +61 02 8584 8888	Telephone	: +61-2-8784 8555
Project	: 0628507 SOP	Date Samples Received	: 27-Jan-2022 15:25
Order number	: ----	Date Analysis Commenced	: 31-Jan-2022
C-O-C number	: ----	Issue Date	: 04-Feb-2022 17:15
Sampler	: ANTHONY RICHARD		
Site	: ----		
Quote number	: EN/114		
No. of samples received	: 32		
No. of samples analysed	: 32		

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

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

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results
- 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.

Signatories	*Position*	*Accreditation Category*
Alana Smylie	Asbestos Identifier	Newcastle - Asbestos, Mayfield West, NSW
Alex Rossi	Organic Chemist	Sydney Organics, Smithfield, NSW
Ankit Joshi	Inorganic Chemist	Sydney Inorganics, Smithfield, NSW
Dian Dao	Senior Chemist - Inorganics	Sydney Inorganics, Smithfield, NSW
Edwandy Fadjar	Organic Coordinator	Sydney Organics, Smithfield, NSW
Franco Lentini	LCMS Coordinator	Sydney Inorganics, 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.
- 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-dichlorothene, trans-1,2-dichlorothene, 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 EP2200832 # 001. Confirmed by redigestion and reanalysis.
- 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
- ED007 and ED008: When Exchangeable Al is reported from these methods, it should be noted that Rayment & Lyons (2011) suggests Exchange Acidity by 1M KCl - Method 15G1 (ED005) is a more suitable method for the determination of exchange acidity (H+ + Al3+).
- 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	SOP_BH128_0.9_220124	SOP_BH128_5.0_220124	SOP_BH129_0.5_220124	SOP_BH129_1.0_220124	SOP_BH130_0.4_220124
			Sampling date / time	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00
Compound	CAS Number	LOR	Unit	ES2202692-001	ES2202692-002	ES2202692-003	ES2202692-004	ES2202692-005
				Result	Result	Result	Result	Result
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	----	1.0	%	16.5	4.9	11.6	10.2	18.0
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	437	----	271	----	395
APPROVED IDENTIFIER:	----	-	--	A. SMYLIE	----	A. SMYLIE	----	A. SMYLIE
EG005(ED093)T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	<5	7	12	9	14
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	<1	<1
Chromium	7440-47-3	2	mg/kg	4	6	29	7	15
Copper	7440-50-8	5	mg/kg	16	41	16	27	29
Lead	7439-92-1	5	mg/kg	16	17	31	17	21
Nickel	7440-02-0	2	mg/kg	2	20	7	3	8
Zinc	7440-66-6	5	mg/kg	17	84	31	20	29
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	<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	<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	0.13	<0.05	<0.05
trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	<0.05	0.06	<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	0.07	<0.05	<0.05

Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH128_0.9_220124	SOP_BH128_5.0_220124	SOP_BH129_0.5_220124	SOP_BH129_1.0_220124	SOP_BH130_0.4_220124
				Sampling date / time	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00
					ES2202692-001	ES2202692-002	ES2202692-003	ES2202692-004	ES2202692-005
					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

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	SOP_BH128_0.9_220124	SOP_BH128_5.0_220124	SOP_BH129_0.5_220124	SOP_BH129_1.0_220124	SOP_BH130_0.4_220124
				Sampling date / time	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00
Compound	CAS Number	LOR	Unit		ES2202692-001	ES2202692-002	ES2202692-003	ES2202692-004	ES2202692-005
					Result	Result	Result	Result	Result
EP074A: Monocyclic Aromatic Hydrocarbons									
Benzene	71-43-2	0.2	mg/kg		<0.2	----	----	<0.2	----
Toluene	108-88-3	0.5	mg/kg		<0.5	----	----	<0.5	----
Ethylbenzene	100-41-4	0.5	mg/kg		<0.5	----	----	<0.5	----
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg		<0.5	----	----	<0.5	----
Styrene	100-42-5	0.5	mg/kg		<0.5	----	----	<0.5	----
ortho-Xylene	95-47-6	0.5	mg/kg		<0.5	----	----	<0.5	----
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	----

Analytical Results

Sub-Matrix: SOIL
(Matrix: SOIL)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH128_0.9_220124	SOP_BH128_5.0_220124	SOP_BH129_0.5_220124	SOP_BH129_1.0_220124	SOP_BH130_0.4_220124
				Sampling date / time	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00
					ES2202692-001	ES2202692-002	ES2202692-003	ES2202692-004	ES2202692-005
					Result	Result	Result	Result	Result
EP074E: Halogenated Aliphatic Compounds - Continued									
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	----
Bromoform	75-25-2	0.5	mg/kg		<0.5	----	----	<0.5	----
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons									
Naphthalene	91-20-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5

Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH128_0.9_220124	SOP_BH128_5.0_220124	SOP_BH129_0.5_220124	SOP_BH129_1.0_220124	SOP_BH130_0.4_220124
				Sampling date / time	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00
					ES2202692-001	ES2202692-002	ES2202692-003	ES2202692-004	ES2202692-005
					Result	Result	Result	Result	Result
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued									
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		<0.5	<0.5	<0.5	<0.5	<0.5
Anthracene	120-12-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Fluoranthene	206-44-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Pyrene	129-00-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benz(a)anthracene	56-55-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Chrysene	218-01-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg		<0.5	<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		<0.5	<0.5	<0.5	<0.5	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ **Sum of polycyclic aromatic hydrocarbons**	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ **Benzo(a)pyrene TEQ (zero)**	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ **Benzo(a)pyrene TEQ (half LOR)**	----	0.5	mg/kg		**0.6**	**0.6**	**0.6**	**0.6**	**0.6**
^ **Benzo(a)pyrene TEQ (LOR)**	----	0.5	mg/kg		**1.2**	**1.2**	**1.2**	**1.2**	**1.2**
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	----

Analytical Results

Sub-Matrix: SOIL
(Matrix: SOIL)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH128_0.9_220124	SOP_BH128_5.0_220124	SOP_BH129_0.5_220124	SOP_BH129_1.0_220124	SOP_BH130_0.4_220124
				Sampling date / time	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00
					ES2202692-001	ES2202692-002	ES2202692-003	ES2202692-004	ES2202692-005
					Result	Result	Result	Result	Result
EP075B: Polynuclear Aromatic Hydrocarbons - Continued									
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	----
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	----

Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH128_0.9_220124	SOP_BH128_5.0_220124	SOP_BH129_0.5_220124	SOP_BH129_1.0_220124	SOP_BH130_0.4_220124
				Sampling date / time	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00
					ES2202692-001	ES2202692-002	ES2202692-003	ES2202692-004	ES2202692-005
					Result	Result	Result	Result	Result
EP075D: Nitrosamines - Continued									
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									
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	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	SOP_BH128_0.9_220124	SOP_BH128_5.0_220124	SOP_BH129_0.5_220124	SOP_BH129_1.0_220124	SOP_BH130_0.4_220124
				Sampling date / time	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00
Compound	CAS Number	LOR	Unit		ES2202692-001	ES2202692-002	ES2202692-003	ES2202692-004	ES2202692-005
					Result	Result	Result	Result	Result
EP075G: Chlorinated Hydrocarbons - Continued									
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	----
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									

Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH128_0.9_220124	SOP_BH128_5.0_220124	SOP_BH129_0.5_220124	SOP_BH129_1.0_220124	SOP_BH130_0.4_220124
				Sampling date / time	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00
					ES2202692-001	ES2202692-002	ES2202692-003	ES2202692-004	ES2202692-005
					Result	Result	Result	Result	Result
EP075J: Organophosphorus Pesticides - Continued									
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	<100	<100	<100	<100
C29 - C36 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
^ **C10 - C36 Fraction (sum)**	----	50	mg/kg		<50	<50	<50	<50	<50
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
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		<100	<100	<100	<100	<100
>C34 - C40 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
^ **>C10 - C40 Fraction (sum)**	----	50	mg/kg		<50	<50	<50	<50	<50
^ **>C10 - C16 Fraction minus Naphthalene (F2)**	----	50	mg/kg		<50	<50	<50	<50	<50
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

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	SOP_BH128_0.9_220124	SOP_BH128_5.0_220124	SOP_BH129_0.5_220124	SOP_BH129_1.0_220124	SOP_BH130_0.4_220124
				Sampling date / time	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00
Compound	CAS Number	LOR	Unit		ES2202692-001	ES2202692-002	ES2202692-003	ES2202692-004	ES2202692-005
					Result	Result	Result	Result	Result
EP080: BTEXN - Continued									
^ 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	<0.0002	----
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	<0.0002	----
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.0002	mg/kg		<0.0002	<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	<0.001	----
Perfluoropentanoic acid (PFPeA)	2706-90-3	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	<0.0002	----
Perfluorohexanoic acid (PFHxA)	307-24-4	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	<0.0002	----
Perfluoroheptanoic acid (PFHpA)	375-85-9	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	<0.0002	----
Perfluorooctanoic acid (PFOA)	335-67-1	0.0002	mg/kg		<0.0002	<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	<0.0005	----
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.0005	mg/kg		<0.0005	<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	<0.0005	----
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.0005	mg/kg		<0.0005	<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	<0.0002	----
Sum of PFAS (WA DER List)	----	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	<0.0002	----
EP066S: PCB Surrogate									
Decachlorobiphenyl	2051-24-3	0.1	%		**104**	**120**	**127**	**122**	**105**
EP068S: Organochlorine Pesticide Surrogate									
Dibromo-DDE	21655-73-2	0.05	%		**105**	**99.3**	**92.8**	**102**	**82.2**
EP068T: Organophosphorus Pesticide Surrogate									
DEF	78-48-8	0.05	%		**124**	**120**	**108**	**50.9**	**91.0**

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	SOP_BH128_0.9_220124	SOP_BH128_5.0_220124	SOP_BH129_0.5_220124	SOP_BH129_1.0_220124	SOP_BH130_0.4_220124
			Sampling date / time	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00
Compound	CAS Number	LOR	Unit	ES2202692-001	ES2202692-002	ES2202692-003	ES2202692-004	ES2202692-005
				Result	Result	Result	Result	Result
EP074S: VOC Surrogates								
1.2-Dichloroethane-D4	17060-07-0	0.5	%	87.9	----	----	83.6	----
Toluene-D8	2037-26-5	0.5	%	86.1	----	----	85.8	----
4-Bromofluorobenzene	460-00-4	0.5	%	93.2	----	----	92.3	----
EP075(SIM)S: Phenolic Compound Surrogates								
Phenol-d6	13127-88-3	0.5	%	100	96.7	97.6	96.8	93.5
2-Chlorophenol-D4	93951-73-6	0.5	%	98.9	97.2	96.9	94.6	91.2
2.4.6-Tribromophenol	118-79-6	0.5	%	88.8	82.3	84.6	81.3	80.7
EP075(SIM)T: PAH Surrogates								
2-Fluorobiphenyl	321-60-8	0.5	%	104	101	101	99.5	97.8
Anthracene-d10	1719-06-8	0.5	%	105	103	101	99.9	99.6
4-Terphenyl-d14	1718-51-0	0.5	%	95.5	94.0	92.6	92.1	91.3
EP075S: Acid Extractable Surrogates								
2-Fluorophenol	367-12-4	0.5	%	109	----	----	103	----
Phenol-d6	13127-88-3	0.5	%	108	----	----	104	----
2-Chlorophenol-D4	93951-73-6	0.5	%	105	----	----	99.2	----
2.4.6-Tribromophenol	118-79-6	0.5	%	70.6	----	----	82.8	----
EP075T: Base/Neutral Extractable Surrogates								
Nitrobenzene-D5	4165-60-0	0.5	%	116	----	----	104	----
1.2-Dichlorobenzene-D4	2199-69-1	0.5	%	91.9	----	----	91.5	----
2-Fluorobiphenyl	321-60-8	0.5	%	109	----	----	106	----
Anthracene-d10	1719-06-8	0.5	%	130	----	----	116	----
4-Terphenyl-d14	1718-51-0	0.5	%	109	----	----	88.4	----
EP080S: TPH(V)/BTEX Surrogates								
1.2-Dichloroethane-D4	17060-07-0	0.2	%	89.4	77.1	81.7	85.5	84.9
Toluene-D8	2037-26-5	0.2	%	90.4	99.6	87.7	90.0	90.6
4-Bromofluorobenzene	460-00-4	0.2	%	98.8	107	91.2	98.8	83.2
EP231S: PFAS Surrogate								
13C4-PFOS	----	0.0002	%	106	110	106	98.0	----
13C8-PFOA	----	0.0002	%	101	103	108	99.5	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	SOP_BH130_2.0_220124	SOP_BH131_1.0_220124	SOP_BH131_2.0_220124	DUP07_220124	SOP_BH122_1.0_220124
			Sampling date / time	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00
Compound	CAS Number	LOR	Unit	ES2202692-006	ES2202692-007	ES2202692-008	ES2202692-009	ES2202692-010
				Result	Result	Result	Result	Result
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	----	1.0	%	7.8	11.8	8.6	7.7	8.2
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	----	279	----	----	185
APPROVED IDENTIFIER:	----	-	--	----	A. SMYLIE	----	----	A. SMYLIE
EG005(ED093)T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	8	6	6	8	9
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	<1	<1
Chromium	7440-47-3	2	mg/kg	10	5	6	6	10
Copper	7440-50-8	5	mg/kg	59	12	28	36	32
Lead	7439-92-1	5	mg/kg	16	12	17	17	12
Nickel	7440-02-0	2	mg/kg	10	<2	4	6	<2
Zinc	7440-66-6	5	mg/kg	66	<5	28	42	9
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	<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	<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

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	SOP_BH130_2.0_220124	SOP_BH131_1.0_220124	SOP_BH131_2.0_220124	DUP07_220124	SOP_BH122_1.0_220124
			Sampling date / time	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00
Compound	CAS Number	LOR	Unit	ES2202692-006	ES2202692-007	ES2202692-008	ES2202692-009	ES2202692-010
				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

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	SOP_BH130_2.0_220124	SOP_BH131_1.0_220124	SOP_BH131_2.0_220124	DUP07_220124	SOP_BH122_1.0_220124
				Sampling date / time	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00
Compound	CAS Number	LOR	Unit		ES2202692-006	ES2202692-007	ES2202692-008	ES2202692-009	ES2202692-010
					Result	Result	Result	Result	Result
EP074A: Monocyclic Aromatic Hydrocarbons									
Benzene	71-43-2	0.2	mg/kg		<0.2	<0.2	----	----	----
Toluene	108-88-3	0.5	mg/kg		<0.5	<0.5	----	----	----
Ethylbenzene	100-41-4	0.5	mg/kg		<0.5	<0.5	----	----	----
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg		<0.5	<0.5	----	----	----
Styrene	100-42-5	0.5	mg/kg		<0.5	<0.5	----	----	----
ortho-Xylene	95-47-6	0.5	mg/kg		<0.5	<0.5	----	----	----
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	----	----	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	SOP_BH130_2.0_220124	SOP_BH131_1.0_220124	SOP_BH131_2.0_220124	DUP07_220124	SOP_BH122_1.0_220124
			Sampling date / time	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00
Compound	CAS Number	LOR	Unit	ES2202692-006	ES2202692-007	ES2202692-008	ES2202692-009	ES2202692-010
				Result	Result	Result	Result	Result
EP074E: Halogenated Aliphatic Compounds - Continued								
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	----	----	----
Bromoform	75-25-2	0.5	mg/kg	<0.5	<0.5	----	----	----
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons								
Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	SOP_BH130_2.0_220124	SOP_BH131_1.0_220124	SOP_BH131_2.0_220124	DUP07_220124	SOP_BH122_1.0_220124
			Sampling date / time	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00
Compound	CAS Number	LOR	Unit	ES2202692-006	ES2202692-007	ES2202692-008	ES2202692-009	ES2202692-010
				Result	Result	Result	Result	Result
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued								
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	<0.5	<0.5	<0.5	<0.5	<0.5
Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Fluoranthene	206-44-0	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	<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	<0.5	<0.5	<0.5	<0.5	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg	**0.6**	**0.6**	**0.6**	**0.6**	**0.6**
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg	**1.2**	**1.2**	**1.2**	**1.2**	**1.2**
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	----	----	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	SOP_BH130_2.0_220124	SOP_BH131_1.0_220124	SOP_BH131_2.0_220124	DUP07_220124	SOP_BH122_1.0_220124
			Sampling date / time	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00
Compound	CAS Number	LOR	Unit	ES2202692-006	ES2202692-007	ES2202692-008	ES2202692-009	ES2202692-010
				Result	Result	Result	Result	Result
EP075B: Polynuclear Aromatic Hydrocarbons - Continued								
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	----	----	----
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	----	----	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	SOP_BH130_2.0_220124	SOP_BH131_1.0_220124	SOP_BH131_2.0_220124	DUP07_220124	SOP_BH122_1.0_220124
			Sampling date / time	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00
Compound	CAS Number	LOR	Unit	ES2202692-006	ES2202692-007	ES2202692-008	ES2202692-009	ES2202692-010
				Result	Result	Result	Result	Result
EP075D: Nitrosamines - Continued								
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								
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	----	----	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	SOP_BH130_2.0_220124	SOP_BH131_1.0_220124	SOP_BH131_2.0_220124	DUP07_220124	SOP_BH122_1.0_220124
				Sampling date / time	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00
Compound	CAS Number	LOR	Unit		ES2202692-006	ES2202692-007	ES2202692-008	ES2202692-009	ES2202692-010
					Result	Result	Result	Result	Result
EP075G: Chlorinated Hydrocarbons - Continued									
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	----	----	----
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									

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	SOP_BH130_2.0_220124	SOP_BH131_1.0_220124	SOP_BH131_2.0_220124	DUP07_220124	SOP_BH122_1.0_220124
			Sampling date / time	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00
Compound	CAS Number	LOR	Unit	ES2202692-006	ES2202692-007	ES2202692-008	ES2202692-009	ES2202692-010
				Result	Result	Result	Result	Result
EP075J: Organophosphorus Pesticides - Continued								
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	<100	<100	<100	<100
C29 - C36 Fraction	----	100	mg/kg	<100	<100	<100	<100	<100
^ C10 - C36 Fraction (sum)	----	50	mg/kg	<50	<50	<50	<50	<50
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions								
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	<100	<100	<100	<100	<100
>C34 - C40 Fraction	----	100	mg/kg	<100	<100	<100	<100	<100
^ >C10 - C40 Fraction (sum)	----	50	mg/kg	<50	<50	<50	<50	<50
^ >C10 - C16 Fraction minus Naphthalene (F2)	----	50	mg/kg	<50	<50	<50	<50	<50
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

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	SOP_BH130_2.0_220124	SOP_BH131_1.0_220124	SOP_BH131_2.0_220124	DUP07_220124	SOP_BH122_1.0_220124
				Sampling date / time	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00
Compound	CAS Number	LOR	Unit		ES2202692-006	ES2202692-007	ES2202692-008	ES2202692-009	ES2202692-010
					Result	Result	Result	Result	Result
EP080: BTEXN - Continued									
^ 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		----	----	<0.0002	<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	----
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	%		**120**	**116**	**122**	**115**	**129**
EP068S: Organochlorine Pesticide Surrogate									
Dibromo-DDE	21655-73-2	0.05	%		**89.1**	**92.6**	**98.4**	**105**	**94.6**
EP068T: Organophosphorus Pesticide Surrogate									
DEF	78-48-8	0.05	%		**46.5**	**64.7**	**116**	**116**	**90.9**

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	SOP_BH130_2.0_220124	SOP_BH131_1.0_220124	SOP_BH131_2.0_220124	DUP07_220124	SOP_BH122_1.0_220124
			Sampling date / time	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00
Compound	CAS Number	LOR	Unit	ES2202692-006	ES2202692-007	ES2202692-008	ES2202692-009	ES2202692-010
				Result	Result	Result	Result	Result
EP074S: VOC Surrogates								
1.2-Dichloroethane-D4	17060-07-0	0.5	%	92.4	83.1	----	----	----
Toluene-D8	2037-26-5	0.5	%	90.9	90.0	----	----	----
4-Bromofluorobenzene	460-00-4	0.5	%	99.0	92.8	----	----	----
EP075(SIM)S: Phenolic Compound Surrogates								
Phenol-d6	13127-88-3	0.5	%	100	95.8	96.2	96.4	97.9
2-Chlorophenol-D4	93951-73-6	0.5	%	99.1	94.3	95.0	94.6	96.2
2.4.6-Tribromophenol	118-79-6	0.5	%	84.9	80.4	77.7	79.9	78.4
EP075(SIM)T: PAH Surrogates								
2-Fluorobiphenyl	321-60-8	0.5	%	104	99.9	99.8	99.6	102
Anthracene-d10	1719-06-8	0.5	%	101	99.6	98.0	97.7	100
4-Terphenyl-d14	1718-51-0	0.5	%	98.8	92.8	92.4	94.0	94.4
EP075S: Acid Extractable Surrogates								
2-Fluorophenol	367-12-4	0.5	%	94.2	112	----	----	----
Phenol-d6	13127-88-3	0.5	%	98.3	104	----	----	----
2-Chlorophenol-D4	93951-73-6	0.5	%	93.8	105	----	----	----
2.4.6-Tribromophenol	118-79-6	0.5	%	80.1	103	----	----	----
EP075T: Base/Neutral Extractable Surrogates								
Nitrobenzene-D5	4165-60-0	0.5	%	103	98.7	----	----	----
1.2-Dichlorobenzene-D4	2199-69-1	0.5	%	91.2	90.3	----	----	----
2-Fluorobiphenyl	321-60-8	0.5	%	122	105	----	----	----
Anthracene-d10	1719-06-8	0.5	%	118	122	----	----	----
4-Terphenyl-d14	1718-51-0	0.5	%	104	100	----	----	----
EP080S: TPH(V)/BTEX Surrogates								
1.2-Dichloroethane-D4	17060-07-0	0.2	%	94.3	84.9	88.6	81.2	86.2
Toluene-D8	2037-26-5	0.2	%	95.3	94.5	93.8	84.6	91.6
4-Bromofluorobenzene	460-00-4	0.2	%	106	98.2	86.0	80.3	84.9
EP231S: PFAS Surrogate								
13C4-PFOS	----	0.0002	%	----	----	102	99.5	----
13C8-PFOA	----	0.0002	%	----	----	103	106	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	SOP_BH122_2.0_220124	SOP_BH123_1.0_220124	SOP_BH123_3.0_220124	SOP_BH140_1.0_220124	SOP_BH140_2.0_220124
			Sampling date / time	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00
Compound	CAS Number	LOR	Unit	ES2202692-011	ES2202692-012	ES2202692-013	ES2202692-014	ES2202692-015
				Result	Result	Result	Result	Result
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	----	1.0	%	10.0	9.1	8.9	14.2	16.1
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	----	131	----	326	----
APPROVED IDENTIFIER:	----	-	--	----	A. SMYLIE	----	A. SMYLIE	----
EG005(ED093)T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	<5	11	8	13	14
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	<1	<1
Chromium	7440-47-3	2	mg/kg	7	7	7	15	8
Copper	7440-50-8	5	mg/kg	32	25	61	35	32
Lead	7439-92-1	5	mg/kg	25	9	15	24	46
Nickel	7440-02-0	2	mg/kg	<2	2	38	10	4
Zinc	7440-66-6	5	mg/kg	9	15	242	52	18
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	<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	<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

Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH122_2.0_220124	SOP_BH123_1.0_220124	SOP_BH123_3.0_220124	SOP_BH140_1.0_220124	SOP_BH140_2.0_220124
				Sampling date / time	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00
					ES2202692-011	ES2202692-012	ES2202692-013	ES2202692-014	ES2202692-015
					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

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	SOP_BH122_2.0_220124	SOP_BH123_1.0_220124	SOP_BH123_3.0_220124	SOP_BH140_1.0_220124	SOP_BH140_2.0_220124
				Sampling date / time	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00
Compound	CAS Number	LOR	Unit		ES2202692-011	ES2202692-012	ES2202692-013	ES2202692-014	ES2202692-015
					Result	Result	Result	Result	Result
EP074A: Monocyclic Aromatic Hydrocarbons									
Benzene	71-43-2	0.2	mg/kg		<0.2	<0.2	----	----	<0.2
Toluene	108-88-3	0.5	mg/kg		<0.5	<0.5	----	----	<0.5
Ethylbenzene	100-41-4	0.5	mg/kg		<0.5	<0.5	----	----	<0.5
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg		<0.5	<0.5	----	----	<0.5
Styrene	100-42-5	0.5	mg/kg		<0.5	<0.5	----	----	<0.5
ortho-Xylene	95-47-6	0.5	mg/kg		<0.5	<0.5	----	----	<0.5
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

Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH122_2.0_220124	SOP_BH123_1.0_220124	SOP_BH123_3.0_220124	SOP_BH140_1.0_220124	SOP_BH140_2.0_220124
				Sampling date / time	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00
					ES2202692-011	ES2202692-012	ES2202692-013	ES2202692-014	ES2202692-015
					Result	Result	Result	Result	Result
EP074E: Halogenated Aliphatic Compounds - Continued									
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
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)B: Polynuclear Aromatic Hydrocarbons									
Naphthalene	91-20-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5

Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH122_2.0_220124	SOP_BH123_1.0_220124	SOP_BH123_3.0_220124	SOP_BH140_1.0_220124	SOP_BH140_2.0_220124
				Sampling date / time	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00
					ES2202692-011	ES2202692-012	ES2202692-013	ES2202692-014	ES2202692-015
					Result	Result	Result	Result	Result
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued									
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		<0.5	<0.5	<0.5	<0.5	<0.5
Anthracene	120-12-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Fluoranthene	206-44-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Pyrene	129-00-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benz(a)anthracene	56-55-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Chrysene	218-01-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg		<0.5	<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		<0.5	<0.5	<0.5	<0.5	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ **Sum of polycyclic aromatic hydrocarbons**	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ **Benzo(a)pyrene TEQ (zero)**	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ **Benzo(a)pyrene TEQ (half LOR)**	----	0.5	mg/kg		**0.6**	**0.6**	**0.6**	**0.6**	**0.6**
^ **Benzo(a)pyrene TEQ (LOR)**	----	0.5	mg/kg		**1.2**	**1.2**	**1.2**	**1.2**	**1.2**
EP075A: 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	0.5	mg/kg		<0.5	<0.5	----	----	<0.5
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	1	mg/kg		<1	<1	----	----	<1
EP075B: Polynuclear Aromatic Hydrocarbons									
Naphthalene	91-20-3	0.5	mg/kg		<0.5	<0.5	----	----	<0.5

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	SOP_BH122_2.0_220124	SOP_BH123_1.0_220124	SOP_BH123_3.0_220124	SOP_BH140_1.0_220124	SOP_BH140_2.0_220124
				Sampling date / time	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00
Compound	CAS Number	LOR	Unit		ES2202692-011	ES2202692-012	ES2202692-013	ES2202692-014	ES2202692-015
					Result	Result	Result	Result	Result
EP075B: Polynuclear Aromatic Hydrocarbons - Continued									
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
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
N-2-Fluorenyl Acetamide	53-96-3	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) & Benzo(k)fluoranthene	205-99-2 207-08-9	1	mg/kg		<1	<1	----	----	<1
7.12-Dimethylbenz(a)anthracene	57-97-6	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
3-Methylcholanthrene	56-49-5	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 PAHs	----	0.5	mg/kg		<0.5	<0.5	----	----	<0.5
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg		<0.5	<0.5	----	----	<0.5
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg		**0.6**	**0.6**	----	----	**0.6**
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg		**1.2**	**1.2**	----	----	**1.2**
EP075C: Phthalate Esters									
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

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	SOP_BH122_2.0_220124	SOP_BH123_1.0_220124	SOP_BH123_3.0_220124	SOP_BH140_1.0_220124	SOP_BH140_2.0_220124
				Sampling date / time	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00
Compound	CAS Number	LOR	Unit		ES2202692-011	ES2202692-012	ES2202692-013	ES2202692-014	ES2202692-015
					Result	Result	Result	Result	Result
EP075D: Nitrosamines - Continued									
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
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

Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH122_2.0_220124	SOP_BH123_1.0_220124	SOP_BH123_3.0_220124	SOP_BH140_1.0_220124	SOP_BH140_2.0_220124
				Sampling date / time	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00
					ES2202692-011	ES2202692-012	ES2202692-013	ES2202692-014	ES2202692-015
					Result	Result	Result	Result	Result
EP075G: Chlorinated Hydrocarbons - Continued									
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
EP075I: Organochlorine Pesticides									
alpha-BHC	319-84-6	0.5	mg/kg		<0.5	<0.5	----	----	<0.5
beta-BHC	319-85-7	0.5	mg/kg		<0.5	<0.5	----	----	<0.5
gamma-BHC	58-89-9	0.5	mg/kg		<0.5	<0.5	----	----	<0.5
delta-BHC	319-86-8	0.5	mg/kg		<0.5	<0.5	----	----	<0.5
Heptachlor	76-44-8	0.5	mg/kg		<0.5	<0.5	----	----	<0.5
Aldrin	309-00-2	0.5	mg/kg		<0.5	<0.5	----	----	<0.5
Heptachlor epoxide	1024-57-3	0.5	mg/kg		<0.5	<0.5	----	----	<0.5
alpha-Endosulfan	959-98-8	0.5	mg/kg		<0.5	<0.5	----	----	<0.5
4.4`-DDE	72-55-9	0.5	mg/kg		<0.5	<0.5	----	----	<0.5
Dieldrin	60-57-1	0.5	mg/kg		<0.5	<0.5	----	----	<0.5
Endrin	72-20-8	0.5	mg/kg		<0.5	<0.5	----	----	<0.5
beta-Endosulfan	33213-65-9	0.5	mg/kg		<0.5	<0.5	----	----	<0.5
4.4`-DDD	72-54-8	0.5	mg/kg		<0.5	<0.5	----	----	<0.5
Endosulfan sulfate	1031-07-8	0.5	mg/kg		<0.5	<0.5	----	----	<0.5
4.4`-DDT	50-29-3	1.0	mg/kg		<1.0	<1.0	----	----	<1.0
EP075J: Organophosphorus Pesticides									

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	SOP_BH122_2.0_220124	SOP_BH123_1.0_220124	SOP_BH123_3.0_220124	SOP_BH140_1.0_220124	SOP_BH140_2.0_220124
			Sampling date / time	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00
Compound	CAS Number	LOR	Unit	ES2202692-011	ES2202692-012	ES2202692-013	ES2202692-014	ES2202692-015
				Result	Result	Result	Result	Result
EP075J: Organophosphorus Pesticides - Continued								
Dichlorvos	62-73-7	0.5	mg/kg	<0.5	<0.5	----	----	<0.5
Dimethoate	60-51-5	0.5	mg/kg	<0.5	<0.5	----	----	<0.5
Diazinon	333-41-5	0.5	mg/kg	<0.5	<0.5	----	----	<0.5
Chlorpyrifos-methyl	5598-13-0	0.5	mg/kg	<0.5	<0.5	----	----	<0.5
Malathion	121-75-5	0.5	mg/kg	<0.5	<0.5	----	----	<0.5
Fenthion	55-38-9	0.5	mg/kg	<0.5	<0.5	----	----	<0.5
Chlorpyrifos	2921-88-2	0.5	mg/kg	<0.5	<0.5	----	----	<0.5
Pirimphos-ethyl	23505-41-1	0.5	mg/kg	<0.5	<0.5	----	----	<0.5
Chlorfenvinphos	470-90-6	0.5	mg/kg	<0.5	<0.5	----	----	<0.5
Prothiofos	34643-46-4	0.5	mg/kg	<0.5	<0.5	----	----	<0.5
Ethion	563-12-2	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	<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	<50	<50
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	<100	<100	<100	<100	<100
>C34 - C40 Fraction	----	100	mg/kg	<100	<100	<100	<100	<100
^ >C10 - C40 Fraction (sum)	----	50	mg/kg	<50	<50	<50	<50	<50
^ >C10 - C16 Fraction minus Naphthalene (F2)	----	50	mg/kg	<50	<50	<50	<50	<50
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

Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH122_2.0_220124	SOP_BH123_1.0_220124	SOP_BH123_3.0_220124	SOP_BH140_1.0_220124	SOP_BH140_2.0_220124
				Sampling date / time	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00
					ES2202692-011	ES2202692-012	ES2202692-013	ES2202692-014	ES2202692-015
					Result	Result	Result	Result	Result
EP080: BTEXN - Continued									
^ **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		----	<0.0002	----	----	<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
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	%		**116**	**124**	**125**	**95.7**	**113**
EP068S: Organochlorine Pesticide Surrogate									
Dibromo-DDE	21655-73-2	0.05	%		**92.2**	**87.8**	**89.4**	**81.1**	**102**
EP068T: Organophosphorus Pesticide Surrogate									
DEF	78-48-8	0.05	%		**79.9**	**70.6**	**75.6**	**83.4**	**79.1**

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	SOP_BH122_2.0_220124	SOP_BH123_1.0_220124	SOP_BH123_3.0_220124	SOP_BH140_1.0_220124	SOP_BH140_2.0_220124
				Sampling date / time	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00
Compound	CAS Number	LOR	Unit		ES2202692-011	ES2202692-012	ES2202692-013	ES2202692-014	ES2202692-015
					Result	Result	Result	Result	Result
EP074S: VOC Surrogates									
1.2-Dichloroethane-D4	17060-07-0	0.5	%		76.3	84.0	----	----	77.9
Toluene-D8	2037-26-5	0.5	%		86.3	89.5	----	----	86.6
4-Bromofluorobenzene	460-00-4	0.5	%		86.2	93.9	----	----	86.8
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	0.5	%		98.0	94.6	98.0	98.0	96.5
2-Chlorophenol-D4	93951-73-6	0.5	%		96.5	92.7	96.5	97.0	94.5
2.4.6-Tribromophenol	118-79-6	0.5	%		77.3	73.5	74.9	82.9	78.9
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	0.5	%		102	98.1	102	102	101
Anthracene-d10	1719-06-8	0.5	%		101	96.5	99.5	103	98.1
4-Terphenyl-d14	1718-51-0	0.5	%		95.9	91.2	94.9	96.0	95.0
EP075S: Acid Extractable Surrogates									
2-Fluorophenol	367-12-4	0.5	%		99.3	111	----	----	99.4
Phenol-d6	13127-88-3	0.5	%		104	102	----	----	98.8
2-Chlorophenol-D4	93951-73-6	0.5	%		97.5	101	----	----	92.7
2.4.6-Tribromophenol	118-79-6	0.5	%		62.6	77.5	----	----	93.0
EP075T: Base/Neutral Extractable Surrogates									
Nitrobenzene-D5	4165-60-0	0.5	%		110	108	----	----	103
1.2-Dichlorobenzene-D4	2199-69-1	0.5	%		96.3	94.0	----	----	87.8
2-Fluorobiphenyl	321-60-8	0.5	%		104	103	----	----	104
Anthracene-d10	1719-06-8	0.5	%		122	118	----	----	116
4-Terphenyl-d14	1718-51-0	0.5	%		114	100	----	----	101
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	0.2	%		78.1	85.9	84.1	78.0	79.6
Toluene-D8	2037-26-5	0.2	%		90.7	93.9	89.0	79.5	90.9
4-Bromofluorobenzene	460-00-4	0.2	%		92.3	100	82.9	75.2	92.8
EP231S: PFAS Surrogate									
13C4-PFOS	----	0.0002	%		----	106	----	----	103
13C8-PFOA	----	0.0002	%		----	103	----	----	108

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	SOP_BH141_0.3_220124	SOP_BH141_0.4_220124	SOP_BH132_1.0_220125	SOP_BH132_3.0_220125	SOP_BH133_0.3_220125
			Sampling date / time	24-Jan-2022 00:00	24-Jan-2022 00:00	25-Jan-2022 00:00	25-Jan-2022 00:00	25-Jan-2022 00:00
Compound	CAS Number	LOR	Unit	ES2202692-016	ES2202692-017	ES2202692-018	ES2202692-019	ES2202692-020
				Result	Result	Result	Result	Result
EA002: pH 1:5 (Soils)								
pH Value	----	0.1	pH Unit	----	----	5.2	----	----
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	----	1.0	%	5.1	8.3	20.0	8.9	9.1
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	----	310	271	----	410
APPROVED IDENTIFIER:	----	-	--	----	A. SMYLIE	A. SMYLIE	----	A. SMYLIE
ED007: Exchangeable Cations								
Exchangeable Calcium	----	0.1	meq/100g	----	----	0.3	----	----
Exchangeable Magnesium	----	0.1	meq/100g	----	----	2.3	----	----
Exchangeable Potassium	----	0.1	meq/100g	----	----	0.1	----	----
Exchangeable Sodium	----	0.1	meq/100g	----	----	0.9	----	----
Cation Exchange Capacity	----	0.1	meq/100g	----	----	5.1	----	----
Exchangeable Sodium Percent	----	0.1	%	----	----	24.0	----	----
EG005(ED093)T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	<5	7	<5	11	<5
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	<1	<1
Chromium	7440-47-3	2	mg/kg	15	13	5	8	16
Copper	7440-50-8	5	mg/kg	101	38	11	73	48
Lead	7439-92-1	5	mg/kg	<5	17	13	18	<5
Nickel	7440-02-0	2	mg/kg	98	28	<2	4	91
Zinc	7440-66-6	5	mg/kg	43	60	5	38	45
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	<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	<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

Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH141_0.3_220124	SOP_BH141_0.4_220124	SOP_BH132_1.0_220125	SOP_BH132_3.0_220125	SOP_BH133_0.3_220125
				Sampling date / time	24-Jan-2022 00:00	24-Jan-2022 00:00	25-Jan-2022 00:00	25-Jan-2022 00:00	25-Jan-2022 00:00
					ES2202692-016	ES2202692-017	ES2202692-018	ES2202692-019	ES2202692-020
					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	<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		**0.62**	**0.16**	<0.05	<0.05	**0.09**
Aldrin	309-00-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	**0.19**
Heptachlor epoxide	1024-57-3	0.05	mg/kg		**0.55**	**0.15**	<0.05	<0.05	<0.05
^ **Total Chlordane (sum)**	----	0.05	mg/kg		**3.09**	**0.70**	<0.05	<0.05	**0.95**
trans-Chlordane	5103-74-2	0.05	mg/kg		**2.74**	**0.60**	<0.05	<0.05	**0.84**
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		**0.35**	**0.10**	<0.05	<0.05	**0.11**
Dieldrin	60-57-1	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	**0.17**
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	**0.36**
^ **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

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	SOP_BH141_0.3_220124	SOP_BH141_0.4_220124	SOP_BH132_1.0_220125	SOP_BH132_3.0_220125	SOP_BH133_0.3_220125
				Sampling date / time	24-Jan-2022 00:00	24-Jan-2022 00:00	25-Jan-2022 00:00	25-Jan-2022 00:00	25-Jan-2022 00:00
Compound	CAS Number	LOR	Unit		ES2202692-016	ES2202692-017	ES2202692-018	ES2202692-019	ES2202692-020
					Result	Result	Result	Result	Result
EP068B: Organophosphorus Pesticides (OP) - Continued									
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									
Benzene	71-43-2	0.2	mg/kg		----	<0.2	----	<0.2	<0.2
Toluene	108-88-3	0.5	mg/kg		----	<0.5	----	<0.5	<0.5
Ethylbenzene	100-41-4	0.5	mg/kg		----	<0.5	----	<0.5	<0.5
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg		----	<0.5	----	<0.5	<0.5
Styrene	100-42-5	0.5	mg/kg		----	<0.5	----	<0.5	<0.5
ortho-Xylene	95-47-6	0.5	mg/kg		----	<0.5	----	<0.5	<0.5
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

Analytical Results

Sub-Matrix: SOIL
(Matrix: SOIL)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH141_0.3_220124	SOP_BH141_0.4_220124	SOP_BH132_1.0_220125	SOP_BH132_3.0_220125	SOP_BH133_0.3_220125
				Sampling date / time	24-Jan-2022 00:00	24-Jan-2022 00:00	25-Jan-2022 00:00	25-Jan-2022 00:00	25-Jan-2022 00:00
					ES2202692-016	ES2202692-017	ES2202692-018	ES2202692-019	ES2202692-020
					Result	Result	Result	Result	Result
EP074D: Fumigants - Continued									
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
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

Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH141_0.3_220124	SOP_BH141_0.4_220124	SOP_BH132_1.0_220125	SOP_BH132_3.0_220125	SOP_BH133_0.3_220125
				Sampling date / time	24-Jan-2022 00:00	24-Jan-2022 00:00	25-Jan-2022 00:00	25-Jan-2022 00:00	25-Jan-2022 00:00
					ES2202692-016	ES2202692-017	ES2202692-018	ES2202692-019	ES2202692-020
					Result	Result	Result	Result	Result
EP074F: Halogenated Aromatic Compounds - Continued									
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)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		<0.5	<0.5	<0.5	<0.5	<0.5
Anthracene	120-12-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Fluoranthene	206-44-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Pyrene	129-00-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benz(a)anthracene	56-55-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Chrysene	218-01-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg		<0.5	<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		<0.5	<0.5	<0.5	<0.5	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg		**0.6**	**0.6**	**0.6**	**0.6**	**0.6**
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg		**1.2**	**1.2**	**1.2**	**1.2**	**1.2**
EP075A: 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	0.5	mg/kg		----	<0.5	----	<0.5	<0.5

Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH141_0.3_220124	SOP_BH141_0.4_220124	SOP_BH132_1.0_220125	SOP_BH132_3.0_220125	SOP_BH133_0.3_220125
				Sampling date / time	24-Jan-2022 00:00	24-Jan-2022 00:00	25-Jan-2022 00:00	25-Jan-2022 00:00	25-Jan-2022 00:00
					ES2202692-016	ES2202692-017	ES2202692-018	ES2202692-019	ES2202692-020
					Result	Result	Result	Result	Result
EP075A: Phenolic Compounds - Continued									
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	1	mg/kg		----	<1	----	<1	<1
EP075B: Polynuclear Aromatic Hydrocarbons									
Naphthalene	91-20-3	0.5	mg/kg		----	<0.5	----	<0.5	<0.5
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
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
N-2-Fluorenyl Acetamide	53-96-3	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) & Benzo(k)fluoranthene	205-99-2 207-08-9	1	mg/kg		----	<1	----	<1	<1
7.12-Dimethylbenz(a)anthracene	57-97-6	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
3-Methylcholanthrene	56-49-5	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 PAHs	----	0.5	mg/kg		----	<0.5	----	<0.5	<0.5
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg		----	<0.5	----	<0.5	<0.5
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg		----	**0.6**	----	**0.6**	**0.6**
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg		----	**1.2**	----	**1.2**	**1.2**

Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH141_0.3_220124	SOP_BH141_0.4_220124	SOP_BH132_1.0_220125	SOP_BH132_3.0_220125	SOP_BH133_0.3_220125
				Sampling date / time	24-Jan-2022 00:00	24-Jan-2022 00:00	25-Jan-2022 00:00	25-Jan-2022 00:00	25-Jan-2022 00:00
					ES2202692-016	ES2202692-017	ES2202692-018	ES2202692-019	ES2202692-020
					Result	Result	Result	Result	Result
EP075C: Phthalate Esters									
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		----	**8.7**	----	<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

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	SOP_BH141_0.3_220124	SOP_BH141_0.4_220124	SOP_BH132_1.0_220125	SOP_BH132_3.0_220125	SOP_BH133_0.3_220125
				Sampling date / time	24-Jan-2022 00:00	24-Jan-2022 00:00	25-Jan-2022 00:00	25-Jan-2022 00:00	25-Jan-2022 00:00
Compound	CAS Number	LOR	Unit		ES2202692-016	ES2202692-017	ES2202692-018	ES2202692-019	ES2202692-020
					Result	Result	Result	Result	Result
EP075E: Nitroaromatics and Ketones - Continued									
Chlorobenzilate	510-15-6	0.5	mg/kg		----	<0.5	----	<0.5	<0.5
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
EP075I: Organochlorine Pesticides									
alpha-BHC	319-84-6	0.5	mg/kg		----	<0.5	----	<0.5	<0.5
beta-BHC	319-85-7	0.5	mg/kg		----	<0.5	----	<0.5	<0.5
gamma-BHC	58-89-9	0.5	mg/kg		----	<0.5	----	<0.5	<0.5
delta-BHC	319-86-8	0.5	mg/kg		----	<0.5	----	<0.5	<0.5
Heptachlor	76-44-8	0.5	mg/kg		----	<0.5	----	<0.5	<0.5
Aldrin	309-00-2	0.5	mg/kg		----	<0.5	----	<0.5	<0.5
Heptachlor epoxide	1024-57-3	0.5	mg/kg		----	<0.5	----	<0.5	<0.5

Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH141_0.3_220124	SOP_BH141_0.4_220124	SOP_BH132_1.0_220125	SOP_BH132_3.0_220125	SOP_BH133_0.3_220125
				Sampling date / time	24-Jan-2022 00:00	24-Jan-2022 00:00	25-Jan-2022 00:00	25-Jan-2022 00:00	25-Jan-2022 00:00
					ES2202692-016	ES2202692-017	ES2202692-018	ES2202692-019	ES2202692-020
					Result	Result	Result	Result	Result
EP075I: Organochlorine Pesticides - Continued									
alpha-Endosulfan	959-98-8	0.5	mg/kg		----	<0.5	----	<0.5	<0.5
4.4`-DDE	72-55-9	0.5	mg/kg		----	<0.5	----	<0.5	<0.5
Dieldrin	60-57-1	0.5	mg/kg		----	<0.5	----	<0.5	<0.5
Endrin	72-20-8	0.5	mg/kg		----	<0.5	----	<0.5	<0.5
beta-Endosulfan	33213-65-9	0.5	mg/kg		----	<0.5	----	<0.5	<0.5
4.4`-DDD	72-54-8	0.5	mg/kg		----	<0.5	----	<0.5	<0.5
Endosulfan sulfate	1031-07-8	0.5	mg/kg		----	<0.5	----	<0.5	<0.5
4.4`-DDT	50-29-3	1.0	mg/kg		----	<1.0	----	<1.0	<1.0
EP075J: Organophosphorus Pesticides									
Dichlorvos	62-73-7	0.5	mg/kg		----	<0.5	----	<0.5	<0.5
Dimethoate	60-51-5	0.5	mg/kg		----	<0.5	----	<0.5	<0.5
Diazinon	333-41-5	0.5	mg/kg		----	<0.5	----	<0.5	<0.5
Chlorpyrifos-methyl	5598-13-0	0.5	mg/kg		----	<0.5	----	<0.5	<0.5
Malathion	121-75-5	0.5	mg/kg		----	<0.5	----	<0.5	<0.5
Fenthion	55-38-9	0.5	mg/kg		----	<0.5	----	<0.5	<0.5
Chlorpyrifos	2921-88-2	0.5	mg/kg		----	<0.5	----	<0.5	<0.5
Pirimphos-ethyl	23505-41-1	0.5	mg/kg		----	<0.5	----	<0.5	<0.5
Chlorfenvinphos	470-90-6	0.5	mg/kg		----	<0.5	----	<0.5	<0.5
Prothiofos	34643-46-4	0.5	mg/kg		----	<0.5	----	<0.5	<0.5
Ethion	563-12-2	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	<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	<50	<50
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		<100	<100	<100	<100	<100
>C34 - C40 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
^ **>C10 - C40 Fraction (sum)**	----	50	mg/kg		<50	<50	<50	<50	<50

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	SOP_BH141_0.3_220124	SOP_BH141_0.4_220124	SOP_BH132_1.0_220125	SOP_BH132_3.0_220125	SOP_BH133_0.3_220125
				Sampling date / time	24-Jan-2022 00:00	24-Jan-2022 00:00	25-Jan-2022 00:00	25-Jan-2022 00:00	25-Jan-2022 00:00
Compound	CAS Number	LOR	Unit		ES2202692-016	ES2202692-017	ES2202692-018	ES2202692-019	ES2202692-020
					Result	Result	Result	Result	Result
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions - Continued									
^ >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	----	----
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									

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	SOP_BH141_0.3_220124	SOP_BH141_0.4_220124	SOP_BH132_1.0_220125	SOP_BH132_3.0_220125	SOP_BH133_0.3_220125
			Sampling date / time	24-Jan-2022 00:00	24-Jan-2022 00:00	25-Jan-2022 00:00	25-Jan-2022 00:00	25-Jan-2022 00:00
Compound	CAS Number	LOR	Unit	ES2202692-016	ES2202692-017	ES2202692-018	ES2202692-019	ES2202692-020
				Result	Result	Result	Result	Result
EP231P: PFAS Sums - Continued								
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	%	127	105	129	113	105
EP068S: Organochlorine Pesticide Surrogate								
Dibromo-DDE	21655-73-2	0.05	%	108	79.5	96.3	97.7	98.3
EP068T: Organophosphorus Pesticide Surrogate								
DEF	78-48-8	0.05	%	87.2	71.3	73.2	115	107
EP074S: VOC Surrogates								
1.2-Dichloroethane-D4	17060-07-0	0.5	%	----	88.5	----	84.3	97.6
Toluene-D8	2037-26-5	0.5	%	----	100	----	88.8	86.8
4-Bromofluorobenzene	460-00-4	0.5	%	----	97.3	----	85.4	94.9
EP075(SIM)S: Phenolic Compound Surrogates								
Phenol-d6	13127-88-3	0.5	%	95.8	97.1	95.2	93.5	94.3
2-Chlorophenol-D4	93951-73-6	0.5	%	95.1	95.8	93.5	93.6	93.1
2.4.6-Tribromophenol	118-79-6	0.5	%	72.6	73.1	74.7	74.1	70.7
EP075(SIM)T: PAH Surrogates								
2-Fluorobiphenyl	321-60-8	0.5	%	102	102	98.7	99.6	100
Anthracene-d10	1719-06-8	0.5	%	99.6	100	98.2	98.6	99.7
4-Terphenyl-d14	1718-51-0	0.5	%	95.0	91.4	92.1	94.0	93.0
EP075S: Acid Extractable Surrogates								
2-Fluorophenol	367-12-4	0.5	%	----	104	----	103	92.4
Phenol-d6	13127-88-3	0.5	%	----	99.1	----	99.5	98.2
2-Chlorophenol-D4	93951-73-6	0.5	%	----	96.1	----	97.2	92.3
2.4.6-Tribromophenol	118-79-6	0.5	%	----	97.2	----	90.4	47.5
EP075T: Base/Neutral Extractable Surrogates								
Nitrobenzene-D5	4165-60-0	0.5	%	----	90.9	----	92.0	102
1.2-Dichlorobenzene-D4	2199-69-1	0.5	%	----	88.7	----	84.5	89.4
2-Fluorobiphenyl	321-60-8	0.5	%	----	98.2	----	92.7	106
Anthracene-d10	1719-06-8	0.5	%	----	115	----	113	119
4-Terphenyl-d14	1718-51-0	0.5	%	----	98.2	----	99.6	95.2
EP080S: TPH(V)/BTEX Surrogates								

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	SOP_BH141_0.3_220124	SOP_BH141_0.4_220124	SOP_BH132_1.0_220125	SOP_BH132_3.0_220125	SOP_BH133_0.3_220125
				Sampling date / time	24-Jan-2022 00:00	24-Jan-2022 00:00	25-Jan-2022 00:00	25-Jan-2022 00:00	25-Jan-2022 00:00
Compound	CAS Number	LOR	Unit		ES2202692-016	ES2202692-017	ES2202692-018	ES2202692-019	ES2202692-020
					Result	Result	Result	Result	Result
EP080S: TPH(V)/BTEX Surrogates - Continued									
1.2-Dichloroethane-D4	17060-07-0	0.2	%		94.8	90.5	78.2	82.4	95.6
Toluene-D8	2037-26-5	0.2	%		87.1	105	78.8	80.4	82.1
4-Bromofluorobenzene	460-00-4	0.2	%		84.6	103	77.8	80.0	90.8
EP231S: PFAS Surrogate									
13C4-PFOS	----	0.0002	%		----	----	97.0	----	----
13C8-PFOA	----	0.0002	%		----	----	102	----	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	SOP_BH133_0.8_220125	SOP_BH134_0.5_220125	SOP_BH134_2.0_220125	SOP_BH135_0.5_220125	SOP_BH135_0.8_220125
			Sampling date / time	25-Jan-2022 00:00	25-Jan-2022 00:00	25-Jan-2022 00:00	25-Jan-2022 00:00	25-Jan-2022 00:00
Compound	CAS Number	LOR	Unit	ES2202692-021	ES2202692-022	ES2202692-023	ES2202692-024	ES2202692-025
				Result	Result	Result	Result	Result
EA002: pH 1:5 (Soils)								
pH Value	----	0.1	pH Unit	----	----	----	----	4.9
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	----	1.0	%	14.2	19.8	13.1	4.9	8.8
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	-	--	----	-	----	-	----
Synthetic Mineral Fibre	----	0.1	g/kg	----	No	----	No	----
Organic Fibre	----	0.1	g/kg	----	No	----	No	----
Sample weight (dry)	----	0.01	g	----	422	----	320	----
APPROVED IDENTIFIER:	----	-	--	----	A. SMYLIE	----	A. SMYLIE	----
ED007: Exchangeable Cations								
Exchangeable Calcium	----	0.1	meq/100g	----	----	----	----	0.3
Exchangeable Magnesium	----	0.1	meq/100g	----	----	----	----	2.4
Exchangeable Potassium	----	0.1	meq/100g	----	----	----	----	0.2
Exchangeable Sodium	----	0.1	meq/100g	----	----	----	----	0.9
Cation Exchange Capacity	----	0.1	meq/100g	----	----	----	----	8.4
Exchangeable Sodium Percent	----	0.1	%	----	----	----	----	23.9
EG005(ED093)T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	32	9	13	<5	<5
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	<1	<1
Chromium	7440-47-3	2	mg/kg	8	13	8	6	7
Copper	7440-50-8	5	mg/kg	44	27	112	7	14
Lead	7439-92-1	5	mg/kg	69	29	20	8	8
Nickel	7440-02-0	2	mg/kg	10	8	99	2	<2
Zinc	7440-66-6	5	mg/kg	86	43	79	10	<5
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	<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	<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

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	SOP_BH133_0.8_220125	SOP_BH134_0.5_220125	SOP_BH134_2.0_220125	SOP_BH135_0.5_220125	SOP_BH135_0.8_220125
				Sampling date / time	25-Jan-2022 00:00	25-Jan-2022 00:00	25-Jan-2022 00:00	25-Jan-2022 00:00	25-Jan-2022 00:00
Compound	CAS Number	LOR	Unit		ES2202692-021	ES2202692-022	ES2202692-023	ES2202692-024	ES2202692-025
					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	<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	**0.06**	<0.05	<0.05	<0.05
trans-Chlordane	5103-74-2	0.05	mg/kg		<0.05	**0.06**	<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	72-54-8/72-55-9/50-2	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

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	SOP_BH133_0.8_220125	SOP_BH134_0.5_220125	SOP_BH134_2.0_220125	SOP_BH135_0.5_220125	SOP_BH135_0.8_220125
				Sampling date / time	25-Jan-2022 00:00	25-Jan-2022 00:00	25-Jan-2022 00:00	25-Jan-2022 00:00	25-Jan-2022 00:00
Compound	CAS Number	LOR	Unit		ES2202692-021	ES2202692-022	ES2202692-023	ES2202692-024	ES2202692-025
					Result	Result	Result	Result	Result
EP068B: Organophosphorus Pesticides (OP) - Continued									
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									
Benzene	71-43-2	0.2	mg/kg		----	<0.2	----	<0.2	----
Toluene	108-88-3	0.5	mg/kg		----	<0.5	----	<0.5	----
Ethylbenzene	100-41-4	0.5	mg/kg		----	<0.5	----	<0.5	----
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg		----	<0.5	----	<0.5	----
Styrene	100-42-5	0.5	mg/kg		----	<0.5	----	<0.5	----
ortho-Xylene	95-47-6	0.5	mg/kg		----	<0.5	----	<0.5	----
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	----

Analytical Results

Sub-Matrix: SOIL
(Matrix: SOIL)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH133_0.8_220125	SOP_BH134_0.5_220125	SOP_BH134_2.0_220125	SOP_BH135_0.5_220125	SOP_BH135_0.8_220125
				Sampling date / time	25-Jan-2022 00:00	25-Jan-2022 00:00	25-Jan-2022 00:00	25-Jan-2022 00:00	25-Jan-2022 00:00
					ES2202692-021	ES2202692-022	ES2202692-023	ES2202692-024	ES2202692-025
					Result	Result	Result	Result	Result
EP074D: Fumigants - Continued									
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	----
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	----

Analytical Results

Sub-Matrix: SOIL
(Matrix: SOIL)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH133_0.8_220125	SOP_BH134_0.5_220125	SOP_BH134_2.0_220125	SOP_BH135_0.5_220125	SOP_BH135_0.8_220125
				Sampling date / time	25-Jan-2022 00:00	25-Jan-2022 00:00	25-Jan-2022 00:00	25-Jan-2022 00:00	25-Jan-2022 00:00
					ES2202692-021	ES2202692-022	ES2202692-023	ES2202692-024	ES2202692-025
					Result	Result	Result	Result	Result
EP074F: Halogenated Aromatic Compounds - Continued									
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)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		<0.5	<0.5	<0.5	<0.5	<0.5
Anthracene	120-12-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Fluoranthene	206-44-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Pyrene	129-00-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benz(a)anthracene	56-55-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Chrysene	218-01-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg		<0.5	<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		<0.5	<0.5	<0.5	<0.5	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg		0.6	0.6	0.6	0.6	0.6
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg		1.2	1.2	1.2	1.2	1.2
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	----

Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH133_0.8_220125	SOP_BH134_0.5_220125	SOP_BH134_2.0_220125	SOP_BH135_0.5_220125	SOP_BH135_0.8_220125
				Sampling date / time	25-Jan-2022 00:00	25-Jan-2022 00:00	25-Jan-2022 00:00	25-Jan-2022 00:00	25-Jan-2022 00:00
					ES2202692-021	ES2202692-022	ES2202692-023	ES2202692-024	ES2202692-025
					Result	Result	Result	Result	Result
EP075A: Phenolic Compounds - Continued									
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	----	<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**	----

Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH133_0.8_220125	SOP_BH134_0.5_220125	SOP_BH134_2.0_220125	SOP_BH135_0.5_220125	SOP_BH135_0.8_220125
				Sampling date / time	25-Jan-2022 00:00	25-Jan-2022 00:00	25-Jan-2022 00:00	25-Jan-2022 00:00	25-Jan-2022 00:00
					ES2202692-021	ES2202692-022	ES2202692-023	ES2202692-024	ES2202692-025
					Result	Result	Result	Result	Result
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	----
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	----

Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH133_0.8_220125	SOP_BH134_0.5_220125	SOP_BH134_2.0_220125	SOP_BH135_0.5_220125	SOP_BH135_0.8_220125
				Sampling date / time	25-Jan-2022 00:00	25-Jan-2022 00:00	25-Jan-2022 00:00	25-Jan-2022 00:00	25-Jan-2022 00:00
					ES2202692-021	ES2202692-022	ES2202692-023	ES2202692-024	ES2202692-025
					Result	Result	Result	Result	Result
EP075E: Nitroaromatics and Ketones - Continued									
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	----
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	----

Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH133_0.8_220125	SOP_BH134_0.5_220125	SOP_BH134_2.0_220125	SOP_BH135_0.5_220125	SOP_BH135_0.8_220125
				Sampling date / time	25-Jan-2022 00:00	25-Jan-2022 00:00	25-Jan-2022 00:00	25-Jan-2022 00:00	25-Jan-2022 00:00
					ES2202692-021	ES2202692-022	ES2202692-023	ES2202692-024	ES2202692-025
					Result	Result	Result	Result	Result
EP075I: Organochlorine Pesticides - Continued									
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	<100	<100	<100	<100
C29 - C36 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
^ **C10 - C36 Fraction (sum)**	----	50	mg/kg		<50	<50	<50	<50	<50
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
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		<100	<100	<100	<100	<100
>C34 - C40 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
^ **>C10 - C40 Fraction (sum)**	----	50	mg/kg		<50	<50	<50	<50	<50

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	SOP_BH133_0.8_220125	SOP_BH134_0.5_220125	SOP_BH134_2.0_220125	SOP_BH135_0.5_220125	SOP_BH135_0.8_220125
				Sampling date / time	25-Jan-2022 00:00	25-Jan-2022 00:00	25-Jan-2022 00:00	25-Jan-2022 00:00	25-Jan-2022 00:00
Compound	CAS Number	LOR	Unit		ES2202692-021	ES2202692-022	ES2202692-023	ES2202692-024	ES2202692-025
					Result	Result	Result	Result	Result
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions - Continued									
^ >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	----	----	----
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									

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	SOP_BH133_0.8_220125	SOP_BH134_0.5_220125	SOP_BH134_2.0_220125	SOP_BH135_0.5_220125	SOP_BH135_0.8_220125
			Sampling date / time	25-Jan-2022 00:00	25-Jan-2022 00:00	25-Jan-2022 00:00	25-Jan-2022 00:00	25-Jan-2022 00:00
Compound	CAS Number	LOR	Unit	ES2202692-021	ES2202692-022	ES2202692-023	ES2202692-024	ES2202692-025
				Result	Result	Result	Result	Result
EP231P: PFAS Sums - Continued								
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	%	91.1	91.2	84.4	114	94.7
EP068S: Organochlorine Pesticide Surrogate								
Dibromo-DDE	21655-73-2	0.05	%	87.9	90.5	87.8	113	90.6
EP068T: Organophosphorus Pesticide Surrogate								
DEF	78-48-8	0.05	%	102	99.0	80.6	61.8	55.6
EP074S: VOC Surrogates								
1.2-Dichloroethane-D4	17060-07-0	0.5	%	----	80.1	----	105	----
Toluene-D8	2037-26-5	0.5	%	----	81.5	----	92.4	----
4-Bromofluorobenzene	460-00-4	0.5	%	----	81.2	----	96.9	----
EP075(SIM)S: Phenolic Compound Surrogates								
Phenol-d6	13127-88-3	0.5	%	82.1	83.5	84.0	85.2	84.5
2-Chlorophenol-D4	93951-73-6	0.5	%	84.3	85.8	86.0	87.6	86.3
2.4.6-Tribromophenol	118-79-6	0.5	%	79.4	79.2	76.1	75.8	75.4
EP075(SIM)T: PAH Surrogates								
2-Fluorobiphenyl	321-60-8	0.5	%	84.7	85.6	86.0	88.6	87.4
Anthracene-d10	1719-06-8	0.5	%	94.0	98.4	97.7	99.8	97.7
4-Terphenyl-d14	1718-51-0	0.5	%	86.8	89.2	89.0	91.0	89.9
EP075S: Acid Extractable Surrogates								
2-Fluorophenol	367-12-4	0.5	%	----	103	----	107	----
Phenol-d6	13127-88-3	0.5	%	----	94.8	----	101	----
2-Chlorophenol-D4	93951-73-6	0.5	%	----	94.8	----	96.4	----
2.4.6-Tribromophenol	118-79-6	0.5	%	----	96.3	----	100.0	----
EP075T: Base/Neutral Extractable Surrogates								
Nitrobenzene-D5	4165-60-0	0.5	%	----	99.1	----	103	----
1.2-Dichlorobenzene-D4	2199-69-1	0.5	%	----	79.2	----	81.5	----
2-Fluorobiphenyl	321-60-8	0.5	%	----	91.3	----	104	----
Anthracene-d10	1719-06-8	0.5	%	----	111	----	110	----
4-Terphenyl-d14	1718-51-0	0.5	%	----	94.3	----	99.3	----
EP080S: TPH(V)/BTEX Surrogates								

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	SOP_BH133_0.8_220125	SOP_BH134_0.5_220125	SOP_BH134_2.0_220125	SOP_BH135_0.5_220125	SOP_BH135_0.8_220125
				Sampling date / time	25-Jan-2022 00:00	25-Jan-2022 00:00	25-Jan-2022 00:00	25-Jan-2022 00:00	25-Jan-2022 00:00
Compound	CAS Number	LOR	Unit		ES2202692-021	ES2202692-022	ES2202692-023	ES2202692-024	ES2202692-025
					Result	Result	Result	Result	Result
EP080S: TPH(V)/BTEX Surrogates - Continued									
1.2-Dichloroethane-D4	17060-07-0	0.2	%		80.0	78.3	96.0	103	81.8
Toluene-D8	2037-26-5	0.2	%		85.8	77.7	89.7	87.2	98.6
4-Bromofluorobenzene	460-00-4	0.2	%		80.4	76.2	85.5	91.7	97.0
EP231S: PFAS Surrogate									
13C4-PFOS	----	0.0002	%		----	81.0	----	----	----
13C8-PFOA	----	0.0002	%		----	108	----	----	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	SOP_BH136_0.2_220125	SOP_BH137_0.2_220125	SOP_BH138_0.2_220125	SOP_BH139_1.2_220125	SOP_BH139_2.0_220125
			Sampling date / time	25-Jan-2022 00:00	25-Jan-2022 00:00	25-Jan-2022 00:00	24-Jan-2022 00:00	25-Jan-2022 00:00
Compound	CAS Number	LOR	Unit	ES2202692-026	ES2202692-027	ES2202692-028	ES2202692-029	ES2202692-030
				Result	Result	Result	Result	Result
EA002: pH 1:5 (Soils)								
pH Value	----	0.1	pH Unit	----	----	----	5.1	----
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	----	1.0	%	18.1	18.1	19.2	23.6	8.4
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	396	459	515	377	----
APPROVED IDENTIFIER:	----	-	--	A. SMYLIE	A. SMYLIE	A. SMYLIE	A. SMYLIE	----
ED007: Exchangeable Cations								
Exchangeable Calcium	----	0.1	meq/100g	----	----	----	3.9	----
Exchangeable Magnesium	----	0.1	meq/100g	----	----	----	4.1	----
Exchangeable Potassium	----	0.1	meq/100g	----	----	----	0.3	----
Exchangeable Sodium	----	0.1	meq/100g	----	----	----	1.3	----
Cation Exchange Capacity	----	0.1	meq/100g	----	----	----	11.0	----
Exchangeable Sodium Percent	----	0.1	%	----	----	----	13.6	----
EG005(ED093)T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	5	6	6	10	10
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	<1	<1
Chromium	7440-47-3	2	mg/kg	9	10	12	16	10
Copper	7440-50-8	5	mg/kg	31	36	32	26	44
Lead	7439-92-1	5	mg/kg	18	17	23	17	17
Nickel	7440-02-0	2	mg/kg	18	15	26	4	8
Zinc	7440-66-6	5	mg/kg	51	63	111	20	37
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	<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	<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

Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH136_0.2_220125	SOP_BH137_0.2_220125	SOP_BH138_0.2_220125	SOP_BH139_1.2_220125	SOP_BH139_2.0_220125
				Sampling date / time	25-Jan-2022 00:00	25-Jan-2022 00:00	25-Jan-2022 00:00	24-Jan-2022 00:00	25-Jan-2022 00:00
					ES2202692-026	ES2202692-027	ES2202692-028	ES2202692-029	ES2202692-030
					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	<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		**0.10**	<0.05	**0.06**	<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		**0.06**	<0.05	**0.13**	<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		**0.16**	<0.05	**0.19**	<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

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	SOP_BH136_0.2_220125	SOP_BH137_0.2_220125	SOP_BH138_0.2_220125	SOP_BH139_1.2_220125	SOP_BH139_2.0_220125
				Sampling date / time	25-Jan-2022 00:00	25-Jan-2022 00:00	25-Jan-2022 00:00	24-Jan-2022 00:00	25-Jan-2022 00:00
Compound	CAS Number	LOR	Unit		ES2202692-026	ES2202692-027	ES2202692-028	ES2202692-029	ES2202692-030
					Result	Result	Result	Result	Result
EP068B: Organophosphorus Pesticides (OP) - Continued									
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									
Benzene	71-43-2	0.2	mg/kg		<0.2	<0.2	<0.2	----	<0.2
Toluene	108-88-3	0.5	mg/kg		<0.5	<0.5	<0.5	----	<0.5
Ethylbenzene	100-41-4	0.5	mg/kg		<0.5	<0.5	<0.5	----	<0.5
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg		<0.5	<0.5	<0.5	----	<0.5
Styrene	100-42-5	0.5	mg/kg		<0.5	<0.5	<0.5	----	<0.5
ortho-Xylene	95-47-6	0.5	mg/kg		<0.5	<0.5	<0.5	----	<0.5
Isopropylbenzene	98-82-8	0.5	mg/kg		<0.5	<0.5	<0.5	----	<0.5
n-Propylbenzene	103-65-1	0.5	mg/kg		<0.5	<0.5	<0.5	----	<0.5
1.3.5-Trimethylbenzene	108-67-8	0.5	mg/kg		<0.5	<0.5	<0.5	----	<0.5
sec-Butylbenzene	135-98-8	0.5	mg/kg		<0.5	<0.5	<0.5	----	<0.5
1.2.4-Trimethylbenzene	95-63-6	0.5	mg/kg		<0.5	<0.5	<0.5	----	<0.5
tert-Butylbenzene	98-06-6	0.5	mg/kg		<0.5	<0.5	<0.5	----	<0.5
p-Isopropyltoluene	99-87-6	0.5	mg/kg		<0.5	<0.5	<0.5	----	<0.5
n-Butylbenzene	104-51-8	0.5	mg/kg		<0.5	<0.5	<0.5	----	<0.5
EP074B: Oxygenated Compounds									
Vinyl Acetate	108-05-4	5	mg/kg		<5	<5	<5	----	<5
2-Butanone (MEK)	78-93-3	5	mg/kg		<5	<5	<5	----	<5
4-Methyl-2-pentanone (MIBK)	108-10-1	5	mg/kg		<5	<5	<5	----	<5
2-Hexanone (MBK)	591-78-6	5	mg/kg		<5	<5	<5	----	<5
EP074C: Sulfonated Compounds									
Carbon disulfide	75-15-0	0.5	mg/kg		<0.5	<0.5	<0.5	----	<0.5
EP074D: Fumigants									
2.2-Dichloropropane	594-20-7	0.5	mg/kg		<0.5	<0.5	<0.5	----	<0.5
1.2-Dichloropropane	78-87-5	0.5	mg/kg		<0.5	<0.5	<0.5	----	<0.5

Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH136_0.2_220125	SOP_BH137_0.2_220125	SOP_BH138_0.2_220125	SOP_BH139_1.2_220125	SOP_BH139_2.0_220125
				Sampling date / time	25-Jan-2022 00:00	25-Jan-2022 00:00	25-Jan-2022 00:00	24-Jan-2022 00:00	25-Jan-2022 00:00
					ES2202692-026	ES2202692-027	ES2202692-028	ES2202692-029	ES2202692-030
					Result	Result	Result	Result	Result
EP074D: Fumigants - Continued									
cis-1.3-Dichloropropylene	10061-01-5	0.5	mg/kg		<0.5	<0.5	<0.5	----	<0.5
trans-1.3-Dichloropropylene	10061-02-6	0.5	mg/kg		<0.5	<0.5	<0.5	----	<0.5
1.2-Dibromoethane (EDB)	106-93-4	0.5	mg/kg		<0.5	<0.5	<0.5	----	<0.5
EP074E: Halogenated Aliphatic Compounds									
Dichlorodifluoromethane	75-71-8	5	mg/kg		<5	<5	<5	----	<5
Chloromethane	74-87-3	5	mg/kg		<5	<5	<5	----	<5
Vinyl chloride	75-01-4	5	mg/kg		<5	<5	<5	----	<5
Bromomethane	74-83-9	5	mg/kg		<5	<5	<5	----	<5
Chloroethane	75-00-3	5	mg/kg		<5	<5	<5	----	<5
Trichlorofluoromethane	75-69-4	5	mg/kg		<5	<5	<5	----	<5
1.1-Dichloroethene	75-35-4	0.5	mg/kg		<0.5	<0.5	<0.5	----	<0.5
Iodomethane	74-88-4	0.5	mg/kg		<0.5	<0.5	<0.5	----	<0.5
trans-1.2-Dichloroethene	156-60-5	0.5	mg/kg		<0.5	<0.5	<0.5	----	<0.5
1.1-Dichloroethane	75-34-3	0.5	mg/kg		<0.5	<0.5	<0.5	----	<0.5
cis-1.2-Dichloroethene	156-59-2	0.5	mg/kg		<0.5	<0.5	<0.5	----	<0.5
1.1.1-Trichloroethane	71-55-6	0.5	mg/kg		<0.5	<0.5	<0.5	----	<0.5
1.1-Dichloropropylene	563-58-6	0.5	mg/kg		<0.5	<0.5	<0.5	----	<0.5
Carbon Tetrachloride	56-23-5	0.5	mg/kg		<0.5	<0.5	<0.5	----	<0.5
1.2-Dichloroethane	107-06-2	0.5	mg/kg		<0.5	<0.5	<0.5	----	<0.5
Trichloroethene	79-01-6	0.5	mg/kg		<0.5	<0.5	<0.5	----	<0.5
Dibromomethane	74-95-3	0.5	mg/kg		<0.5	<0.5	<0.5	----	<0.5
1.1.2-Trichloroethane	79-00-5	0.5	mg/kg		<0.5	<0.5	<0.5	----	<0.5
1.3-Dichloropropane	142-28-9	0.5	mg/kg		<0.5	<0.5	<0.5	----	<0.5
Tetrachloroethene	127-18-4	0.5	mg/kg		<0.5	<0.5	<0.5	----	<0.5
1.1.1.2-Tetrachloroethane	630-20-6	0.5	mg/kg		<0.5	<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	----	<0.5
cis-1.4-Dichloro-2-butene	1476-11-5	0.5	mg/kg		<0.5	<0.5	<0.5	----	<0.5
1.1.2.2-Tetrachloroethane	79-34-5	0.5	mg/kg		<0.5	<0.5	<0.5	----	<0.5
1.2.3-Trichloropropane	96-18-4	0.5	mg/kg		<0.5	<0.5	<0.5	----	<0.5
Pentachloroethane	76-01-7	0.5	mg/kg		<0.5	<0.5	<0.5	----	<0.5
1.2-Dibromo-3-chloropropane	96-12-8	0.5	mg/kg		<0.5	<0.5	<0.5	----	<0.5
EP074F: Halogenated Aromatic Compounds									
Chlorobenzene	108-90-7	0.5	mg/kg		<0.5	<0.5	<0.5	----	<0.5
Bromobenzene	108-86-1	0.5	mg/kg		<0.5	<0.5	<0.5	----	<0.5

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	SOP_BH136_0.2_220125	SOP_BH137_0.2_220125	SOP_BH138_0.2_220125	SOP_BH139_1.2_220125	SOP_BH139_2.0_220125
				Sampling date / time	25-Jan-2022 00:00	25-Jan-2022 00:00	25-Jan-2022 00:00	24-Jan-2022 00:00	25-Jan-2022 00:00
Compound	CAS Number	LOR	Unit		ES2202692-026	ES2202692-027	ES2202692-028	ES2202692-029	ES2202692-030
					Result	Result	Result	Result	Result
EP074F: Halogenated Aromatic Compounds - Continued									
2-Chlorotoluene	95-49-8	0.5	mg/kg		<0.5	<0.5	<0.5	----	<0.5
4-Chlorotoluene	106-43-4	0.5	mg/kg		<0.5	<0.5	<0.5	----	<0.5
1.2.3-Trichlorobenzene	87-61-6	0.5	mg/kg		<0.5	<0.5	<0.5	----	<0.5
EP074G: Trihalomethanes									
Chloroform	67-66-3	0.5	mg/kg		<0.5	<0.5	<0.5	----	<0.5
Bromodichloromethane	75-27-4	0.5	mg/kg		<0.5	<0.5	<0.5	----	<0.5
Dibromochloromethane	124-48-1	0.5	mg/kg		<0.5	<0.5	<0.5	----	<0.5
Bromoform	75-25-2	0.5	mg/kg		<0.5	<0.5	<0.5	----	<0.5
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		<0.5	<0.5	<0.5	<0.5	<0.5
Anthracene	120-12-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Fluoranthene	206-44-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Pyrene	129-00-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benz(a)anthracene	56-55-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Chrysene	218-01-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg		<0.5	<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		<0.5	<0.5	<0.5	<0.5	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg		**0.6**	**0.6**	**0.6**	**0.6**	**0.6**
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg		**1.2**	**1.2**	**1.2**	**1.2**	**1.2**
EP075A: 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	0.5	mg/kg		<0.5	<0.5	<0.5	----	<0.5

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	SOP_BH136_0.2_220125	SOP_BH137_0.2_220125	SOP_BH138_0.2_220125	SOP_BH139_1.2_220125	SOP_BH139_2.0_220125
				Sampling date / time	25-Jan-2022 00:00	25-Jan-2022 00:00	25-Jan-2022 00:00	24-Jan-2022 00:00	25-Jan-2022 00:00
Compound	CAS Number	LOR	Unit		ES2202692-026	ES2202692-027	ES2202692-028	ES2202692-029	ES2202692-030
					Result	Result	Result	Result	Result
EP075A: Phenolic Compounds - Continued									
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
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	1	mg/kg		<1	<1	<1	----	<1
EP075B: Polynuclear Aromatic Hydrocarbons									
Naphthalene	91-20-3	0.5	mg/kg		<0.5	<0.5	<0.5	----	<0.5
2-Methylnaphthalene	91-57-6	0.5	mg/kg		<0.5	<0.5	<0.5	----	<0.5
2-Chloronaphthalene	91-58-7	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		<0.5	<0.5	<0.5	----	<0.5
N-2-Fluorenyl Acetamide	53-96-3	0.5	mg/kg		<0.5	<0.5	<0.5	----	<0.5
Benz(a)anthracene	56-55-3	0.5	mg/kg		<0.5	<0.5	<0.5	----	<0.5
Chrysene	218-01-9	0.5	mg/kg		<0.5	<0.5	<0.5	----	<0.5
Benzo(b+j) & Benzo(k)fluoranthene	205-99-2 207-08-9	1	mg/kg		<1	<1	<1	----	<1
7.12-Dimethylbenz(a)anthracene	57-97-6	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
3-Methylcholanthrene	56-49-5	0.5	mg/kg		<0.5	<0.5	<0.5	----	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg		<0.5	<0.5	<0.5	----	<0.5
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg		<0.5	<0.5	<0.5	----	<0.5
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg		<0.5	<0.5	<0.5	----	<0.5
^ Sum of PAHs	----	0.5	mg/kg		<0.5	<0.5	<0.5	----	<0.5
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg		<0.5	<0.5	<0.5	----	<0.5
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg		0.6	0.6	0.6	----	0.6
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg		1.2	1.2	1.2	----	1.2

Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH136_0.2_220125	SOP_BH137_0.2_220125	SOP_BH138_0.2_220125	SOP_BH139_1.2_220125	SOP_BH139_2.0_220125
				Sampling date / time	25-Jan-2022 00:00	25-Jan-2022 00:00	25-Jan-2022 00:00	24-Jan-2022 00:00	25-Jan-2022 00:00
					ES2202692-026	ES2202692-027	ES2202692-028	ES2202692-029	ES2202692-030
					Result	Result	Result	Result	Result
EP075C: Phthalate Esters									
Dimethyl phthalate	131-11-3	0.5	mg/kg		<0.5	<0.5	<0.5	----	<0.5
Diethyl phthalate	84-66-2	0.5	mg/kg		<0.5	<0.5	<0.5	----	<0.5
Di-n-butyl phthalate	84-74-2	0.5	mg/kg		<0.5	<0.5	<0.5	----	<0.5
Butyl benzyl phthalate	85-68-7	0.5	mg/kg		<0.5	<0.5	<0.5	----	<0.5
bis(2-ethylhexyl) phthalate	117-81-7	5.0	mg/kg		<5.0	<5.0	<5.0	----	<5.0
Di-n-octylphthalate	117-84-0	0.5	mg/kg		<0.5	<0.5	<0.5	----	<0.5
EP075D: Nitrosamines									
N-Nitrosomethylethylamine	10595-95-6	0.5	mg/kg		<0.5	<0.5	<0.5	----	<0.5
N-Nitrosodiethylamine	55-18-5	0.5	mg/kg		<0.5	<0.5	<0.5	----	<0.5
N-Nitrosopyrrolidine	930-55-2	1.0	mg/kg		<1.0	<1.0	<1.0	----	<1.0
N-Nitrosomorpholine	59-89-2	0.5	mg/kg		<0.5	<0.5	<0.5	----	<0.5
N-Nitrosodi-n-propylamine	621-64-7	0.5	mg/kg		<0.5	<0.5	<0.5	----	<0.5
N-Nitrosopiperidine	100-75-4	0.5	mg/kg		<0.5	<0.5	<0.5	----	<0.5
N-Nitrosodibutylamine	924-16-3	0.5	mg/kg		<0.5	<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	----	<1.0
Methapyrilene	91-80-5	0.5	mg/kg		<0.5	<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	----	<0.5
Acetophenone	98-86-2	0.5	mg/kg		<0.5	<0.5	<0.5	----	<0.5
Nitrobenzene	98-95-3	0.5	mg/kg		<0.5	<0.5	<0.5	----	<0.5
Isophorone	78-59-1	0.5	mg/kg		<0.5	<0.5	<0.5	----	<0.5
2.6-Dinitrotoluene	606-20-2	1.0	mg/kg		<1.0	<1.0	<1.0	----	<1.0
2.4-Dinitrotoluene	121-14-2	1.0	mg/kg		<1.0	<1.0	<1.0	----	<1.0
1-Naphthylamine	134-32-7	0.5	mg/kg		<0.5	<0.5	<0.5	----	<0.5
4-Nitroquinoline-N-oxide	56-57-5	0.5	mg/kg		<0.5	<0.5	<0.5	----	<0.5
5-Nitro-o-toluidine	99-55-8	0.5	mg/kg		<0.5	<0.5	<0.5	----	<0.5
Azobenzene	103-33-3	1	mg/kg		<1	<1	<1	----	<1
1.3.5-Trinitrobenzene	99-35-4	0.5	mg/kg		<0.5	<0.5	<0.5	----	<0.5
Phenacetin	62-44-2	0.5	mg/kg		<0.5	<0.5	<0.5	----	<0.5
4-Aminobiphenyl	92-67-1	0.5	mg/kg		<0.5	<0.5	<0.5	----	<0.5
Pentachloronitrobenzene	82-68-8	0.5	mg/kg		<0.5	<0.5	<0.5	----	<0.5
Pronamide	23950-58-5	0.5	mg/kg		<0.5	<0.5	<0.5	----	<0.5
Dimethylaminoazobenzene	60-11-7	0.5	mg/kg		<0.5	<0.5	<0.5	----	<0.5

Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH136_0.2_220125	SOP_BH137_0.2_220125	SOP_BH138_0.2_220125	SOP_BH139_1.2_220125	SOP_BH139_2.0_220125
				Sampling date / time	25-Jan-2022 00:00	25-Jan-2022 00:00	25-Jan-2022 00:00	24-Jan-2022 00:00	25-Jan-2022 00:00
					ES2202692-026	ES2202692-027	ES2202692-028	ES2202692-029	ES2202692-030
					Result	Result	Result	Result	Result
EP075E: Nitroaromatics and Ketones - Continued									
Chlorobenzilate	510-15-6	0.5	mg/kg		<0.5	<0.5	<0.5	----	<0.5
EP075F: Haloethers									
Bis(2-chloroethyl) ether	111-44-4	0.5	mg/kg		<0.5	<0.5	<0.5	----	<0.5
Bis(2-chloroethoxy) methane	111-91-1	0.5	mg/kg		<0.5	<0.5	<0.5	----	<0.5
4-Chlorophenyl phenyl ether	7005-72-3	0.5	mg/kg		<0.5	<0.5	<0.5	----	<0.5
4-Bromophenyl phenyl ether	101-55-3	0.5	mg/kg		<0.5	<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	----	<0.5
1.4-Dichlorobenzene	106-46-7	0.5	mg/kg		<0.5	<0.5	<0.5	----	<0.5
1.2-Dichlorobenzene	95-50-1	0.5	mg/kg		<0.5	<0.5	<0.5	----	<0.5
Hexachloroethane	67-72-1	0.5	mg/kg		<0.5	<0.5	<0.5	----	<0.5
1.2.4-Trichlorobenzene	120-82-1	0.5	mg/kg		<0.5	<0.5	<0.5	----	<0.5
Hexachloropropylene	1888-71-7	0.5	mg/kg		<0.5	<0.5	<0.5	----	<0.5
Hexachlorobutadiene	87-68-3	0.5	mg/kg		<0.5	<0.5	<0.5	----	<0.5
Hexachlorocyclopentadiene	77-47-4	2.5	mg/kg		<2.5	<2.5	<2.5	----	<2.5
Pentachlorobenzene	608-93-5	0.5	mg/kg		<0.5	<0.5	<0.5	----	<0.5
Hexachlorobenzene (HCB)	118-74-1	1.0	mg/kg		<1.0	<1.0	<1.0	----	<1.0
EP075H: Anilines and Benzidines									
Aniline	62-53-3	0.5	mg/kg		<0.5	<0.5	<0.5	----	<0.5
4-Chloroaniline	106-47-8	0.5	mg/kg		<0.5	<0.5	<0.5	----	<0.5
2-Nitroaniline	88-74-4	1.0	mg/kg		<1.0	<1.0	<1.0	----	<1.0
3-Nitroaniline	99-09-2	1.0	mg/kg		<1.0	<1.0	<1.0	----	<1.0
Dibenzofuran	132-64-9	0.5	mg/kg		<0.5	<0.5	<0.5	----	<0.5
4-Nitroaniline	100-01-6	0.5	mg/kg		<0.5	<0.5	<0.5	----	<0.5
Carbazole	86-74-8	0.5	mg/kg		<0.5	<0.5	<0.5	----	<0.5
3.3`-Dichlorobenzidine	91-94-1	0.5	mg/kg		<0.5	<0.5	<0.5	----	<0.5
EP075I: Organochlorine Pesticides									
alpha-BHC	319-84-6	0.5	mg/kg		<0.5	<0.5	<0.5	----	<0.5
beta-BHC	319-85-7	0.5	mg/kg		<0.5	<0.5	<0.5	----	<0.5
gamma-BHC	58-89-9	0.5	mg/kg		<0.5	<0.5	<0.5	----	<0.5
delta-BHC	319-86-8	0.5	mg/kg		<0.5	<0.5	<0.5	----	<0.5
Heptachlor	76-44-8	0.5	mg/kg		<0.5	<0.5	<0.5	----	<0.5
Aldrin	309-00-2	0.5	mg/kg		<0.5	<0.5	<0.5	----	<0.5
Heptachlor epoxide	1024-57-3	0.5	mg/kg		<0.5	<0.5	<0.5	----	<0.5

Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH136_0.2_220125	SOP_BH137_0.2_220125	SOP_BH138_0.2_220125	SOP_BH139_1.2_220125	SOP_BH139_2.0_220125
				Sampling date / time	25-Jan-2022 00:00	25-Jan-2022 00:00	25-Jan-2022 00:00	24-Jan-2022 00:00	25-Jan-2022 00:00
					ES2202692-026	ES2202692-027	ES2202692-028	ES2202692-029	ES2202692-030
					Result	Result	Result	Result	Result
EP075I: Organochlorine Pesticides - Continued									
alpha-Endosulfan	959-98-8	0.5	mg/kg		<0.5	<0.5	<0.5	----	<0.5
4.4`-DDE	72-55-9	0.5	mg/kg		<0.5	<0.5	<0.5	----	<0.5
Dieldrin	60-57-1	0.5	mg/kg		<0.5	<0.5	<0.5	----	<0.5
Endrin	72-20-8	0.5	mg/kg		<0.5	<0.5	<0.5	----	<0.5
beta-Endosulfan	33213-65-9	0.5	mg/kg		<0.5	<0.5	<0.5	----	<0.5
4.4`-DDD	72-54-8	0.5	mg/kg		<0.5	<0.5	<0.5	----	<0.5
Endosulfan sulfate	1031-07-8	0.5	mg/kg		<0.5	<0.5	<0.5	----	<0.5
4.4`-DDT	50-29-3	1.0	mg/kg		<1.0	<1.0	<1.0	----	<1.0
EP075J: Organophosphorus Pesticides									
Dichlorvos	62-73-7	0.5	mg/kg		<0.5	<0.5	<0.5	----	<0.5
Dimethoate	60-51-5	0.5	mg/kg		<0.5	<0.5	<0.5	----	<0.5
Diazinon	333-41-5	0.5	mg/kg		<0.5	<0.5	<0.5	----	<0.5
Chlorpyrifos-methyl	5598-13-0	0.5	mg/kg		<0.5	<0.5	<0.5	----	<0.5
Malathion	121-75-5	0.5	mg/kg		<0.5	<0.5	<0.5	----	<0.5
Fenthion	55-38-9	0.5	mg/kg		<0.5	<0.5	<0.5	----	<0.5
Chlorpyrifos	2921-88-2	0.5	mg/kg		<0.5	<0.5	<0.5	----	<0.5
Pirimphos-ethyl	23505-41-1	0.5	mg/kg		<0.5	<0.5	<0.5	----	<0.5
Chlorfenvinphos	470-90-6	0.5	mg/kg		<0.5	<0.5	<0.5	----	<0.5
Prothiofos	34643-46-4	0.5	mg/kg		<0.5	<0.5	<0.5	----	<0.5
Ethion	563-12-2	0.5	mg/kg		<0.5	<0.5	<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	<50	<50
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		<100	<100	<100	<100	<100
>C34 - C40 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
^ **>C10 - C40 Fraction (sum)**	----	50	mg/kg		<50	<50	<50	<50	<50

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	SOP_BH136_0.2_220125	SOP_BH137_0.2_220125	SOP_BH138_0.2_220125	SOP_BH139_1.2_220125	SOP_BH139_2.0_220125
				Sampling date / time	25-Jan-2022 00:00	25-Jan-2022 00:00	25-Jan-2022 00:00	24-Jan-2022 00:00	25-Jan-2022 00:00
Compound	CAS Number	LOR	Unit		ES2202692-026	ES2202692-027	ES2202692-028	ES2202692-029	ES2202692-030
					Result	Result	Result	Result	Result
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions - Continued									
^ >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	----
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									

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	SOP_BH136_0.2_220125	SOP_BH137_0.2_220125	SOP_BH138_0.2_220125	SOP_BH139_1.2_220125	SOP_BH139_2.0_220125
			Sampling date / time	25-Jan-2022 00:00	25-Jan-2022 00:00	25-Jan-2022 00:00	24-Jan-2022 00:00	25-Jan-2022 00:00
Compound	CAS Number	LOR	Unit	ES2202692-026	ES2202692-027	ES2202692-028	ES2202692-029	ES2202692-030
				Result	Result	Result	Result	Result
EP231P: PFAS Sums - Continued								
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	%	125	114	110	83.4	112
EP068S: Organochlorine Pesticide Surrogate								
Dibromo-DDE	21655-73-2	0.05	%	104	111	97.9	80.0	109
EP068T: Organophosphorus Pesticide Surrogate								
DEF	78-48-8	0.05	%	87.4	104	95.7	72.3	71.0
EP074S: VOC Surrogates								
1.2-Dichloroethane-D4	17060-07-0	0.5	%	89.4	89.9	93.2	----	91.0
Toluene-D8	2037-26-5	0.5	%	82.2	82.3	85.7	----	82.7
4-Bromofluorobenzene	460-00-4	0.5	%	90.4	89.5	87.6	----	84.3
EP075(SIM)S: Phenolic Compound Surrogates								
Phenol-d6	13127-88-3	0.5	%	81.2	84.0	84.4	84.2	90.2
2-Chlorophenol-D4	93951-73-6	0.5	%	83.5	85.8	86.7	86.4	93.0
2.4.6-Tribromophenol	118-79-6	0.5	%	69.6	69.6	75.1	74.4	80.7
EP075(SIM)T: PAH Surrogates								
2-Fluorobiphenyl	321-60-8	0.5	%	84.6	86.6	88.0	86.1	93.5
Anthracene-d10	1719-06-8	0.5	%	95.9	98.0	98.1	98.1	106
4-Terphenyl-d14	1718-51-0	0.5	%	88.2	88.9	91.4	90.1	96.3
EP075S: Acid Extractable Surrogates								
2-Fluorophenol	367-12-4	0.5	%	109	99.8	102	----	108
Phenol-d6	13127-88-3	0.5	%	102	92.8	96.0	----	102
2-Chlorophenol-D4	93951-73-6	0.5	%	98.7	94.5	88.9	----	98.4
2.4.6-Tribromophenol	118-79-6	0.5	%	80.6	85.8	87.4	----	80.7
EP075T: Base/Neutral Extractable Surrogates								
Nitrobenzene-D5	4165-60-0	0.5	%	98.0	100	97.0	----	108
1.2-Dichlorobenzene-D4	2199-69-1	0.5	%	89.2	87.9	83.8	----	87.2
2-Fluorobiphenyl	321-60-8	0.5	%	103	97.6	106	----	105
Anthracene-d10	1719-06-8	0.5	%	116	113	112	----	109
4-Terphenyl-d14	1718-51-0	0.5	%	101	93.3	94.4	----	96.6
EP080S: TPH(V)/BTEX Surrogates								

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	SOP_BH136_0.2_220125	SOP_BH137_0.2_220125	SOP_BH138_0.2_220125	SOP_BH139_1.2_220125	SOP_BH139_2.0_220125
				Sampling date / time	25-Jan-2022 00:00	25-Jan-2022 00:00	25-Jan-2022 00:00	24-Jan-2022 00:00	25-Jan-2022 00:00
Compound	CAS Number	LOR	Unit		ES2202692-026	ES2202692-027	ES2202692-028	ES2202692-029	ES2202692-030
					Result	Result	Result	Result	Result
EP080S: TPH(V)/BTEX Surrogates - Continued									
1.2-Dichloroethane-D4	17060-07-0	0.2	%		79.0	77.4	91.2	74.0	89.1
Toluene-D8	2037-26-5	0.2	%		76.1	78.1	81.2	76.2	78.3
4-Bromofluorobenzene	460-00-4	0.2	%		75.2	75.5	84.0	83.7	80.9
EP231S: PFAS Surrogate									
13C4-PFOS	----	0.0002	%		----	----	----	100	----
13C8-PFOA	----	0.0002	%		----	----	----	102	----

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)			Sample ID	RIN06_220124	RIN07_220125	----	----	----
			Sampling date / time	22-Jan-2022 00:00	22-Jan-2022 00:00	----	----	----
Compound	CAS Number	LOR	Unit	ES2202692-031	ES2202692-032	--------	--------	--------
				Result	Result	----	----	----
EG020T: Total 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	<0.001	<0.001	----	----	----
Lead	7439-92-1	0.001	mg/L	<0.001	<0.001	----	----	----
Zinc	7440-66-6	0.005	mg/L	<0.005	<0.005	----	----	----
EG035T: Total Recoverable 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	RIN06_220124	RIN07_220125	----	----	----
			Sampling date / time	22-Jan-2022 00:00	22-Jan-2022 00:00	----	----	----
Compound	CAS Number	LOR	Unit	ES2202692-031	ES2202692-032	--------	--------	--------
				Result	Result	----	----	----
EP068A: Organochlorine Pesticides (OC) - Continued								
^ Sum of DDD + DDE + DDT	72-54-8/72-55-9/50-2	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)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	----	----	----

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)			Sample ID	RIN06_220124	RIN07_220125	----	----	----
			Sampling date / time	22-Jan-2022 00:00	22-Jan-2022 00:00	----	----	----
Compound	CAS Number	LOR	Unit	ES2202692-031	ES2202692-032	--------	--------	--------
				Result	Result	----	----	----
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued								
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	----	----	----
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	----	----	----
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	20	µg/L	<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	----	----	----
^ >C10 - C16 Fraction minus Naphthalene (F2)	----	100	µg/L	<100	<100	----	----	----
EP080: BTEXN								
Benzene	71-43-2	1	µg/L	<1	<1	----	----	----
Toluene	108-88-3	2	µg/L	<2	<2	----	----	----
Ethylbenzene	100-41-4	2	µg/L	<2	<2	----	----	----
meta- & para-Xylene	108-38-3 106-42-3	2	µg/L	<2	<2	----	----	----
ortho-Xylene	95-47-6	2	µg/L	<2	<2	----	----	----
^ Total Xylenes	----	2	µg/L	<2	<2	----	----	----
^ Sum of BTEX	----	1	µg/L	<1	<1	----	----	----
Naphthalene	91-20-3	5	µg/L	<5	<5	----	----	----
EP066S: PCB Surrogate								
Decachlorobiphenyl	2051-24-3	1	%	**89.4**	**91.4**	----	----	----

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	RIN06_220124	RIN07_220125	----	----	----
				Sampling date / time	22-Jan-2022 00:00	22-Jan-2022 00:00	----	----	----
Compound	CAS Number	LOR	Unit		ES2202692-031	ES2202692-032	--------	--------	--------
					Result	Result	----	----	----
EP068S: Organochlorine Pesticide Surrogate									
Dibromo-DDE	21655-73-2	0.5	%		91.0	90.0	----	----	----
EP068T: Organophosphorus Pesticide Surrogate									
DEF	78-48-8	0.5	%		83.3	92.8	----	----	----
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	1.0	%		18.1	16.6	----	----	----
2-Chlorophenol-D4	93951-73-6	1.0	%		41.6	45.0	----	----	----
2.4.6-Tribromophenol	118-79-6	1.0	%		59.3	54.1	----	----	----
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	1.0	%		84.9	53.7	----	----	----
Anthracene-d10	1719-06-8	1.0	%		99.2	98.1	----	----	----
4-Terphenyl-d14	1718-51-0	1.0	%		92.9	99.4	----	----	----
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	2	%		99.7	97.1	----	----	----
Toluene-D8	2037-26-5	2	%		107	107	----	----	----
4-Bromofluorobenzene	460-00-4	2	%		96.2	96.3	----	----	----

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	SOP_BH128_0.9_220124 - 24-Jan-2022 00:00	Soil sample.
EA200: Description	SOP_BH129_0.5_220124 - 24-Jan-2022 00:00	Soil sample.
EA200: Description	SOP_BH130_0.4_220124 - 24-Jan-2022 00:00	Soil sample.
EA200: Description	SOP_BH131_1.0_220124 - 24-Jan-2022 00:00	Soil sample.
EA200: Description	SOP_BH122_1.0_220124 - 24-Jan-2022 00:00	Soil sample.
EA200: Description	SOP_BH123_1.0_220124 - 24-Jan-2022 00:00	Soil sample.
EA200: Description	SOP_BH140_1.0_220124 - 24-Jan-2022 00:00	Soil sample.
EA200: Description	SOP_BH141_0.4_220124 - 24-Jan-2022 00:00	Soil sample.
EA200: Description	SOP_BH132_1.0_220125 - 25-Jan-2022 00:00	Soil sample.
EA200: Description	SOP_BH133_0.3_220125 - 25-Jan-2022 00:00	Soil sample.
EA200: Description	SOP_BH134_0.5_220125 - 25-Jan-2022 00:00	Soil sample.
EA200: Description	SOP_BH135_0.5_220125 - 25-Jan-2022 00:00	Soil sample.
EA200: Description	SOP_BH136_0.2_220125 - 25-Jan-2022 00:00	Soil sample.
EA200: Description	SOP_BH137_0.2_220125 - 25-Jan-2022 00:00	Soil sample.
EA200: Description	SOP_BH138_0.2_220125 - 25-Jan-2022 00:00	Soil sample.
EA200: Description	SOP_BH139_1.2_220125 - 24-Jan-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
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

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

ALS Environmental

QUALITY CONTROL REPORT

Work Order	: **ES2202692**	Page	: 1 of 47
Client	: **ENVIRONMENTAL RESOURCES MANAGEMENT (ERM)**	Laboratory	: Environmental Division Sydney
Contact	: MS JESSICA LAWRENCE	Contact	: Customer Services ES
Address	: LEVEL 15 309 KENT STREET SYDNEY NSW AUSTRALIA 2000	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
Telephone	: +61 02 8584 8888	Telephone	: +61-2-8784 8555
Project	: 0628507 SOP	Date Samples Received	: 27-Jan-2022
Order number	: ----	Date Analysis Commenced	: 31-Jan-2022
C-O-C number	: ----	Issue Date	: 04-Feb-2022
Sampler	: ANTHONY RICHARD		
Site	: ----		
Quote number	: EN/114		
No. of samples received	: 32		
No. of samples analysed	: 32		

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

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

This Quality Control Report contains the following information:

- Laboratory Duplicate (DUP) Report; Relative Percentage Difference (RPD) and Acceptance Limits
- Method Blank (MB) and Laboratory Control Spike (LCS) Report; Recovery and Acceptance Limits
- Matrix Spike (MS) Report; Recovery and Acceptance Limits

Signatories

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

Signatories	*Position*	*Accreditation Category*
Alana Smylie	Asbestos Identifier	Newcastle - Asbestos, Mayfield West, NSW
Alex Rossi	Organic Chemist	Sydney Organics, Smithfield, NSW
Ankit Joshi	Inorganic Chemist	Sydney Inorganics, Smithfield, NSW
Dian Dao	Senior Chemist - Inorganics	Sydney Inorganics, Smithfield, NSW
Edwandy Fadjar	Organic Coordinator	Sydney Organics, Smithfield, NSW
Franco Lentini	LCMS Coordinator	Sydney Inorganics, 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.

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: 4148302)									
ES2202692-004	SOP_BH129_1.0_220124	EG005T: Cadmium	7440-43-9	1	mg/kg	<1	<1	0.0	No Limit
		EG005T: Chromium	7440-47-3	2	mg/kg	7	7	0.0	No Limit
		EG005T: Nickel	7440-02-0	2	mg/kg	3	2	0.0	No Limit
		EG005T: Arsenic	7440-38-2	5	mg/kg	9	6	38.1	No Limit
		EG005T: Copper	7440-50-8	5	mg/kg	27	28	0.0	No Limit
		EG005T: Lead	7439-92-1	5	mg/kg	17	20	18.0	No Limit
		EG005T: Zinc	7440-66-6	5	mg/kg	20	23	13.9	No Limit
ES2202692-012	SOP_BH123_1.0_220124	EG005T: Cadmium	7440-43-9	1	mg/kg	<1	<1	0.0	No Limit
		EG005T: Chromium	7440-47-3	2	mg/kg	7	6	15.2	No Limit
		EG005T: Nickel	7440-02-0	2	mg/kg	2	2	0.0	No Limit
		EG005T: Arsenic	7440-38-2	5	mg/kg	11	8	39.1	No Limit
		EG005T: Copper	7440-50-8	5	mg/kg	25	21	15.0	No Limit
		EG005T: Lead	7439-92-1	5	mg/kg	9	8	14.9	No Limit
		EG005T: Zinc	7440-66-6	5	mg/kg	15	14	9.9	No Limit
EG005(ED093)T: Total Metals by ICP-AES (QC Lot: 4148304)									
ES2202692-022	SOP_BH134_0.5_220125	EG005T: Cadmium	7440-43-9	1	mg/kg	<1	<1	0.0	No Limit
		EG005T: Chromium	7440-47-3	2	mg/kg	13	13	0.0	No Limit
		EG005T: Nickel	7440-02-0	2	mg/kg	8	7	0.0	No Limit
		EG005T: Arsenic	7440-38-2	5	mg/kg	9	8	0.0	No Limit
		EG005T: Copper	7440-50-8	5	mg/kg	27	22	17.1	No Limit
		EG005T: Lead	7439-92-1	5	mg/kg	29	35	17.9	No Limit
		EG005T: Zinc	7440-66-6	5	mg/kg	43	36	16.5	No Limit
EG005(ED093)T: Total Metals by ICP-AES (QC Lot: 4150331)									
ES2202958-043	Anonymous	EG005T: Cadmium	7440-43-9	1	mg/kg	<1	<1	0.0	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Acceptable RPD (%)*
EG005(ED093)T: Total Metals by ICP-AES (QC Lot: 4150331) - continued									
ES2202958-043	Anonymous	EG005T: Chromium	7440-47-3	2	mg/kg	10	11	9.8	No Limit
		EG005T: Nickel	7440-02-0	2	mg/kg	16	11	35.1	No Limit
		EG005T: Arsenic	7440-38-2	5	mg/kg	9	8	0.0	No Limit
		EG005T: Copper	7440-50-8	5	mg/kg	30	39	26.9	No Limit
		EG005T: Lead	7439-92-1	5	mg/kg	14	15	0.0	No Limit
		EG005T: Zinc	7440-66-6	5	mg/kg	62	49	22.9	0% - 50%
EP2200832-001	Anonymous	EG005T: Cadmium	7440-43-9	1	mg/kg	<1	<1	0.0	No Limit
		EG005T: Chromium	7440-47-3	2	mg/kg	56	# 74	27.7	0% - 20%
		EG005T: Nickel	7440-02-0	2	mg/kg	10	10	0.0	No Limit
		EG005T: Arsenic	7440-38-2	5	mg/kg	7	8	21.1	No Limit
		EG005T: Copper	7440-50-8	5	mg/kg	82	68	18.2	0% - 50%
		EG005T: Lead	7439-92-1	5	mg/kg	32	32	0.0	No Limit
		EG005T: Zinc	7440-66-6	5	mg/kg	442	468	5.6	0% - 20%
EA002: pH 1:5 (Soils) (QC Lot: 4148578)									
ES2202692-018	SOP_BH132_1.0_220125	EA002: pH Value	----	0.1	pH Unit	5.2	5.3	0.0	0% - 20%
EA002: pH 1:5 (Soils) (QC Lot: 4148784)									
ES2201615-001	Anonymous	EA002: pH Value	----	0.1	pH Unit	7.6	7.7	1.6	0% - 20%
ES2203182-004	Anonymous	EA002: pH Value	----	0.1	pH Unit	10.0	9.8	1.4	0% - 20%
EA055: Moisture Content (Dried @ 105-110°C) (QC Lot: 4146559)									
ES2202692-012	SOP_BH123_1.0_220124	EA055: Moisture Content	----	0.1	%	9.1	8.5	7.4	No Limit
EA055: Moisture Content (Dried @ 105-110°C) (QC Lot: 4148306)									
ES2202692-006	SOP_BH130_2.0_220124	EA055: Moisture Content	----	0.1	%	7.8	7.5	3.2	No Limit
ES2202692-018	SOP_BH132_1.0_220125	EA055: Moisture Content	----	0.1	%	20.0	21.7	8.2	0% - 20%
EA055: Moisture Content (Dried @ 105-110°C) (QC Lot: 4148307)									
ES2202692-028	SOP_BH138_0.2_220125	EA055: Moisture Content	----	0.1	%	19.2	20.2	5.0	0% - 20%
EA055: Moisture Content (Dried @ 105-110°C) (QC Lot: 4150340)									
ES2202692-002	SOP_BH128_5.0_220124	EA055: Moisture Content	----	0.1	%	4.9	4.9	0.0	No Limit
ES2202958-047	Anonymous	EA055: Moisture Content	----	0.1	%	18.0	14.8	19.6	0% - 50%
ED007: Exchangeable Cations (QC Lot: 4155053)									
ES2202692-018	SOP_BH132_1.0_220125	ED007: Exchangeable Sodium Percent	----	0.1	%	24.0	24.0	0.0	0% - 20%
		ED007: Exchangeable Calcium	----	0.1	meq/100g	0.3	0.3	0.0	No Limit
		ED007: Exchangeable Magnesium	----	0.1	meq/100g	2.3	2.3	0.0	0% - 20%
		ED007: Exchangeable Potassium	----	0.1	meq/100g	0.1	0.1	0.0	No Limit
		ED007: Exchangeable Sodium	----	0.1	meq/100g	0.9	0.9	0.0	No Limit
		ED007: Cation Exchange Capacity	----	0.1	meq/100g	5.1	5.1	0.0	0% - 20%
EG035T: Total Recoverable Mercury by FIMS (QC Lot: 4148303)									
ES2202692-004	SOP_BH129_1.0_220124	EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	0.0	No Limit
ES2202692-012	SOP_BH123_1.0_220124	EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	0.0	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Acceptable RPD (%)*
EG035T: Total Recoverable Mercury by FIMS (QC Lot: 4148305)									
ES2202692-022	SOP_BH134_0.5_220125	EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	0.0	No Limit
EG035T: Total Recoverable Mercury by FIMS (QC Lot: 4150332)									
EP2200832-001	Anonymous	EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	0.0	No Limit
ES2202854-001	Anonymous	EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	0.0	No Limit
EP066: Polychlorinated Biphenyls (PCB) (QC Lot: 4145649)									
ES2202692-011	SOP_BH122_2.0_220124	EP066: Total Polychlorinated biphenyls	----	0.1	mg/kg	<0.1	<0.1	0.0	No Limit
ES2202692-001	SOP_BH128_0.9_220124	EP066: Total Polychlorinated biphenyls	----	0.1	mg/kg	<0.1	<0.1	0.0	No Limit
EP066: Polychlorinated Biphenyls (PCB) (QC Lot: 4145657)									
ES2202692-022	SOP_BH134_0.5_220125	EP066: Total Polychlorinated biphenyls	----	0.1	mg/kg	<0.1	<0.1	0.0	No Limit
EP068A: Organochlorine Pesticides (OC) (QC Lot: 4145648)									
ES2202692-011	SOP_BH122_2.0_220124	EP068: alpha-BHC	319-84-6	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: beta-BHC	319-85-7	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: gamma-BHC	58-89-9	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: delta-BHC	319-86-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Heptachlor	76-44-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Aldrin	309-00-2	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Dieldrin	60-57-1	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: 4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Endrin	72-20-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: 4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: 4.4`-DDT	50-29-3	0.2	mg/kg	<0.2	<0.2	0.0	No Limit
		EP068: Methoxychlor	72-43-5	0.2	mg/kg	<0.2	<0.2	0.0	No Limit
ES2202692-001	SOP_BH128_0.9_220124	EP068: alpha-BHC	319-84-6	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: beta-BHC	319-85-7	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: gamma-BHC	58-89-9	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: delta-BHC	319-86-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Heptachlor	76-44-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Aldrin	309-00-2	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	<0.05	0.0	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Acceptable RPD (%)*
EP068A: Organochlorine Pesticides (OC) (QC Lot: 4145648) - continued									
ES2202692-001	SOP_BH128_0.9_220124	EP068: trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Dieldrin	60-57-1	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: 4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Endrin	72-20-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: 4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: 4.4`-DDT	50-29-3	0.2	mg/kg	<0.2	<0.2	0.0	No Limit
		EP068: Methoxychlor	72-43-5	0.2	mg/kg	<0.2	<0.2	0.0	No Limit
EP068A: Organochlorine Pesticides (OC) (QC Lot: 4145656)									
ES2202692-022	SOP_BH134_0.5_220125	EP068: alpha-BHC	319-84-6	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: beta-BHC	319-85-7	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: gamma-BHC	58-89-9	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: delta-BHC	319-86-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Heptachlor	76-44-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Aldrin	309-00-2	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: trans-Chlordane	5103-74-2	0.05	mg/kg	0.06	0.07	15.7	No Limit
		EP068: alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	0.05	0.0	No Limit
		EP068: Dieldrin	60-57-1	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: 4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Endrin	72-20-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: 4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: 4.4`-DDT	50-29-3	0.2	mg/kg	<0.2	<0.2	0.0	No Limit
		EP068: Methoxychlor	72-43-5	0.2	mg/kg	<0.2	<0.2	0.0	No Limit
EP068B: Organophosphorus Pesticides (OP) (QC Lot: 4145648)									
ES2202692-011	SOP_BH122_2.0_220124	EP068: Dichlorvos	62-73-7	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Dimethoate	60-51-5	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Diazinon	333-41-5	0.05	mg/kg	<0.05	<0.05	0.0	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Acceptable RPD (%)*
EP068B: Organophosphorus Pesticides (OP) (QC Lot: 4145648) - continued									
ES2202692-011	SOP_BH122_2.0_220124	EP068: Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Malathion	121-75-5	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Fenthion	55-38-9	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Chlorfenvinphos	470-90-6	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Prothiofos	34643-46-4	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Ethion	563-12-2	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Carbophenothion	786-19-6	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Azinphos Methyl	86-50-0	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	<0.2	0.0	No Limit
		EP068: Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	<0.2	0.0	No Limit
		EP068: Parathion	56-38-2	0.2	mg/kg	<0.2	<0.2	0.0	No Limit
ES2202692-001	SOP_BH128_0.9_220124	EP068: Dichlorvos	62-73-7	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Dimethoate	60-51-5	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Diazinon	333-41-5	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Malathion	121-75-5	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Fenthion	55-38-9	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Chlorfenvinphos	470-90-6	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Prothiofos	34643-46-4	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Ethion	563-12-2	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Carbophenothion	786-19-6	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Azinphos Methyl	86-50-0	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	<0.2	0.0	No Limit
		EP068: Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	<0.2	0.0	No Limit
		EP068: Parathion	56-38-2	0.2	mg/kg	<0.2	<0.2	0.0	No Limit
EP068B: Organophosphorus Pesticides (OP) (QC Lot: 4145656)									
ES2202692-022	SOP_BH134_0.5_220125	EP068: Dichlorvos	62-73-7	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Dimethoate	60-51-5	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Diazinon	333-41-5	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	<0.05	0.0	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Acceptable RPD (%)*
EP068B: Organophosphorus Pesticides (OP) (QC Lot: 4145656) - continued									
ES2202692-022	SOP_BH134_0.5_220125	EP068: Malathion	121-75-5	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Fenthion	55-38-9	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Chlorfenvinphos	470-90-6	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Prothiofos	34643-46-4	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Ethion	563-12-2	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Carbophenothion	786-19-6	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Azinphos Methyl	86-50-0	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	<0.2	0.0	No Limit
		EP068: Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	<0.2	0.0	No Limit
		EP068: Parathion	56-38-2	0.2	mg/kg	<0.2	<0.2	0.0	No Limit
EP074A: Monocyclic Aromatic Hydrocarbons (QC Lot: 4144799)									
ES2202692-001	SOP_BH128_0.9_220124	EP074: Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	0.0	No Limit
		EP074: Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: Styrene	100-42-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: Isopropylbenzene	98-82-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: n-Propylbenzene	103-65-1	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: 1.3.5-Trimethylbenzene	108-67-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: sec-Butylbenzene	135-98-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: 1.2.4-Trimethylbenzene	95-63-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: tert-Butylbenzene	98-06-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: p-Isopropyltoluene	99-87-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: n-Butylbenzene	104-51-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
EP074A: Monocyclic Aromatic Hydrocarbons (QC Lot: 4144827)									
ES2202692-019	SOP_BH132_3.0_220125	EP074: Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	0.0	No Limit
		EP074: Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: Styrene	100-42-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: Isopropylbenzene	98-82-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: n-Propylbenzene	103-65-1	0.5	mg/kg	<0.5	<0.5	0.0	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Acceptable RPD (%)*
EP074A: Monocyclic Aromatic Hydrocarbons (QC Lot: 4144827) - continued									
ES2202692-019	SOP_BH132_3.0_220125	EP074: 1.3.5-Trimethylbenzene	108-67-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: sec-Butylbenzene	135-98-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: 1.2.4-Trimethylbenzene	95-63-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: tert-Butylbenzene	98-06-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: p-Isopropyltoluene	99-87-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: n-Butylbenzene	104-51-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
EP074B: Oxygenated Compounds (QC Lot: 4144799)									
ES2202692-001	SOP_BH128_0.9_220124	EP074: Vinyl Acetate	108-05-4	5	mg/kg	<5	<5	0.0	No Limit
		EP074: 2-Butanone (MEK)	78-93-3	5	mg/kg	<5	<5	0.0	No Limit
		EP074: 4-Methyl-2-pentanone (MIBK)	108-10-1	5	mg/kg	<5	<5	0.0	No Limit
		EP074: 2-Hexanone (MBK)	591-78-6	5	mg/kg	<5	<5	0.0	No Limit
EP074B: Oxygenated Compounds (QC Lot: 4144827)									
ES2202692-019	SOP_BH132_3.0_220125	EP074: Vinyl Acetate	108-05-4	5	mg/kg	<5	<5	0.0	No Limit
		EP074: 2-Butanone (MEK)	78-93-3	5	mg/kg	<5	<5	0.0	No Limit
		EP074: 4-Methyl-2-pentanone (MIBK)	108-10-1	5	mg/kg	<5	<5	0.0	No Limit
		EP074: 2-Hexanone (MBK)	591-78-6	5	mg/kg	<5	<5	0.0	No Limit
EP074C: Sulfonated Compounds (QC Lot: 4144799)									
ES2202692-001	SOP_BH128_0.9_220124	EP074: Carbon disulfide	75-15-0	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
EP074C: Sulfonated Compounds (QC Lot: 4144827)									
ES2202692-019	SOP_BH132_3.0_220125	EP074: Carbon disulfide	75-15-0	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
EP074D: Fumigants (QC Lot: 4144799)									
ES2202692-001	SOP_BH128_0.9_220124	EP074: 2.2-Dichloropropane	594-20-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: 1.2-Dichloropropane	78-87-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: cis-1.3-Dichloropropylene	10061-01-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: trans-1.3-Dichloropropylene	10061-02-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: 1.2-Dibromoethane (EDB)	106-93-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
EP074D: Fumigants (QC Lot: 4144827)									
ES2202692-019	SOP_BH132_3.0_220125	EP074: 2.2-Dichloropropane	594-20-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: 1.2-Dichloropropane	78-87-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: cis-1.3-Dichloropropylene	10061-01-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: trans-1.3-Dichloropropylene	10061-02-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: 1.2-Dibromoethane (EDB)	106-93-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
EP074E: Halogenated Aliphatic Compounds (QC Lot: 4144799)									
ES2202692-001	SOP_BH128_0.9_220124	EP074: 1.1-Dichloroethene	75-35-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: Iodomethane	74-88-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: trans-1.2-Dichloroethene	156-60-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: 1.1-Dichloroethane	75-34-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: cis-1.2-Dichloroethene	156-59-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: 1.1.1-Trichloroethane	71-55-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Acceptable RPD (%)*
EP074E: Halogenated Aliphatic Compounds (QC Lot: 4144799) - continued									
ES2202692-001	SOP_BH128_0.9_220124	EP074: 1.1-Dichloropropylene	563-58-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: Carbon Tetrachloride	56-23-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: 1.2-Dichloroethane	107-06-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: Trichloroethene	79-01-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: Dibromomethane	74-95-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: 1.1.2-Trichloroethane	79-00-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: 1.3-Dichloropropane	142-28-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: Tetrachloroethene	127-18-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: 1.1.1.2-Tetrachloroethane	630-20-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: trans-1.4-Dichloro-2-butene	110-57-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: cis-1.4-Dichloro-2-butene	1476-11-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: 1.1.2.2-Tetrachloroethane	79-34-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: 1.2.3-Trichloropropane	96-18-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: Pentachloroethane	76-01-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: 1.2-Dibromo-3-chloropropane	96-12-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: Dichlorodifluoromethane	75-71-8	5	mg/kg	<5	<5	0.0	No Limit
		EP074: Chloromethane	74-87-3	5	mg/kg	<5	<5	0.0	No Limit
		EP074: Vinyl chloride	75-01-4	5	mg/kg	<5	<5	0.0	No Limit
		EP074: Bromomethane	74-83-9	5	mg/kg	<5	<5	0.0	No Limit
		EP074: Chloroethane	75-00-3	5	mg/kg	<5	<5	0.0	No Limit
		EP074: Trichlorofluoromethane	75-69-4	5	mg/kg	<5	<5	0.0	No Limit
EP074E: Halogenated Aliphatic Compounds (QC Lot: 4144827)									
ES2202692-019	SOP_BH132_3.0_220125	EP074: 1.1-Dichloroethene	75-35-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: Iodomethane	74-88-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: trans-1.2-Dichloroethene	156-60-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: 1.1-Dichloroethane	75-34-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: cis-1.2-Dichloroethene	156-59-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: 1.1.1-Trichloroethane	71-55-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: 1.1-Dichloropropylene	563-58-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: Carbon Tetrachloride	56-23-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: 1.2-Dichloroethane	107-06-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: Trichloroethene	79-01-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: Dibromomethane	74-95-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: 1.1.2-Trichloroethane	79-00-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: 1.3-Dichloropropane	142-28-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: Tetrachloroethene	127-18-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: 1.1.1.2-Tetrachloroethane	630-20-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: trans-1.4-Dichloro-2-butene	110-57-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: cis-1.4-Dichloro-2-butene	1476-11-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: 1.1.2.2-Tetrachloroethane	79-34-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Acceptable RPD (%)*
EP074E: Halogenated Aliphatic Compounds (QC Lot: 4144827) - continued									
ES2202692-019	SOP_BH132_3.0_220125	EP074: 1.2.3-Trichloropropane	96-18-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: Pentachloroethane	76-01-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: 1.2-Dibromo-3-chloropropane	96-12-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: Dichlorodifluoromethane	75-71-8	5	mg/kg	<5	<5	0.0	No Limit
		EP074: Chloromethane	74-87-3	5	mg/kg	<5	<5	0.0	No Limit
		EP074: Vinyl chloride	75-01-4	5	mg/kg	<5	<5	0.0	No Limit
		EP074: Bromomethane	74-83-9	5	mg/kg	<5	<5	0.0	No Limit
		EP074: Chloroethane	75-00-3	5	mg/kg	<5	<5	0.0	No Limit
		EP074: Trichlorofluoromethane	75-69-4	5	mg/kg	<5	<5	0.0	No Limit
EP074F: Halogenated Aromatic Compounds (QC Lot: 4144799)									
ES2202692-001	SOP_BH128_0.9_220124	EP074: Chlorobenzene	108-90-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: Bromobenzene	108-86-1	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: 2-Chlorotoluene	95-49-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: 4-Chlorotoluene	106-43-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: 1.2.3-Trichlorobenzene	87-61-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
EP074F: Halogenated Aromatic Compounds (QC Lot: 4144827)									
ES2202692-019	SOP_BH132_3.0_220125	EP074: Chlorobenzene	108-90-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: Bromobenzene	108-86-1	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: 2-Chlorotoluene	95-49-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: 4-Chlorotoluene	106-43-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: 1.2.3-Trichlorobenzene	87-61-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
EP074G: Trihalomethanes (QC Lot: 4144799)									
ES2202692-001	SOP_BH128_0.9_220124	EP074: Chloroform	67-66-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: Bromodichloromethane	75-27-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: Dibromochloromethane	124-48-1	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: Bromoform	75-25-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
EP074G: Trihalomethanes (QC Lot: 4144827)									
ES2202692-019	SOP_BH132_3.0_220125	EP074: Chloroform	67-66-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: Bromodichloromethane	75-27-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: Dibromochloromethane	124-48-1	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP074: Bromoform	75-25-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QC Lot: 4145647)									
ES2202692-011	SOP_BH122_2.0_220124	EP075(SIM): Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Phenanthrene	85-01-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Fluoranthene	206-44-0	0.5	mg/kg	<0.5	<0.5	0.0	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Acceptable RPD (%)
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QC Lot: 4145647) - continued									
ES2202692-011	SOP_BH122_2.0_220124	EP075(SIM): Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
ES2202692-001	SOP_BH128_0.9_220124	EP075(SIM): Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Phenanthrene	85-01-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Fluoranthene	206-44-0	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QC Lot: 4145655)									
ES2202692-022	SOP_BH134_0.5_220125	EP075(SIM): Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Phenanthrene	85-01-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Acceptable RPD (%)*
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QC Lot: 4145655) - continued									
ES2202692-022	SOP_BH134_0.5_220125	EP075(SIM): Fluoranthene	206-44-0	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
EP075A: Phenolic Compounds (QC Lot: 4145650)									
ES2202692-001	SOP_BH128_0.9_220124	EP075: Phenol	108-95-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 2-Chlorophenol	95-57-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 2-Methylphenol	95-48-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 3- & 4-Methylphenol	1319-77-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 2-Nitrophenol	88-75-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 2.4-Dimethylphenol	105-67-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 2.4-Dichlorophenol	120-83-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 2.6-Dichlorophenol	87-65-0	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 4-Chloro-3-methylphenol	59-50-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 2.4.6-Trichlorophenol	88-06-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 2.4.5-Trichlorophenol	95-95-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Pentachlorophenol	87-86-5	1	mg/kg	<1	<1	0.0	No Limit
EP075A: Phenolic Compounds (QC Lot: 4145658)									
ES2202692-022	SOP_BH134_0.5_220125	EP075: Phenol	108-95-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 2-Chlorophenol	95-57-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 2-Methylphenol	95-48-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 3- & 4-Methylphenol	1319-77-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 2-Nitrophenol	88-75-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 2.4-Dimethylphenol	105-67-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 2.4-Dichlorophenol	120-83-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 2.6-Dichlorophenol	87-65-0	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 4-Chloro-3-methylphenol	59-50-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 2.4.6-Trichlorophenol	88-06-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 2.4.5-Trichlorophenol	95-95-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Pentachlorophenol	87-86-5	1	mg/kg	<1	<1	0.0	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Acceptable RPD (%)*
EP075B: Polynuclear Aromatic Hydrocarbons (QC Lot: 4145650)									
ES2202692-001	SOP_BH128_0.9_220124	EP075: Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 2-Methylnaphthalene	91-57-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 2-Chloronaphthalene	91-58-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Phenanthrene	85-01-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Fluoranthene	206-44-0	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: N-2-Fluorenyl Acetamide	53-96-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 7.12-Dimethylbenz(a)anthracene	57-97-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 3-Methylcholanthrene	56-49-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Benzo(b+j) & Benzo(k)fluoranthene	205-99-2 207-08-9	1	mg/kg	<1	<1	0.0	No Limit
EP075B: Polynuclear Aromatic Hydrocarbons (QC Lot: 4145658)									
ES2202692-022	SOP_BH134_0.5_220125	EP075: Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 2-Methylnaphthalene	91-57-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 2-Chloronaphthalene	91-58-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Phenanthrene	85-01-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Fluoranthene	206-44-0	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: N-2-Fluorenyl Acetamide	53-96-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 7.12-Dimethylbenz(a)anthracene	57-97-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 3-Methylcholanthrene	56-49-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Acceptable RPD (%)*
EP075B: Polynuclear Aromatic Hydrocarbons (QC Lot: 4145658) - continued									
ES2202692-022	SOP_BH134_0.5_220125	EP075: Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Benzo(b+j) & Benzo(k)fluoranthene	205-99-2 207-08-9	1	mg/kg	<1	<1	0.0	No Limit
EP075C: Phthalate Esters (QC Lot: 4145650)									
ES2202692-001	SOP_BH128_0.9_220124	EP075: Dimethyl phthalate	131-11-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Diethyl phthalate	84-66-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Di-n-butyl phthalate	84-74-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Butyl benzyl phthalate	85-68-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Di-n-octylphthalate	117-84-0	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
EP075C: Phthalate Esters (QC Lot: 4145658)									
ES2202692-022	SOP_BH134_0.5_220125	EP075: Dimethyl phthalate	131-11-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Diethyl phthalate	84-66-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Di-n-butyl phthalate	84-74-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Butyl benzyl phthalate	85-68-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Di-n-octylphthalate	117-84-0	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
EP075D: Nitrosamines (QC Lot: 4145650)									
ES2202692-001	SOP_BH128_0.9_220124	EP075: N-Nitrosomethylethylamine	10595-95-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: N-Nitrosodiethylamine	55-18-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: N-Nitrosopyrrolidine	930-55-2	0.5	mg/kg	<1.0	<1.0	0.0	No Limit
		EP075: N-Nitrosomorpholine	59-89-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: N-Nitrosodi-n-propylamine	621-64-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: N-Nitrosopiperidine	100-75-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: N-Nitrosodibutylamine	924-16-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: N-Nitrosodiphenyl & Diphenylamine	86-30-6 122-39-4	0.5	mg/kg	<1.0	<1.0	0.0	No Limit
		EP075: Methapyrilene	91-80-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
EP075D: Nitrosamines (QC Lot: 4145658)									
ES2202692-022	SOP_BH134_0.5_220125	EP075: N-Nitrosomethylethylamine	10595-95-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: N-Nitrosodiethylamine	55-18-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: N-Nitrosopyrrolidine	930-55-2	0.5	mg/kg	<1.0	<1.0	0.0	No Limit
		EP075: N-Nitrosomorpholine	59-89-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: N-Nitrosodi-n-propylamine	621-64-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: N-Nitrosopiperidine	100-75-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: N-Nitrosodibutylamine	924-16-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: N-Nitrosodiphenyl & Diphenylamine	86-30-6 122-39-4	0.5	mg/kg	<1.0	<1.0	0.0	No Limit
		EP075: Methapyrilene	91-80-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
EP075E: Nitroaromatics and Ketones (QC Lot: 4145650)									
ES2202692-001	SOP_BH128_0.9_220124	EP075: 2-Picoline	109-06-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Acceptable RPD (%)*
EP075E: Nitroaromatics and Ketones (QC Lot: 4145650) - continued									
ES2202692-001	SOP_BH128_0.9_220124	EP075: Acetophenone	98-86-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Nitrobenzene	98-95-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Isophorone	78-59-1	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 2.6-Dinitrotoluene	606-20-2	0.5	mg/kg	<1.0	<1.0	0.0	No Limit
		EP075: 2.4-Dinitrotoluene	121-14-2	0.5	mg/kg	<1.0	<1.0	0.0	No Limit
		EP075: 1-Naphthylamine	134-32-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 4-Nitroquinoline-N-oxide	56-57-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 5-Nitro-o-toluidine	99-55-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 1.3.5-Trinitrobenzene	99-35-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Phenacetin	62-44-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 4-Aminobiphenyl	92-67-1	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Pentachloronitrobenzene	82-68-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Pronamide	23950-58-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Dimethylaminoazobenzene	60-11-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Chlorobenzilate	510-15-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Azobenzene	103-33-3	1	mg/kg	<1	<1	0.0	No Limit
EP075E: Nitroaromatics and Ketones (QC Lot: 4145658)									
ES2202692-022	SOP_BH134_0.5_220125	EP075: 2-Picoline	109-06-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Acetophenone	98-86-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Nitrobenzene	98-95-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Isophorone	78-59-1	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 2.6-Dinitrotoluene	606-20-2	0.5	mg/kg	<1.0	<1.0	0.0	No Limit
		EP075: 2.4-Dinitrotoluene	121-14-2	0.5	mg/kg	<1.0	<1.0	0.0	No Limit
		EP075: 1-Naphthylamine	134-32-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 4-Nitroquinoline-N-oxide	56-57-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 5-Nitro-o-toluidine	99-55-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 1.3.5-Trinitrobenzene	99-35-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Phenacetin	62-44-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 4-Aminobiphenyl	92-67-1	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Pentachloronitrobenzene	82-68-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Pronamide	23950-58-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Dimethylaminoazobenzene	60-11-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Chlorobenzilate	510-15-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Azobenzene	103-33-3	1	mg/kg	<1	<1	0.0	No Limit
EP075F: Haloethers (QC Lot: 4145650)									
ES2202692-001	SOP_BH128_0.9_220124	EP075: Bis(2-chloroethyl) ether	111-44-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Bis(2-chloroethoxy) methane	111-91-1	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 4-Chlorophenyl phenyl ether	7005-72-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 4-Bromophenyl phenyl ether	101-55-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
EP075F: Haloethers (QC Lot: 4145658)									

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 (%)*
EP075F: Haloethers (QC Lot: 4145658) - continued									
ES2202692-022	SOP_BH134_0.5_220125	EP075: Bis(2-chloroethyl) ether	111-44-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Bis(2-chloroethoxy) methane	111-91-1	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 4-Chlorophenyl phenyl ether	7005-72-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 4-Bromophenyl phenyl ether	101-55-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
EP075G: Chlorinated Hydrocarbons (QC Lot: 4145650)									
ES2202692-001	SOP_BH128_0.9_220124	EP075: 1.3-Dichlorobenzene	541-73-1	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 1.4-Dichlorobenzene	106-46-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 1.2-Dichlorobenzene	95-50-1	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Hexachloroethane	67-72-1	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 1.2.4-Trichlorobenzene	120-82-1	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Hexachloropropylene	1888-71-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Hexachlorobutadiene	87-68-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Pentachlorobenzene	608-93-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Hexachlorobenzene (HCB)	118-74-1	0.5	mg/kg	<1.0	<1.0	0.0	No Limit
		EP075: Hexachlorocyclopentadiene	77-47-4	2.5	mg/kg	<2.5	<2.5	0.0	No Limit
EP075G: Chlorinated Hydrocarbons (QC Lot: 4145658)									
ES2202692-022	SOP_BH134_0.5_220125	EP075: 1.3-Dichlorobenzene	541-73-1	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 1.4-Dichlorobenzene	106-46-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 1.2-Dichlorobenzene	95-50-1	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Hexachloroethane	67-72-1	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 1.2.4-Trichlorobenzene	120-82-1	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Hexachloropropylene	1888-71-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Hexachlorobutadiene	87-68-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Pentachlorobenzene	608-93-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Hexachlorobenzene (HCB)	118-74-1	0.5	mg/kg	<1.0	<1.0	0.0	No Limit
		EP075: Hexachlorocyclopentadiene	77-47-4	2.5	mg/kg	<2.5	<2.5	0.0	No Limit
EP075H: Anilines and Benzidines (QC Lot: 4145650)									
ES2202692-001	SOP_BH128_0.9_220124	EP075: Aniline	62-53-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 4-Chloroaniline	106-47-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 2-Nitroaniline	88-74-4	0.5	mg/kg	<1.0	<1.0	0.0	No Limit
		EP075: 3-Nitroaniline	99-09-2	0.5	mg/kg	<1.0	<1.0	0.0	No Limit
		EP075: Dibenzofuran	132-64-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 4-Nitroaniline	100-01-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Carbazole	86-74-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 3.3`-Dichlorobenzidine	91-94-1	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
EP075H: Anilines and Benzidines (QC Lot: 4145658)									
ES2202692-022	SOP_BH134_0.5_220125	EP075: Aniline	62-53-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 4-Chloroaniline	106-47-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 2-Nitroaniline	88-74-4	0.5	mg/kg	<1.0	<1.0	0.0	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Acceptable RPD (%)*
EP075H: Anilines and Benzidines (QC Lot: 4145658) - continued									
ES2202692-022	SOP_BH134_0.5_220125	EP075: 3-Nitroaniline	99-09-2	0.5	mg/kg	<1.0	<1.0	0.0	No Limit
		EP075: Dibenzofuran	132-64-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 4-Nitroaniline	100-01-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Carbazole	86-74-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 3.3`-Dichlorobenzidine	91-94-1	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
EP075I: Organochlorine Pesticides (QC Lot: 4145650)									
ES2202692-001	SOP_BH128_0.9_220124	EP075: alpha-BHC	319-84-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: beta-BHC	319-85-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: gamma-BHC	58-89-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: delta-BHC	319-86-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Heptachlor	76-44-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Aldrin	309-00-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Heptachlor epoxide	1024-57-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: alpha-Endosulfan	959-98-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 4.4`-DDE	72-55-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Dieldrin	60-57-1	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Endrin	72-20-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: beta-Endosulfan	33213-65-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 4.4`-DDD	72-54-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Endosulfan sulfate	1031-07-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 4.4`-DDT	50-29-3	0.5	mg/kg	<1.0	<1.0	0.0	No Limit
EP075I: Organochlorine Pesticides (QC Lot: 4145658)									
ES2202692-022	SOP_BH134_0.5_220125	EP075: alpha-BHC	319-84-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: beta-BHC	319-85-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: gamma-BHC	58-89-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: delta-BHC	319-86-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Heptachlor	76-44-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Aldrin	309-00-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Heptachlor epoxide	1024-57-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: alpha-Endosulfan	959-98-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 4.4`-DDE	72-55-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Dieldrin	60-57-1	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Endrin	72-20-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: beta-Endosulfan	33213-65-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 4.4`-DDD	72-54-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Endosulfan sulfate	1031-07-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: 4.4`-DDT	50-29-3	0.5	mg/kg	<1.0	<1.0	0.0	No Limit
EP075J: Organophosphorus Pesticides (QC Lot: 4145650)									
ES2202692-001	SOP_BH128_0.9_220124	EP075: Dichlorvos	62-73-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Dimethoate	60-51-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Acceptable RPD (%)*
EP075J: Organophosphorus Pesticides (QC Lot: 4145650) - continued									
ES2202692-001	SOP_BH128_0.9_220124	EP075: Diazinon	333-41-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Chlorpyrifos-methyl	5598-13-0	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Malathion	121-75-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Fenthion	55-38-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Chlorpyrifos	2921-88-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Pirimphos-ethyl	23505-41-1	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Chlorfenvinphos	470-90-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Prothiofos	34643-46-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Ethion	563-12-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
EP075J: Organophosphorus Pesticides (QC Lot: 4145658)									
ES2202692-022	SOP_BH134_0.5_220125	EP075: Dichlorvos	62-73-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Dimethoate	60-51-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Diazinon	333-41-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Chlorpyrifos-methyl	5598-13-0	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Malathion	121-75-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Fenthion	55-38-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Chlorpyrifos	2921-88-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Pirimphos-ethyl	23505-41-1	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Chlorfenvinphos	470-90-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Prothiofos	34643-46-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075: Ethion	563-12-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 4144798)									
ES2202692-012	SOP_BH123_1.0_220124	EP080: C6 - C9 Fraction	----	10	mg/kg	<10	<10	0.0	No Limit
ES2202692-001	SOP_BH128_0.9_220124	EP080: C6 - C9 Fraction	----	10	mg/kg	<10	<10	0.0	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 4144826)									
ES2202692-005	SOP_BH130_0.4_220124	EP080: C6 - C9 Fraction	----	10	mg/kg	<10	<10	0.0	No Limit
ES2202692-019	SOP_BH132_3.0_220125	EP080: C6 - C9 Fraction	----	10	mg/kg	<10	<10	0.0	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 4145646)									
ES2202692-011	SOP_BH122_2.0_220124	EP071: C15 - C28 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071: C29 - C36 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071: C10 - C14 Fraction	----	50	mg/kg	<50	<50	0.0	No Limit
ES2202692-001	SOP_BH128_0.9_220124	EP071: C15 - C28 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071: C29 - C36 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071: C10 - C14 Fraction	----	50	mg/kg	<50	<50	0.0	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 4145654)									
ES2202692-022	SOP_BH134_0.5_220125	EP071: C15 - C28 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071: C29 - C36 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071: C10 - C14 Fraction	----	50	mg/kg	<50	<50	0.0	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 4149327)									

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Acceptable RPD (%)*
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 4149327) - continued									
ES2202692-002	SOP_BH128_5.0_220124	EP080: C6 - C9 Fraction	----	10	mg/kg	<10	<10	0.0	No Limit
ES2203027-002	Anonymous	EP080: C6 - C9 Fraction	----	10	mg/kg	<10	<10	0.0	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 4144798)									
ES2202692-012	SOP_BH123_1.0_220124	EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	<10	0.0	No Limit
ES2202692-001	SOP_BH128_0.9_220124	EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	<10	0.0	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 4144826)									
ES2202692-005	SOP_BH130_0.4_220124	EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	<10	0.0	No Limit
ES2202692-019	SOP_BH132_3.0_220125	EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	<10	0.0	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 4145646)									
ES2202692-011	SOP_BH122_2.0_220124	EP071: >C16 - C34 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071: >C34 - C40 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071: >C10 - C16 Fraction	----	50	mg/kg	<50	<50	0.0	No Limit
ES2202692-001	SOP_BH128_0.9_220124	EP071: >C16 - C34 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071: >C34 - C40 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071: >C10 - C16 Fraction	----	50	mg/kg	<50	<50	0.0	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 4145654)									
ES2202692-022	SOP_BH134_0.5_220125	EP071: >C16 - C34 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071: >C34 - C40 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071: >C10 - C16 Fraction	----	50	mg/kg	<50	<50	0.0	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 4149327)									
ES2202692-002	SOP_BH128_5.0_220124	EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	<10	0.0	No Limit
ES2203027-002	Anonymous	EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	<10	0.0	No Limit
EP080: BTEXN (QC Lot: 4144798)									
ES2202692-012	SOP_BH123_1.0_220124	EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	0.0	No Limit
		EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: Naphthalene	91-20-3	1	mg/kg	<1	<1	0.0	No Limit
ES2202692-001	SOP_BH128_0.9_220124	EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	0.0	No Limit
		EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: Naphthalene	91-20-3	1	mg/kg	<1	<1	0.0	No Limit
EP080: BTEXN (QC Lot: 4144826)									
ES2202692-005	SOP_BH130_0.4_220124	EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	0.0	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Acceptable RPD (%)*
EP080: BTEXN (QC Lot: 4144826) - continued									
ES2202692-005	SOP_BH130_0.4_220124	EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: Naphthalene	91-20-3	1	mg/kg	<1	<1	0.0	No Limit
ES2202692-019	SOP_BH132_3.0_220125	EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	0.0	No Limit
		EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: Naphthalene	91-20-3	1	mg/kg	<1	<1	0.0	No Limit
EP080: BTEXN (QC Lot: 4149327)									
ES2202692-002	SOP_BH128_5.0_220124	EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	0.0	No Limit
		EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: Naphthalene	91-20-3	1	mg/kg	<1	<1	0.0	No Limit
ES2203027-002	Anonymous	EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	0.0	No Limit
		EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: Naphthalene	91-20-3	1	mg/kg	<1	<1	0.0	No Limit
EP231A: Perfluoroalkyl Sulfonic Acids (QC Lot: 4144794)									
EP2200866-005	Anonymous	EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.0002	mg/kg	0.0002	0.0003	0.0	No Limit
ES2202692-002	SOP_BH128_5.0_220124	EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
EP231B: Perfluoroalkyl Carboxylic Acids (QC Lot: 4144794)									
EP2200866-005	Anonymous	EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Acceptable RPD (%)*
EP231B: Perfluoroalkyl Carboxylic Acids (QC Lot: 4144794) - continued									
EP2200866-005	Anonymous	EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.001	mg/kg	<0.001	<0.001	0.0	No Limit
ES2202692-002	SOP_BH128_5.0_220124	EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.0002	mg/kg	<0.0002	<0.0002	0.0	No Limit
		EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.001	mg/kg	<0.001	<0.001	0.0	No Limit
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QC Lot: 4144794)									
EP2200866-005	Anonymous	EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
ES2202692-002	SOP_BH128_5.0_220124	EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit
		EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.0005	mg/kg	<0.0005	<0.0005	0.0	No Limit

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 (%)*
EG020T: Total Metals by ICP-MS (QC Lot: 4146955)									
ES2202692-032	RIN07_220125	EG020A-T: Cadmium	7440-43-9	0.0001	mg/L	<0.0001	<0.0001	0.0	No Limit
		EG020A-T: Arsenic	7440-38-2	0.001	mg/L	<0.001	<0.001	0.0	No Limit
		EG020A-T: Chromium	7440-47-3	0.001	mg/L	<0.001	<0.001	0.0	No Limit
		EG020A-T: Copper	7440-50-8	0.001	mg/L	<0.001	<0.001	0.0	No Limit
		EG020A-T: Lead	7439-92-1	0.001	mg/L	<0.001	<0.001	0.0	No Limit
		EG020A-T: Nickel	7440-02-0	0.001	mg/L	<0.001	<0.001	0.0	No Limit
		EG020A-T: Zinc	7440-66-6	0.005	mg/L	<0.005	<0.005	0.0	No Limit
ES2201996-001	Anonymous	EG020A-T: Cadmium	7440-43-9	0.0001	mg/L	<0.0001	<0.0001	0.0	No Limit
		EG020A-T: Arsenic	7440-38-2	0.001	mg/L	0.002	0.003	0.0	No Limit
		EG020A-T: Chromium	7440-47-3	0.001	mg/L	0.002	0.002	0.0	No Limit
		EG020A-T: Copper	7440-50-8	0.001	mg/L	0.642	0.638	0.7	0% - 20%
		EG020A-T: Lead	7439-92-1	0.001	mg/L	0.002	0.002	0.0	No Limit
		EG020A-T: Nickel	7440-02-0	0.001	mg/L	0.002	0.002	0.0	No Limit
		EG020A-T: Zinc	7440-66-6	0.005	mg/L	0.083	0.080	3.4	0% - 50%

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 (%)*
EG035T: Total Recoverable Mercury by FIMS (QC Lot: 4147048)									
ES2201996-001	Anonymous	EG035T: Mercury	7439-97-6	0.0001	mg/L	<0.0001	<0.0001	0.0	No Limit
ES2203057-005	Anonymous	EG035T: Mercury	7439-97-6	0.0001	mg/L	<0.0010	<0.0010	0.0	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 4148706)									
CA2200542-001	Anonymous	EP080: C6 - C9 Fraction	----	20	µg/L	<20	<20	0.0	No Limit
ES2203030-024	Anonymous	EP080: C6 - C9 Fraction	----	20	µg/L	<20	<20	0.0	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 4148706)									
CA2200542-001	Anonymous	EP080: C6 - C10 Fraction	C6_C10	20	µg/L	<20	<20	0.0	No Limit
ES2203030-024	Anonymous	EP080: C6 - C10 Fraction	C6_C10	20	µg/L	<20	<20	0.0	No Limit
EP080: BTEXN (QC Lot: 4148706)									
CA2200542-001	Anonymous	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	108-38-3 106-42-3	2	µg/L	<2	<2	0.0	No Limit
		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
ES2203030-024	Anonymous	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	108-38-3 106-42-3	2	µg/L	<2	<2	0.0	No Limit
		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

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

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

Sub-Matrix: **SOIL**

				Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Acceptable Limits (%)	
Method: Compound	CAS Number	LOR	Unit	Result	Concentration	LCS	Low	High
EG005(ED093)T: Total Metals by ICP-AES (QCLot: 4148302)								
EG005T: Arsenic	7440-38-2	5	mg/kg	<5	121.1 mg/kg	109	88.0	113
EG005T: Cadmium	7440-43-9	1	mg/kg	<1	0.74 mg/kg	94.1	70.0	130
EG005T: Chromium	7440-47-3	2	mg/kg	<2	19.6 mg/kg	126	68.0	132
EG005T: Copper	7440-50-8	5	mg/kg	<5	52.9 mg/kg	111	89.0	111
EG005T: Lead	7439-92-1	5	mg/kg	<5	60.8 mg/kg	108	82.0	119
EG005T: Nickel	7440-02-0	2	mg/kg	<2	15.3 mg/kg	111	80.0	120
EG005T: Zinc	7440-66-6	5	mg/kg	<5	139.3 mg/kg	100	66.0	133
EG005(ED093)T: Total Metals by ICP-AES (QCLot: 4148304)								
EG005T: Arsenic	7440-38-2	5	mg/kg	<5	121.1 mg/kg	102	88.0	113
EG005T: Cadmium	7440-43-9	1	mg/kg	<1	0.74 mg/kg	85.8	70.0	130
EG005T: Chromium	7440-47-3	2	mg/kg	<2	19.6 mg/kg	119	68.0	132
EG005T: Copper	7440-50-8	5	mg/kg	<5	52.9 mg/kg	106	89.0	111
EG005T: Lead	7439-92-1	5	mg/kg	<5	60.8 mg/kg	96.7	82.0	119
EG005T: Nickel	7440-02-0	2	mg/kg	<2	15.3 mg/kg	104	80.0	120
EG005T: Zinc	7440-66-6	5	mg/kg	<5	139.3 mg/kg	89.7	66.0	133
EG005(ED093)T: Total Metals by ICP-AES (QCLot: 4150331)								
EG005T: Arsenic	7440-38-2	5	mg/kg	<5	121.1 mg/kg	104	88.0	113
EG005T: Cadmium	7440-43-9	1	mg/kg	<1	0.74 mg/kg	102	70.0	130
EG005T: Chromium	7440-47-3	2	mg/kg	<2	19.6 mg/kg	116	68.0	132
EG005T: Copper	7440-50-8	5	mg/kg	<5	52.9 mg/kg	108	89.0	111
EG005T: Lead	7439-92-1	5	mg/kg	<5	60.8 mg/kg	103	82.0	119
EG005T: Nickel	7440-02-0	2	mg/kg	<2	15.3 mg/kg	105	80.0	120
EG005T: Zinc	7440-66-6	5	mg/kg	<5	139.3 mg/kg	95.8	66.0	133
ED007: Exchangeable Cations (QCLot: 4155053)								
ED007: Exchangeable Calcium	----	0.1	meq/100g	<0.1	1 meq/100g	100	75.8	120
ED007: Exchangeable Magnesium	----	0.1	meq/100g	<0.1	1.67 meq/100g	100	74.9	115
ED007: Exchangeable Potassium	----	0.1	meq/100g	<0.1	0.51 meq/100g	103	80.0	120
ED007: Exchangeable Sodium	----	0.1	meq/100g	<0.1	0.87 meq/100g	93.1	80.0	120
ED007: Cation Exchange Capacity	----	0.1	meq/100g	<0.1	----	----	----	----
ED007: Exchangeable Sodium Percent	----	0.1	%	<0.1	----	----	----	----
EG035T: Total Recoverable Mercury by FIMS (QCLot: 4148303)								
EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	0.087 mg/kg	107	70.0	125
EG035T: Total Recoverable Mercury by FIMS (QCLot: 4148305)								
EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	0.087 mg/kg	87.4	70.0	125

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Acceptable Limits (%)	
				Result	Concentration	LCS	Low	High
EG035T: Total Recoverable Mercury by FIMS (QCLot: 4150332)								
EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	0.087 mg/kg	94.2	70.0	125
EP066: Polychlorinated Biphenyls (PCB) (QCLot: 4145649)								
EP066: Total Polychlorinated biphenyls	----	0.1	mg/kg	<0.1	1 mg/kg	95.2	62.0	126
EP066: Polychlorinated Biphenyls (PCB) (QCLot: 4145657)								
EP066: Total Polychlorinated biphenyls	----	0.1	mg/kg	<0.1	1 mg/kg	103	62.0	126
EP068A: Organochlorine Pesticides (OC) (QCLot: 4145648)								
EP068: alpha-BHC	319-84-6	0.05	mg/kg	<0.05	0.5 mg/kg	95.1	69.0	113
EP068: Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	0.5 mg/kg	101	65.0	117
EP068: beta-BHC	319-85-7	0.05	mg/kg	<0.05	0.5 mg/kg	92.0	67.0	119
EP068: gamma-BHC	58-89-9	0.05	mg/kg	<0.05	0.5 mg/kg	95.4	68.0	116
EP068: delta-BHC	319-86-8	0.05	mg/kg	<0.05	0.5 mg/kg	88.5	65.0	117
EP068: Heptachlor	76-44-8	0.05	mg/kg	<0.05	0.5 mg/kg	95.2	67.0	115
EP068: Aldrin	309-00-2	0.05	mg/kg	<0.05	0.5 mg/kg	92.0	69.0	115
EP068: Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	0.5 mg/kg	93.5	62.0	118
EP068: trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	0.5 mg/kg	91.9	63.0	117
EP068: alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	0.5 mg/kg	90.2	66.0	116
EP068: cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	0.5 mg/kg	98.9	64.0	116
EP068: Dieldrin	60-57-1	0.05	mg/kg	<0.05	0.5 mg/kg	92.1	66.0	116
EP068: 4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	0.5 mg/kg	98.6	67.0	115
EP068: Endrin	72-20-8	0.05	mg/kg	<0.05	0.5 mg/kg	105	67.0	123
EP068: beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	0.5 mg/kg	89.2	69.0	115
EP068: 4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	0.5 mg/kg	97.6	69.0	121
EP068: Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	0.5 mg/kg	79.7	56.0	120
EP068: Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	0.5 mg/kg	94.3	62.0	124
EP068: 4.4`-DDT	50-29-3	0.2	mg/kg	<0.2	0.5 mg/kg	88.0	66.0	120
EP068: Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	0.5 mg/kg	86.5	64.0	122
EP068: Methoxychlor	72-43-5	0.2	mg/kg	<0.2	0.5 mg/kg	78.4	54.0	130
EP068A: Organochlorine Pesticides (OC) (QCLot: 4145656)								
EP068: alpha-BHC	319-84-6	0.05	mg/kg	<0.05	0.5 mg/kg	92.8	69.0	113
EP068: Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	0.5 mg/kg	93.6	65.0	117
EP068: beta-BHC	319-85-7	0.05	mg/kg	<0.05	0.5 mg/kg	87.6	67.0	119
EP068: gamma-BHC	58-89-9	0.05	mg/kg	<0.05	0.5 mg/kg	99.8	68.0	116
EP068: delta-BHC	319-86-8	0.05	mg/kg	<0.05	0.5 mg/kg	87.2	65.0	117
EP068: Heptachlor	76-44-8	0.05	mg/kg	<0.05	0.5 mg/kg	87.8	67.0	115
EP068: Aldrin	309-00-2	0.05	mg/kg	<0.05	0.5 mg/kg	89.1	69.0	115
EP068: Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	0.5 mg/kg	93.9	62.0	118
EP068: trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	0.5 mg/kg	89.4	63.0	117
EP068: alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	0.5 mg/kg	95.6	66.0	116

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Acceptable Limits (%)	
				Result	Concentration	LCS	Low	High
EP068A: Organochlorine Pesticides (OC) (QCLot: 4145656) - continued								
EP068: cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	0.5 mg/kg	93.0	64.0	116
EP068: Dieldrin	60-57-1	0.05	mg/kg	<0.05	0.5 mg/kg	93.0	66.0	116
EP068: 4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	0.5 mg/kg	90.8	67.0	115
EP068: Endrin	72-20-8	0.05	mg/kg	<0.05	0.5 mg/kg	93.9	67.0	123
EP068: beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	0.5 mg/kg	95.6	69.0	115
EP068: 4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	0.5 mg/kg	90.2	69.0	121
EP068: Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	0.5 mg/kg	105	56.0	120
EP068: Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	0.5 mg/kg	98.6	62.0	124
EP068: 4.4`-DDT	50-29-3	0.2	mg/kg	<0.2	0.5 mg/kg	93.1	66.0	120
EP068: Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	0.5 mg/kg	100	64.0	122
EP068: Methoxychlor	72-43-5	0.2	mg/kg	<0.2	0.5 mg/kg	99.3	54.0	130
EP068B: Organophosphorus Pesticides (OP) (QCLot: 4145648)								
EP068: Dichlorvos	62-73-7	0.05	mg/kg	<0.05	0.5 mg/kg	84.1	59.0	119
EP068: Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	0.5 mg/kg	93.6	62.0	128
EP068: Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	0.5 mg/kg	79.2	54.0	126
EP068: Dimethoate	60-51-5	0.05	mg/kg	<0.05	0.5 mg/kg	95.8	67.0	119
EP068: Diazinon	333-41-5	0.05	mg/kg	<0.05	0.5 mg/kg	96.3	70.0	120
EP068: Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	0.5 mg/kg	91.0	72.0	120
EP068: Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	0.5 mg/kg	81.2	68.0	120
EP068: Malathion	121-75-5	0.05	mg/kg	<0.05	0.5 mg/kg	82.5	68.0	122
EP068: Fenthion	55-38-9	0.05	mg/kg	<0.05	0.5 mg/kg	92.7	69.0	117
EP068: Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	0.5 mg/kg	93.2	76.0	118
EP068: Parathion	56-38-2	0.2	mg/kg	<0.2	0.5 mg/kg	82.7	64.0	122
EP068: Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	0.5 mg/kg	90.4	70.0	116
EP068: Chlorfenvinphos	470-90-6	0.05	mg/kg	<0.05	0.5 mg/kg	89.0	69.0	121
EP068: Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	0.5 mg/kg	83.2	66.0	118
EP068: Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	0.5 mg/kg	93.8	68.0	124
EP068: Prothiofos	34643-46-4	0.05	mg/kg	<0.05	0.5 mg/kg	105	62.0	112
EP068: Ethion	563-12-2	0.05	mg/kg	<0.05	0.5 mg/kg	102	68.0	120
EP068: Carbophenothion	786-19-6	0.05	mg/kg	<0.05	0.5 mg/kg	76.9	65.0	127
EP068: Azinphos Methyl	86-50-0	0.05	mg/kg	<0.05	0.5 mg/kg	60.4	41.0	123
EP068B: Organophosphorus Pesticides (OP) (QCLot: 4145656)								
EP068: Dichlorvos	62-73-7	0.05	mg/kg	<0.05	0.5 mg/kg	78.1	59.0	119
EP068: Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	0.5 mg/kg	95.4	62.0	128
EP068: Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	0.5 mg/kg	94.6	54.0	126
EP068: Dimethoate	60-51-5	0.05	mg/kg	<0.05	0.5 mg/kg	88.1	67.0	119
EP068: Diazinon	333-41-5	0.05	mg/kg	<0.05	0.5 mg/kg	93.9	70.0	120
EP068: Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	0.5 mg/kg	84.3	72.0	120
EP068: Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	0.5 mg/kg	92.6	68.0	120

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Acceptable Limits (%)	
				Result	Concentration	LCS	Low	High
EP068B: Organophosphorus Pesticides (OP) (QCLot: 4145656) - continued								
EP068: Malathion	121-75-5	0.05	mg/kg	<0.05	0.5 mg/kg	81.7	68.0	122
EP068: Fenthion	55-38-9	0.05	mg/kg	<0.05	0.5 mg/kg	84.2	69.0	117
EP068: Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	0.5 mg/kg	87.7	76.0	118
EP068: Parathion	56-38-2	0.2	mg/kg	<0.2	0.5 mg/kg	83.1	64.0	122
EP068: Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	0.5 mg/kg	83.6	70.0	116
EP068: Chlorfenvinphos	470-90-6	0.05	mg/kg	<0.05	0.5 mg/kg	99.6	69.0	121
EP068: Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	0.5 mg/kg	88.7	66.0	118
EP068: Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	0.5 mg/kg	87.1	68.0	124
EP068: Prothiofos	34643-46-4	0.05	mg/kg	<0.05	0.5 mg/kg	99.2	62.0	112
EP068: Ethion	563-12-2	0.05	mg/kg	<0.05	0.5 mg/kg	84.8	68.0	120
EP068: Carbophenothion	786-19-6	0.05	mg/kg	<0.05	0.5 mg/kg	87.7	65.0	127
EP068: Azinphos Methyl	86-50-0	0.05	mg/kg	<0.05	0.5 mg/kg	80.2	41.0	123
EP074A: Monocyclic Aromatic Hydrocarbons (QCLot: 4144799)								
EP074: Benzene	71-43-2	0.2	mg/kg	<0.2	1 mg/kg	100	71.0	121
EP074: Toluene	108-88-3	0.5	mg/kg	<0.5	1 mg/kg	101	65.0	131
EP074: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	1 mg/kg	97.7	72.0	114
EP074: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	2 mg/kg	99.1	70.0	116
EP074: Styrene	100-42-5	0.5	mg/kg	<0.5	1 mg/kg	94.5	67.0	113
EP074: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	1 mg/kg	99.5	75.0	115
EP074: Isopropylbenzene	98-82-8	0.5	mg/kg	<0.5	1 mg/kg	97.3	65.0	117
EP074: n-Propylbenzene	103-65-1	0.5	mg/kg	<0.5	1 mg/kg	95.1	66.0	122
EP074: 1.3.5-Trimethylbenzene	108-67-8	0.5	mg/kg	<0.5	1 mg/kg	95.8	68.0	118
EP074: sec-Butylbenzene	135-98-8	0.5	mg/kg	<0.5	1 mg/kg	96.4	69.0	119
EP074: 1.2.4-Trimethylbenzene	95-63-6	0.5	mg/kg	<0.5	1 mg/kg	95.2	69.0	117
EP074: tert-Butylbenzene	98-06-6	0.5	mg/kg	<0.5	1 mg/kg	97.3	69.0	115
EP074: p-Isopropyltoluene	99-87-6	0.5	mg/kg	<0.5	1 mg/kg	94.5	66.0	118
EP074: n-Butylbenzene	104-51-8	0.5	mg/kg	<0.5	1 mg/kg	96.2	59.0	125
EP074A: Monocyclic Aromatic Hydrocarbons (QCLot: 4144827)								
EP074: Benzene	71-43-2	0.2	mg/kg	<0.2	1 mg/kg	100	71.0	121
EP074: Toluene	108-88-3	0.5	mg/kg	<0.5	1 mg/kg	103	65.0	131
EP074: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	1 mg/kg	103	72.0	114
EP074: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	2 mg/kg	102	70.0	116
EP074: Styrene	100-42-5	0.5	mg/kg	<0.5	1 mg/kg	101	67.0	113
EP074: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	1 mg/kg	103	75.0	115
EP074: Isopropylbenzene	98-82-8	0.5	mg/kg	<0.5	1 mg/kg	103	65.0	117
EP074: n-Propylbenzene	103-65-1	0.5	mg/kg	<0.5	1 mg/kg	102	66.0	122
EP074: 1.3.5-Trimethylbenzene	108-67-8	0.5	mg/kg	<0.5	1 mg/kg	102	68.0	118

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Acceptable Limits (%)	
				Result	Concentration	LCS	Low	High
EP074A: Monocyclic Aromatic Hydrocarbons (QCLot: 4144827) - continued								
EP074: sec-Butylbenzene	135-98-8	0.5	mg/kg	<0.5	1 mg/kg	103	69.0	119
EP074: 1.2.4-Trimethylbenzene	95-63-6	0.5	mg/kg	<0.5	1 mg/kg	101	69.0	117
EP074: tert-Butylbenzene	98-06-6	0.5	mg/kg	<0.5	1 mg/kg	103	69.0	115
EP074: p-Isopropyltoluene	99-87-6	0.5	mg/kg	<0.5	1 mg/kg	103	66.0	118
EP074: n-Butylbenzene	104-51-8	0.5	mg/kg	<0.5	1 mg/kg	104	59.0	125
EP074B: Oxygenated Compounds (QCLot: 4144799)								
EP074: Vinyl Acetate	108-05-4	5	mg/kg	<5	10 mg/kg	103	29.6	156
EP074: 2-Butanone (MEK)	78-93-3	5	mg/kg	<5	10 mg/kg	120	58.0	136
EP074: 4-Methyl-2-pentanone (MIBK)	108-10-1	5	mg/kg	<5	10 mg/kg	118	62.0	132
EP074: 2-Hexanone (MBK)	591-78-6	5	mg/kg	<5	10 mg/kg	120	54.0	136
EP074B: Oxygenated Compounds (QCLot: 4144827)								
EP074: Vinyl Acetate	108-05-4	5	mg/kg	<5	10 mg/kg	101	29.6	156
EP074: 2-Butanone (MEK)	78-93-3	5	mg/kg	<5	10 mg/kg	86.8	58.0	136
EP074: 4-Methyl-2-pentanone (MIBK)	108-10-1	5	mg/kg	<5	10 mg/kg	99.7	62.0	132
EP074: 2-Hexanone (MBK)	591-78-6	5	mg/kg	<5	10 mg/kg	93.1	54.0	136
EP074C: Sulfonated Compounds (QCLot: 4144799)								
EP074: Carbon disulfide	75-15-0	0.5	mg/kg	<0.5	1 mg/kg	91.7	54.0	126
EP074C: Sulfonated Compounds (QCLot: 4144827)								
EP074: Carbon disulfide	75-15-0	0.5	mg/kg	<0.5	1 mg/kg	97.7	54.0	126
EP074D: Fumigants (QCLot: 4144799)								
EP074: 2.2-Dichloropropane	594-20-7	0.5	mg/kg	<0.5	1 mg/kg	101	60.0	126
EP074: 1.2-Dichloropropane	78-87-5	0.5	mg/kg	<0.5	1 mg/kg	103	68.0	124
EP074: cis-1.3-Dichloropropylene	10061-01-5	0.5	mg/kg	<0.5	1 mg/kg	100	51.0	119
EP074: trans-1.3-Dichloropropylene	10061-02-6	0.5	mg/kg	<0.5	1 mg/kg	104	52.0	114
EP074: 1.2-Dibromoethane (EDB)	106-93-4	0.5	mg/kg	<0.5	1 mg/kg	112	63.0	115
EP074D: Fumigants (QCLot: 4144827)								
EP074: 2.2-Dichloropropane	594-20-7	0.5	mg/kg	<0.5	1 mg/kg	102	60.0	126
EP074: 1.2-Dichloropropane	78-87-5	0.5	mg/kg	<0.5	1 mg/kg	99.3	68.0	124
EP074: cis-1.3-Dichloropropylene	10061-01-5	0.5	mg/kg	<0.5	1 mg/kg	98.1	51.0	119
EP074: trans-1.3-Dichloropropylene	10061-02-6	0.5	mg/kg	<0.5	1 mg/kg	99.4	52.0	114
EP074: 1.2-Dibromoethane (EDB)	106-93-4	0.5	mg/kg	<0.5	1 mg/kg	101	63.0	115
EP074E: Halogenated Aliphatic Compounds (QCLot: 4144799)								
EP074: Dichlorodifluoromethane	75-71-8	5	mg/kg	<5	10 mg/kg	90.0	30.0	148
EP074: Chloromethane	74-87-3	5	mg/kg	<5	10 mg/kg	93.1	41.0	141
EP074: Vinyl chloride	75-01-4	5	mg/kg	<5	10 mg/kg	97.2	43.0	147
EP074: Bromomethane	74-83-9	5	mg/kg	<5	10 mg/kg	97.0	47.0	141
EP074: Chloroethane	75-00-3	5	mg/kg	<5	10 mg/kg	97.0	49.0	143
EP074: Trichlorofluoromethane	75-69-4	5	mg/kg	<5	10 mg/kg	98.4	49.0	135

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Acceptable Limits (%)	
				Result	Concentration	LCS	Low	High
EP074E: Halogenated Aliphatic Compounds (QCLot: 4144799) - continued								
EP074: 1.1-Dichloroethene	75-35-4	0.5	mg/kg	<0.5	1 mg/kg	95.6	54.0	126
EP074: Iodomethane	74-88-4	0.5	mg/kg	<0.5	1 mg/kg	78.4	43.0	129
EP074: trans-1.2-Dichloroethene	156-60-5	0.5	mg/kg	<0.5	1 mg/kg	100	64.0	120
EP074: 1.1-Dichloroethane	75-34-3	0.5	mg/kg	<0.5	1 mg/kg	102	67.0	125
EP074: cis-1.2-Dichloroethene	156-59-2	0.5	mg/kg	<0.5	1 mg/kg	101	69.0	121
EP074: 1.1.1-Trichloroethane	71-55-6	0.5	mg/kg	<0.5	1 mg/kg	103	65.0	117
EP074: 1.1-Dichloropropylene	563-58-6	0.5	mg/kg	<0.5	1 mg/kg	96.9	65.0	123
EP074: Carbon Tetrachloride	56-23-5	0.5	mg/kg	<0.5	1 mg/kg	94.6	59.0	125
EP074: 1.2-Dichloroethane	107-06-2	0.5	mg/kg	<0.5	1 mg/kg	106	65.0	125
EP074: Trichloroethene	79-01-6	0.5	mg/kg	<0.5	1 mg/kg	102	70.0	118
EP074: Dibromomethane	74-95-3	0.5	mg/kg	<0.5	1 mg/kg	105	68.0	118
EP074: 1.1.2-Trichloroethane	79-00-5	0.5	mg/kg	<0.5	1 mg/kg	104	64.0	126
EP074: 1.3-Dichloropropane	142-28-9	0.5	mg/kg	<0.5	1 mg/kg	111	68.0	122
EP074: Tetrachloroethene	127-18-4	0.5	mg/kg	<0.5	1 mg/kg	99.7	67.0	143
EP074: 1.1.1.2-Tetrachloroethane	630-20-6	0.5	mg/kg	<0.5	1 mg/kg	97.5	62.0	122
EP074: trans-1.4-Dichloro-2-butene	110-57-6	0.5	mg/kg	<0.5	1 mg/kg	103	54.0	128
EP074: cis-1.4-Dichloro-2-butene	1476-11-5	0.5	mg/kg	<0.5	1 mg/kg	106	55.0	129
EP074: 1.1.2.2-Tetrachloroethane	79-34-5	0.5	mg/kg	<0.5	1 mg/kg	108	65.0	121
EP074: 1.2.3-Trichloropropane	96-18-4	0.5	mg/kg	<0.5	1 mg/kg	106	61.0	125
EP074: Pentachloroethane	76-01-7	0.5	mg/kg	<0.5	1 mg/kg	86.7	19.8	134
EP074: 1.2-Dibromo-3-chloropropane	96-12-8	0.5	mg/kg	<0.5	1 mg/kg	111	53.0	129
EP074E: Halogenated Aliphatic Compounds (QCLot: 4144827)								
EP074: Dichlorodifluoromethane	75-71-8	5	mg/kg	<5	10 mg/kg	101	30.0	148
EP074: Chloromethane	74-87-3	5	mg/kg	<5	10 mg/kg	101	41.0	141
EP074: Vinyl chloride	75-01-4	5	mg/kg	<5	10 mg/kg	106	43.0	147
EP074: Bromomethane	74-83-9	5	mg/kg	<5	10 mg/kg	110	47.0	141
EP074: Chloroethane	75-00-3	5	mg/kg	<5	10 mg/kg	108	49.0	143
EP074: Trichlorofluoromethane	75-69-4	5	mg/kg	<5	10 mg/kg	111	49.0	135
EP074: 1.1-Dichloroethene	75-35-4	0.5	mg/kg	<0.5	1 mg/kg	111	54.0	126
EP074: Iodomethane	74-88-4	0.5	mg/kg	<0.5	1 mg/kg	101	43.0	129
EP074: trans-1.2-Dichloroethene	156-60-5	0.5	mg/kg	<0.5	1 mg/kg	101	64.0	120
EP074: 1.1-Dichloroethane	75-34-3	0.5	mg/kg	<0.5	1 mg/kg	101	67.0	125
EP074: cis-1.2-Dichloroethene	156-59-2	0.5	mg/kg	<0.5	1 mg/kg	101	69.0	121
EP074: 1.1.1-Trichloroethane	71-55-6	0.5	mg/kg	<0.5	1 mg/kg	103	65.0	117
EP074: 1.1-Dichloropropylene	563-58-6	0.5	mg/kg	<0.5	1 mg/kg	102	65.0	123
EP074: Carbon Tetrachloride	56-23-5	0.5	mg/kg	<0.5	1 mg/kg	102	59.0	125
EP074: 1.2-Dichloroethane	107-06-2	0.5	mg/kg	<0.5	1 mg/kg	105	65.0	125
EP074: Trichloroethene	79-01-6	0.5	mg/kg	<0.5	1 mg/kg	102	70.0	118
EP074: Dibromomethane	74-95-3	0.5	mg/kg	<0.5	1 mg/kg	102	68.0	118

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Acceptable Limits (%)	
				Result	Concentration	LCS	Low	High
EP074E: Halogenated Aliphatic Compounds (QCLot: 4144827) - continued								
EP074: 1.1.2-Trichloroethane	79-00-5	0.5	mg/kg	<0.5	1 mg/kg	103	64.0	126
EP074: 1.3-Dichloropropane	142-28-9	0.5	mg/kg	<0.5	1 mg/kg	101	68.0	122
EP074: Tetrachloroethene	127-18-4	0.5	mg/kg	<0.5	1 mg/kg	101	67.0	143
EP074: 1.1.1.2-Tetrachloroethane	630-20-6	0.5	mg/kg	<0.5	1 mg/kg	99.5	62.0	122
EP074: trans-1.4-Dichloro-2-butene	110-57-6	0.5	mg/kg	<0.5	1 mg/kg	102	54.0	128
EP074: cis-1.4-Dichloro-2-butene	1476-11-5	0.5	mg/kg	<0.5	1 mg/kg	103	55.0	129
EP074: 1.1.2.2-Tetrachloroethane	79-34-5	0.5	mg/kg	<0.5	1 mg/kg	103	65.0	121
EP074: 1.2.3-Trichloropropane	96-18-4	0.5	mg/kg	<0.5	1 mg/kg	105	61.0	125
EP074: Pentachloroethane	76-01-7	0.5	mg/kg	<0.5	1 mg/kg	103	19.8	134
EP074: 1.2-Dibromo-3-chloropropane	96-12-8	0.5	mg/kg	<0.5	1 mg/kg	102	53.0	129
EP074F: Halogenated Aromatic Compounds (QCLot: 4144799)								
EP074: Chlorobenzene	108-90-7	0.5	mg/kg	<0.5	1 mg/kg	98.9	68.0	116
EP074: Bromobenzene	108-86-1	0.5	mg/kg	<0.5	1 mg/kg	97.0	70.0	114
EP074: 2-Chlorotoluene	95-49-8	0.5	mg/kg	<0.5	1 mg/kg	99.1	68.0	122
EP074: 4-Chlorotoluene	106-43-4	0.5	mg/kg	<0.5	1 mg/kg	100	67.0	123
EP074: 1.2.3-Trichlorobenzene	87-61-6	0.5	mg/kg	<0.5	1 mg/kg	103	52.0	122
EP074F: Halogenated Aromatic Compounds (QCLot: 4144827)								
EP074: Chlorobenzene	108-90-7	0.5	mg/kg	<0.5	1 mg/kg	103	68.0	116
EP074: Bromobenzene	108-86-1	0.5	mg/kg	<0.5	1 mg/kg	102	70.0	114
EP074: 2-Chlorotoluene	95-49-8	0.5	mg/kg	<0.5	1 mg/kg	103	68.0	122
EP074: 4-Chlorotoluene	106-43-4	0.5	mg/kg	<0.5	1 mg/kg	102	67.0	123
EP074: 1.2.3-Trichlorobenzene	87-61-6	0.5	mg/kg	<0.5	1 mg/kg	106	52.0	122
EP074G: Trihalomethanes (QCLot: 4144799)								
EP074: Chloroform	67-66-3	0.5	mg/kg	<0.5	1 mg/kg	104	66.0	124
EP074: Bromodichloromethane	75-27-4	0.5	mg/kg	<0.5	1 mg/kg	103	61.0	121
EP074: Dibromochloromethane	124-48-1	0.5	mg/kg	<0.5	1 mg/kg	97.5	63.0	121
EP074: Bromoform	75-25-2	0.5	mg/kg	<0.5	1 mg/kg	100	60.0	126
EP074G: Trihalomethanes (QCLot: 4144827)								
EP074: Chloroform	67-66-3	0.5	mg/kg	<0.5	1 mg/kg	103	66.0	124
EP074: Bromodichloromethane	75-27-4	0.5	mg/kg	<0.5	1 mg/kg	99.5	61.0	121
EP074: Dibromochloromethane	124-48-1	0.5	mg/kg	<0.5	1 mg/kg	98.4	63.0	121
EP074: Bromoform	75-25-2	0.5	mg/kg	<0.5	1 mg/kg	102	60.0	126
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 4145647)								
EP075(SIM): Naphthalene	91-20-3	0.5	mg/kg	<0.5	6 mg/kg	110	77.0	125
EP075(SIM): Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	6 mg/kg	102	72.0	124
EP075(SIM): Acenaphthene	83-32-9	0.5	mg/kg	<0.5	6 mg/kg	107	73.0	127
EP075(SIM): Fluorene	86-73-7	0.5	mg/kg	<0.5	6 mg/kg	110	72.0	126
EP075(SIM): Phenanthrene	85-01-8	0.5	mg/kg	<0.5	6 mg/kg	107	75.0	127

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Acceptable Limits (%)	
				Result	Concentration	LCS	Low	High
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 4145647) - continued								
EP075(SIM): Anthracene	120-12-7	0.5	mg/kg	<0.5	6 mg/kg	99.7	77.0	127
EP075(SIM): Fluoranthene	206-44-0	0.5	mg/kg	<0.5	6 mg/kg	107	73.0	127
EP075(SIM): Pyrene	129-00-0	0.5	mg/kg	<0.5	6 mg/kg	106	74.0	128
EP075(SIM): Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	6 mg/kg	99.8	69.0	123
EP075(SIM): Chrysene	218-01-9	0.5	mg/kg	<0.5	6 mg/kg	104	75.0	127
EP075(SIM): Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	6 mg/kg	94.1	68.0	116
EP075(SIM): Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	6 mg/kg	105	74.0	126
EP075(SIM): Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	6 mg/kg	91.9	70.0	126
EP075(SIM): Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	6 mg/kg	97.3	61.0	121
EP075(SIM): Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	6 mg/kg	96.6	62.0	118
EP075(SIM): Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	6 mg/kg	94.8	63.0	121
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 4145655)								
EP075(SIM): Naphthalene	91-20-3	0.5	mg/kg	<0.5	6 mg/kg	93.7	77.0	125
EP075(SIM): Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	6 mg/kg	95.3	72.0	124
EP075(SIM): Acenaphthene	83-32-9	0.5	mg/kg	<0.5	6 mg/kg	92.7	73.0	127
EP075(SIM): Fluorene	86-73-7	0.5	mg/kg	<0.5	6 mg/kg	95.7	72.0	126
EP075(SIM): Phenanthrene	85-01-8	0.5	mg/kg	<0.5	6 mg/kg	97.7	75.0	127
EP075(SIM): Anthracene	120-12-7	0.5	mg/kg	<0.5	6 mg/kg	100	77.0	127
EP075(SIM): Fluoranthene	206-44-0	0.5	mg/kg	<0.5	6 mg/kg	97.8	73.0	127
EP075(SIM): Pyrene	129-00-0	0.5	mg/kg	<0.5	6 mg/kg	96.3	74.0	128
EP075(SIM): Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	6 mg/kg	89.6	69.0	123
EP075(SIM): Chrysene	218-01-9	0.5	mg/kg	<0.5	6 mg/kg	94.2	75.0	127
EP075(SIM): Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	6 mg/kg	87.9	68.0	116
EP075(SIM): Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	6 mg/kg	95.1	74.0	126
EP075(SIM): Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	6 mg/kg	89.9	70.0	126
EP075(SIM): Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	6 mg/kg	88.9	61.0	121
EP075(SIM): Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	6 mg/kg	90.4	62.0	118
EP075(SIM): Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	6 mg/kg	89.1	63.0	121
EP075A: Phenolic Compounds (QCLot: 4145650)								
EP075: Phenol	108-95-2	0.5	mg/kg	<0.5	1.5 mg/kg	93.1	64.0	114
EP075: 2-Chlorophenol	95-57-8	0.5	mg/kg	<0.5	1.5 mg/kg	87.3	57.0	115
EP075: 2-Methylphenol	95-48-7	0.5	mg/kg	<0.5	1.5 mg/kg	97.1	55.0	117
EP075: 3- & 4-Methylphenol	1319-77-3	0.5	mg/kg	<0.5	1.5 mg/kg	105	46.0	122
EP075: 2-Nitrophenol	88-75-5	0.5	mg/kg	<0.5	1.5 mg/kg	93.2	47.0	117
EP075: 2.4-Dimethylphenol	105-67-9	0.5	mg/kg	<0.5	1.5 mg/kg	# 110	13.7	108
EP075: 2.4-Dichlorophenol	120-83-2	0.5	mg/kg	<0.5	1.5 mg/kg	89.7	47.0	105
EP075: 2.6-Dichlorophenol	87-65-0	0.5	mg/kg	<0.5	1.5 mg/kg	97.6	48.0	110

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Acceptable Limits (%)	
				Result	Concentration	LCS	Low	High
EP075A: Phenolic Compounds (QCLot: 4145650) - continued								
EP075: 4-Chloro-3-methylphenol	59-50-7	0.5	mg/kg	<0.5	1.5 mg/kg	108	57.0	113
EP075: 2.4.6-Trichlorophenol	88-06-2	0.5	mg/kg	<0.5	1.5 mg/kg	89.3	49.0	109
EP075: 2.4.5-Trichlorophenol	95-95-4	0.5	mg/kg	<0.5	1.5 mg/kg	96.2	49.0	107
EP075: Pentachlorophenol	87-86-5	1	mg/kg	<1	3 mg/kg	51.2	12.0	76.0
EP075A: Phenolic Compounds (QCLot: 4145658)								
EP075: Phenol	108-95-2	0.5	mg/kg	<0.5	1.5 mg/kg	92.5	64.0	114
EP075: 2-Chlorophenol	95-57-8	0.5	mg/kg	<0.5	1.5 mg/kg	83.2	57.0	115
EP075: 2-Methylphenol	95-48-7	0.5	mg/kg	<0.5	1.5 mg/kg	94.5	55.0	117
EP075: 3- & 4-Methylphenol	1319-77-3	0.5	mg/kg	<0.5	1.5 mg/kg	104	46.0	122
EP075: 2-Nitrophenol	88-75-5	0.5	mg/kg	<0.5	1.5 mg/kg	92.7	47.0	117
EP075: 2.4-Dimethylphenol	105-67-9	0.5	mg/kg	<0.5	1.5 mg/kg	# 109	13.7	108
EP075: 2.4-Dichlorophenol	120-83-2	0.5	mg/kg	<0.5	1.5 mg/kg	89.6	47.0	105
EP075: 2.6-Dichlorophenol	87-65-0	0.5	mg/kg	<0.5	1.5 mg/kg	92.6	48.0	110
EP075: 4-Chloro-3-methylphenol	59-50-7	0.5	mg/kg	<0.5	1.5 mg/kg	102	57.0	113
EP075: 2.4.6-Trichlorophenol	88-06-2	0.5	mg/kg	<0.5	1.5 mg/kg	85.3	49.0	109
EP075: 2.4.5-Trichlorophenol	95-95-4	0.5	mg/kg	<0.5	1.5 mg/kg	92.8	49.0	107
EP075: Pentachlorophenol	87-86-5	1	mg/kg	<1	3 mg/kg	51.8	12.0	76.0
EP075B: Polynuclear Aromatic Hydrocarbons (QCLot: 4145650)								
EP075: Naphthalene	91-20-3	0.5	mg/kg	<0.5	1.5 mg/kg	96.7	62.0	118
EP075: 2-Methylnaphthalene	91-57-6	0.5	mg/kg	<0.5	1.5 mg/kg	102	58.0	116
EP075: 2-Chloronaphthalene	91-58-7	0.5	mg/kg	<0.5	1.5 mg/kg	112	54.0	112
EP075: Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	1.5 mg/kg	108	56.0	114
EP075: Acenaphthene	83-32-9	0.5	mg/kg	<0.5	1.5 mg/kg	104	62.0	112
EP075: Fluorene	86-73-7	0.5	mg/kg	<0.5	1.5 mg/kg	108	59.0	115
EP075: Phenanthrene	85-01-8	0.5	mg/kg	<0.5	1.5 mg/kg	98.5	63.0	113
EP075: Anthracene	120-12-7	0.5	mg/kg	<0.5	1.5 mg/kg	99.6	57.0	111
EP075: Fluoranthene	206-44-0	0.5	mg/kg	<0.5	1.5 mg/kg	101	58.0	114
EP075: Pyrene	129-00-0	0.5	mg/kg	<0.5	1.5 mg/kg	103	57.0	117
EP075: N-2-Fluorenyl Acetamide	53-96-3	0.5	mg/kg	<0.5	1.5 mg/kg	102	58.0	114
EP075: Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	1.5 mg/kg	106	59.0	115
EP075: Chrysene	218-01-9	0.5	mg/kg	<0.5	1.5 mg/kg	109	61.0	117
EP075: Benzo(b+j) & Benzo(k)fluoranthene	205-99-2 207-08-9	1	mg/kg	<1	3 mg/kg	96.6	57.0	119
EP075: 7.12-Dimethylbenz(a)anthracene	57-97-6	0.5	mg/kg	<0.5	1.5 mg/kg	# 119	48.1	106
EP075: Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	1.5 mg/kg	96.3	56.0	116
EP075: 3-Methylcholanthrene	56-49-5	0.5	mg/kg	<0.5	1.5 mg/kg	96.0	50.0	116
EP075: Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	1.5 mg/kg	95.0	55.0	117
EP075: Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	1.5 mg/kg	94.1	53.0	119
EP075: Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	1.5 mg/kg	94.4	56.0	120

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Acceptable Limits (%)	
				Result	Concentration	LCS	Low	High
EP075B: Polynuclear Aromatic Hydrocarbons (QCLot: 4145658)								
EP075: Naphthalene	91-20-3	0.5	mg/kg	<0.5	1.5 mg/kg	91.9	62.0	118
EP075: 2-Methylnaphthalene	91-57-6	0.5	mg/kg	<0.5	1.5 mg/kg	97.4	58.0	116
EP075: 2-Chloronaphthalene	91-58-7	0.5	mg/kg	<0.5	1.5 mg/kg	109	54.0	112
EP075: Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	1.5 mg/kg	97.9	56.0	114
EP075: Acenaphthene	83-32-9	0.5	mg/kg	<0.5	1.5 mg/kg	98.6	62.0	112
EP075: Fluorene	86-73-7	0.5	mg/kg	<0.5	1.5 mg/kg	106	59.0	115
EP075: Phenanthrene	85-01-8	0.5	mg/kg	<0.5	1.5 mg/kg	92.4	63.0	113
EP075: Anthracene	120-12-7	0.5	mg/kg	<0.5	1.5 mg/kg	93.4	57.0	111
EP075: Fluoranthene	206-44-0	0.5	mg/kg	<0.5	1.5 mg/kg	94.6	58.0	114
EP075: Pyrene	129-00-0	0.5	mg/kg	<0.5	1.5 mg/kg	96.0	57.0	117
EP075: N-2-Fluorenyl Acetamide	53-96-3	0.5	mg/kg	<0.5	1.5 mg/kg	80.3	58.0	114
EP075: Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	1.5 mg/kg	97.2	59.0	115
EP075: Chrysene	218-01-9	0.5	mg/kg	<0.5	1.5 mg/kg	101	61.0	117
EP075: Benzo(b+j) & Benzo(k)fluoranthene	205-99-2 207-08-9	1	mg/kg	<1	3 mg/kg	92.6	57.0	119
EP075: 7.12-Dimethylbenz(a)anthracene	57-97-6	0.5	mg/kg	<0.5	1.5 mg/kg	# 119	48.1	106
EP075: Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	1.5 mg/kg	92.4	56.0	116
EP075: 3-Methylcholanthrene	56-49-5	0.5	mg/kg	<0.5	1.5 mg/kg	85.0	50.0	116
EP075: Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	1.5 mg/kg	84.9	55.0	117
EP075: Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	1.5 mg/kg	84.7	53.0	119
EP075: Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	1.5 mg/kg	85.7	56.0	120
EP075C: Phthalate Esters (QCLot: 4145650)								
EP075: Dimethyl phthalate	131-11-3	0.5	mg/kg	<0.5	1.5 mg/kg	112	60.0	118
EP075: Diethyl phthalate	84-66-2	0.5	mg/kg	<0.5	1.5 mg/kg	# 118	65.0	115
EP075: Di-n-butyl phthalate	84-74-2	0.5	mg/kg	<0.5	1.5 mg/kg	98.6	65.0	121
EP075: Butyl benzyl phthalate	85-68-7	0.5	mg/kg	<0.5	1.5 mg/kg	103	62.0	116
EP075: bis(2-ethylhexyl) phthalate	117-81-7	----	mg/kg	----	1.5 mg/kg	89.2	69.0	133
EP075: Di-n-octylphthalate	117-84-0	0.5	mg/kg	<0.5	1.5 mg/kg	90.6	62.0	124
EP075C: Phthalate Esters (QCLot: 4145658)								
EP075: Dimethyl phthalate	131-11-3	0.5	mg/kg	<0.5	1.5 mg/kg	101	60.0	118
EP075: Diethyl phthalate	84-66-2	0.5	mg/kg	<0.5	1.5 mg/kg	# 117	65.0	115
EP075: Di-n-butyl phthalate	84-74-2	0.5	mg/kg	<0.5	1.5 mg/kg	90.6	65.0	121
EP075: Butyl benzyl phthalate	85-68-7	0.5	mg/kg	<0.5	1.5 mg/kg	95.5	62.0	116
EP075: bis(2-ethylhexyl) phthalate	117-81-7	----	mg/kg	----	1.5 mg/kg	83.7	69.0	133
EP075: Di-n-octylphthalate	117-84-0	0.5	mg/kg	<0.5	1.5 mg/kg	86.6	62.0	124
EP075D: Nitrosamines (QCLot: 4145650)								
EP075: N-Nitrosomethylethylamine	10595-95-6	0.5	mg/kg	<0.5	1.5 mg/kg	88.6	39.4	124
EP075: N-Nitrosodiethylamine	55-18-5	0.5	mg/kg	<0.5	1.5 mg/kg	91.0	59.0	117

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Acceptable Limits (%)	
				Result	Concentration	LCS	Low	High
EP075D: Nitrosamines (QCLot: 4145650) - continued								
EP075: N-Nitrosopyrrolidine	930-55-2	0.5	mg/kg	<0.5	1.5 mg/kg	119	53.0	125
EP075: N-Nitrosomorpholine	59-89-2	0.5	mg/kg	<0.5	1.5 mg/kg	116	65.0	121
EP075: N-Nitrosodi-n-propylamine	621-64-7	0.5	mg/kg	<0.5	1.5 mg/kg	105	59.0	123
EP075: N-Nitrosopiperidine	100-75-4	0.5	mg/kg	<0.5	1.5 mg/kg	109	57.0	115
EP075: N-Nitrosodibutylamine	924-16-3	0.5	mg/kg	<0.5	1.5 mg/kg	110	57.0	119
EP075: N-Nitrosodiphenyl & Diphenylamine	86-30-6 122-39-4	0.5	mg/kg	<0.6	3 mg/kg	109	42.0	112
EP075: Methapyrilene	91-80-5	0.5	mg/kg	<0.5	1.5 mg/kg	53.4	16.3	123
EP075D: Nitrosamines (QCLot: 4145658)								
EP075: N-Nitrosomethylethylamine	10595-95-6	0.5	mg/kg	<0.5	1.5 mg/kg	87.8	39.4	124
EP075: N-Nitrosodiethylamine	55-18-5	0.5	mg/kg	<0.5	1.5 mg/kg	91.9	59.0	117
EP075: N-Nitrosopyrrolidine	930-55-2	0.5	mg/kg	<0.5	1.5 mg/kg	119	53.0	125
EP075: N-Nitrosomorpholine	59-89-2	0.5	mg/kg	<0.5	1.5 mg/kg	116	65.0	121
EP075: N-Nitrosodi-n-propylamine	621-64-7	0.5	mg/kg	<0.5	1.5 mg/kg	104	59.0	123
EP075: N-Nitrosopiperidine	100-75-4	0.5	mg/kg	<0.5	1.5 mg/kg	111	57.0	115
EP075: N-Nitrosodibutylamine	924-16-3	0.5	mg/kg	<0.5	1.5 mg/kg	101	57.0	119
EP075: N-Nitrosodiphenyl & Diphenylamine	86-30-6 122-39-4	0.5	mg/kg	<0.6	3 mg/kg	110	42.0	112
EP075: Methapyrilene	91-80-5	0.5	mg/kg	<0.5	1.5 mg/kg	76.8	16.3	123
EP075E: Nitroaromatics and Ketones (QCLot: 4145650)								
EP075: 2-Picoline	109-06-8	0.5	mg/kg	<0.5	1.5 mg/kg	87.1	27.3	129
EP075: Acetophenone	98-86-2	0.5	mg/kg	<0.5	1.5 mg/kg	95.8	60.0	116
EP075: Nitrobenzene	98-95-3	0.5	mg/kg	<0.5	1.5 mg/kg	99.4	65.0	119
EP075: Isophorone	78-59-1	0.5	mg/kg	<0.5	1.5 mg/kg	110	62.0	116
EP075: 2.6-Dinitrotoluene	606-20-2	0.5	mg/kg	<0.5	1.5 mg/kg	113	58.0	118
EP075: 2.4-Dinitrotoluene	121-14-2	0.5	mg/kg	<0.5	1.5 mg/kg	108	59.0	115
EP075: 1-Naphthylamine	134-32-7	0.5	mg/kg	<0.5	1.5 mg/kg	87.1	18.0	112
EP075: 4-Nitroquinoline-N-oxide	56-57-5	0.5	mg/kg	<0.5	1.5 mg/kg	# 94.4	10.0	87.0
EP075: 5-Nitro-o-toluidine	99-55-8	0.5	mg/kg	<0.5	1.5 mg/kg	# 99.4	48.3	98.5
EP075: Azobenzene	103-33-3	1	mg/kg	<1	1.5 mg/kg	108	62.0	118
EP075: 1.3.5-Trinitrobenzene	99-35-4	0.5	mg/kg	<0.5	1.5 mg/kg	99.3	36.0	114
EP075: Phenacetin	62-44-2	0.5	mg/kg	<0.5	1.5 mg/kg	98.9	62.0	114
EP075: 4-Aminobiphenyl	92-67-1	0.5	mg/kg	<0.5	1.5 mg/kg	# 105	36.1	102
EP075: Pentachloronitrobenzene	82-68-8	0.5	mg/kg	<0.5	1.5 mg/kg	102	56.0	110
EP075: Pronamide	23950-58-5	0.5	mg/kg	<0.5	1.5 mg/kg	96.4	54.0	110
EP075: Dimethylaminoazobenzene	60-11-7	0.5	mg/kg	<0.5	1.5 mg/kg	103	48.0	108
EP075: Chlorobenzilate	510-15-6	0.5	mg/kg	<0.5	1.5 mg/kg	100	57.4	112
EP075E: Nitroaromatics and Ketones (QCLot: 4145658)								

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Acceptable Limits (%)	
				Result	Concentration	LCS	Low	High
EP075E: Nitroaromatics and Ketones (QCLot: 4145658) - continued								
EP075: 2-Picoline	109-06-8	0.5	mg/kg	<0.5	1.5 mg/kg	85.8	27.3	129
EP075: Acetophenone	98-86-2	0.5	mg/kg	<0.5	1.5 mg/kg	97.8	60.0	116
EP075: Nitrobenzene	98-95-3	0.5	mg/kg	<0.5	1.5 mg/kg	101	65.0	119
EP075: Isophorone	78-59-1	0.5	mg/kg	<0.5	1.5 mg/kg	108	62.0	116
EP075: 2.6-Dinitrotoluene	606-20-2	0.5	mg/kg	<0.5	1.5 mg/kg	104	58.0	118
EP075: 2.4-Dinitrotoluene	121-14-2	0.5	mg/kg	<0.5	1.5 mg/kg	99.5	59.0	115
EP075: 1-Naphthylamine	134-32-7	0.5	mg/kg	<0.5	1.5 mg/kg	83.3	18.0	112
EP075: 4-Nitroquinoline-N-oxide	56-57-5	0.5	mg/kg	<0.5	1.5 mg/kg	84.9	10.0	87.0
EP075: 5-Nitro-o-toluidine	99-55-8	0.5	mg/kg	<0.5	1.5 mg/kg	# 105	48.3	98.5
EP075: Azobenzene	103-33-3	1	mg/kg	<1	1.5 mg/kg	109	62.0	118
EP075: 1.3.5-Trinitrobenzene	99-35-4	0.5	mg/kg	<0.5	1.5 mg/kg	97.6	36.0	114
EP075: Phenacetin	62-44-2	0.5	mg/kg	<0.5	1.5 mg/kg	86.6	62.0	114
EP075: 4-Aminobiphenyl	92-67-1	0.5	mg/kg	<0.5	1.5 mg/kg	# 107	36.1	102
EP075: Pentachloronitrobenzene	82-68-8	0.5	mg/kg	<0.5	1.5 mg/kg	106	56.0	110
EP075: Pronamide	23950-58-5	0.5	mg/kg	<0.5	1.5 mg/kg	93.2	54.0	110
EP075: Dimethylaminoazobenzene	60-11-7	0.5	mg/kg	<0.5	1.5 mg/kg	92.5	48.0	108
EP075: Chlorobenzilate	510-15-6	0.5	mg/kg	<0.5	1.5 mg/kg	92.1	57.4	112
EP075F: Haloethers (QCLot: 4145650)								
EP075: Bis(2-chloroethyl) ether	111-44-4	0.5	mg/kg	<0.5	1.5 mg/kg	93.7	63.0	121
EP075: Bis(2-chloroethoxy) methane	111-91-1	0.5	mg/kg	<0.5	1.5 mg/kg	102	59.0	115
EP075: 4-Chlorophenyl phenyl ether	7005-72-3	0.5	mg/kg	<0.5	1.5 mg/kg	105	58.0	112
EP075: 4-Bromophenyl phenyl ether	101-55-3	0.5	mg/kg	<0.5	1.5 mg/kg	106	58.0	110
EP075F: Haloethers (QCLot: 4145658)								
EP075: Bis(2-chloroethyl) ether	111-44-4	0.5	mg/kg	<0.5	1.5 mg/kg	93.0	63.0	121
EP075: Bis(2-chloroethoxy) methane	111-91-1	0.5	mg/kg	<0.5	1.5 mg/kg	103	59.0	115
EP075: 4-Chlorophenyl phenyl ether	7005-72-3	0.5	mg/kg	<0.5	1.5 mg/kg	105	58.0	112
EP075: 4-Bromophenyl phenyl ether	101-55-3	0.5	mg/kg	<0.5	1.5 mg/kg	107	58.0	110
EP075G: Chlorinated Hydrocarbons (QCLot: 4145650)								
EP075: 1.3-Dichlorobenzene	541-73-1	0.5	mg/kg	<0.5	1.5 mg/kg	82.6	58.0	112
EP075: 1.4-Dichlorobenzene	106-46-7	0.5	mg/kg	<0.5	1.5 mg/kg	84.9	58.0	116
EP075: 1.2-Dichlorobenzene	95-50-1	0.5	mg/kg	<0.5	1.5 mg/kg	89.2	57.0	115
EP075: Hexachloroethane	67-72-1	0.5	mg/kg	<0.5	1.5 mg/kg	85.2	54.0	116
EP075: 1.2.4-Trichlorobenzene	120-82-1	0.5	mg/kg	<0.5	1.5 mg/kg	92.3	62.9	108
EP075: Hexachloropropylene	1888-71-7	0.5	mg/kg	<0.5	1.5 mg/kg	91.8	39.1	110
EP075: Hexachlorobutadiene	87-68-3	0.5	mg/kg	<0.5	1.5 mg/kg	91.6	59.0	117
EP075: Hexachlorocyclopentadiene	77-47-4	2.5	mg/kg	<2.5	1.5 mg/kg	80.4	24.3	108
EP075: Pentachlorobenzene	608-93-5	0.5	mg/kg	<0.5	1.5 mg/kg	102	57.0	109
EP075: Hexachlorobenzene (HCB)	118-74-1	0.5	mg/kg	<0.5	1.5 mg/kg	108	59.0	111

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Acceptable Limits (%)	
				Result	Concentration	LCS	Low	High
EP075G: Chlorinated Hydrocarbons (QCLot: 4145658)								
EP075: 1.3-Dichlorobenzene	541-73-1	0.5	mg/kg	<0.5	1.5 mg/kg	79.6	58.0	112
EP075: 1.4-Dichlorobenzene	106-46-7	0.5	mg/kg	<0.5	1.5 mg/kg	82.8	58.0	116
EP075: 1.2-Dichlorobenzene	95-50-1	0.5	mg/kg	<0.5	1.5 mg/kg	86.8	57.0	115
EP075: Hexachloroethane	67-72-1	0.5	mg/kg	<0.5	1.5 mg/kg	85.3	54.0	116
EP075: 1.2.4-Trichlorobenzene	120-82-1	0.5	mg/kg	<0.5	1.5 mg/kg	90.8	62.9	108
EP075: Hexachloropropylene	1888-71-7	0.5	mg/kg	<0.5	1.5 mg/kg	85.9	39.1	110
EP075: Hexachlorobutadiene	87-68-3	0.5	mg/kg	<0.5	1.5 mg/kg	89.8	59.0	117
EP075: Hexachlorocyclopentadiene	77-47-4	2.5	mg/kg	<2.5	1.5 mg/kg	81.0	24.3	108
EP075: Pentachlorobenzene	608-93-5	0.5	mg/kg	<0.5	1.5 mg/kg	97.3	57.0	109
EP075: Hexachlorobenzene (HCB)	118-74-1	0.5	mg/kg	<0.5	1.5 mg/kg	109	59.0	111
EP075H: Anilines and Benzidines (QCLot: 4145650)								
EP075: Aniline	62-53-3	0.5	mg/kg	<0.5	1.5 mg/kg	77.5	13.2	108
EP075: 4-Chloroaniline	106-47-8	0.5	mg/kg	<0.5	1.5 mg/kg	65.0	20.5	99.0
EP075: 2-Nitroaniline	88-74-4	0.5	mg/kg	<0.5	1.5 mg/kg	# 114	52.0	112
EP075: 3-Nitroaniline	99-09-2	0.5	mg/kg	<0.5	1.5 mg/kg	# 107	31.5	93.7
EP075: Dibenzofuran	132-64-9	0.5	mg/kg	<0.5	1.5 mg/kg	104	60.0	110
EP075: 4-Nitroaniline	100-01-6	0.5	mg/kg	<0.5	1.5 mg/kg	108	42.0	112
EP075: Carbazole	86-74-8	0.5	mg/kg	<0.5	1.5 mg/kg	105	59.0	111
EP075: 3.3`-Dichlorobenzidine	91-94-1	0.5	mg/kg	<0.5	1.5 mg/kg	102	23.1	113
EP075H: Anilines and Benzidines (QCLot: 4145658)								
EP075: Aniline	62-53-3	0.5	mg/kg	<0.5	1.5 mg/kg	77.4	13.2	108
EP075: 4-Chloroaniline	106-47-8	0.5	mg/kg	<0.5	1.5 mg/kg	69.3	20.5	99.0
EP075: 2-Nitroaniline	88-74-4	0.5	mg/kg	<0.5	1.5 mg/kg	108	52.0	112
EP075: 3-Nitroaniline	99-09-2	0.5	mg/kg	<0.5	1.5 mg/kg	# 113	31.5	93.7
EP075: Dibenzofuran	132-64-9	0.5	mg/kg	<0.5	1.5 mg/kg	99.4	60.0	110
EP075: 4-Nitroaniline	100-01-6	0.5	mg/kg	<0.5	1.5 mg/kg	110	42.0	112
EP075: Carbazole	86-74-8	0.5	mg/kg	<0.5	1.5 mg/kg	96.0	59.0	111
EP075: 3.3`-Dichlorobenzidine	91-94-1	0.5	mg/kg	<0.5	1.5 mg/kg	93.4	23.1	113
EP075I: Organochlorine Pesticides (QCLot: 4145650)								
EP075: alpha-BHC	319-84-6	0.5	mg/kg	<0.5	1.5 mg/kg	107	63.0	113
EP075: beta-BHC	319-85-7	0.5	mg/kg	<0.5	1.5 mg/kg	113	57.0	113
EP075: gamma-BHC	58-89-9	0.5	mg/kg	<0.5	1.5 mg/kg	109	61.0	117
EP075: delta-BHC	319-86-8	0.5	mg/kg	<0.5	1.5 mg/kg	97.8	64.0	118
EP075: Heptachlor	76-44-8	0.5	mg/kg	<0.5	1.5 mg/kg	91.9	55.0	115
EP075: Aldrin	309-00-2	0.5	mg/kg	<0.5	1.5 mg/kg	95.3	61.0	115
EP075: Heptachlor epoxide	1024-57-3	0.5	mg/kg	<0.5	1.5 mg/kg	94.6	56.0	118
EP075: alpha-Endosulfan	959-98-8	0.5	mg/kg	<0.5	1.5 mg/kg	98.5	65.0	125
EP075: 4.4`-DDE	72-55-9	0.5	mg/kg	<0.5	1.5 mg/kg	100.0	60.0	116

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Acceptable Limits (%)	
				Result	Concentration	LCS	Low	High
EP075I: Organochlorine Pesticides (QCLot: 4145650) - continued								
EP075: Dieldrin	60-57-1	0.5	mg/kg	<0.5	1.5 mg/kg	100	64.0	118
EP075: Endrin	72-20-8	0.5	mg/kg	<0.5	1.5 mg/kg	95.8	53.0	117
EP075: beta-Endosulfan	33213-65-9	0.5	mg/kg	<0.5	1.5 mg/kg	97.7	65.0	115
EP075: 4.4`-DDD	72-54-8	0.5	mg/kg	<0.5	1.5 mg/kg	102	62.0	118
EP075: Endosulfan sulfate	1031-07-8	0.5	mg/kg	<0.5	1.5 mg/kg	103	63.0	129
EP075: 4.4`-DDT	50-29-3	0.5	mg/kg	<0.5	1.5 mg/kg	99.3	46.0	122
EP075I: Organochlorine Pesticides (QCLot: 4145658)								
EP075: alpha-BHC	319-84-6	0.5	mg/kg	<0.5	1.5 mg/kg	108	63.0	113
EP075: beta-BHC	319-85-7	0.5	mg/kg	<0.5	1.5 mg/kg	112	57.0	113
EP075: gamma-BHC	58-89-9	0.5	mg/kg	<0.5	1.5 mg/kg	111	61.0	117
EP075: delta-BHC	319-86-8	0.5	mg/kg	<0.5	1.5 mg/kg	91.0	64.0	118
EP075: Heptachlor	76-44-8	0.5	mg/kg	<0.5	1.5 mg/kg	85.6	55.0	115
EP075: Aldrin	309-00-2	0.5	mg/kg	<0.5	1.5 mg/kg	87.5	61.0	115
EP075: Heptachlor epoxide	1024-57-3	0.5	mg/kg	<0.5	1.5 mg/kg	89.2	56.0	118
EP075: alpha-Endosulfan	959-98-8	0.5	mg/kg	<0.5	1.5 mg/kg	90.3	65.0	125
EP075: 4.4`-DDE	72-55-9	0.5	mg/kg	<0.5	1.5 mg/kg	91.8	60.0	116
EP075: Dieldrin	60-57-1	0.5	mg/kg	<0.5	1.5 mg/kg	93.1	64.0	118
EP075: Endrin	72-20-8	0.5	mg/kg	<0.5	1.5 mg/kg	89.5	53.0	117
EP075: beta-Endosulfan	33213-65-9	0.5	mg/kg	<0.5	1.5 mg/kg	92.1	65.0	115
EP075: 4.4`-DDD	72-54-8	0.5	mg/kg	<0.5	1.5 mg/kg	95.5	62.0	118
EP075: Endosulfan sulfate	1031-07-8	0.5	mg/kg	<0.5	1.5 mg/kg	94.6	63.0	129
EP075: 4.4`-DDT	50-29-3	0.5	mg/kg	<0.5	1.5 mg/kg	92.5	46.0	122
EP075J: Organophosphorus Pesticides (QCLot: 4145650)								
EP075: Dichlorvos	62-73-7	0.5	mg/kg	<0.5	1.5 mg/kg	98.5	46.0	112
EP075: Dimethoate	60-51-5	0.5	mg/kg	<0.5	1.5 mg/kg	109	63.0	119
EP075: Diazinon	333-41-5	0.5	mg/kg	<0.5	1.5 mg/kg	95.8	68.0	134
EP075: Chlorpyrifos-methyl	5598-13-0	0.5	mg/kg	<0.5	1.5 mg/kg	95.7	60.0	130
EP075: Malathion	121-75-5	0.5	mg/kg	<0.5	1.5 mg/kg	103	65.0	127
EP075: Fenthion	55-38-9	0.5	mg/kg	<0.5	1.5 mg/kg	97.1	60.0	116
EP075: Chlorpyrifos	2921-88-2	0.5	mg/kg	<0.5	1.5 mg/kg	97.6	63.0	113
EP075: Pirimphos-ethyl	23505-41-1	0.5	mg/kg	<0.5	1.5 mg/kg	97.5	65.0	115
EP075: Chlorfenvinphos	470-90-6	0.5	mg/kg	<0.5	1.5 mg/kg	82.8	59.0	103
EP075: Prothiofos	34643-46-4	0.5	mg/kg	<0.5	1.5 mg/kg	98.8	59.0	119
EP075: Ethion	563-12-2	0.5	mg/kg	<0.5	1.5 mg/kg	99.9	62.0	118
EP075J: Organophosphorus Pesticides (QCLot: 4145658)								
EP075: Dichlorvos	62-73-7	0.5	mg/kg	<0.5	1.5 mg/kg	95.2	46.0	112
EP075: Dimethoate	60-51-5	0.5	mg/kg	<0.5	1.5 mg/kg	108	63.0	119
EP075: Diazinon	333-41-5	0.5	mg/kg	<0.5	1.5 mg/kg	89.2	68.0	134

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Acceptable Limits (%)	
				Result	Concentration	LCS	Low	High
EP075J: Organophosphorus Pesticides (QCLot: 4145658) - continued								
EP075: Chlorpyrifos-methyl	5598-13-0	0.5	mg/kg	<0.5	1.5 mg/kg	88.0	60.0	130
EP075: Malathion	121-75-5	0.5	mg/kg	<0.5	1.5 mg/kg	95.4	65.0	127
EP075: Fenthion	55-38-9	0.5	mg/kg	<0.5	1.5 mg/kg	89.7	60.0	116
EP075: Chlorpyrifos	2921-88-2	0.5	mg/kg	<0.5	1.5 mg/kg	90.5	63.0	113
EP075: Pirimphos-ethyl	23505-41-1	0.5	mg/kg	<0.5	1.5 mg/kg	90.3	65.0	115
EP075: Chlorfenvinphos	470-90-6	0.5	mg/kg	<0.5	1.5 mg/kg	73.3	59.0	103
EP075: Prothiofos	34643-46-4	0.5	mg/kg	<0.5	1.5 mg/kg	91.3	59.0	119
EP075: Ethion	563-12-2	0.5	mg/kg	<0.5	1.5 mg/kg	93.7	62.0	118
EP080/071: Total Petroleum Hydrocarbons (QCLot: 4144798)								
EP080: C6 - C9 Fraction	----	10	mg/kg	<10	26 mg/kg	87.5	68.4	128
EP080/071: Total Petroleum Hydrocarbons (QCLot: 4144826)								
EP080: C6 - C9 Fraction	----	10	mg/kg	<10	26 mg/kg	81.8	68.4	128
EP080/071: Total Petroleum Hydrocarbons (QCLot: 4145646)								
EP071: C10 - C14 Fraction	----	50	mg/kg	<50	300 mg/kg	94.7	75.0	129
EP071: C15 - C28 Fraction	----	100	mg/kg	<100	450 mg/kg	103	77.0	131
EP071: C29 - C36 Fraction	----	100	mg/kg	<100	300 mg/kg	104	71.0	129
EP080/071: Total Petroleum Hydrocarbons (QCLot: 4145654)								
EP071: C10 - C14 Fraction	----	50	mg/kg	<50	300 mg/kg	92.6	75.0	129
EP071: C15 - C28 Fraction	----	100	mg/kg	<100	450 mg/kg	100	77.0	131
EP071: C29 - C36 Fraction	----	100	mg/kg	<100	300 mg/kg	98.9	71.0	129
EP080/071: Total Petroleum Hydrocarbons (QCLot: 4149327)								
EP080: C6 - C9 Fraction	----	10	mg/kg	<10	26 mg/kg	93.3	68.4	128
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 4144798)								
EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	31 mg/kg	91.4	68.4	128
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 4144826)								
EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	31 mg/kg	83.5	68.4	128
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 4145646)								
EP071: >C10 - C16 Fraction	----	50	mg/kg	<50	375 mg/kg	100	77.0	125
EP071: >C16 - C34 Fraction	----	100	mg/kg	<100	525 mg/kg	102	74.0	138
EP071: >C34 - C40 Fraction	----	100	mg/kg	<100	225 mg/kg	109	63.0	131
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 4145654)								
EP071: >C10 - C16 Fraction	----	50	mg/kg	<50	375 mg/kg	98.1	77.0	125
EP071: >C16 - C34 Fraction	----	100	mg/kg	<100	525 mg/kg	99.0	74.0	138
EP071: >C34 - C40 Fraction	----	100	mg/kg	<100	225 mg/kg	96.2	63.0	131
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 4149327)								
EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	31 mg/kg	80.8	68.4	128
EP080: BTEXN (QCLot: 4144798)								

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Acceptable Limits (%)	
				Result	Concentration	LCS	Low	High
EP080: BTEXN (QCLot: 4144798) - continued								
EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	1 mg/kg	90.6	62.0	116
EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	1 mg/kg	93.3	67.0	121
EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	1 mg/kg	94.8	65.0	117
EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	2 mg/kg	93.1	66.0	118
EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	1 mg/kg	93.6	68.0	120
EP080: Naphthalene	91-20-3	1	mg/kg	<1	1 mg/kg	90.2	63.0	119
EP080: BTEXN (QCLot: 4144826)								
EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	1 mg/kg	101	62.0	116
EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	1 mg/kg	97.7	67.0	121
EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	1 mg/kg	97.0	65.0	117
EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	2 mg/kg	94.8	66.0	118
EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	1 mg/kg	94.8	68.0	120
EP080: Naphthalene	91-20-3	1	mg/kg	<1	1 mg/kg	88.4	63.0	119
EP080: BTEXN (QCLot: 4149327)								
EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	1 mg/kg	80.4	62.0	116
EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	1 mg/kg	83.1	67.0	121
EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	1 mg/kg	82.0	65.0	117
EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	2 mg/kg	93.0	66.0	118
EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	1 mg/kg	91.8	68.0	120
EP080: Naphthalene	91-20-3	1	mg/kg	<1	1 mg/kg	86.2	63.0	119
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 4144794)								
EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.0002	mg/kg	<0.0002	0.00125 mg/kg	86.0	72.0	128
EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.0002	mg/kg	<0.0002	0.00125 mg/kg	82.4	67.0	130
EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.0002	mg/kg	<0.0002	0.00125 mg/kg	75.6	68.0	136
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4144794)								
EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.001	mg/kg	<0.001	0.00625 mg/kg	82.8	71.0	135
EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.0002	mg/kg	<0.0002	0.00125 mg/kg	77.2	69.0	132
EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.0002	mg/kg	<0.0002	0.00125 mg/kg	117	70.0	132
EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.0002	mg/kg	<0.0002	0.00125 mg/kg	99.6	71.0	131
EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.0002	mg/kg	<0.0002	0.00125 mg/kg	92.8	69.0	133
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 4144794)								
EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.0005	mg/kg	<0.0005	0.00125 mg/kg	88.4	62.0	145
EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.0005	mg/kg	<0.0005	0.00125 mg/kg	93.2	64.0	140
EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.0005	mg/kg	<0.0005	0.00125 mg/kg	92.0	65.0	137
EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.0005	mg/kg	<0.0005	0.00125 mg/kg	96.4	69.2	143

Sub-Matrix: **WATER**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Acceptable Limits (%)	
				Result	Concentration	LCS	Low	High
EG020T: Total Metals by ICP-MS (QCLot: 4146955)								
EG020A-T: Arsenic	7440-38-2	0.001	mg/L	<0.001	0.1 mg/L	94.2	82.0	114
EG020A-T: Cadmium	7440-43-9	0.0001	mg/L	<0.0001	0.1 mg/L	93.9	84.0	112
EG020A-T: Chromium	7440-47-3	0.001	mg/L	<0.001	0.1 mg/L	91.6	86.0	116
EG020A-T: Copper	7440-50-8	0.001	mg/L	<0.001	0.1 mg/L	94.4	83.0	118
EG020A-T: Lead	7439-92-1	0.001	mg/L	<0.001	0.1 mg/L	95.8	85.0	115
EG020A-T: Nickel	7440-02-0	0.001	mg/L	<0.001	0.1 mg/L	94.0	84.0	116
EG020A-T: Zinc	7440-66-6	0.005	mg/L	<0.005	0.1 mg/L	93.3	79.0	117
EG035T: Total Recoverable Mercury by FIMS (QCLot: 4147048)								
EG035T: Mercury	7439-97-6	0.0001	mg/L	<0.0001	0.01 mg/L	102	77.0	111
EP066: Polychlorinated Biphenyls (PCB) (QCLot: 4145291)								
EP066: Total Polychlorinated biphenyls	----	1	µg/L	<1	10 µg/L	103	68.9	113
EP068A: Organochlorine Pesticides (OC) (QCLot: 4145289)								
EP068: alpha-BHC	319-84-6	0.5	µg/L	<0.5	5 µg/L	86.8	64.9	107
EP068: Hexachlorobenzene (HCB)	118-74-1	0.5	µg/L	<0.5	5 µg/L	78.6	58.3	111
EP068: beta-BHC	319-85-7	0.5	µg/L	<0.5	5 µg/L	90.8	69.0	117
EP068: gamma-BHC	58-89-9	0.5	µg/L	<0.5	5 µg/L	88.7	70.0	112
EP068: delta-BHC	319-86-8	0.5	µg/L	<0.5	5 µg/L	92.7	68.9	110
EP068: Heptachlor	76-44-8	0.5	µg/L	<0.5	5 µg/L	88.8	65.2	108
EP068: Aldrin	309-00-2	0.5	µg/L	<0.5	5 µg/L	92.8	65.8	109
EP068: Heptachlor epoxide	1024-57-3	0.5	µg/L	<0.5	5 µg/L	98.1	67.1	107
EP068: trans-Chlordane	5103-74-2	0.5	µg/L	<0.5	5 µg/L	98.1	64.1	110
EP068: alpha-Endosulfan	959-98-8	0.5	µg/L	<0.5	5 µg/L	91.2	66.7	112
EP068: cis-Chlordane	5103-71-9	0.5	µg/L	<0.5	5 µg/L	100	63.2	111
EP068: Dieldrin	60-57-1	0.5	µg/L	<0.5	5 µg/L	94.4	65.2	113
EP068: 4.4`-DDE	72-55-9	0.5	µg/L	<0.5	5 µg/L	97.2	66.0	112
EP068: Endrin	72-20-8	0.5	µg/L	<0.5	5 µg/L	100	65.2	113
EP068: beta-Endosulfan	33213-65-9	0.5	µg/L	<0.5	5 µg/L	97.8	67.3	114
EP068: 4.4`-DDD	72-54-8	0.5	µg/L	<0.5	5 µg/L	97.6	72.0	122
EP068: Endrin aldehyde	7421-93-4	0.5	µg/L	<0.5	5 µg/L	80.2	66.9	109
EP068: Endosulfan sulfate	1031-07-8	0.5	µg/L	<0.5	5 µg/L	83.7	65.2	112
EP068: 4.4`-DDT	50-29-3	2	µg/L	<2.0	5 µg/L	81.8	65.2	112
EP068: Endrin ketone	53494-70-5	0.5	µg/L	<0.5	5 µg/L	90.0	63.8	110
EP068: Methoxychlor	72-43-5	2	µg/L	<2.0	5 µg/L	81.0	61.1	114
EP068B: Organophosphorus Pesticides (OP) (QCLot: 4145289)								
EP068: Dichlorvos	62-73-7	0.5	µg/L	<0.5	5 µg/L	84.2	65.6	114
EP068: Demeton-S-methyl	919-86-8	0.5	µg/L	<0.5	5 µg/L	78.4	63.7	113
EP068: Monocrotophos	6923-22-4	2	µg/L	<2.0	5 µg/L	26.2	19.7	48.0
EP068: Dimethoate	60-51-5	0.5	µg/L	<0.5	5 µg/L	76.2	69.5	110

Sub-Matrix: **WATER**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Acceptable Limits (%)	
				Result	Concentration	LCS	Low	High
EP068B: Organophosphorus Pesticides (OP) (QCLot: 4145289) - continued								
EP068: Diazinon	333-41-5	0.5	µg/L	<0.5	5 µg/L	97.9	71.1	110
EP068: Chlorpyrifos-methyl	5598-13-0	0.5	µg/L	<0.5	5 µg/L	92.7	77.0	119
EP068: Parathion-methyl	298-00-0	2	µg/L	<2.0	5 µg/L	81.4	70.0	124
EP068: Malathion	121-75-5	0.5	µg/L	<0.5	5 µg/L	88.9	68.4	116
EP068: Fenthion	55-38-9	0.5	µg/L	<0.5	5 µg/L	92.5	68.6	112
EP068: Chlorpyrifos	2921-88-2	0.5	µg/L	<0.5	5 µg/L	95.3	75.0	119
EP068: Parathion	56-38-2	2	µg/L	<2.0	5 µg/L	85.8	67.0	121
EP068: Pirimphos-ethyl	23505-41-1	0.5	µg/L	<0.5	5 µg/L	90.6	69.0	121
EP068: Chlorfenvinphos	470-90-6	0.5	µg/L	<0.5	5 µg/L	96.0	71.8	110
EP068: Bromophos-ethyl	4824-78-6	0.5	µg/L	<0.5	5 µg/L	90.6	67.5	112
EP068: Fenamiphos	22224-92-6	0.5	µg/L	<0.5	5 µg/L	103	64.1	116
EP068: Prothiofos	34643-46-4	0.5	µg/L	<0.5	5 µg/L	97.6	67.8	114
EP068: Ethion	563-12-2	0.5	µg/L	<0.5	5 µg/L	87.2	74.0	120
EP068: Carbophenothion	786-19-6	0.5	µg/L	<0.5	5 µg/L	82.0	66.2	114
EP068: Azinphos Methyl	86-50-0	0.5	µg/L	<0.5	5 µg/L	88.3	51.6	128
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 4145290)								
EP075(SIM): Naphthalene	91-20-3	1	µg/L	<1.0	5 µg/L	73.7	50.0	94.0
EP075(SIM): Acenaphthylene	208-96-8	1	µg/L	<1.0	5 µg/L	83.2	63.6	114
EP075(SIM): Acenaphthene	83-32-9	1	µg/L	<1.0	5 µg/L	83.2	62.2	113
EP075(SIM): Fluorene	86-73-7	1	µg/L	<1.0	5 µg/L	80.6	63.9	115
EP075(SIM): Phenanthrene	85-01-8	1	µg/L	<1.0	5 µg/L	89.7	62.6	116
EP075(SIM): Anthracene	120-12-7	1	µg/L	<1.0	5 µg/L	83.4	64.3	116
EP075(SIM): Fluoranthene	206-44-0	1	µg/L	<1.0	5 µg/L	94.5	63.6	118
EP075(SIM): Pyrene	129-00-0	1	µg/L	<1.0	5 µg/L	90.8	63.1	118
EP075(SIM): Benz(a)anthracene	56-55-3	1	µg/L	<1.0	5 µg/L	84.4	64.1	117
EP075(SIM): Chrysene	218-01-9	1	µg/L	<1.0	5 µg/L	91.1	62.5	116
EP075(SIM): Benzo(b+j)fluoranthene	205-99-2 205-82-3	1	µg/L	<1.0	5 µg/L	97.2	61.7	119
EP075(SIM): Benzo(k)fluoranthene	207-08-9	1	µg/L	<1.0	5 µg/L	85.0	63.0	115
EP075(SIM): Benzo(a)pyrene	50-32-8	0.5	µg/L	<0.5	5 µg/L	93.6	63.3	117
EP075(SIM): Indeno(1.2.3.cd)pyrene	193-39-5	1	µg/L	<1.0	5 µg/L	78.6	59.9	118
EP075(SIM): Dibenz(a.h)anthracene	53-70-3	1	µg/L	<1.0	5 µg/L	79.5	61.2	117
EP075(SIM): Benzo(g.h.i)perylene	191-24-2	1	µg/L	<1.0	5 µg/L	71.8	59.1	118
EP080/071: Total Petroleum Hydrocarbons (QCLot: 4145288)								
EP071: C10 - C14 Fraction	----	50	µg/L	<50	400 µg/L	72.6	55.8	112
EP071: C15 - C28 Fraction	----	100	µg/L	<100	600 µg/L	86.6	71.6	113
EP071: C29 - C36 Fraction	----	50	µg/L	<50	400 µg/L	94.9	56.0	121
EP080/071: Total Petroleum Hydrocarbons (QCLot: 4148706)								

Sub-Matrix: **WATER**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report: Result	Laboratory Control Spike (LCS) Report: Spike Concentration	Spike Recovery (%): LCS	Acceptable Limits (%): Low	Acceptable Limits (%): High
EP080/071: Total Petroleum Hydrocarbons (QCLot: 4148706) - continued								
EP080: C6 - C9 Fraction	----	20	µg/L	<20	260 µg/L	83.8	75.0	127
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 4145288)								
EP071: >C10 - C16 Fraction	----	100	µg/L	<100	500 µg/L	76.2	57.9	119
EP071: >C16 - C34 Fraction	----	100	µg/L	<100	700 µg/L	85.0	62.5	110
EP071: >C34 - C40 Fraction	----	100	µg/L	<100	300 µg/L	83.1	61.5	121
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 4148706)								
EP080: C6 - C10 Fraction	C6_C10	20	µg/L	<20	310 µg/L	85.2	75.0	127
EP080: BTEXN (QCLot: 4148706)								
EP080: Benzene	71-43-2	1	µg/L	<1	10 µg/L	93.7	70.0	122
EP080: Toluene	108-88-3	2	µg/L	<2	10 µg/L	97.4	69.0	123
EP080: Ethylbenzene	100-41-4	2	µg/L	<2	10 µg/L	94.0	70.0	120
EP080: meta- & para-Xylene	108-38-3 106-42-3	2	µg/L	<2	10 µg/L	94.2	69.0	121
EP080: ortho-Xylene	95-47-6	2	µg/L	<2	10 µg/L	96.3	72.0	122
EP080: Naphthalene	91-20-3	5	µg/L	<5	10 µg/L	95.2	70.0	120

Matrix Spike (MS) Report

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

Sub-Matrix: **SOIL**

Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Matrix Spike (MS) Report: Spike Concentration	SpikeRecovery(%): MS	Acceptable Limits (%): Low	Acceptable Limits (%): High
EG005(ED093)T: Total Metals by ICP-AES (QCLot: 4148302)							
ES2202692-004	SOP_BH129_1.0_220124	EG005T: Arsenic	7440-38-2	50 mg/kg	86.0	70.0	130
		EG005T: Cadmium	7440-43-9	50 mg/kg	88.7	70.0	130
		EG005T: Chromium	7440-47-3	50 mg/kg	93.0	68.0	132
		EG005T: Copper	7440-50-8	250 mg/kg	87.3	70.0	130
		EG005T: Lead	7439-92-1	250 mg/kg	89.4	70.0	130
		EG005T: Nickel	7440-02-0	50 mg/kg	91.5	70.0	130
		EG005T: Zinc	7440-66-6	250 mg/kg	88.0	66.0	133
EG005(ED093)T: Total Metals by ICP-AES (QCLot: 4148304)							
ES2202692-022	SOP_BH134_0.5_220125	EG005T: Arsenic	7440-38-2	50 mg/kg	91.8	70.0	130
		EG005T: Cadmium	7440-43-9	50 mg/kg	93.2	70.0	130
		EG005T: Chromium	7440-47-3	50 mg/kg	93.6	68.0	132
		EG005T: Copper	7440-50-8	250 mg/kg	94.3	70.0	130
		EG005T: Lead	7439-92-1	250 mg/kg	95.1	70.0	130
		EG005T: Nickel	7440-02-0	50 mg/kg	92.5	70.0	130

Sub-Matrix: **SOIL**

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Acceptable Limits (%)	
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Concentration	MS	Low	High
EG005(ED093)T: Total Metals by ICP-AES (QCLot: 4148304) - continued							
ES2202692-022	SOP_BH134_0.5_220125	EG005T: Zinc	7440-66-6	250 mg/kg	92.3	66.0	133
EG005(ED093)T: Total Metals by ICP-AES (QCLot: 4150331)							
EP2200832-001	Anonymous	EG005T: Arsenic	7440-38-2	50 mg/kg	93.0	70.0	130
		EG005T: Cadmium	7440-43-9	50 mg/kg	94.5	70.0	130
		EG005T: Chromium	7440-47-3	50 mg/kg	103	68.0	132
		EG005T: Copper	7440-50-8	250 mg/kg	92.3	70.0	130
		EG005T: Lead	7439-92-1	250 mg/kg	94.4	70.0	130
		EG005T: Nickel	7440-02-0	50 mg/kg	93.3	70.0	130
		EG005T: Zinc	7440-66-6	250 mg/kg	93.4	66.0	133
EG035T: Total Recoverable Mercury by FIMS (QCLot: 4148303)							
ES2202692-004	SOP_BH129_1.0_220124	EG035T: Mercury	7439-97-6	5 mg/kg	99.1	70.0	130
EG035T: Total Recoverable Mercury by FIMS (QCLot: 4148305)							
ES2202692-022	SOP_BH134_0.5_220125	EG035T: Mercury	7439-97-6	5 mg/kg	97.9	70.0	130
EG035T: Total Recoverable Mercury by FIMS (QCLot: 4150332)							
EP2200832-001	Anonymous	EG035T: Mercury	7439-97-6	5 mg/kg	95.7	70.0	130
EP066: Polychlorinated Biphenyls (PCB) (QCLot: 4145649)							
ES2202692-001	SOP_BH128_0.9_220124	EP066: Total Polychlorinated biphenyls	----	1 mg/kg	109	70.0	130
EP066: Polychlorinated Biphenyls (PCB) (QCLot: 4145657)							
ES2202692-022	SOP_BH134_0.5_220125	EP066: Total Polychlorinated biphenyls	----	1 mg/kg	95.5	70.0	130
EP068A: Organochlorine Pesticides (OC) (QCLot: 4145648)							
ES2202692-001	SOP_BH128_0.9_220124	EP068: gamma-BHC	58-89-9	0.5 mg/kg	79.9	70.0	130
		EP068: Heptachlor	76-44-8	0.5 mg/kg	77.0	70.0	130
		EP068: Aldrin	309-00-2	0.5 mg/kg	83.3	70.0	130
		EP068: Dieldrin	60-57-1	0.5 mg/kg	102	70.0	130
		EP068: Endrin	72-20-8	2 mg/kg	78.6	70.0	130
		EP068: 4.4`-DDT	50-29-3	2 mg/kg	96.9	70.0	130
EP068A: Organochlorine Pesticides (OC) (QCLot: 4145656)							
ES2202692-022	SOP_BH134_0.5_220125	EP068: gamma-BHC	58-89-9	0.5 mg/kg	86.5	70.0	130
		EP068: Heptachlor	76-44-8	0.5 mg/kg	99.3	70.0	130
		EP068: Aldrin	309-00-2	0.5 mg/kg	112	70.0	130
		EP068: Dieldrin	60-57-1	0.5 mg/kg	96.8	70.0	130
		EP068: Endrin	72-20-8	2 mg/kg	98.2	70.0	130
		EP068: 4.4`-DDT	50-29-3	2 mg/kg	94.1	70.0	130
EP068B: Organophosphorus Pesticides (OP) (QCLot: 4145648)							
ES2202692-001	SOP_BH128_0.9_220124	EP068: Diazinon	333-41-5	0.5 mg/kg	94.6	70.0	130
		EP068: Chlorpyrifos-methyl	5598-13-0	0.5 mg/kg	79.9	70.0	130

Sub-Matrix: **SOIL**

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Acceptable Limits (%)	
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Concentration	MS	Low	High
EP068B: Organophosphorus Pesticides (OP) (QCLot: 4145648) - continued							
ES2202692-001	SOP_BH128_0.9_220124	EP068: Pirimphos-ethyl	23505-41-1	0.5 mg/kg	84.0	70.0	130
		EP068: Bromophos-ethyl	4824-78-6	0.5 mg/kg	79.7	70.0	130
		EP068: Prothiofos	34643-46-4	0.5 mg/kg	88.8	70.0	130
EP068B: Organophosphorus Pesticides (OP) (QCLot: 4145656)							
ES2202692-022	SOP_BH134_0.5_220125	EP068: Diazinon	333-41-5	0.5 mg/kg	102	70.0	130
		EP068: Chlorpyrifos-methyl	5598-13-0	0.5 mg/kg	99.2	70.0	130
		EP068: Pirimphos-ethyl	23505-41-1	0.5 mg/kg	114	70.0	130
		EP068: Bromophos-ethyl	4824-78-6	0.5 mg/kg	110	70.0	130
		EP068: Prothiofos	34643-46-4	0.5 mg/kg	79.5	70.0	130
EP074A: Monocyclic Aromatic Hydrocarbons (QCLot: 4144799)							
ES2202692-001	SOP_BH128_0.9_220124	EP074: Benzene	71-43-2	2.5 mg/kg	85.7	70.0	130
		EP074: Toluene	108-88-3	2.5 mg/kg	77.8	70.0	130
EP074A: Monocyclic Aromatic Hydrocarbons (QCLot: 4144827)							
ES2202692-019	SOP_BH132_3.0_220125	EP074: Benzene	71-43-2	2.5 mg/kg	98.5	70.0	130
		EP074: Toluene	108-88-3	2.5 mg/kg	91.5	70.0	130
EP074E: Halogenated Aliphatic Compounds (QCLot: 4144799)							
ES2202692-001	SOP_BH128_0.9_220124	EP074: 1.1-Dichloroethene	75-35-4	2.5 mg/kg	99.5	70.0	130
		EP074: Trichloroethene	79-01-6	2.5 mg/kg	78.1	70.0	130
EP074E: Halogenated Aliphatic Compounds (QCLot: 4144827)							
ES2202692-019	SOP_BH132_3.0_220125	EP074: 1.1-Dichloroethene	75-35-4	2.5 mg/kg	103	70.0	130
		EP074: Trichloroethene	79-01-6	2.5 mg/kg	108	70.0	130
EP074F: Halogenated Aromatic Compounds (QCLot: 4144799)							
ES2202692-001	SOP_BH128_0.9_220124	EP074: Chlorobenzene	108-90-7	2.5 mg/kg	84.4	70.0	130
EP074F: Halogenated Aromatic Compounds (QCLot: 4144827)							
ES2202692-019	SOP_BH132_3.0_220125	EP074: Chlorobenzene	108-90-7	2.5 mg/kg	89.0	70.0	130
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 4145647)							
ES2202692-001	SOP_BH128_0.9_220124	EP075(SIM): Acenaphthene	83-32-9	10 mg/kg	99.1	70.0	130
		EP075(SIM): Pyrene	129-00-0	10 mg/kg	106	70.0	130
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 4145655)							
ES2202692-022	SOP_BH134_0.5_220125	EP075(SIM): Acenaphthene	83-32-9	10 mg/kg	90.7	70.0	130
		EP075(SIM): Pyrene	129-00-0	10 mg/kg	99.7	70.0	130
EP075A: Phenolic Compounds (QCLot: 4145650)							
ES2202692-001	SOP_BH128_0.9_220124	EP075: Phenol	108-95-2	10 mg/kg	98.8	60.0	130
		EP075: 2-Chlorophenol	95-57-8	10 mg/kg	98.8	60.0	130
		EP075: 2-Nitrophenol	88-75-5	10 mg/kg	104	50.0	130

Sub-Matrix: **SOIL**

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Acceptable Limits (%)	
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Concentration	MS	Low	High
EP075A: Phenolic Compounds (QCLot: 4145650) - continued							
ES2202692-001	SOP_BH128_0.9_220124	EP075: 4-Chloro-3-methylphenol	59-50-7	10 mg/kg	118	50.0	130
		EP075: Pentachlorophenol	87-86-5	10 mg/kg	95.8	10.0	130
EP075A: Phenolic Compounds (QCLot: 4145658)							
ES2202692-022	SOP_BH134_0.5_220125	EP075: Phenol	108-95-2	10 mg/kg	96.1	60.0	130
		EP075: 2-Chlorophenol	95-57-8	10 mg/kg	96.4	60.0	130
		EP075: 2-Nitrophenol	88-75-5	10 mg/kg	106	50.0	130
		EP075: 4-Chloro-3-methylphenol	59-50-7	10 mg/kg	108	50.0	130
		EP075: Pentachlorophenol	87-86-5	10 mg/kg	103	10.0	130
EP075B: Polynuclear Aromatic Hydrocarbons (QCLot: 4145650)							
ES2202692-001	SOP_BH128_0.9_220124	EP075: Acenaphthene	83-32-9	10 mg/kg	101	50.0	130
		EP075: Pyrene	129-00-0	10 mg/kg	87.8	50.0	130
EP075B: Polynuclear Aromatic Hydrocarbons (QCLot: 4145658)							
ES2202692-022	SOP_BH134_0.5_220125	EP075: Acenaphthene	83-32-9	10 mg/kg	96.2	50.0	130
		EP075: Pyrene	129-00-0	10 mg/kg	92.2	50.0	130
EP075D: Nitrosamines (QCLot: 4145650)							
ES2202692-001	SOP_BH128_0.9_220124	EP075: N-Nitrosodi-n-propylamine	621-64-7	10 mg/kg	99.4	50.0	130
EP075D: Nitrosamines (QCLot: 4145658)							
ES2202692-022	SOP_BH134_0.5_220125	EP075: N-Nitrosodi-n-propylamine	621-64-7	10 mg/kg	91.2	50.0	130
EP075E: Nitroaromatics and Ketones (QCLot: 4145650)							
ES2202692-001	SOP_BH128_0.9_220124	EP075: 2.4-Dinitrotoluene	121-14-2	10 mg/kg	111	40.0	130
EP075E: Nitroaromatics and Ketones (QCLot: 4145658)							
ES2202692-022	SOP_BH134_0.5_220125	EP075: 2.4-Dinitrotoluene	121-14-2	10 mg/kg	110	40.0	130
EP075G: Chlorinated Hydrocarbons (QCLot: 4145650)							
ES2202692-001	SOP_BH128_0.9_220124	EP075: 1.4-Dichlorobenzene	106-46-7	10 mg/kg	94.0	60.0	130
		EP075: 1.2.4-Trichlorobenzene	120-82-1	10 mg/kg	98.2	50.0	130
EP075G: Chlorinated Hydrocarbons (QCLot: 4145658)							
ES2202692-022	SOP_BH134_0.5_220125	EP075: 1.4-Dichlorobenzene	106-46-7	10 mg/kg	90.5	60.0	130
		EP075: 1.2.4-Trichlorobenzene	120-82-1	10 mg/kg	96.1	50.0	130
EP080/071: Total Petroleum Hydrocarbons (QCLot: 4144798)							
ES2202692-001	SOP_BH128_0.9_220124	EP080: C6 - C9 Fraction	----	32.5 mg/kg	94.6	70.0	130
EP080/071: Total Petroleum Hydrocarbons (QCLot: 4144826)							
ES2202692-019	SOP_BH132_3.0_220125	EP080: C6 - C9 Fraction	----	32.5 mg/kg	88.3	70.0	130
EP080/071: Total Petroleum Hydrocarbons (QCLot: 4145646)							
ES2202692-001	SOP_BH128_0.9_220124	EP071: C10 - C14 Fraction	----	480 mg/kg	111	73.0	137
		EP071: C15 - C28 Fraction	----	3100 mg/kg	116	53.0	131

Sub-Matrix: **SOIL**

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Acceptable Limits (%)	
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Concentration	MS	Low	High
EP080/071: Total Petroleum Hydrocarbons (QCLot: 4145646) - continued							
ES2202692-001	SOP_BH128_0.9_220124	EP071: C29 - C36 Fraction	----	2060 mg/kg	120	52.0	132
EP080/071: Total Petroleum Hydrocarbons (QCLot: 4145654)							
ES2202692-022	SOP_BH134_0.5_220125	EP071: C10 - C14 Fraction	----	480 mg/kg	114	73.0	137
		EP071: C15 - C28 Fraction	----	3100 mg/kg	119	53.0	131
		EP071: C29 - C36 Fraction	----	2060 mg/kg	121	52.0	132
EP080/071: Total Petroleum Hydrocarbons (QCLot: 4149327)							
ES2202692-002	SOP_BH128_5.0_220124	EP080: C6 - C9 Fraction	----	32.5 mg/kg	97.3	70.0	130
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 4144798)							
ES2202692-001	SOP_BH128_0.9_220124	EP080: C6 - C10 Fraction	C6_C10	37.5 mg/kg	96.6	70.0	130
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 4144826)							
ES2202692-019	SOP_BH132_3.0_220125	EP080: C6 - C10 Fraction	C6_C10	37.5 mg/kg	83.0	70.0	130
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 4145646)							
ES2202692-001	SOP_BH128_0.9_220124	EP071: >C10 - C16 Fraction	----	860 mg/kg	106	73.0	137
		EP071: >C16 - C34 Fraction	----	4320 mg/kg	120	53.0	131
		EP071: >C34 - C40 Fraction	----	890 mg/kg	110	52.0	132
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 4145654)							
ES2202692-022	SOP_BH134_0.5_220125	EP071: >C10 - C16 Fraction	----	860 mg/kg	111	73.0	137
		EP071: >C16 - C34 Fraction	----	4320 mg/kg	121	53.0	131
		EP071: >C34 - C40 Fraction	----	890 mg/kg	111	52.0	132
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 4149327)							
ES2202692-002	SOP_BH128_5.0_220124	EP080: C6 - C10 Fraction	C6_C10	37.5 mg/kg	94.1	70.0	130
EP080: BTEXN (QCLot: 4144798)							
ES2202692-001	SOP_BH128_0.9_220124	EP080: Benzene	71-43-2	2.5 mg/kg	74.8	70.0	130
		EP080: Toluene	108-88-3	2.5 mg/kg	78.1	70.0	130
		EP080: Ethylbenzene	100-41-4	2.5 mg/kg	79.6	70.0	130
		EP080: meta- & para-Xylene	108-38-3 106-42-3	2.5 mg/kg	77.1	70.0	130
		EP080: ortho-Xylene	95-47-6	2.5 mg/kg	79.2	70.0	130
		EP080: Naphthalene	91-20-3	2.5 mg/kg	82.4	70.0	130
EP080: BTEXN (QCLot: 4144826)							
ES2202692-019	SOP_BH132_3.0_220125	EP080: Benzene	71-43-2	2.5 mg/kg	90.9	70.0	130
		EP080: Toluene	108-88-3	2.5 mg/kg	86.5	70.0	130
		EP080: Ethylbenzene	100-41-4	2.5 mg/kg	87.2	70.0	130
		EP080: meta- & para-Xylene	108-38-3 106-42-3	2.5 mg/kg	84.3	70.0	130
		EP080: ortho-Xylene	95-47-6	2.5 mg/kg	85.5	70.0	130

Sub-Matrix: **SOIL**

Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Matrix Spike (MS) Report: Spike Concentration	Matrix Spike (MS) Report: SpikeRecovery(%) MS	Acceptable Limits (%) Low	Acceptable Limits (%) High
EP080: BTEXN (QCLot: 4144826) - continued							
ES2202692-019	SOP_BH132_3.0_220125	EP080: Naphthalene	91-20-3	2.5 mg/kg	87.2	70.0	130
EP080: BTEXN (QCLot: 4149327)							
ES2202692-002	SOP_BH128_5.0_220124	EP080: Benzene	71-43-2	2.5 mg/kg	90.4	70.0	130
		EP080: Toluene	108-88-3	2.5 mg/kg	89.2	70.0	130
		EP080: Ethylbenzene	100-41-4	2.5 mg/kg	89.1	70.0	130
		EP080: meta- & para-Xylene	108-38-3 106-42-3	2.5 mg/kg	85.6	70.0	130
		EP080: ortho-Xylene	95-47-6	2.5 mg/kg	92.9	70.0	130
		EP080: Naphthalene	91-20-3	2.5 mg/kg	77.0	70.0	130
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 4144794)							
EP2200866-005	Anonymous	EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.00125 mg/kg	86.0	72.0	128
		EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.00125 mg/kg	80.8	67.0	130
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.00125 mg/kg	72.8	68.0	136
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4144794)							
EP2200866-005	Anonymous	EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.00625 mg/kg	89.6	71.0	135
		EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.00125 mg/kg	86.0	69.0	132
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.00125 mg/kg	105	70.0	132
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.00125 mg/kg	96.4	71.0	131
		EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.00125 mg/kg	89.6	69.0	133
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 4144794)							
EP2200866-005	Anonymous	EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.00125 mg/kg	82.4	62.0	145
		EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.00125 mg/kg	99.2	64.0	140
		EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.00125 mg/kg	98.0	65.0	137
		EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.00125 mg/kg	92.4	69.2	143

Sub-Matrix: **WATER**

Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Matrix Spike (MS) Report: Spike Concentration	Matrix Spike (MS) Report: SpikeRecovery(%) MS	Acceptable Limits (%) Low	Acceptable Limits (%) High
EG020T: Total Metals by ICP-MS (QCLot: 4146955)							
ES2201996-002	Anonymous	EG020A-T: Arsenic	7440-38-2	1 mg/L	98.0	70.0	130
		EG020A-T: Cadmium	7440-43-9	0.25 mg/L	96.0	70.0	130
		EG020A-T: Chromium	7440-47-3	1 mg/L	95.0	70.0	130
		EG020A-T: Copper	7440-50-8	1 mg/L	82.1	70.0	130
		EG020A-T: Lead	7439-92-1	1 mg/L	97.4	70.0	130
		EG020A-T: Nickel	7440-02-0	1 mg/L	95.0	70.0	130
		EG020A-T: Zinc	7440-66-6	1 mg/L	93.5	70.0	130
EG035T: Total Recoverable Mercury by FIMS (QCLot: 4147048)							
ES2201996-002	Anonymous	EG035T: Mercury	7439-97-6	0.01 mg/L	104	70.0	130

Sub-Matrix: **WATER**

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Acceptable Limits (%)	
Laboratory sample ID	*Sample ID*	*Method: Compound*	*CAS Number*	*Concentration*	*MS*	*Low*	*High*
EP080/071: Total Petroleum Hydrocarbons (QCLot: 4148706)							
CA2200542-001	Anonymous	EP080: C6 - C9 Fraction	----	325 µg/L	100	70.0	130
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 4148706)							
CA2200542-001	Anonymous	EP080: C6 - C10 Fraction	C6_C10	375 µg/L	100	70.0	130
EP080: BTEXN (QCLot: 4148706)							
CA2200542-001	Anonymous	EP080: Benzene	71-43-2	25 µg/L	88.6	70.0	130
		EP080: Toluene	108-88-3	25 µg/L	94.2	70.0	130
		EP080: Ethylbenzene	100-41-4	25 µg/L	94.8	70.0	130
		EP080: meta- & para-Xylene	108-38-3 106-42-3	25 µg/L	97.4	70.0	130
		EP080: ortho-Xylene	95-47-6	25 µg/L	96.4	70.0	130
		EP080: Naphthalene	91-20-3	25 µg/L	89.0	70.0	130

ALS Environmental

QA/QC Compliance Assessment to assist with Quality Review

Work Order	: **ES2202692**	Page	: 1 of 24
Client	: **ENVIRONMENTAL RESOURCES MANAGEMENT (ERM)**	Laboratory	: Environmental Division Sydney
Contact	: MS JESSICA LAWRENCE	Telephone	: +61-2-8784 8555
Project	: 0628507 SOP	Date Samples Received	: 27-Jan-2022
Site	: ----	Issue Date	: 04-Feb-2022
Sampler	: ANTHONY RICHARD	No. of samples received	: 32
Order number	: ----	No. of samples analysed	: 32

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 Matrix Spike outliers occur.**
- **Duplicate outliers exist - please see following pages for full details.**
- **Laboratory Control outliers exist - please see following pages for full details.**
- **Surrogate recovery outliers exist for all regular sample matrices - please see following pages for full details.**

Outliers : Analysis Holding Time Compliance

- **Analysis Holding Time Outliers exist - please see following pages for full details.**

Outliers : Frequency of Quality Control Samples

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

Outliers : Quality Control Samples

Duplicates, Method Blanks, Laboratory Control Samples and Matrix Spikes

Matrix: **SOIL**

Compound Group Name	Laboratory Sample ID	Client Sample ID	Analyte	CAS Number	Data	Limits	Comment
Duplicate (DUP) RPDs							
EG005(ED093)T: Total Metals by ICP-AES	EP2200832--001	Anonymous	**Chromium**	7440-47-3	27.7 %	0% - 20%	**RPD exceeds LOR based limits**
Laboratory Control Spike (LCS) Recoveries							
EP075A: Phenolic Compounds	QC-4145650-002	----	**2.4-Dimethylphenol**	105-67-9	110 %	13.7-108%	**Recovery greater than upper control limit**
EP075A: Phenolic Compounds	QC-4145658-002	----	**2.4-Dimethylphenol**	105-67-9	109 %	13.7-108%	**Recovery greater than upper control limit**
EP075B: Polynuclear Aromatic Hydrocarbons	QC-4145650-002	----	**7.12-Dimethylbenz(a)anthracene**	57-97-6	119 %	48.1-106%	**Recovery greater than upper control limit**
EP075B: Polynuclear Aromatic Hydrocarbons	QC-4145658-002	----	**7.12-Dimethylbenz(a)anthracene**	57-97-6	119 %	48.1-106%	**Recovery greater than upper control limit**
EP075C: Phthalate Esters	QC-4145650-002	----	**Diethyl phthalate**	84-66-2	118 %	65.0-115%	**Recovery greater than upper control limit**
EP075C: Phthalate Esters	QC-4145658-002	----	**Diethyl phthalate**	84-66-2	117 %	65.0-115%	**Recovery greater than upper control limit**
EP075E: Nitroaromatics and Ketones	QC-4145650-002	----	**4-Nitroquinoline-N-oxide**	56-57-5	94.4 %	10.0-87.0%	**Recovery greater than upper control limit**
EP075E: Nitroaromatics and Ketones	QC-4145650-002	----	**5-Nitro-o-toluidine**	99-55-8	99.4 %	48.3-98.5%	**Recovery greater than upper control limit**
EP075E: Nitroaromatics and Ketones	QC-4145658-002	----	**5-Nitro-o-toluidine**	99-55-8	105 %	48.3-98.5%	**Recovery greater than upper control limit**
EP075E: Nitroaromatics and Ketones	QC-4145650-002	----	**4-Aminobiphenyl**	92-67-1	105 %	36.1-102%	**Recovery greater than upper control limit**
EP075E: Nitroaromatics and Ketones	QC-4145658-002	----	**4-Aminobiphenyl**	92-67-1	107 %	36.1-102%	**Recovery greater than upper control limit**
EP075H: Anilines and Benzidines	QC-4145650-002	----	**2-Nitroaniline**	88-74-4	114 %	52.0-112%	**Recovery greater than upper control limit**
EP075H: Anilines and Benzidines	QC-4145650-002	----	**3-Nitroaniline**	99-09-2	107 %	31.5-93.7%	**Recovery greater than upper control limit**
EP075H: Anilines and Benzidines	QC-4145658-002	----	**3-Nitroaniline**	99-09-2	113 %	31.5-93.7%	**Recovery greater than upper control limit**

Regular Sample Surrogates

Sub-Matrix: **SOIL**

Compound Group Name	Laboratory Sample ID	Client Sample ID	Analyte	CAS Number	Data	Limits	Comment
Samples Submitted							
EP075T: Base/Neutral Extractable Surrogates	ES2202692-006	SOP_BH130_2.0_220124	**2-Fluorobiphenyl**	321-60-8	122 %	35.0-121 %	**Recovery greater than upper data quality objective**
EP075T: Base/Neutral Extractable Surrogates	ES2202692-001	SOP_BH128_0.9_220124	**Anthracene-d10**	1719-06-8	130 %	35.0-123 %	**Recovery greater than upper data quality objective**

Outliers : Analysis Holding Time Compliance

Matrix: **SOIL**

Method / Container / Client Sample ID(s)	Extraction / Preparation			Analysis		
	Date extracted	Due for extraction	Days overdue	Date analysed	Due for analysis	Days overdue
EA002: pH 1:5 (Soils)						
Soil Glass Jar - Unpreserved						
SOP_BH139_1.2_220125	02-Feb-2022	31-Jan-2022	**2**	03-Feb-2022	02-Feb-2022	**1**

Matrix: **WATER**

Method / Container / Client Sample ID(s)	Extraction / Preparation			Analysis		
	Date extracted	Due for extraction	Days overdue	Date analysed	Due for analysis	Days overdue
EP066: Polychlorinated Biphenyls (PCB)						
Amber Glass Bottle - Unpreserved						
RIN06_220124, RIN07_220125	31-Jan-2022	29-Jan-2022	**2**	----	----	----
EP068A: Organochlorine Pesticides (OC)						
Amber Glass Bottle - Unpreserved						
RIN06_220124, RIN07_220125	31-Jan-2022	29-Jan-2022	**2**	----	----	----
EP068B: Organophosphorus Pesticides (OP)						
Amber Glass Bottle - Unpreserved						
RIN06_220124, RIN07_220125	31-Jan-2022	29-Jan-2022	**2**	----	----	----
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons						
Amber Glass Bottle - Unpreserved						
RIN06_220124, RIN07_220125	31-Jan-2022	29-Jan-2022	**2**	----	----	----
EP080/071: Total Petroleum Hydrocarbons						
Amber Glass Bottle - Unpreserved						
RIN06_220124, RIN07_220125	31-Jan-2022	29-Jan-2022	**2**	----	----	----
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions						
Amber Glass Bottle - Unpreserved						
RIN06_220124, RIN07_220125	31-Jan-2022	29-Jan-2022	**2**	----	----	----

Outliers : Frequency of Quality Control Samples

Matrix: **WATER**

Quality Control Sample Type / Method	Count		Rate (%)		Quality Control Specification
	QC	Regular	Actual	Expected	
Laboratory Duplicates (DUP)					
PAH/Phenols (GC/MS - SIM)	0	17	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	2	0.00	10.00	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	0	19	0.00	10.00	NEPM 2013 B3 & ALS QC Standard
Matrix Spikes (MS)					
PAH/Phenols (GC/MS - SIM)	0	17	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	2	0.00	5.00	NEPM 2013 B3 & ALS QC Standard

Matrix: **WATER**

Quality Control Sample Type	Count		Rate (%)		Quality Control Specification
Method	QC	Regular	Actual	Expected	
Matrix Spikes (MS) - Continued					
TRH - Semivolatile Fraction	0	19	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: **SOIL**

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

Method / *Container* / Client Sample ID(s)	*Sample Date*	*Extraction / Preparation*			*Analysis*		
		Date extracted	*Due for extraction*	*Evaluation*	*Date analysed*	*Due for analysis*	*Evaluation*
EA002: pH 1:5 (Soils)							
Soil Glass Jar - Unpreserved (EA002)							
SOP_BH139_1.2_220125	**24-Jan-2022**	**02-Feb-2022**	31-Jan-2022	×	**03-Feb-2022**	02-Feb-2022	×
Soil Glass Jar - Unpreserved (EA002)							
SOP_BH132_1.0_220125, SOP_BH135_0.8_220125	**25-Jan-2022**	**01-Feb-2022**	01-Feb-2022	✓	**01-Feb-2022**	02-Feb-2022	✓
EA055: Moisture Content (Dried @ 105-110°C)							
Soil Glass Jar - Unpreserved (EA055)							
SOP_BH129_1.0_220124, SOP_BH130_2.0_220124, SOP_BH131_1.0_220124, SOP_BH131_2.0_220124, DUP07_220124, SOP_BH122_1.0_220124, SOP_BH122_2.0_220124, SOP_BH123_3.0_220124, SOP_BH140_1.0_220124, SOP_BH140_2.0_220124, SOP_BH141_0.3_220124, SOP_BH141_0.4_220124, SOP_BH139_1.2_220125	**24-Jan-2022**	**----**	----	----	**01-Feb-2022**	07-Feb-2022	✓
Soil Glass Jar - Unpreserved (EA055)							
SOP_BH128_5.0_220124, SOP_BH129_0.5_220124	**24-Jan-2022**	**----**	----	----	**02-Feb-2022**	07-Feb-2022	✓
Soil Glass Jar - Unpreserved (EA055)							
SOP_BH128_0.9_220124, SOP_BH130_0.4_220124, SOP_BH123_1.0_220124	**24-Jan-2022**	**----**	----	----	**31-Jan-2022**	07-Feb-2022	✓
Soil Glass Jar - Unpreserved (EA055)							
SOP_BH132_1.0_220125, SOP_BH133_0.3_220125, SOP_BH133_0.8_220125, SOP_BH134_0.5_220125, SOP_BH134_2.0_220125, SOP_BH135_0.5_220125, SOP_BH135_0.8_220125, SOP_BH136_0.2_220125, SOP_BH137_0.2_220125, SOP_BH138_0.2_220125, SOP_BH139_2.0_220125	**25-Jan-2022**	**----**	----	----	**01-Feb-2022**	08-Feb-2022	✓
Soil Glass Jar - Unpreserved (EA055)							
SOP_BH132_3.0_220125	**25-Jan-2022**	**----**	----	----	**31-Jan-2022**	08-Feb-2022	✓

Matrix: **SOIL**

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

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EA200: AS 4964 - 2004 Identification of Asbestos in Soils							
Snap Lock Bag: Separate bag received (EA200)							
SOP_BH128_0.9_220124, SOP_BH129_0.5_220124, SOP_BH130_0.4_220124, SOP_BH131_1.0_220124, SOP_BH122_1.0_220124, SOP_BH123_1.0_220124, SOP_BH140_1.0_220124, SOP_BH141_0.4_220124, SOP_BH139_1.2_220125	**24-Jan-2022**	**----**	----	----	**01-Feb-2022**	23-Jul-2022	✓
Snap Lock Bag: Separate bag received (EA200)							
SOP_BH132_1.0_220125, SOP_BH133_0.3_220125, SOP_BH134_0.5_220125, SOP_BH135_0.5_220125, SOP_BH136_0.2_220125, SOP_BH137_0.2_220125, SOP_BH138_0.2_220125	**25-Jan-2022**	**----**	----	----	**01-Feb-2022**	24-Jul-2022	✓
ED007: Exchangeable Cations							
Soil Glass Jar - Unpreserved (ED007)							
SOP_BH139_1.2_220125	**24-Jan-2022**	**04-Feb-2022**	21-Feb-2022	✓	**04-Feb-2022**	21-Feb-2022	✓
Soil Glass Jar - Unpreserved (ED007)							
SOP_BH132_1.0_220125, SOP_BH135_0.8_220125	**25-Jan-2022**	**04-Feb-2022**	22-Feb-2022	✓	**04-Feb-2022**	22-Feb-2022	✓
EG005(ED093)T: Total Metals by ICP-AES							
Soil Glass Jar - Unpreserved (EG005T)							
SOP_BH128_0.9_220124, SOP_BH129_1.0_220124, SOP_BH130_0.4_220124, SOP_BH130_2.0_220124, SOP_BH131_1.0_220124, SOP_BH131_2.0_220124, DUP07_220124, SOP_BH122_1.0_220124, SOP_BH122_2.0_220124, SOP_BH123_1.0_220124, SOP_BH123_3.0_220124, SOP_BH140_1.0_220124, SOP_BH140_2.0_220124, SOP_BH141_0.3_220124, SOP_BH141_0.4_220124, SOP_BH139_1.2_220125	**24-Jan-2022**	**01-Feb-2022**	23-Jul-2022	✓	**03-Feb-2022**	23-Jul-2022	✓
Soil Glass Jar - Unpreserved (EG005T)							
SOP_BH128_5.0_220124, SOP_BH129_0.5_220124	**24-Jan-2022**	**02-Feb-2022**	23-Jul-2022	✓	**02-Feb-2022**	23-Jul-2022	✓
Soil Glass Jar - Unpreserved (EG005T)							
SOP_BH132_1.0_220125, SOP_BH132_3.0_220125, SOP_BH133_0.3_220125, SOP_BH133_0.8_220125, SOP_BH134_0.5_220125, SOP_BH134_2.0_220125, SOP_BH135_0.5_220125, SOP_BH135_0.8_220125, SOP_BH136_0.2_220125, SOP_BH137_0.2_220125, SOP_BH138_0.2_220125, SOP_BH139_2.0_220125	**25-Jan-2022**	**01-Feb-2022**	24-Jul-2022	✓	**03-Feb-2022**	24-Jul-2022	✓

Matrix: **SOIL**

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

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EG035T: Total Recoverable Mercury by FIMS							
Soil Glass Jar - Unpreserved (EG035T)							
SOP_BH128_0.9_220124, SOP_BH129_1.0_220124, SOP_BH130_0.4_220124, SOP_BH130_2.0_220124, SOP_BH131_1.0_220124, SOP_BH131_2.0_220124, DUP07_220124, SOP_BH122_1.0_220124, SOP_BH122_2.0_220124, SOP_BH123_1.0_220124, SOP_BH123_3.0_220124, SOP_BH140_1.0_220124, SOP_BH140_2.0_220124, SOP_BH141_0.3_220124, SOP_BH141_0.4_220124, SOP_BH139_1.2_220125	**24-Jan-2022**	**01-Feb-2022**	21-Feb-2022	✓	**03-Feb-2022**	21-Feb-2022	✓
Soil Glass Jar - Unpreserved (EG035T)							
SOP_BH128_5.0_220124, SOP_BH129_0.5_220124	**24-Jan-2022**	**02-Feb-2022**	21-Feb-2022	✓	**03-Feb-2022**	21-Feb-2022	✓
Soil Glass Jar - Unpreserved (EG035T)							
SOP_BH132_1.0_220125, SOP_BH132_3.0_220125, SOP_BH133_0.3_220125, SOP_BH133_0.8_220125, SOP_BH134_0.5_220125, SOP_BH134_2.0_220125, SOP_BH135_0.5_220125, SOP_BH135_0.8_220125, SOP_BH136_0.2_220125, SOP_BH137_0.2_220125, SOP_BH138_0.2_220125, SOP_BH139_2.0_220125	**25-Jan-2022**	**01-Feb-2022**	22-Feb-2022	✓	**03-Feb-2022**	22-Feb-2022	✓
EP066: Polychlorinated Biphenyls (PCB)							
Soil Glass Jar - Unpreserved (EP066)							
SOP_BH128_0.9_220124, SOP_BH128_5.0_220124, SOP_BH129_0.5_220124, SOP_BH129_1.0_220124, SOP_BH130_0.4_220124, SOP_BH130_2.0_220124, SOP_BH131_1.0_220124, SOP_BH131_2.0_220124, DUP07_220124, SOP_BH122_1.0_220124, SOP_BH122_2.0_220124, SOP_BH123_1.0_220124, SOP_BH123_3.0_220124, SOP_BH140_1.0_220124, SOP_BH140_2.0_220124, SOP_BH141_0.3_220124, SOP_BH141_0.4_220124, SOP_BH139_1.2_220125	**24-Jan-2022**	**01-Feb-2022**	07-Feb-2022	✓	**03-Feb-2022**	13-Mar-2022	✓
Soil Glass Jar - Unpreserved (EP066)							
SOP_BH132_1.0_220125, SOP_BH132_3.0_220125, SOP_BH133_0.3_220125, SOP_BH133_0.8_220125, SOP_BH134_0.5_220125, SOP_BH134_2.0_220125, SOP_BH135_0.5_220125, SOP_BH135_0.8_220125, SOP_BH136_0.2_220125, SOP_BH137_0.2_220125, SOP_BH138_0.2_220125, SOP_BH139_2.0_220125	**25-Jan-2022**	**01-Feb-2022**	08-Feb-2022	✓	**03-Feb-2022**	13-Mar-2022	✓

Matrix: **SOIL**

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

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP068A: Organochlorine Pesticides (OC)							
Soil Glass Jar - Unpreserved (EP068)							
SOP_BH128_0.9_220124, SOP_BH128_5.0_220124, SOP_BH129_0.5_220124, SOP_BH129_1.0_220124, SOP_BH130_0.4_220124, SOP_BH130_2.0_220124, SOP_BH131_1.0_220124, SOP_BH131_2.0_220124, DUP07_220124, SOP_BH122_1.0_220124, SOP_BH122_2.0_220124, SOP_BH123_1.0_220124, SOP_BH123_3.0_220124, SOP_BH140_1.0_220124, SOP_BH140_2.0_220124, SOP_BH141_0.3_220124, SOP_BH141_0.4_220124, SOP_BH139_1.2_220125	**24-Jan-2022**	**01-Feb-2022**	07-Feb-2022	✓	**03-Feb-2022**	13-Mar-2022	✓
Soil Glass Jar - Unpreserved (EP068)							
SOP_BH132_1.0_220125, SOP_BH132_3.0_220125, SOP_BH133_0.3_220125, SOP_BH133_0.8_220125, SOP_BH134_0.5_220125, SOP_BH134_2.0_220125, SOP_BH135_0.5_220125, SOP_BH135_0.8_220125, SOP_BH136_0.2_220125, SOP_BH137_0.2_220125, SOP_BH138_0.2_220125, SOP_BH139_2.0_220125	**25-Jan-2022**	**01-Feb-2022**	08-Feb-2022	✓	**03-Feb-2022**	13-Mar-2022	✓
EP068B: Organophosphorus Pesticides (OP)							
Soil Glass Jar - Unpreserved (EP068)							
SOP_BH128_0.9_220124, SOP_BH128_5.0_220124, SOP_BH129_0.5_220124, SOP_BH129_1.0_220124, SOP_BH130_0.4_220124, SOP_BH130_2.0_220124, SOP_BH131_1.0_220124, SOP_BH131_2.0_220124, DUP07_220124, SOP_BH122_1.0_220124, SOP_BH122_2.0_220124, SOP_BH123_1.0_220124, SOP_BH123_3.0_220124, SOP_BH140_1.0_220124, SOP_BH140_2.0_220124, SOP_BH141_0.3_220124, SOP_BH141_0.4_220124, SOP_BH139_1.2_220125	**24-Jan-2022**	**01-Feb-2022**	07-Feb-2022	✓	**03-Feb-2022**	13-Mar-2022	✓
Soil Glass Jar - Unpreserved (EP068)							
SOP_BH132_1.0_220125, SOP_BH132_3.0_220125, SOP_BH133_0.3_220125, SOP_BH133_0.8_220125, SOP_BH134_0.5_220125, SOP_BH134_2.0_220125, SOP_BH135_0.5_220125, SOP_BH135_0.8_220125, SOP_BH136_0.2_220125, SOP_BH137_0.2_220125, SOP_BH138_0.2_220125, SOP_BH139_2.0_220125	**25-Jan-2022**	**01-Feb-2022**	08-Feb-2022	✓	**03-Feb-2022**	13-Mar-2022	✓

Matrix: **SOIL**

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

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP074A: Monocyclic Aromatic Hydrocarbons							
Soil Glass Jar - Unpreserved (EP074)							
SOP_BH128_0.9_220124, SOP_BH129_1.0_220124, SOP_BH130_2.0_220124, SOP_BH131_1.0_220124, SOP_BH122_2.0_220124, SOP_BH123_1.0_220124, SOP_BH140_2.0_220124, SOP_BH141_0.4_220124	**24-Jan-2022**	**31-Jan-2022**	31-Jan-2022	✓	**31-Jan-2022**	31-Jan-2022	✓
Soil Glass Jar - Unpreserved (EP074)							
SOP_BH132_3.0_220125, SOP_BH133_0.3_220125, SOP_BH134_0.5_220125, SOP_BH135_0.5_220125, SOP_BH136_0.2_220125, SOP_BH137_0.2_220125, SOP_BH138_0.2_220125, SOP_BH139_2.0_220125	**25-Jan-2022**	**31-Jan-2022**	01-Feb-2022	✓	**01-Feb-2022**	01-Feb-2022	✓
EP074B: Oxygenated Compounds							
Soil Glass Jar - Unpreserved (EP074)							
SOP_BH128_0.9_220124, SOP_BH129_1.0_220124, SOP_BH130_2.0_220124, SOP_BH131_1.0_220124, SOP_BH122_2.0_220124, SOP_BH123_1.0_220124, SOP_BH140_2.0_220124, SOP_BH141_0.4_220124	**24-Jan-2022**	**31-Jan-2022**	31-Jan-2022	✓	**31-Jan-2022**	31-Jan-2022	✓
Soil Glass Jar - Unpreserved (EP074)							
SOP_BH132_3.0_220125, SOP_BH133_0.3_220125, SOP_BH134_0.5_220125, SOP_BH135_0.5_220125, SOP_BH136_0.2_220125, SOP_BH137_0.2_220125, SOP_BH138_0.2_220125, SOP_BH139_2.0_220125	**25-Jan-2022**	**31-Jan-2022**	01-Feb-2022	✓	**01-Feb-2022**	01-Feb-2022	✓
EP074C: Sulfonated Compounds							
Soil Glass Jar - Unpreserved (EP074)							
SOP_BH128_0.9_220124, SOP_BH129_1.0_220124, SOP_BH130_2.0_220124, SOP_BH131_1.0_220124, SOP_BH122_2.0_220124, SOP_BH123_1.0_220124, SOP_BH140_2.0_220124, SOP_BH141_0.4_220124	**24-Jan-2022**	**31-Jan-2022**	31-Jan-2022	✓	**31-Jan-2022**	31-Jan-2022	✓
Soil Glass Jar - Unpreserved (EP074)							
SOP_BH132_3.0_220125, SOP_BH133_0.3_220125, SOP_BH134_0.5_220125, SOP_BH135_0.5_220125, SOP_BH136_0.2_220125, SOP_BH137_0.2_220125, SOP_BH138_0.2_220125, SOP_BH139_2.0_220125	**25-Jan-2022**	**31-Jan-2022**	01-Feb-2022	✓	**01-Feb-2022**	01-Feb-2022	✓

Matrix: **SOIL**

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

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP074D: Fumigants							
Soil Glass Jar - Unpreserved (EP074)							
SOP_BH128_0.9_220124, SOP_BH129_1.0_220124, SOP_BH130_2.0_220124, SOP_BH131_1.0_220124, SOP_BH122_2.0_220124, SOP_BH123_1.0_220124, SOP_BH140_2.0_220124, SOP_BH141_0.4_220124	**24-Jan-2022**	**31-Jan-2022**	31-Jan-2022	✓	**31-Jan-2022**	31-Jan-2022	✓
Soil Glass Jar - Unpreserved (EP074)							
SOP_BH132_3.0_220125, SOP_BH133_0.3_220125, SOP_BH134_0.5_220125, SOP_BH135_0.5_220125, SOP_BH136_0.2_220125, SOP_BH137_0.2_220125, SOP_BH138_0.2_220125, SOP_BH139_2.0_220125	**25-Jan-2022**	**31-Jan-2022**	01-Feb-2022	✓	**01-Feb-2022**	01-Feb-2022	✓
EP074E: Halogenated Aliphatic Compounds							
Soil Glass Jar - Unpreserved (EP074)							
SOP_BH128_0.9_220124, SOP_BH129_1.0_220124, SOP_BH130_2.0_220124, SOP_BH131_1.0_220124, SOP_BH122_2.0_220124, SOP_BH123_1.0_220124, SOP_BH140_2.0_220124, SOP_BH141_0.4_220124	**24-Jan-2022**	**31-Jan-2022**	31-Jan-2022	✓	**31-Jan-2022**	31-Jan-2022	✓
Soil Glass Jar - Unpreserved (EP074)							
SOP_BH132_3.0_220125, SOP_BH133_0.3_220125, SOP_BH134_0.5_220125, SOP_BH135_0.5_220125, SOP_BH136_0.2_220125, SOP_BH137_0.2_220125, SOP_BH138_0.2_220125, SOP_BH139_2.0_220125	**25-Jan-2022**	**31-Jan-2022**	01-Feb-2022	✓	**01-Feb-2022**	01-Feb-2022	✓
EP074F: Halogenated Aromatic Compounds							
Soil Glass Jar - Unpreserved (EP074)							
SOP_BH128_0.9_220124, SOP_BH129_1.0_220124, SOP_BH130_2.0_220124, SOP_BH131_1.0_220124, SOP_BH122_2.0_220124, SOP_BH123_1.0_220124, SOP_BH140_2.0_220124, SOP_BH141_0.4_220124	**24-Jan-2022**	**31-Jan-2022**	31-Jan-2022	✓	**31-Jan-2022**	31-Jan-2022	✓
Soil Glass Jar - Unpreserved (EP074)							
SOP_BH132_3.0_220125, SOP_BH133_0.3_220125, SOP_BH134_0.5_220125, SOP_BH135_0.5_220125, SOP_BH136_0.2_220125, SOP_BH137_0.2_220125, SOP_BH138_0.2_220125, SOP_BH139_2.0_220125	**25-Jan-2022**	**31-Jan-2022**	01-Feb-2022	✓	**01-Feb-2022**	01-Feb-2022	✓

Matrix: **SOIL**

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

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP074G: Trihalomethanes							
Soil Glass Jar - Unpreserved (EP074)							
SOP_BH128_0.9_220124, SOP_BH129_1.0_220124, SOP_BH130_2.0_220124, SOP_BH131_1.0_220124, SOP_BH122_2.0_220124, SOP_BH123_1.0_220124, SOP_BH140_2.0_220124, SOP_BH141_0.4_220124	**24-Jan-2022**	**31-Jan-2022**	31-Jan-2022	✓	**31-Jan-2022**	31-Jan-2022	✓
Soil Glass Jar - Unpreserved (EP074)							
SOP_BH132_3.0_220125, SOP_BH133_0.3_220125, SOP_BH134_0.5_220125, SOP_BH135_0.5_220125, SOP_BH136_0.2_220125, SOP_BH137_0.2_220125, SOP_BH138_0.2_220125, SOP_BH139_2.0_220125	**25-Jan-2022**	**31-Jan-2022**	01-Feb-2022	✓	**01-Feb-2022**	01-Feb-2022	✓
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons							
Soil Glass Jar - Unpreserved (EP075(SIM))							
SOP_BH128_0.9_220124, SOP_BH128_5.0_220124, SOP_BH129_0.5_220124, SOP_BH129_1.0_220124, SOP_BH130_0.4_220124, SOP_BH130_2.0_220124, SOP_BH131_1.0_220124, SOP_BH131_2.0_220124, DUP07_220124, SOP_BH122_1.0_220124, SOP_BH122_2.0_220124, SOP_BH123_1.0_220124, SOP_BH123_3.0_220124, SOP_BH140_1.0_220124, SOP_BH140_2.0_220124, SOP_BH141_0.3_220124, SOP_BH141_0.4_220124, SOP_BH139_1.2_220125	**24-Jan-2022**	**01-Feb-2022**	07-Feb-2022	✓	**03-Feb-2022**	13-Mar-2022	✓
Soil Glass Jar - Unpreserved (EP075(SIM))							
SOP_BH132_1.0_220125, SOP_BH132_3.0_220125, SOP_BH133_0.3_220125, SOP_BH133_0.8_220125, SOP_BH134_0.5_220125, SOP_BH134_2.0_220125, SOP_BH135_0.5_220125, SOP_BH135_0.8_220125, SOP_BH136_0.2_220125, SOP_BH137_0.2_220125, SOP_BH138_0.2_220125, SOP_BH139_2.0_220125	**25-Jan-2022**	**01-Feb-2022**	08-Feb-2022	✓	**03-Feb-2022**	13-Mar-2022	✓
EP075A: Phenolic Compounds							
Soil Glass Jar - Unpreserved (EP075)							
SOP_BH128_0.9_220124, SOP_BH129_1.0_220124, SOP_BH130_2.0_220124, SOP_BH131_1.0_220124, SOP_BH122_2.0_220124, SOP_BH123_1.0_220124, SOP_BH140_2.0_220124, SOP_BH141_0.4_220124	**24-Jan-2022**	**01-Feb-2022**	07-Feb-2022	✓	**03-Feb-2022**	13-Mar-2022	✓
Soil Glass Jar - Unpreserved (EP075)							
SOP_BH132_3.0_220125, SOP_BH133_0.3_220125, SOP_BH134_0.5_220125, SOP_BH135_0.5_220125, SOP_BH136_0.2_220125, SOP_BH137_0.2_220125, SOP_BH138_0.2_220125, SOP_BH139_2.0_220125	**25-Jan-2022**	**01-Feb-2022**	08-Feb-2022	✓	**03-Feb-2022**	13-Mar-2022	✓

Matrix: **SOIL**

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

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP075B: Polynuclear Aromatic Hydrocarbons							
Soil Glass Jar - Unpreserved (EP075)							
SOP_BH128_0.9_220124, SOP_BH129_1.0_220124, SOP_BH130_2.0_220124, SOP_BH131_1.0_220124, SOP_BH122_2.0_220124, SOP_BH123_1.0_220124, SOP_BH140_2.0_220124, SOP_BH141_0.4_220124	**24-Jan-2022**	**01-Feb-2022**	07-Feb-2022	✓	**03-Feb-2022**	13-Mar-2022	✓
Soil Glass Jar - Unpreserved (EP075)							
SOP_BH132_3.0_220125, SOP_BH133_0.3_220125, SOP_BH134_0.5_220125, SOP_BH135_0.5_220125, SOP_BH136_0.2_220125, SOP_BH137_0.2_220125, SOP_BH138_0.2_220125, SOP_BH139_2.0_220125	**25-Jan-2022**	**01-Feb-2022**	08-Feb-2022	✓	**03-Feb-2022**	13-Mar-2022	✓
EP075C: Phthalate Esters							
Soil Glass Jar - Unpreserved (EP075)							
SOP_BH128_0.9_220124, SOP_BH129_1.0_220124, SOP_BH130_2.0_220124, SOP_BH131_1.0_220124, SOP_BH122_2.0_220124, SOP_BH123_1.0_220124, SOP_BH140_2.0_220124, SOP_BH141_0.4_220124	**24-Jan-2022**	**01-Feb-2022**	07-Feb-2022	✓	**03-Feb-2022**	13-Mar-2022	✓
Soil Glass Jar - Unpreserved (EP075)							
SOP_BH132_3.0_220125, SOP_BH133_0.3_220125, SOP_BH134_0.5_220125, SOP_BH135_0.5_220125, SOP_BH136_0.2_220125, SOP_BH137_0.2_220125, SOP_BH138_0.2_220125, SOP_BH139_2.0_220125	**25-Jan-2022**	**01-Feb-2022**	08-Feb-2022	✓	**03-Feb-2022**	13-Mar-2022	✓
EP075D: Nitrosamines							
Soil Glass Jar - Unpreserved (EP075)							
SOP_BH128_0.9_220124, SOP_BH129_1.0_220124, SOP_BH130_2.0_220124, SOP_BH131_1.0_220124, SOP_BH122_2.0_220124, SOP_BH123_1.0_220124, SOP_BH140_2.0_220124, SOP_BH141_0.4_220124	**24-Jan-2022**	**01-Feb-2022**	07-Feb-2022	✓	**03-Feb-2022**	13-Mar-2022	✓
Soil Glass Jar - Unpreserved (EP075)							
SOP_BH132_3.0_220125, SOP_BH133_0.3_220125, SOP_BH134_0.5_220125, SOP_BH135_0.5_220125, SOP_BH136_0.2_220125, SOP_BH137_0.2_220125, SOP_BH138_0.2_220125, SOP_BH139_2.0_220125	**25-Jan-2022**	**01-Feb-2022**	08-Feb-2022	✓	**03-Feb-2022**	13-Mar-2022	✓

Matrix: **SOIL**

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

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP075E: Nitroaromatics and Ketones							
Soil Glass Jar - Unpreserved (EP075)							
SOP_BH128_0.9_220124, SOP_BH129_1.0_220124, SOP_BH130_2.0_220124, SOP_BH131_1.0_220124, SOP_BH122_2.0_220124, SOP_BH123_1.0_220124, SOP_BH140_2.0_220124, SOP_BH141_0.4_220124	**24-Jan-2022**	**01-Feb-2022**	07-Feb-2022	✓	**03-Feb-2022**	13-Mar-2022	✓
Soil Glass Jar - Unpreserved (EP075)							
SOP_BH132_3.0_220125, SOP_BH133_0.3_220125, SOP_BH134_0.5_220125, SOP_BH135_0.5_220125, SOP_BH136_0.2_220125, SOP_BH137_0.2_220125, SOP_BH138_0.2_220125, SOP_BH139_2.0_220125	**25-Jan-2022**	**01-Feb-2022**	08-Feb-2022	✓	**03-Feb-2022**	13-Mar-2022	✓
EP075F: Haloethers							
Soil Glass Jar - Unpreserved (EP075)							
SOP_BH128_0.9_220124, SOP_BH129_1.0_220124, SOP_BH130_2.0_220124, SOP_BH131_1.0_220124, SOP_BH122_2.0_220124, SOP_BH123_1.0_220124, SOP_BH140_2.0_220124, SOP_BH141_0.4_220124	**24-Jan-2022**	**01-Feb-2022**	07-Feb-2022	✓	**03-Feb-2022**	13-Mar-2022	✓
Soil Glass Jar - Unpreserved (EP075)							
SOP_BH132_3.0_220125, SOP_BH133_0.3_220125, SOP_BH134_0.5_220125, SOP_BH135_0.5_220125, SOP_BH136_0.2_220125, SOP_BH137_0.2_220125, SOP_BH138_0.2_220125, SOP_BH139_2.0_220125	**25-Jan-2022**	**01-Feb-2022**	08-Feb-2022	✓	**03-Feb-2022**	13-Mar-2022	✓
EP075G: Chlorinated Hydrocarbons							
Soil Glass Jar - Unpreserved (EP075)							
SOP_BH128_0.9_220124, SOP_BH129_1.0_220124, SOP_BH130_2.0_220124, SOP_BH131_1.0_220124, SOP_BH122_2.0_220124, SOP_BH123_1.0_220124, SOP_BH140_2.0_220124, SOP_BH141_0.4_220124	**24-Jan-2022**	**01-Feb-2022**	07-Feb-2022	✓	**03-Feb-2022**	13-Mar-2022	✓
Soil Glass Jar - Unpreserved (EP075)							
SOP_BH132_3.0_220125, SOP_BH133_0.3_220125, SOP_BH134_0.5_220125, SOP_BH135_0.5_220125, SOP_BH136_0.2_220125, SOP_BH137_0.2_220125, SOP_BH138_0.2_220125, SOP_BH139_2.0_220125	**25-Jan-2022**	**01-Feb-2022**	08-Feb-2022	✓	**03-Feb-2022**	13-Mar-2022	✓

Matrix: **SOIL**

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

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP075H: Anilines and Benzidines							
Soil Glass Jar - Unpreserved (EP075)							
SOP_BH128_0.9_220124, SOP_BH129_1.0_220124, SOP_BH130_2.0_220124, SOP_BH131_1.0_220124, SOP_BH122_2.0_220124, SOP_BH123_1.0_220124, SOP_BH140_2.0_220124, SOP_BH141_0.4_220124	**24-Jan-2022**	**01-Feb-2022**	07-Feb-2022	✓	**03-Feb-2022**	13-Mar-2022	✓
Soil Glass Jar - Unpreserved (EP075)							
SOP_BH132_3.0_220125, SOP_BH133_0.3_220125, SOP_BH134_0.5_220125, SOP_BH135_0.5_220125, SOP_BH136_0.2_220125, SOP_BH137_0.2_220125, SOP_BH138_0.2_220125, SOP_BH139_2.0_220125	**25-Jan-2022**	**01-Feb-2022**	08-Feb-2022	✓	**03-Feb-2022**	13-Mar-2022	✓
EP075I: Organochlorine Pesticides							
Soil Glass Jar - Unpreserved (EP075)							
SOP_BH128_0.9_220124, SOP_BH129_1.0_220124, SOP_BH130_2.0_220124, SOP_BH131_1.0_220124, SOP_BH122_2.0_220124, SOP_BH123_1.0_220124, SOP_BH140_2.0_220124, SOP_BH141_0.4_220124	**24-Jan-2022**	**01-Feb-2022**	07-Feb-2022	✓	**03-Feb-2022**	13-Mar-2022	✓
Soil Glass Jar - Unpreserved (EP075)							
SOP_BH132_3.0_220125, SOP_BH133_0.3_220125, SOP_BH134_0.5_220125, SOP_BH135_0.5_220125, SOP_BH136_0.2_220125, SOP_BH137_0.2_220125, SOP_BH138_0.2_220125, SOP_BH139_2.0_220125	**25-Jan-2022**	**01-Feb-2022**	08-Feb-2022	✓	**03-Feb-2022**	13-Mar-2022	✓
EP075J: Organophosphorus Pesticides							
Soil Glass Jar - Unpreserved (EP075)							
SOP_BH128_0.9_220124, SOP_BH129_1.0_220124, SOP_BH130_2.0_220124, SOP_BH131_1.0_220124, SOP_BH122_2.0_220124, SOP_BH123_1.0_220124, SOP_BH140_2.0_220124, SOP_BH141_0.4_220124	**24-Jan-2022**	**01-Feb-2022**	07-Feb-2022	✓	**03-Feb-2022**	13-Mar-2022	✓
Soil Glass Jar - Unpreserved (EP075)							
SOP_BH132_3.0_220125, SOP_BH133_0.3_220125, SOP_BH134_0.5_220125, SOP_BH135_0.5_220125, SOP_BH136_0.2_220125, SOP_BH137_0.2_220125, SOP_BH138_0.2_220125, SOP_BH139_2.0_220125	**25-Jan-2022**	**01-Feb-2022**	08-Feb-2022	✓	**03-Feb-2022**	13-Mar-2022	✓

Matrix: **SOIL**

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

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP080/071: Total Petroleum Hydrocarbons							
Soil Glass Jar - Unpreserved (EP071)							
SOP_BH128_0.9_220124, SOP_BH128_5.0_220124, SOP_BH129_0.5_220124, SOP_BH129_1.0_220124, SOP_BH130_0.4_220124, SOP_BH130_2.0_220124, SOP_BH131_1.0_220124, SOP_BH131_2.0_220124, DUP07_220124, SOP_BH122_1.0_220124, SOP_BH122_2.0_220124, SOP_BH123_1.0_220124, SOP_BH123_3.0_220124, SOP_BH140_1.0_220124, SOP_BH140_2.0_220124, SOP_BH141_0.3_220124, SOP_BH141_0.4_220124, SOP_BH139_1.2_220125	**24-Jan-2022**	**01-Feb-2022**	07-Feb-2022	✓	**03-Feb-2022**	13-Mar-2022	✓
Soil Glass Jar - Unpreserved (EP080)							
SOP_BH128_5.0_220124, SOP_BH129_0.5_220124	**24-Jan-2022**	**02-Feb-2022**	07-Feb-2022	✓	**03-Feb-2022**	07-Feb-2022	✓
Soil Glass Jar - Unpreserved (EP080)							
SOP_BH130_0.4_220124, SOP_BH131_2.0_220124, DUP07_220124, SOP_BH122_1.0_220124, SOP_BH123_3.0_220124, SOP_BH140_1.0_220124, SOP_BH141_0.3_220124, SOP_BH139_1.2_220125	**24-Jan-2022**	**31-Jan-2022**	07-Feb-2022	✓	**01-Feb-2022**	07-Feb-2022	✓
Soil Glass Jar - Unpreserved (EP080)							
SOP_BH128_0.9_220124, SOP_BH129_1.0_220124, SOP_BH130_2.0_220124, SOP_BH131_1.0_220124, SOP_BH122_2.0_220124, SOP_BH123_1.0_220124, SOP_BH140_2.0_220124, SOP_BH141_0.4_220124	**24-Jan-2022**	**31-Jan-2022**	07-Feb-2022	✓	**31-Jan-2022**	07-Feb-2022	✓
Soil Glass Jar - Unpreserved (EP071)							
SOP_BH132_1.0_220125, SOP_BH132_3.0_220125, SOP_BH133_0.3_220125, SOP_BH133_0.8_220125, SOP_BH134_0.5_220125, SOP_BH134_2.0_220125, SOP_BH135_0.5_220125, SOP_BH135_0.8_220125, SOP_BH136_0.2_220125, SOP_BH137_0.2_220125, SOP_BH138_0.2_220125, SOP_BH139_2.0_220125	**25-Jan-2022**	**01-Feb-2022**	08-Feb-2022	✓	**03-Feb-2022**	13-Mar-2022	✓
Soil Glass Jar - Unpreserved (EP080)							
SOP_BH132_1.0_220125, SOP_BH132_3.0_220125, SOP_BH133_0.3_220125, SOP_BH133_0.8_220125, SOP_BH134_0.5_220125, SOP_BH134_2.0_220125, SOP_BH135_0.5_220125, SOP_BH135_0.8_220125, SOP_BH136_0.2_220125, SOP_BH137_0.2_220125, SOP_BH138_0.2_220125, SOP_BH139_2.0_220125	**25-Jan-2022**	**31-Jan-2022**	08-Feb-2022	✓	**01-Feb-2022**	08-Feb-2022	✓

Matrix: **SOIL**

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

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions							
Soil Glass Jar - Unpreserved (EP071)							
SOP_BH128_0.9_220124, SOP_BH128_5.0_220124, SOP_BH129_0.5_220124, SOP_BH129_1.0_220124, SOP_BH130_0.4_220124, SOP_BH130_2.0_220124, SOP_BH131_1.0_220124, SOP_BH131_2.0_220124, DUP07_220124, SOP_BH122_1.0_220124, SOP_BH122_2.0_220124, SOP_BH123_1.0_220124, SOP_BH123_3.0_220124, SOP_BH140_1.0_220124, SOP_BH140_2.0_220124, SOP_BH141_0.3_220124, SOP_BH141_0.4_220124, SOP_BH139_1.2_220125	**24-Jan-2022**	**01-Feb-2022**	07-Feb-2022	✓	**03-Feb-2022**	13-Mar-2022	✓
Soil Glass Jar - Unpreserved (EP080)							
SOP_BH128_5.0_220124, SOP_BH129_0.5_220124	**24-Jan-2022**	**02-Feb-2022**	07-Feb-2022	✓	**03-Feb-2022**	07-Feb-2022	✓
Soil Glass Jar - Unpreserved (EP080)							
SOP_BH130_0.4_220124, SOP_BH131_2.0_220124, DUP07_220124, SOP_BH122_1.0_220124, SOP_BH123_3.0_220124, SOP_BH140_1.0_220124, SOP_BH141_0.3_220124, SOP_BH139_1.2_220125	**24-Jan-2022**	**31-Jan-2022**	07-Feb-2022	✓	**01-Feb-2022**	07-Feb-2022	✓
Soil Glass Jar - Unpreserved (EP080)							
SOP_BH128_0.9_220124, SOP_BH129_1.0_220124, SOP_BH130_2.0_220124, SOP_BH131_1.0_220124, SOP_BH122_2.0_220124, SOP_BH123_1.0_220124, SOP_BH140_2.0_220124, SOP_BH141_0.4_220124	**24-Jan-2022**	**31-Jan-2022**	07-Feb-2022	✓	**31-Jan-2022**	07-Feb-2022	✓
Soil Glass Jar - Unpreserved (EP071)							
SOP_BH132_1.0_220125, SOP_BH132_3.0_220125, SOP_BH133_0.3_220125, SOP_BH133_0.8_220125, SOP_BH134_0.5_220125, SOP_BH134_2.0_220125, SOP_BH135_0.5_220125, SOP_BH135_0.8_220125, SOP_BH136_0.2_220125, SOP_BH137_0.2_220125, SOP_BH138_0.2_220125, SOP_BH139_2.0_220125	**25-Jan-2022**	**01-Feb-2022**	08-Feb-2022	✓	**03-Feb-2022**	13-Mar-2022	✓
Soil Glass Jar - Unpreserved (EP080)							
SOP_BH132_1.0_220125, SOP_BH132_3.0_220125, SOP_BH133_0.3_220125, SOP_BH133_0.8_220125, SOP_BH134_0.5_220125, SOP_BH134_2.0_220125, SOP_BH135_0.5_220125, SOP_BH135_0.8_220125, SOP_BH136_0.2_220125, SOP_BH137_0.2_220125, SOP_BH138_0.2_220125, SOP_BH139_2.0_220125	**25-Jan-2022**	**31-Jan-2022**	08-Feb-2022	✓	**01-Feb-2022**	08-Feb-2022	✓

Matrix: **SOIL**

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

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP080: BTEXN							
Soil Glass Jar - Unpreserved (EP080)							
SOP_BH128_5.0_220124, SOP_BH129_0.5_220124	**24-Jan-2022**	**02-Feb-2022**	07-Feb-2022	✓	**03-Feb-2022**	07-Feb-2022	✓
Soil Glass Jar - Unpreserved (EP080)							
SOP_BH130_0.4_220124, SOP_BH131_2.0_220124, DUP07_220124, SOP_BH122_1.0_220124, SOP_BH123_3.0_220124, SOP_BH140_1.0_220124, SOP_BH141_0.3_220124, SOP_BH139_1.2_220125	**24-Jan-2022**	**31-Jan-2022**	07-Feb-2022	✓	**01-Feb-2022**	07-Feb-2022	✓
Soil Glass Jar - Unpreserved (EP080)							
SOP_BH128_0.9_220124, SOP_BH129_1.0_220124, SOP_BH130_2.0_220124, SOP_BH131_1.0_220124, SOP_BH122_2.0_220124, SOP_BH123_1.0_220124, SOP_BH140_2.0_220124, SOP_BH141_0.4_220124	**24-Jan-2022**	**31-Jan-2022**	07-Feb-2022	✓	**31-Jan-2022**	07-Feb-2022	✓
Soil Glass Jar - Unpreserved (EP080)							
SOP_BH132_1.0_220125, SOP_BH132_3.0_220125, SOP_BH133_0.3_220125, SOP_BH133_0.8_220125, SOP_BH134_0.5_220125, SOP_BH134_2.0_220125, SOP_BH135_0.5_220125, SOP_BH135_0.8_220125, SOP_BH136_0.2_220125, SOP_BH137_0.2_220125, SOP_BH138_0.2_220125, SOP_BH139_2.0_220125	**25-Jan-2022**	**31-Jan-2022**	08-Feb-2022	✓	**01-Feb-2022**	08-Feb-2022	✓
EP231A: Perfluoroalkyl Sulfonic Acids							
HDPE Soil Jar (EP231X)							
SOP_BH128_0.9_220124, SOP_BH128_5.0_220124, SOP_BH129_0.5_220124, SOP_BH129_1.0_220124, SOP_BH131_2.0_220124, DUP07_220124, SOP_BH123_1.0_220124, SOP_BH140_2.0_220124, SOP_BH139_1.2_220125	**24-Jan-2022**	**31-Jan-2022**	23-Jul-2022	✓	**31-Jan-2022**	12-Mar-2022	✓
HDPE Soil Jar (EP231X)							
SOP_BH132_1.0_220125, SOP_BH134_0.5_220125	**25-Jan-2022**	**31-Jan-2022**	24-Jul-2022	✓	**31-Jan-2022**	12-Mar-2022	✓
EP231B: Perfluoroalkyl Carboxylic Acids							
HDPE Soil Jar (EP231X)							
SOP_BH128_0.9_220124, SOP_BH128_5.0_220124, SOP_BH129_0.5_220124, SOP_BH129_1.0_220124, SOP_BH131_2.0_220124, DUP07_220124, SOP_BH123_1.0_220124, SOP_BH140_2.0_220124, SOP_BH139_1.2_220125	**24-Jan-2022**	**31-Jan-2022**	23-Jul-2022	✓	**31-Jan-2022**	12-Mar-2022	✓
HDPE Soil Jar (EP231X)							
SOP_BH132_1.0_220125, SOP_BH134_0.5_220125	**25-Jan-2022**	**31-Jan-2022**	24-Jul-2022	✓	**31-Jan-2022**	12-Mar-2022	✓

Matrix: **SOIL**

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

Method / Container / Client Sample ID(s)		Sample Date	Extraction / Preparation			Analysis		
			Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP231D: (n:2) Fluorotelomer Sulfonic Acids								
HDPE Soil Jar (EP231X)								
SOP_BH128_0.9_220124,	SOP_BH128_5.0_220124,	**24-Jan-2022**	**31-Jan-2022**	23-Jul-2022	✓	**31-Jan-2022**	12-Mar-2022	✓
SOP_BH129_0.5_220124,	SOP_BH129_1.0_220124,							
SOP_BH131_2.0_220124,	DUP07_220124,							
SOP_BH123_1.0_220124,	SOP_BH140_2.0_220124,							
SOP_BH139_1.2_220125								
HDPE Soil Jar (EP231X)								
SOP_BH132_1.0_220125,	SOP_BH134_0.5_220125	**25-Jan-2022**	**31-Jan-2022**	24-Jul-2022	✓	**31-Jan-2022**	12-Mar-2022	✓
EP231P: PFAS Sums								
HDPE Soil Jar (EP231X)								
SOP_BH128_0.9_220124,	SOP_BH128_5.0_220124,	**24-Jan-2022**	**31-Jan-2022**	23-Jul-2022	✓	**31-Jan-2022**	12-Mar-2022	✓
SOP_BH129_0.5_220124,	SOP_BH129_1.0_220124,							
SOP_BH131_2.0_220124,	DUP07_220124,							
SOP_BH123_1.0_220124,	SOP_BH140_2.0_220124,							
SOP_BH139_1.2_220125								
HDPE Soil Jar (EP231X)								
SOP_BH132_1.0_220125,	SOP_BH134_0.5_220125	**25-Jan-2022**	**31-Jan-2022**	24-Jul-2022	✓	**31-Jan-2022**	12-Mar-2022	✓

Matrix: **WATER**

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

Method / Container / Client Sample ID(s)		Sample Date	Extraction / Preparation			Analysis		
			Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EG020T: Total Metals by ICP-MS								
Clear Plastic Bottle - Nitric Acid; Unfiltered (EG020A-T)								
RIN06_220124,	RIN07_220125	**22-Jan-2022**	**01-Feb-2022**	21-Jul-2022	✓	**01-Feb-2022**	21-Jul-2022	✓
EG035T: Total Recoverable Mercury by FIMS								
Clear Plastic Bottle - Nitric Acid; Unfiltered (EG035T)								
RIN06_220124,	RIN07_220125	**22-Jan-2022**	**----**	----	----	**01-Feb-2022**	19-Feb-2022	✓
EP066: Polychlorinated Biphenyls (PCB)								
Amber Glass Bottle - Unpreserved (EP066)								
RIN06_220124,	RIN07_220125	**22-Jan-2022**	**31-Jan-2022**	29-Jan-2022	×	**02-Feb-2022**	12-Mar-2022	✓
EP068A: Organochlorine Pesticides (OC)								
Amber Glass Bottle - Unpreserved (EP068)								
RIN06_220124,	RIN07_220125	**22-Jan-2022**	**31-Jan-2022**	29-Jan-2022	×	**02-Feb-2022**	12-Mar-2022	✓
EP068B: Organophosphorus Pesticides (OP)								
Amber Glass Bottle - Unpreserved (EP068)								
RIN06_220124,	RIN07_220125	**22-Jan-2022**	**31-Jan-2022**	29-Jan-2022	×	**02-Feb-2022**	12-Mar-2022	✓
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons								
Amber Glass Bottle - Unpreserved (EP075(SIM))								
RIN06_220124,	RIN07_220125	**22-Jan-2022**	**31-Jan-2022**	29-Jan-2022	×	**02-Feb-2022**	12-Mar-2022	✓

Matrix: **WATER**

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

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP080/071: Total Petroleum Hydrocarbons							
Amber Glass Bottle - Unpreserved (EP071)							
RIN06_220124, RIN07_220125	**22-Jan-2022**	**31-Jan-2022**	29-Jan-2022	×	**02-Feb-2022**	12-Mar-2022	✓
Amber VOC Vial - Sulfuric Acid (EP080)							
RIN06_220124, RIN07_220125	**22-Jan-2022**	**03-Feb-2022**	05-Feb-2022	✓	**03-Feb-2022**	05-Feb-2022	✓
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions							
Amber Glass Bottle - Unpreserved (EP071)							
RIN06_220124, RIN07_220125	**22-Jan-2022**	**31-Jan-2022**	29-Jan-2022	×	**02-Feb-2022**	12-Mar-2022	✓
Amber VOC Vial - Sulfuric Acid (EP080)							
RIN06_220124, RIN07_220125	**22-Jan-2022**	**03-Feb-2022**	05-Feb-2022	✓	**03-Feb-2022**	05-Feb-2022	✓
EP080: BTEXN							
Amber VOC Vial - Sulfuric Acid (EP080)							
RIN06_220124, RIN07_220125	**22-Jan-2022**	**03-Feb-2022**	05-Feb-2022	✓	**03-Feb-2022**	05-Feb-2022	✓

Quality Control Parameter Frequency Compliance

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

Matrix: **SOIL**

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

Quality Control Sample Type		Count		Rate (%)			Quality Control Specification
Analytical Methods	*Method*	*QC*	*Regular*	***Actual***	***Expected***	*Evaluation*	
Laboratory Duplicates (DUP)							
Exchangeable Cations	ED007	1	3	**33.33**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Moisture Content	EA055	6	48	**12.50**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
PAH/Phenols (SIM)	EP075(SIM)	3	30	**10.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	2	20	**10.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	EP068	3	30	**10.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
pH (1:5)	EA002	3	20	**15.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Polychlorinated Biphenyls (PCB)	EP066	3	30	**10.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Semivolatile Organic Compounds	EP075	2	16	**12.50**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	5	48	**10.42**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	5	48	**10.42**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	3	30	**10.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	6	51	**11.76**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Volatile Organic Compounds	EP074	2	17	**11.76**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Laboratory Control Samples (LCS)							
Exchangeable Cations	ED007	1	3	**33.33**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
PAH/Phenols (SIM)	EP075(SIM)	2	30	**6.67**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	EP068	2	30	**6.67**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Polychlorinated Biphenyls (PCB)	EP066	2	30	**6.67**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Semivolatile Organic Compounds	EP075	2	16	**12.50**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	3	48	**6.25**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	3	48	**6.25**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	2	30	**6.67**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	3	51	**5.88**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Volatile Organic Compounds	EP074	2	17	**11.76**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Method Blanks (MB)							
Exchangeable Cations	ED007	1	3	**33.33**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
PAH/Phenols (SIM)	EP075(SIM)	2	30	**6.67**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	EP068	2	30	**6.67**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Polychlorinated Biphenyls (PCB)	EP066	2	30	**6.67**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Semivolatile Organic Compounds	EP075	2	16	**12.50**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	3	48	**6.25**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	3	48	**6.25**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	2	30	**6.67**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	3	51	**5.88**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard

Matrix: **SOIL**

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

Quality Control Sample Type		Count		Rate (%)			Quality Control Specification
Analytical Methods	Method	QC	Regular	Actual	Expected	Evaluation	
Method Blanks (MB) - Continued							
Volatile Organic Compounds	EP074	2	17	11.76	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Matrix Spikes (MS)							
PAH/Phenols (SIM)	EP075(SIM)	2	30	6.67	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	1	20	5.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Pesticides by GCMS	EP068	2	30	6.67	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Polychlorinated Biphenyls (PCB)	EP066	2	30	6.67	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Semivolatile Organic Compounds	EP075	2	16	12.50	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	3	48	6.25	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	3	48	6.25	5.00	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	2	30	6.67	5.00	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	3	51	5.88	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Volatile Organic Compounds	EP074	2	17	11.76	5.00	✓	NEPM 2013 B3 & ALS QC Standard

Matrix: **WATER**

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

Quality Control Sample Type		Count		Rate (%)			Quality Control Specification
Analytical Methods	Method	QC	Regular	Actual	Expected	Evaluation	
Laboratory Duplicates (DUP)							
PAH/Phenols (GC/MS - SIM)	EP075(SIM)	0	17	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	2	0.00	10.00	×	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	2	18	11.11	10.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-MS - Suite A	EG020A-T	2	15	13.33	10.00	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	0	19	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)							
PAH/Phenols (GC/MS - SIM)	EP075(SIM)	1	17	5.88	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	2	50.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	1	18	5.56	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-MS - Suite A	EG020A-T	1	15	6.67	5.00	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	1	19	5.26	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)							
PAH/Phenols (GC/MS - SIM)	EP075(SIM)	1	17	5.88	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	2	50.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	1	18	5.56	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-MS - Suite A	EG020A-T	1	15	6.67	5.00	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	1	19	5.26	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: **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*	
Matrix Spikes (MS)							
PAH/Phenols (GC/MS - SIM)	EP075(SIM)	0	17	**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	2	**0.00**	**5.00**	×	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	1	18	**5.56**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-MS - Suite A	EG020A-T	1	15	**6.67**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	0	19	**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
pH (1:5)	EA002	SOIL	In house: Referenced to Rayment and Lyons 4A1 and APHA 4500H+. pH is determined on soil samples after a 1:5 soil/water leach. This method is compliant with NEPM Schedule B(3).
Moisture Content	EA055	SOIL	In house: A gravimetric procedure based on weight loss over a 12 hour drying period at 105-110 degrees C. This method is compliant with NEPM Schedule B(3).
Asbestos Identification in Soils	EA200	SOIL	AS 4964 Method for the qualitative identification of asbestos in bulk samples Analysis by Polarised Light Microscopy including dispersion staining
Exchangeable Cations	ED007	SOIL	In house: Referenced to Rayment & Lyons Method 15A1. Cations are exchanged from the sample by contact with Ammonium Chloride. They are then quantitated in the final solution by ICPAES and reported as meq/100g of original soil. This method is compliant with NEPM Schedule B(3).
Total Metals by ICP-AES	EG005T	SOIL	In house: Referenced to APHA 3120; USEPA SW 846 - 6010. Metals are determined following an appropriate acid digestion of the soil. The ICPAES technique ionises samples in a plasma, emitting a characteristic spectrum based on metals present. Intensities at selected wavelengths are compared against those of matrix matched standards. This method is compliant with NEPM Schedule B(3)
Total Mercury by FIMS	EG035T	SOIL	In house: Referenced to APHA 3112 Hg - B (Flow-injection (SnCl2) (Cold Vapour generation) AAS) FIM-AAS is an automated flameless atomic absorption technique. Mercury in solids are determined following an appropriate acid digestion. Ionic mercury is reduced online to atomic mercury vapour by SnCl2 which is then purged into a heated quartz cell. Quantification is by comparing absorbance against a calibration curve. This method is compliant with NEPM Schedule B(3)
Polychlorinated Biphenyls (PCB)	EP066	SOIL	In house: Referenced to USEPA SW 846 - 8270 Extracts are analysed by Capillary GC/MS and quantification is by comparison against an established 5 point calibration curve. This method is compliant with NEPM Schedule B(3).
Pesticides by GCMS	EP068	SOIL	In house: Referenced to USEPA SW 846 - 8270 Extracts are analysed by Capillary GC/MS and quantification is by comparison against an established 5 point calibration curve. This technique is compliant with NEPM Schedule B(3).
TRH - Semivolatile Fraction	EP071	SOIL	In house: Referenced to USEPA SW 846 - 8015 Sample extracts are analysed by Capillary GC/FID and quantified against alkane standards over the range C10 - C40. Compliant with NEPM Schedule B(3).
Volatile Organic Compounds	EP074	SOIL	In house: Referenced to USEPA SW 846 - 8260 Extracts are analysed by Purge and Trap, Capillary GC/MS. Quantification is by comparison against an established 5 point calibration curve. This method is compliant with NEPM Schedule B(3).
Semivolatile Organic Compounds	EP075	SOIL	In house: Referenced to USEPA SW 846 - 8270 Extracts are analysed by Capillary GC/MS and quantification is by comparison against an established 5 point calibration curve. This technique is compliant with NEPM Schedule B(3).
PAH/Phenols (SIM)	EP075(SIM)	SOIL	In house: Referenced to USEPA SW 846 - 8270. Extracts are analysed by Capillary GC/MS in Selective Ion Mode (SIM) and quantification is by comparison against an established 5 point calibration curve. This method is compliant with NEPM Schedule B(3)

Analytical Methods	Method	Matrix	Method Descriptions
TRH Volatiles/BTEX	EP080	SOIL	In house: Referenced to USEPA SW 846 - 8260. Extracts are analysed by Purge and Trap, Capillary GC/MS. Quantification is by comparison against an established 5 point calibration curve. Compliant with NEPM Schedule B(3) amended.
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	SOIL	In-house: Analysis of soils by solvent extraction followed by LC-Electrospray-MS-MS, Negative Mode using MRM using internal standard quantitation. Isotopically labelled analogues of target analytes used as internal standards and surrogates are added to a portion of soil which is then extracted with MTBE and an ion pairing reagent. A portion of extract is exchanged into the analytical solvent mixture, combined with an equal volume reagent water and filtered for analysis. Method procedures and data quality objectives conform to US DoD QSM 5.3, table B-15 requirements.
Total Metals by ICP-MS - Suite A	EG020A-T	WATER	In house: Referenced to APHA 3125; USEPA SW846 - 6020, ALS QWI-EN/EG020. 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.
Total Mercury by FIMS	EG035T	WATER	In house: Referenced to APHA 3112 Hg - B (Flow-injection (SnCl2)(Cold Vapour generation) AAS) FIM-AAS is an automated flameless atomic absorption technique. A bromate/bromide reagent is used to oxidise any organic mercury compounds in the unfiltered sample. The ionic mercury is reduced online to atomic mercury vapour by SnCl2 which is then purged into a heated quartz cell. Quantification is by comparing absorbance against a calibration curve. This method is compliant with NEPM Schedule B(3).
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
Exchangeable Cations Preparation Method	ED007PR	SOIL	In house: Referenced to Rayment & Lyons method 15A1. A 1M NH4Cl extraction by end over end tumbling at a ratio of 1:20. There is no pretreatment for soluble salts. Extracts can be run by ICP for cations.
1:5 solid / water leach for soluble analytes	EN34	SOIL	10 g of soil is mixed with 50 mL of reagent grade water and tumbled end over end for 1 hour. Water soluble salts are leached from the soil by the continuous suspension. Samples are settled and the water filtered off for analysis.

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).
Methanolic Extraction of Soils for Purge and Trap	ORG16	SOIL	In house: Referenced to USEPA SW 846 - 5030A. 5g of solid is shaken with surrogate and 10mL methanol prior to analysis by Purge and Trap - GC/MS.
Tumbler Extraction of Solids	ORG17	SOIL	In house: Mechanical agitation (tumbler). 10g of sample, Na2SO4 and surrogate are extracted with 30mL 1:1 DCM/Acetone by end over end tumble. The solvent is decanted, dehydrated and concentrated (by KD) to the desired volume for analysis.
QuECheRS Extraction of Solids	ORG71	SOIL	In house: Sequential extractions with Acetonitrile/Methanol by shaking. Extraction efficiency aided by the addition of salts under acidic conditions. Where relevant, interferences from co-extracted organics are removed with dispersive clean-up media (dSPE). The extract is either diluted or concentrated and exchanged into the analytical solvent.
Digestion for Total Recoverable Metals	EN25	WATER	In house: Referenced to USEPA SW846-3005. Method 3005 is a Nitric/Hydrochloric acid digestion procedure used to prepare surface and ground water samples for analysis by ICPAES or ICPMS. This method is compliant with NEPM Schedule B(3)
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.

CHAIN OF CUSTODY

ALS Laboratory: please tick →

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WOLLONGONG 99 Kenny Street Wollongong NSW 2500 Ph: 02 4225 3125 E: wollongong@alsglobal.com

CLIENT: ERM	TURNAROUND REQUIREMENTS: (Standard TAT may be longer for some tests e.g., Ultra Trace Organics)	☒ Standard TAT (List due date):	FOR LABORATORY USE ONLY (Circle)
OFFICE: SYDNEY		☐ Non Standard or urgent TAT (List due date):	Custody Seal Intact? Yes / No / N/A
PROJECT: SOP	PROJECT NO.: 0626507	ALS QUOTE NO.:	Free ice / frozen ice bricks present upon receipt? Yes / No / N/A
ORDER NUMBER: —	PURCHASE ORDER NO.: —	COUNTRY OF ORIGIN: Australia	COC SEQUENCE NUMBER (Circle) COC: 1 2 3 4 5 6 7 OF: 1 2 3 4 5 6 7
PROJECT MANAGER: NICK G / JESS L	CONTACT PH: 0415 833925		Random Sample Temperature on Receipt: 18.6 °C
SAMPLER: ~~Tristen Rodrigues~~ Anthony Richard	SAMPLER MOBILE: 0427159735		Other comment:
COC Emailed to ALS? (YES / (NO)	EDD FORMAT (or default):		
Email Reports to (will default to PM if no other addresses are listed): NICK G, Jess L			
Email Invoice to (will default to PM if no other addresses are listed): Default			

RELINQUISHED BY:	RECEIVED BY:	RELINQUISHED BY:	RECEIVED BY:
DATE/TIME:	DATE/TIME: 27/1/22 1535	DATE/TIME:	DATE/TIME:

COMMENTS/SPECIAL HANDLING/STORAGE OR DISPOSAL: Please issue Preliminary Report.

ALS USE ONLY	SAMPLE DETAILS MATRIX: Solid(S) Water(W)			CONTAINER INFORMATION		ANALYSIS REQUIRED including SUITES (NB. Suite Codes must be listed to attract suite price) Where Metals are required, specify Total (unfiltered bottle required) or Dissolved (field filtered bottle required).								Additional Information
LAB ID	SAMPLE ID	DATE / TIME	MATRIX	TYPE & PRESERVATIVE (refer to codes below)	TOTAL JARS	S16	S23	EA200 G	EP231	BTEX/TRH				Comments on likely contaminant levels, dilutions, or samples requiring specific QC analysis etc.
1	SOP_BH128_0.9_220124		S	JPA	3	X	X	X	X					
2	SOP_BH128_5.0_220124			JPA	3	X			X					
3	SOP_BH129_0.5_220124			JPA	3	X		X	X					
4	SOP_BH129_1.0_220124			JPA	3	X	X		X					
5	SOP_BH130_0.4_220124			JA	2	X		X						
6	SOP_BH130_2.0_220124			JP	2	X	X							
7	SOP_BH131_1.0_220124			JA	2	X	X	X						
8	SOP_BH131_2.0_220124			JP	2	X			X					
9	DUP07_220124	24-1-22		JP	2	X			X					
—	TRIP07_220124	24-1-22		JP	2	X			X					Please fwd to Eurofins
10	SOP_BH122_1.0_220124			JA	2	X		X						
11	SOP_BH122_2.0_220124			J	1	X	X							
12	SOP_BH123_1.0_220124			JPA	3	X	X	X	X					
13	SOP_BH123_3.0_220124			J	1	X								
~~14~~														
				TOTAL										

Environmental Division
Sydney
Work Order Reference
ES2202692

Telephone : +61-2-8784 8555

Water Container Codes: P = Unpreserved Plastic; N = Nitric Preserved Plastic; ORC = Nitric Preserved ORC; SH = Sodium Hydroxide/Cd Preserved; S = Sodium Hydroxide Preserved Plastic; AG = Amber Glass Unpreserved; AP - Airfreight Unpreserved Plastic
V = VOA Vial HCl Preserved; VB = VOA Vial Sodium Bisulphate Preserved; VS = VOA Vial Sulfuric Preserved; AV = Airfreight Unpreserved Vial SG = Sulfuric Preserved Amber Glass; H = HCl preserved Plastic; HS = HCl preserved Speciation bottle; SP = Sulfuric Preserved Plastic; F = Formaldehyde Preserved Glass;
Z = Zinc Acetate Preserved Bottle; E = EDTA Preserved Bottles; ST = Sterile Bottle; ASS = Plastic Bag for Acid Sulphate Soils; B = Unpreserved Bag; LI = Lugols Iodine Preserved Bottles; STT = Sterile Sodium Thiosulfate Preserved Bottles.

CHAIN OF CUSTODY

ALS Laboratory: please tick →

☐ADELAIDE 21 Burma Road Pooraka SA 5095 Ph: 08 8359 0890 E: adelaide@alsglobal.com

☐BRISBANE 2 Byth Street Stafford QLD 4053 Ph: 07 3243 7222 E: samples.brisbane@alsglobal.com

☐GLADSTONE 46 Callemondah Drive Clinton QLD 4680 Ph: 07 7471 5600 E: gladstone@alsglobal.com

☐MACKAY 78 Harbour Road Mackay QLD 4740 Ph: 07 4944 0177 E: mackay@alsglobal.com

☐MELBOURNE 2-4 Westall Road Springvale VIC 3171 Ph: 03 8549 9600 E: samples.melbourne@alsglobal.com

☐MUDGEE 129 Sydney Road Mudgee NSW 2850 Ph: 02 6372 6735 E: mudgee.mail@alsglobal.com

☐NEWCASTLE 5/585 Maitland Road Mayfield West NSW 2304 Ph: 02 4014 2500 E: samples.newcastle@alsglobal.com

☐NOWRA 4/13 Geary Place North Nowra NSW 2541 Ph: 02 4423 2063 E: nowra@alsglobal.com

☐PERTH 10 Hod Way Malaga WA 6090 Ph: 08 9209 7655 E: samples.perth@alsglobal.com

☐SYDNEY 277-289 Woodpark Road Smithfield NSW 2164 Ph: 02 8784 8555 E: samples.sydney@alsglobal.com

☐TOWNSVILLE 14-15 Desma Court Bohle QLD 4818 Ph: 07 4796 0600 E: townsville.environmental@alsglobal.com

☐WOLLONGONG 99 Kenny Street Wollongong NSW 2500 Ph: 02 4225 3125 E: wollongong@alsglobal.com

CLIENT:	**TURNAROUND REQUIREMENTS :** (Standard TAT may be longer for some tests e.g. Ultra Trace Organics)	☐ Standard TAT (**List due date**):	**FOR LABORATORY USE ONLY (Circle)**
OFFICE:		☐ Non Standard or urgent TAT (**List due date**):	Custody Seal Intact? Yes No N/A
PROJECT: **PROJECT NO.:**	**ALS QUOTE NO.:**	**COC SEQUENCE NUMBER (Circle)**	Free ice / frozen ice bricks present upon receipt? Yes No N/A
ORDER NUMBER: **PURCHASE ORDER NO.:** SEE PAGE 2	**COUNTRY OF ORIGIN:** Australia	COC: 1 2 3 4 5 6 7	Random Sample Temperature on Receipt: 18.6 °C
PROJECT MANAGER:	**CONTACT PH:**	OF: 1 2 3 4 5 6 7	Other comment:
SAMPLER: Tristan Rodrigues	**SAMPLER MOBILE:**	**RELINQUISHED BY:**	**RECEIVED BY:**
COC Emailed to ALS? (YES / NO)	**EDD FORMAT (or default):**		
Email Reports to (will default to PM if no other addresses are listed):		DATE/TIME:	DATE/TIME: 27/11/22 1525
Email Invoice to (will default to PM if no other addresses are listed):		**RELINQUISHED BY:** DATE/TIME:	**RECEIVED BY:** DATE/TIME:

COMMENTS/SPECIAL HANDLING/STORAGE OR DISPOSAL: Please issue Preliminary Report.

ALS USE ONLY	SAMPLE DETAILS MATRIX: Solid(S) Water(W)			CONTAINER INFORMATION		ANALYSIS REQUIRED including SUITES (NB. Suite Codes must be listed to attract suite price) Where **Metals** are required, specify **Total** (unfiltered bottle required) or **Dissolved** (field filtered bottle required).								Additional Information
LAB ID	SAMPLE ID	DATE / TIME	MATRIX	TYPE & PRESERVATIVE *(refer to codes below)*	TOTAL JARS	S16	S23	EA200 G	EP231	BTEX/TRH				Comments on likely contaminant levels, dilutions, or samples requiring specific QC analysis etc.
14	SOP_BH140_1.0_220124		S	JA	2	X		X						
15	SOP_BH140_2.0_220124			JP	2	X	X		X					
16	SOP_BH141_0.3_220124			JA	2	X		X						
17	SOP_BH141_0.4_220124			JA	2	X	X	X						
18	SOP_BH132_1.0_220125			JPA	3	X		X	X					
19	SOP_BH132_3.0_220125			JA	2	X	X							
20	SOP_BH133_0.3_220125			JA	2	X	X	X						
21	SOP_BH133_0.8_220125			JA	2	X								
22	SOP_BH134_0.5_220125			JPA	3	X	X	X	X					
23	SOP_BH134_2.0_220125			JA	2	X								
24	SOP_BH135_0.5_220125			JA	2	X	X	X						
25	SOP_BH135_0.8_220125			JA	2	X								
26	SOP_BH136_0.2_220125			JA	2	X	X	X						
27	SOP_BH137_0.2_220125			JA	2	X	X	X						
28	SOP_BH138_0.2_220125		↓	JA	2	X	X	X						
				TOTAL										

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V = VOA Vial HCl Preserved; VB = VOA Vial Sodium Bisulphate Preserved; VS = VOA Vial Sulfuric Preserved; AV = Airfreight Unpreserved Vial SG = Sulfuric Preserved Amber Glass; H = HCl preserved Plastic; HS = HCl preserved Speciation bottle; SP = Sulfuric Preserved Plastic; F = Formaldehyde Preserved Glass;
Z = Zinc Acetate Preserved Bottle; E = EDTA Preserved Bottles; ST = Sterile Bottle; ASS = Plastic Bag for Acid Sulphate Soils; B = Unpreserved Bag; LI = Lugols Iodine Preserved Bottles; STT = Sterile Sodium Thiosulfate Preserved Bottles.

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CLIENT:	TURNAROUND REQUIREMENTS : (Standard TAT may be longer for some tests e.g. Ultra Trace Organics) ☐ Standard TAT (List due date): ☐ Non Standard or urgent TAT (List due date):	FOR LABORATORY USE ONLY (Circle)	
OFFICE:		Custody Seal Intact?	Yes / No / N/A
PROJECT: PROJECT NO.:	ALS QUOTE NO.:	Free ice / frozen ice bricks present upon receipt?	Yes / No / N/A
ORDER NUMBER: PURCHASE ORDER NO.:	COUNTRY OF ORIGIN: Australia	Random Sample Temperature on Receipt:	°C
PROJECT MANAGER:	CONTACT PH:	Other comment:	
SAMPLER: Tristan Rodrigues	SAMPLER MOBILE:		
COC Emailed to ALS? (YES / NO)	EDD FORMAT (or default):		
Email Reports to (will default to PM if no other addresses are listed):			
Email Invoice to (will default to PM if no other addresses are listed):			

SEE PAGE 1

COC SEQUENCE NUMBER (Circle)

COC: 1 2 3 4 5 6 7

OF: 1 2 3 4 5 6 7

RELINQUISHED BY:	RECEIVED BY:	RELINQUISHED BY:	RECEIVED BY:
DATE/TIME:	DATE/TIME: 27/1/22 1525	DATE/TIME:	DATE/TIME:

COMMENTS/SPECIAL HANDLING/STORAGE OR DISPOSAL: Please issue Preliminary Report.

ALS USE ONLY	SAMPLE DETAILS MATRIX: Solid(S) Water(W)			CONTAINER INFORMATION		ANALYSIS REQUIRED including SUITES (NB. Suite Codes must be listed to attract suite price) Where Metals are required, specify Total (unfiltered bottle required) or Dissolved (field filtered bottle required).								Additional Information
LAB ID	SAMPLE ID	DATE / TIME	MATRIX	TYPE & PRESERVATIVE (refer to codes below)	TOTAL JARS	S16	S23	EA200 G	EP231	BTEX/TRH				Comments on likely contaminant levels, dilutions, or samples requiring specific QC analysis etc.
29	SOP_BH139_1.2_220125		S	JPA	3	X		X	X					
30	SOP_BH139_2.0_220125		S	JA	2	X	X							
31	RIN06_220124	25/1/22	W		6	X								
32	RIN07_220125	25/1/22	W		6	X								
				TOTAL										

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V = VOA Vial HCl Preserved; VB = VOA Vial Sodium Bisulphate Preserved; VS = VOA Vial Sulfuric Preserved; AV = Airfreight Unpreserved Vial SG = Sulfuric Preserved Amber Glass; H = HCl preserved Plastic; HS = HCl preserved Speciation bottle; SP = Sulfuric Preserved Plastic; F = Formaldehyde Preserved Glass;
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ALS Environmental

CERTIFICATE OF ANALYSIS

Work Order	: **ES2203937**	Page	: 1 of 9
Client	: **ENVIRONMENTAL RESOURCES MANAGEMENT (ERM)**	Laboratory	: Environmental Division Sydney
Contact	: NICHOLAS GRBICH	Contact	: Customer Services ES
Address	: LEVEL 15 309 KENT STREET SYDNEY NSW AUSTRALIA 2000	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
Telephone	: ----	Telephone	: +61-2-8784 8555
Project	: AFJV SOP 0628507	Date Samples Received	: 04-Feb-2022 17:50
Order number	: ----	Date Analysis Commenced	: 05-Feb-2022
C-O-C number	: ----	Issue Date	: 10-Feb-2022 16:36
Sampler	: Anthony Richard		
Site	: ----		
Quote number	: EN/114		
No. of samples received	: 1		
No. of samples analysed	: 1		

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

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

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results
- Surrogate Control Limits

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

Signatories

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

Signatories	*Position*	*Accreditation Category*
Ankit Joshi	Inorganic Chemist	Sydney Inorganics, Smithfield, NSW
Edwandy Fadjar	Organic Coordinator	Sydney Organics, Smithfield, NSW
Franco Lentini	LCMS 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.
- 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.
- 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.
- Sodium Adsorption Ratio (where reported): Where results for Na, Ca or Mg are <LOR, a concentration at half the reported LOR is incorporated into the SAR calculation. This represents a conservative approach for Na relative to the assumption that <LOR = zero concentration and a conservative approach for Ca & Mg relative to the assumption that <LOR is equivalent to the LOR concentration.
- 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	SWM_BH032_220204	----	----	----	----
				Sampling date / time	04-Feb-2022 00:00	----	----	----	----
Compound	CAS Number	LOR	Unit		ES2203937-001	--------	--------	--------	--------
					Result	----	----	----	----
EA015: Total Dissolved Solids dried at 180 ± 5 °C									
Total Dissolved Solids @180°C	----	10	mg/L		**11400**	----	----	----	----
ED037P: Alkalinity by PC Titrator									
Hydroxide Alkalinity as CaCO3	DMO-210-001	1	mg/L		<1	----	----	----	----
Carbonate Alkalinity as CaCO3	3812-32-6	1	mg/L		<1	----	----	----	----
Bicarbonate Alkalinity as CaCO3	71-52-3	1	mg/L		**420**	----	----	----	----
Total Alkalinity as CaCO3	----	1	mg/L		**420**	----	----	----	----
ED041G: Sulfate (Turbidimetric) as SO4 2- by DA									
Sulfate as SO4 - Turbidimetric	14808-79-8	1	mg/L		**758**	----	----	----	----
ED045G: Chloride by Discrete Analyser									
Chloride	16887-00-6	1	mg/L		**5850**	----	----	----	----
ED093F: Dissolved Major Cations									
Calcium	7440-70-2	1	mg/L		**393**	----	----	----	----
Magnesium	7439-95-4	1	mg/L		**320**	----	----	----	----
Sodium	7440-23-5	1	mg/L		**2950**	----	----	----	----
Potassium	7440-09-7	1	mg/L		**40**	----	----	----	----
EG020F: Dissolved Metals by ICP-MS									
Arsenic	7440-38-2	0.001	mg/L		**0.003**	----	----	----	----
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	----	----	----	----
Lead	7439-92-1	0.001	mg/L		<0.001	----	----	----	----
Nickel	7440-02-0	0.001	mg/L		**0.005**	----	----	----	----
Zinc	7440-66-6	0.005	mg/L		**0.013**	----	----	----	----
Iron	7439-89-6	0.05	mg/L		<0.05	----	----	----	----
EG035F: Dissolved Mercury by FIMS									
Mercury	7439-97-6	0.0001	mg/L		<0.0001	----	----	----	----
EK040P: Fluoride by PC Titrator									
Fluoride	16984-48-8	0.1	mg/L		**0.2**	----	----	----	----
EK055G: Ammonia as N by Discrete Analyser									
Ammonia as N	7664-41-7	0.01	mg/L		**1.96**	----	----	----	----
EK057G: Nitrite as N by Discrete Analyser									
Nitrite as N	14797-65-0	0.01	mg/L		<0.01	----	----	----	----
EK058G: Nitrate as N by Discrete Analyser									

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	SWM_BH032_220204	----	----	----	----
				Sampling date / time	04-Feb-2022 00:00	----	----	----	----
Compound	CAS Number	LOR	Unit		ES2203937-001	--------	--------	--------	--------
					Result	----	----	----	----
EK058G: Nitrate as N by Discrete Analyser - Continued									
Nitrate as N	14797-55-8	0.01	mg/L		**0.12**	----	----	----	----
EK059G: Nitrite plus Nitrate as N (NOx) by Discrete Analyser									
Nitrite + Nitrate as N	----	0.01	mg/L		**0.12**	----	----	----	----
EK061G: Total Kjeldahl Nitrogen By Discrete Analyser									
Total Kjeldahl Nitrogen as N	----	0.1	mg/L		**2.6**	----	----	----	----
EK062G: Total Nitrogen as N (TKN + NOx) by Discrete Analyser									
^ Total Nitrogen as N	----	0.1	mg/L		**2.7**	----	----	----	----
EK067G: Total Phosphorus as P by Discrete Analyser									
Total Phosphorus as P	----	0.01	mg/L		**0.24**	----	----	----	----
EN055: Ionic Balance									
ø Total Anions	----	0.01	meq/L		**189**	----	----	----	----
ø Total Cations	----	0.01	meq/L		**175**	----	----	----	----
ø Ionic Balance	----	0.01	%		**3.82**	----	----	----	----
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									
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		<5	----	----	----	----
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	----	----	----	----

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	SWM_BH032_220204	----	----	----	----
				Sampling date / time	04-Feb-2022 00:00	----	----	----	----
Compound	CAS Number	LOR	Unit		ES2203937-001	--------	--------	--------	--------
					Result	----	----	----	----
EP074D: Fumigants - Continued									
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	----	----	----	----
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	----	----	----	----
Hexachlorobutadiene	87-68-3	5	µg/L		<5	----	----	----	----
EP074F: Halogenated Aromatic Compounds									
Chlorobenzene	108-90-7	5	µg/L		<5	----	----	----	----
Bromobenzene	108-86-1	5	µg/L		<5	----	----	----	----

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	SWM_BH032_220204	----	----	----	----
				Sampling date / time	04-Feb-2022 00:00	----	----	----	----
Compound	CAS Number	LOR	Unit		ES2203937-001	--------	--------	--------	--------
					Result	----	----	----	----
EP074F: Halogenated Aromatic Compounds - Continued									
2-Chlorotoluene	95-49-8	5	µg/L		<5	----	----	----	----
4-Chlorotoluene	106-43-4	5	µg/L		<5	----	----	----	----
1.3-Dichlorobenzene	541-73-1	5	µg/L		<5	----	----	----	----
1.4-Dichlorobenzene	106-46-7	5	µg/L		<5	----	----	----	----
1.2-Dichlorobenzene	95-50-1	5	µg/L		<5	----	----	----	----
1.2.4-Trichlorobenzene	120-82-1	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)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	----	----	----	----
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	----	----	----	----

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	SWM_BH032_220204	----	----	----	----
				Sampling date / time	04-Feb-2022 00:00	----	----	----	----
Compound	CAS Number	LOR	Unit		ES2203937-001	--------	--------	--------	--------
					Result	----	----	----	----
EP080/071: Total Petroleum Hydrocarbons - Continued									
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	----	----	----	----
EP231A: Perfluoroalkyl Sulfonic Acids									
Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L		<0.02	----	----	----	----
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L		<0.01	----	----	----	----
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L		<0.01	----	----	----	----
EP231B: Perfluoroalkyl Carboxylic Acids									
Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L		<0.1	----	----	----	----
Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L		<0.02	----	----	----	----
Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L		<0.02	----	----	----	----
Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L		<0.02	----	----	----	----
Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L		<0.01	----	----	----	----

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	SWM_BH032_220204	----	----	----	----
				Sampling date / time	04-Feb-2022 00:00	----	----	----	----
Compound	CAS Number	LOR	Unit		ES2203937-001	--------	--------	--------	--------
					Result	----	----	----	----
EP231D: (n:2) Fluorotelomer Sulfonic Acids									
4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L		<0.05	----	----	----	----
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.05	µg/L		<0.05	----	----	----	----
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.05	µg/L		<0.05	----	----	----	----
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.05	µg/L		<0.05	----	----	----	----
EP231P: PFAS Sums									
Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L		<0.01	----	----	----	----
Sum of PFAS (WA DER List)	----	0.01	µg/L		<0.01	----	----	----	----
EP074S: VOC Surrogates									
1.2-Dichloroethane-D4	17060-07-0	5	%		**131**	----	----	----	----
Toluene-D8	2037-26-5	5	%		**124**	----	----	----	----
4-Bromofluorobenzene	460-00-4	5	%		**115**	----	----	----	----
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	1.0	%		**23.5**	----	----	----	----
2-Chlorophenol-D4	93951-73-6	1.0	%		**49.1**	----	----	----	----
2.4.6-Tribromophenol	118-79-6	1.0	%		**64.0**	----	----	----	----
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	1.0	%		**62.2**	----	----	----	----
Anthracene-d10	1719-06-8	1.0	%		**77.4**	----	----	----	----
4-Terphenyl-d14	1718-51-0	1.0	%		**81.4**	----	----	----	----
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	2	%		**122**	----	----	----	----
Toluene-D8	2037-26-5	2	%		**127**	----	----	----	----
4-Bromofluorobenzene	460-00-4	2	%		**114**	----	----	----	----

Surrogate Control Limits

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

ALS Environmental

QUALITY CONTROL REPORT

Work Order	: **ES2203937**	Page	: 1 of 13
Client	: **ENVIRONMENTAL RESOURCES MANAGEMENT (ERM)**	Laboratory	: Environmental Division Sydney
Contact	: NICHOLAS GRBICH	Contact	: Customer Services ES
Address	: LEVEL 15 309 KENT STREET SYDNEY NSW AUSTRALIA 2000	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
Telephone	: ----	Telephone	: +61-2-8784 8555
Project	: AFJV SOP 0628507	Date Samples Received	: 04-Feb-2022
Order number	: ----	Date Analysis Commenced	: 05-Feb-2022
C-O-C number	: ----	Issue Date	: 10-Feb-2022
Sampler	: Anthony Richard		
Site	: ----		
Quote number	: EN/114		
No. of samples received	: 1		
No. of samples analysed	: 1		

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

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

This Quality Control Report contains the following information:

- Laboratory Duplicate (DUP) Report; Relative Percentage Difference (RPD) and Acceptance Limits
- Method Blank (MB) and Laboratory Control Spike (LCS) Report; Recovery and Acceptance Limits
- Matrix Spike (MS) Report; Recovery and Acceptance Limits

Signatories

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

Signatories	*Position*	*Accreditation Category*
Ankit Joshi	Inorganic Chemist	Sydney Inorganics, Smithfield, NSW
Edwandy Fadjar	Organic Coordinator	Sydney Organics, Smithfield, NSW
Franco Lentini	LCMS 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**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Acceptable RPD (%)
EA015: Total Dissolved Solids dried at 180 ± 5 °C (QC Lot: 4159541)									
ES2203896-011	Anonymous	EA015H: Total Dissolved Solids @180°C	----	10	mg/L	1540	1440	6.4	0% - 20%
ED037P: Alkalinity by PC Titrator (QC Lot: 4158342)									
ES2203896-009	Anonymous	ED037-P: Hydroxide Alkalinity as CaCO3	DMO-210-001	1	mg/L	<1	<1	0.0	No Limit
		ED037-P: Carbonate Alkalinity as CaCO3	3812-32-6	1	mg/L	<1	<1	0.0	No Limit
		ED037-P: Bicarbonate Alkalinity as CaCO3	71-52-3	1	mg/L	136	133	2.3	0% - 20%
		ED037-P: Total Alkalinity as CaCO3	----	1	mg/L	136	133	2.3	0% - 20%
ES2203935-001	Anonymous	ED037-P: Hydroxide Alkalinity as CaCO3	DMO-210-001	1	mg/L	<1	<1	0.0	No Limit
		ED037-P: Carbonate Alkalinity as CaCO3	3812-32-6	1	mg/L	<1	<1	0.0	No Limit
		ED037-P: Bicarbonate Alkalinity as CaCO3	71-52-3	1	mg/L	187	187	0.0	0% - 20%
		ED037-P: Total Alkalinity as CaCO3	----	1	mg/L	187	187	0.0	0% - 20%
ED041G: Sulfate (Turbidimetric) as SO4 2- by DA (QC Lot: 4156214)									
ES2203687-001	Anonymous	ED041G: Sulfate as SO4 - Turbidimetric	14808-79-8	1	mg/L	<1	<1	0.0	No Limit
ED045G: Chloride by Discrete Analyser (QC Lot: 4156213)									
ES2203687-001	Anonymous	ED045G: Chloride	16887-00-6	1	mg/L	11	11	0.0	0% - 50%
ED093F: Dissolved Major Cations (QC Lot: 4160776)									
ES2203328-002	Anonymous	ED093F: Calcium	7440-70-2	1	mg/L	203	203	0.0	0% - 20%
		ED093F: Magnesium	7439-95-4	1	mg/L	73	73	0.0	0% - 20%
		ED093F: Sodium	7440-23-5	1	mg/L	1350	1320	1.9	0% - 20%
		ED093F: Potassium	7440-09-7	1	mg/L	63	63	0.0	0% - 20%
ES2204008-006	Anonymous	ED093F: Calcium	7440-70-2	1	mg/L	95	97	2.0	0% - 20%
		ED093F: Magnesium	7439-95-4	1	mg/L	32	34	5.6	0% - 20%
		ED093F: Sodium	7440-23-5	1	mg/L	7	6	0.0	No Limit
		ED093F: Potassium	7440-09-7	1	mg/L	1	1	0.0	No Limit

Sub-Matrix: **WATER**

Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Laboratory Duplicate (DUP) Report					
				LOR	Unit	Original Result	Duplicate Result	RPD (%)	Acceptable RPD (%)
EG020F: Dissolved Metals by ICP-MS (QC Lot: 4160774)									
ES2203328-002	Anonymous	EG020A-F: Cadmium	7440-43-9	0.0001	mg/L	<0.1 ug/L	<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	0.034	0.033	0.0	0% - 20%
		EG020A-F: Copper	7440-50-8	0.001	mg/L	2 ug/L	0.002	0.0	No Limit
		EG020A-F: Lead	7439-92-1	0.001	mg/L	<1 ug/L	<0.001	0.0	No Limit
		EG020A-F: Nickel	7440-02-0	0.001	mg/L	<1 ug/L	<0.001	0.0	No Limit
		EG020A-F: Zinc	7440-66-6	0.005	mg/L	<5 ug/L	<0.005	0.0	No Limit
		EG020A-F: Iron	7439-89-6	0.05	mg/L	<50 ug/L	<0.05	0.0	No Limit
ES2204008-006	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	<0.001	<0.001	0.0	No Limit
		EG020A-F: Zinc	7440-66-6	0.005	mg/L	<0.005	<0.005	0.0	No Limit
		EG020A-F: Iron	7439-89-6	0.05	mg/L	0.14	0.14	0.0	No Limit
EG035F: Dissolved Mercury by FIMS (QC Lot: 4160775)									
ES2203770-001	Anonymous	EG035F: Mercury	7439-97-6	0.0001	mg/L	<0.0001	<0.0001	0.0	No Limit
EK040P: Fluoride by PC Titrator (QC Lot: 4158338)									
ES2203848-002	Anonymous	EK040P: Fluoride	16984-48-8	0.1	mg/L	<0.1	<0.1	0.0	No Limit
ES2203661-001	Anonymous	EK040P: Fluoride	16984-48-8	0.1	mg/L	0.5	0.4	22.7	No Limit
EK055G: Ammonia as N by Discrete Analyser (QC Lot: 4158982)									
ES2203887-002	Anonymous	EK055G: Ammonia as N	7664-41-7	0.01	mg/L	0.02	0.03	0.0	No Limit
EK057G: Nitrite as N by Discrete Analyser (QC Lot: 4156212)									
ES2203848-001	Anonymous	EK057G: Nitrite as N	14797-65-0	0.01	mg/L	<0.01	<0.01	0.0	No Limit
ES2203687-001	Anonymous	EK057G: Nitrite as N	14797-65-0	0.01	mg/L	<0.01	<0.01	0.0	No Limit
EK059G: Nitrite plus Nitrate as N (NOx) by Discrete Analyser (QC Lot: 4158983)									
ES2203887-002	Anonymous	EK059G: Nitrite + Nitrate as N	----	0.01	mg/L	0.55	0.56	0.0	0% - 20%
EK061G: Total Kjeldahl Nitrogen By Discrete Analyser (QC Lot: 4158989)									
ES2203887-002	Anonymous	EK061G: Total Kjeldahl Nitrogen as N	----	0.1	mg/L	<0.2	<0.2	0.0	No Limit
EK067G: Total Phosphorus as P by Discrete Analyser (QC Lot: 4158988)									
ES2203887-002	Anonymous	EK067G: Total Phosphorus as P	----	0.01	mg/L	0.23	0.25	7.0	0% - 50%
EP074A: Monocyclic Aromatic Hydrocarbons (QC Lot: 4158307)									
ES2203726-001	Anonymous	EP074: Styrene	100-42-5	5	µg/L	<5	<5	0.0	No Limit
		EP074: Isopropylbenzene	98-82-8	5	µg/L	<5	<5	0.0	No Limit
		EP074: n-Propylbenzene	103-65-1	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.3.5-Trimethylbenzene	108-67-8	5	µg/L	<5	<5	0.0	No Limit
		EP074: sec-Butylbenzene	135-98-8	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.2.4-Trimethylbenzene	95-63-6	5	µg/L	<5	<5	0.0	No Limit

Sub-Matrix: **WATER**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Acceptable RPD (%)*
EP074A: Monocyclic Aromatic Hydrocarbons (QC Lot: 4158307) - continued									
ES2203726-001	Anonymous	EP074: tert-Butylbenzene	98-06-6	5	µg/L	<5	<5	0.0	No Limit
		EP074: p-Isopropyltoluene	99-87-6	5	µg/L	<5	<5	0.0	No Limit
		EP074: n-Butylbenzene	104-51-8	5	µg/L	<5	<5	0.0	No Limit
ET2200656-001	Anonymous	EP074: Styrene	100-42-5	5	µg/L	<5	<5	0.0	No Limit
		EP074: Isopropylbenzene	98-82-8	5	µg/L	<5	<5	0.0	No Limit
		EP074: n-Propylbenzene	103-65-1	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.3.5-Trimethylbenzene	108-67-8	5	µg/L	<5	<5	0.0	No Limit
		EP074: sec-Butylbenzene	135-98-8	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.2.4-Trimethylbenzene	95-63-6	5	µg/L	<5	<5	0.0	No Limit
		EP074: tert-Butylbenzene	98-06-6	5	µg/L	<5	<5	0.0	No Limit
		EP074: p-Isopropyltoluene	99-87-6	5	µg/L	<5	<5	0.0	No Limit
		EP074: n-Butylbenzene	104-51-8	5	µg/L	<5	<5	0.0	No Limit
EP074B: Oxygenated Compounds (QC Lot: 4158307)									
ES2203726-001	Anonymous	EP074: Vinyl Acetate	108-05-4	50	µg/L	<50	<50	0.0	No Limit
		EP074: 2-Butanone (MEK)	78-93-3	50	µg/L	<50	<50	0.0	No Limit
		EP074: 4-Methyl-2-pentanone (MIBK)	108-10-1	50	µg/L	<50	<50	0.0	No Limit
		EP074: 2-Hexanone (MBK)	591-78-6	50	µg/L	<50	<50	0.0	No Limit
ET2200656-001	Anonymous	EP074: Vinyl Acetate	108-05-4	50	µg/L	<50	<50	0.0	No Limit
		EP074: 2-Butanone (MEK)	78-93-3	50	µg/L	<50	<50	0.0	No Limit
		EP074: 4-Methyl-2-pentanone (MIBK)	108-10-1	50	µg/L	<50	<50	0.0	No Limit
		EP074: 2-Hexanone (MBK)	591-78-6	50	µg/L	<50	<50	0.0	No Limit
EP074C: Sulfonated Compounds (QC Lot: 4158307)									
ES2203726-001	Anonymous	EP074: Carbon disulfide	75-15-0	5	µg/L	<5	<5	0.0	No Limit
ET2200656-001	Anonymous	EP074: Carbon disulfide	75-15-0	5	µg/L	<5	<5	0.0	No Limit
EP074D: Fumigants (QC Lot: 4158307)									
ES2203726-001	Anonymous	EP074: 2.2-Dichloropropane	594-20-7	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.2-Dichloropropane	78-87-5	5	µg/L	<5	<5	0.0	No Limit
		EP074: cis-1.3-Dichloropropylene	10061-01-5	5	µg/L	<5	<5	0.0	No Limit
		EP074: trans-1.3-Dichloropropylene	10061-02-6	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.2-Dibromoethane (EDB)	106-93-4	5	µg/L	<5	<5	0.0	No Limit
ET2200656-001	Anonymous	EP074: 2.2-Dichloropropane	594-20-7	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.2-Dichloropropane	78-87-5	5	µg/L	<5	<5	0.0	No Limit
		EP074: cis-1.3-Dichloropropylene	10061-01-5	5	µg/L	<5	<5	0.0	No Limit
		EP074: trans-1.3-Dichloropropylene	10061-02-6	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.2-Dibromoethane (EDB)	106-93-4	5	µg/L	<5	<5	0.0	No Limit
EP074E: Halogenated Aliphatic Compounds (QC Lot: 4158307)									
ES2203726-001	Anonymous	EP074: 1.1-Dichloroethene	75-35-4	5	µg/L	<5	<5	0.0	No Limit
		EP074: Iodomethane	74-88-4	5	µg/L	<5	<5	0.0	No Limit
		EP074: trans-1.2-Dichloroethene	156-60-5	5	µg/L	<5	<5	0.0	No Limit

Sub-Matrix: **WATER**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Acceptable RPD (%)*
EP074E: Halogenated Aliphatic Compounds (QC Lot: 4158307) - continued									
ES2203726-001	Anonymous	EP074: 1.1-Dichloroethane	75-34-3	5	µg/L	<5	<5	0.0	No Limit
		EP074: cis-1.2-Dichloroethene	156-59-2	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.1.1-Trichloroethane	71-55-6	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.1-Dichloropropylene	563-58-6	5	µg/L	<5	<5	0.0	No Limit
		EP074: Carbon Tetrachloride	56-23-5	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.2-Dichloroethane	107-06-2	5	µg/L	<5	<5	0.0	No Limit
		EP074: Trichloroethene	79-01-6	5	µg/L	<5	<5	0.0	No Limit
		EP074: Dibromomethane	74-95-3	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.1.2-Trichloroethane	79-00-5	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.3-Dichloropropane	142-28-9	5	µg/L	<5	<5	0.0	No Limit
		EP074: Tetrachloroethene	127-18-4	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.1.1.2-Tetrachloroethane	630-20-6	5	µg/L	<5	<5	0.0	No Limit
		EP074: trans-1.4-Dichloro-2-butene	110-57-6	5	µg/L	<5	<5	0.0	No Limit
		EP074: cis-1.4-Dichloro-2-butene	1476-11-5	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.1.2.2-Tetrachloroethane	79-34-5	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.2.3-Trichloropropane	96-18-4	5	µg/L	<5	<5	0.0	No Limit
		EP074: Pentachloroethane	76-01-7	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.2-Dibromo-3-chloropropane	96-12-8	5	µg/L	<5	<5	0.0	No Limit
		EP074: Hexachlorobutadiene	87-68-3	5	µg/L	<5	<5	0.0	No Limit
		EP074: Dichlorodifluoromethane	75-71-8	50	µg/L	<50	<50	0.0	No Limit
		EP074: Chloromethane	74-87-3	50	µg/L	<50	<50	0.0	No Limit
		EP074: Vinyl chloride	75-01-4	50	µg/L	<50	<50	0.0	No Limit
		EP074: Bromomethane	74-83-9	50	µg/L	<50	<50	0.0	No Limit
		EP074: Chloroethane	75-00-3	50	µg/L	<50	<50	0.0	No Limit
		EP074: Trichlorofluoromethane	75-69-4	50	µg/L	<50	<50	0.0	No Limit
ET2200656-001	Anonymous	EP074: 1.1-Dichloroethene	75-35-4	5	µg/L	<5	<5	0.0	No Limit
		EP074: Iodomethane	74-88-4	5	µg/L	<5	<5	0.0	No Limit
		EP074: trans-1.2-Dichloroethene	156-60-5	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.1-Dichloroethane	75-34-3	5	µg/L	<5	<5	0.0	No Limit
		EP074: cis-1.2-Dichloroethene	156-59-2	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.1.1-Trichloroethane	71-55-6	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.1-Dichloropropylene	563-58-6	5	µg/L	<5	<5	0.0	No Limit
		EP074: Carbon Tetrachloride	56-23-5	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.2-Dichloroethane	107-06-2	5	µg/L	<5	<5	0.0	No Limit
		EP074: Trichloroethene	79-01-6	5	µg/L	<5	<5	0.0	No Limit
		EP074: Dibromomethane	74-95-3	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.1.2-Trichloroethane	79-00-5	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.3-Dichloropropane	142-28-9	5	µg/L	<5	<5	0.0	No Limit
		EP074: Tetrachloroethene	127-18-4	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.1.1.2-Tetrachloroethane	630-20-6	5	µg/L	<5	<5	0.0	No Limit

Sub-Matrix: **WATER**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Acceptable RPD (%)*
EP074E: Halogenated Aliphatic Compounds (QC Lot: 4158307) - continued									
ET2200656-001	Anonymous	EP074: trans-1.4-Dichloro-2-butene	110-57-6	5	µg/L	<5	<5	0.0	No Limit
		EP074: cis-1.4-Dichloro-2-butene	1476-11-5	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.1.2.2-Tetrachloroethane	79-34-5	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.2.3-Trichloropropane	96-18-4	5	µg/L	<5	<5	0.0	No Limit
		EP074: Pentachloroethane	76-01-7	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.2-Dibromo-3-chloropropane	96-12-8	5	µg/L	<5	<5	0.0	No Limit
		EP074: Hexachlorobutadiene	87-68-3	5	µg/L	<5	<5	0.0	No Limit
		EP074: Dichlorodifluoromethane	75-71-8	50	µg/L	<50	<50	0.0	No Limit
		EP074: Chloromethane	74-87-3	50	µg/L	<50	<50	0.0	No Limit
		EP074: Vinyl chloride	75-01-4	50	µg/L	<50	<50	0.0	No Limit
		EP074: Bromomethane	74-83-9	50	µg/L	<50	<50	0.0	No Limit
		EP074: Chloroethane	75-00-3	50	µg/L	<50	<50	0.0	No Limit
		EP074: Trichlorofluoromethane	75-69-4	50	µg/L	<50	<50	0.0	No Limit
EP074F: Halogenated Aromatic Compounds (QC Lot: 4158307)									
ES2203726-001	Anonymous	EP074: Chlorobenzene	108-90-7	5	µg/L	<5	<5	0.0	No Limit
		EP074: Bromobenzene	108-86-1	5	µg/L	<5	<5	0.0	No Limit
		EP074: 2-Chlorotoluene	95-49-8	5	µg/L	<5	<5	0.0	No Limit
		EP074: 4-Chlorotoluene	106-43-4	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.3-Dichlorobenzene	541-73-1	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.4-Dichlorobenzene	106-46-7	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.2-Dichlorobenzene	95-50-1	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.2.4-Trichlorobenzene	120-82-1	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.2.3-Trichlorobenzene	87-61-6	5	µg/L	<5	<5	0.0	No Limit
ET2200656-001	Anonymous	EP074: Chlorobenzene	108-90-7	5	µg/L	<5	<5	0.0	No Limit
		EP074: Bromobenzene	108-86-1	5	µg/L	<5	<5	0.0	No Limit
		EP074: 2-Chlorotoluene	95-49-8	5	µg/L	<5	<5	0.0	No Limit
		EP074: 4-Chlorotoluene	106-43-4	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.3-Dichlorobenzene	541-73-1	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.4-Dichlorobenzene	106-46-7	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.2-Dichlorobenzene	95-50-1	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.2.4-Trichlorobenzene	120-82-1	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.2.3-Trichlorobenzene	87-61-6	5	µg/L	<5	<5	0.0	No Limit
EP074G: Trihalomethanes (QC Lot: 4158307)									
ES2203726-001	Anonymous	EP074: Chloroform	67-66-3	5	µg/L	<5	<5	0.0	No Limit
		EP074: Bromodichloromethane	75-27-4	5	µg/L	<5	<5	0.0	No Limit
		EP074: Dibromochloromethane	124-48-1	5	µg/L	<5	<5	0.0	No Limit
		EP074: Bromoform	75-25-2	5	µg/L	<5	<5	0.0	No Limit
ET2200656-001	Anonymous	EP074: Chloroform	67-66-3	5	µg/L	<5	<5	0.0	No Limit
		EP074: Bromodichloromethane	75-27-4	5	µg/L	<5	<5	0.0	No Limit
		EP074: Dibromochloromethane	124-48-1	5	µg/L	<5	<5	0.0	No Limit

Sub-Matrix: **WATER**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Acceptable RPD (%)*
EP074G: Trihalomethanes (QC Lot: 4158307) - continued									
ET2200656-001	Anonymous	EP074: Bromoform	75-25-2	5	µg/L	<5	<5	0.0	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 4158306)									
ES2203726-001	Anonymous	EP080: C6 - C9 Fraction	----	20	µg/L	<20	<20	0.0	No Limit
ET2200656-001	Anonymous	EP080: C6 - C9 Fraction	----	20	µg/L	<20	<20	0.0	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 4158306)									
ES2203726-001	Anonymous	EP080: C6 - C10 Fraction	C6_C10	20	µg/L	<20	<20	0.0	No Limit
ET2200656-001	Anonymous	EP080: C6 - C10 Fraction	C6_C10	20	µg/L	<20	<20	0.0	No Limit
EP080: BTEXN (QC Lot: 4158306)									
ES2203726-001	Anonymous	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	108-38-3 106-42-3	2	µg/L	<2	<2	0.0	No Limit
		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
ET2200656-001	Anonymous	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	108-38-3 106-42-3	2	µg/L	<2	<2	0.0	No Limit
		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

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: **WATER**

				Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Acceptable Limits (%)	
Method: Compound	CAS Number	LOR	Unit	Result	Concentration	LCS	Low	High
EA015: Total Dissolved Solids dried at 180 ± 5 °C (QCLot: 4159541)								
EA015H: Total Dissolved Solids @180°C	----	10	mg/L	<10	2000 mg/L	100	87.0	109
				<10	293 mg/L	102	75.2	126
				<10	2835 mg/L	105	83.0	124
ED037P: Alkalinity by PC Titrator (QCLot: 4158342)								
ED037-P: Total Alkalinity as CaCO3	----	----	mg/L	----	200 mg/L	111	81.0	111
				----	50 mg/L	120	80.0	120
ED041G: Sulfate (Turbidimetric) as SO4 2- by DA (QCLot: 4156214)								
ED041G: Sulfate as SO4 - Turbidimetric	14808-79-8	1	mg/L	<1	25 mg/L	106	82.0	122
				<1	500 mg/L	106	82.0	122
ED045G: Chloride by Discrete Analyser (QCLot: 4156213)								
ED045G: Chloride	16887-00-6	1	mg/L	<1	50 mg/L	100	80.9	127
				<1	1000 mg/L	103	80.9	127
ED093F: Dissolved Major Cations (QCLot: 4160776)								
ED093F: Calcium	7440-70-2	1	mg/L	<1	50 mg/L	105	80.0	114
ED093F: Magnesium	7439-95-4	1	mg/L	<1	50 mg/L	94.4	90.0	116
ED093F: Sodium	7440-23-5	1	mg/L	<1	50 mg/L	93.0	82.0	120
ED093F: Potassium	7440-09-7	1	mg/L	<1	50 mg/L	95.6	85.0	113
EG020F: Dissolved Metals by ICP-MS (QCLot: 4160774)								
EG020A-F: Arsenic	7440-38-2	0.001	mg/L	<0.001	0.1 mg/L	90.9	85.0	114
EG020A-F: Cadmium	7440-43-9	0.0001	mg/L	<0.0001	0.1 mg/L	90.2	84.0	110
EG020A-F: Chromium	7440-47-3	0.001	mg/L	<0.001	0.1 mg/L	90.8	85.0	111
EG020A-F: Copper	7440-50-8	0.001	mg/L	<0.001	0.1 mg/L	88.5	81.0	111
EG020A-F: Lead	7439-92-1	0.001	mg/L	<0.001	0.1 mg/L	92.3	83.0	111
EG020A-F: Nickel	7440-02-0	0.001	mg/L	<0.001	0.1 mg/L	86.9	82.0	112
EG020A-F: Zinc	7440-66-6	0.005	mg/L	<0.005	0.1 mg/L	93.7	81.0	117
EG020A-F: Iron	7439-89-6	0.05	mg/L	<0.05	0.5 mg/L	89.4	82.0	112
EG035F: Dissolved Mercury by FIMS (QCLot: 4160775)								
EG035F: Mercury	7439-97-6	0.0001	mg/L	<0.0001	0.01 mg/L	96.1	83.0	105
EK040P: Fluoride by PC Titrator (QCLot: 4158338)								
EK040P: Fluoride	16984-48-8	0.1	mg/L	<0.1	5 mg/L	101	82.0	116
EK055G: Ammonia as N by Discrete Analyser (QCLot: 4158982)								
EK055G: Ammonia as N	7664-41-7	0.01	mg/L	<0.01	1 mg/L	103	90.0	114
EK057G: Nitrite as N by Discrete Analyser (QCLot: 4156212)								

Sub-Matrix: **WATER**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Acceptable Limits (%)	
				Result	Concentration	LCS	Low	High
EK057G: Nitrite as N by Discrete Analyser (QCLot: 4156212) - continued								
EK057G: Nitrite as N	14797-65-0	0.01	mg/L	<0.01	0.5 mg/L	101	82.0	114
EK059G: Nitrite plus Nitrate as N (NOx) by Discrete Analyser (QCLot: 4158983)								
EK059G: Nitrite + Nitrate as N	----	0.01	mg/L	<0.01	0.5 mg/L	102	91.0	113
EK061G: Total Kjeldahl Nitrogen By Discrete Analyser (QCLot: 4158989)								
EK061G: Total Kjeldahl Nitrogen as N	----	0.1	mg/L	<0.1	10 mg/L	89.6	69.0	101
				<0.1	1 mg/L	90.6	70.0	118
				<0.1	5 mg/L	98.5	70.0	130
EK067G: Total Phosphorus as P by Discrete Analyser (QCLot: 4158988)								
EK067G: Total Phosphorus as P	----	0.01	mg/L	<0.01	4.42 mg/L	94.7	71.0	101
				<0.01	0.442 mg/L	90.7	72.0	108
				<0.01	1 mg/L	101	70.0	130
EP074A: Monocyclic Aromatic Hydrocarbons (QCLot: 4158307)								
EP074: Styrene	100-42-5	5	µg/L	<5	10 µg/L	109	73.0	119
EP074: Isopropylbenzene	98-82-8	5	µg/L	<5	10 µg/L	108	76.0	118
EP074: n-Propylbenzene	103-65-1	5	µg/L	<5	10 µg/L	106	69.0	119
EP074: 1.3.5-Trimethylbenzene	108-67-8	5	µg/L	<5	10 µg/L	107	74.0	116
EP074: sec-Butylbenzene	135-98-8	5	µg/L	<5	10 µg/L	107	73.0	119
EP074: 1.2.4-Trimethylbenzene	95-63-6	5	µg/L	<5	10 µg/L	107	74.0	116
EP074: tert-Butylbenzene	98-06-6	5	µg/L	<5	10 µg/L	107	72.0	116
EP074: p-Isopropyltoluene	99-87-6	5	µg/L	<5	10 µg/L	109	71.0	119
EP074: n-Butylbenzene	104-51-8	5	µg/L	<5	10 µg/L	110	65.0	123
EP074B: Oxygenated Compounds (QCLot: 4158307)								
EP074: Vinyl Acetate	108-05-4	50	µg/L	<50	100 µg/L	109	61.4	134
EP074: 2-Butanone (MEK)	78-93-3	50	µg/L	<50	100 µg/L	88.8	73.6	130
EP074: 4-Methyl-2-pentanone (MIBK)	108-10-1	50	µg/L	<50	100 µg/L	127	66.0	132
EP074: 2-Hexanone (MBK)	591-78-6	50	µg/L	<50	100 µg/L	113	65.0	137
EP074C: Sulfonated Compounds (QCLot: 4158307)								
EP074: Carbon disulfide	75-15-0	5	µg/L	<5	10 µg/L	80.2	72.8	127
EP074D: Fumigants (QCLot: 4158307)								
EP074: 2.2-Dichloropropane	594-20-7	5	µg/L	<5	10 µg/L	93.2	68.0	122
EP074: 1.2-Dichloropropane	78-87-5	5	µg/L	<5	10 µg/L	107	76.0	118
EP074: cis-1.3-Dichloropropylene	10061-01-5	5	µg/L	<5	10 µg/L	99.1	62.0	120
EP074: trans-1.3-Dichloropropylene	10061-02-6	5	µg/L	<5	10 µg/L	101	60.0	114
EP074: 1.2-Dibromoethane (EDB)	106-93-4	5	µg/L	<5	10 µg/L	102	69.0	117
EP074E: Halogenated Aliphatic Compounds (QCLot: 4158307)								
EP074: Dichlorodifluoromethane	75-71-8	50	µg/L	<50	100 µg/L	63.5	60.6	138
EP074: Chloromethane	74-87-3	50	µg/L	<50	100 µg/L	76.6	67.4	130
EP074: Vinyl chloride	75-01-4	50	µg/L	<50	100 µg/L	123	69.4	129

Sub-Matrix: **WATER**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Acceptable Limits (%)	
				Result	Concentration	LCS	Low	High
EP074E: Halogenated Aliphatic Compounds (QCLot: 4158307) - continued								
EP074: Bromomethane	74-83-9	50	µg/L	<50	100 µg/L	85.0	56.0	140
EP074: Chloroethane	75-00-3	50	µg/L	<50	100 µg/L	93.2	61.0	139
EP074: Trichlorofluoromethane	75-69-4	50	µg/L	<50	100 µg/L	96.6	69.0	131
EP074: 1.1-Dichloroethene	75-35-4	5	µg/L	<5	10 µg/L	91.8	70.0	124
EP074: Iodomethane	74-88-4	5	µg/L	<5	10 µg/L	70.8	70.2	128
EP074: trans-1.2-Dichloroethene	156-60-5	5	µg/L	<5	10 µg/L	99.4	74.0	118
EP074: 1.1-Dichloroethane	75-34-3	5	µg/L	<5	10 µg/L	105	74.0	120
EP074: cis-1.2-Dichloroethene	156-59-2	5	µg/L	<5	10 µg/L	102	77.0	119
EP074: 1.1.1-Trichloroethane	71-55-6	5	µg/L	<5	10 µg/L	98.2	67.0	119
EP074: 1.1-Dichloropropylene	563-58-6	5	µg/L	<5	10 µg/L	102	73.0	119
EP074: Carbon Tetrachloride	56-23-5	5	µg/L	<5	10 µg/L	100	62.0	120
EP074: 1.2-Dichloroethane	107-06-2	5	µg/L	<5	10 µg/L	102	73.0	123
EP074: Trichloroethene	79-01-6	5	µg/L	<5	10 µg/L	100	76.0	118
EP074: Dibromomethane	74-95-3	5	µg/L	<5	10 µg/L	100	73.0	119
EP074: 1.1.2-Trichloroethane	79-00-5	5	µg/L	<5	10 µg/L	106	72.0	126
EP074: 1.3-Dichloropropane	142-28-9	5	µg/L	<5	10 µg/L	109	71.0	129
EP074: Tetrachloroethene	127-18-4	5	µg/L	<5	10 µg/L	95.8	72.0	124
EP074: 1.1.1.2-Tetrachloroethane	630-20-6	5	µg/L	<5	10 µg/L	97.9	66.0	114
EP074: trans-1.4-Dichloro-2-butene	110-57-6	5	µg/L	<5	10 µg/L	109	60.0	120
EP074: cis-1.4-Dichloro-2-butene	1476-11-5	5	µg/L	<5	10 µg/L	106	70.6	128
EP074: 1.1.2.2-Tetrachloroethane	79-34-5	5	µg/L	<5	10 µg/L	111	70.0	124
EP074: 1.2.3-Trichloropropane	96-18-4	5	µg/L	<5	10 µg/L	107	74.0	126
EP074: Pentachloroethane	76-01-7	5	µg/L	<5	10 µg/L	106	71.8	126
EP074: 1.2-Dibromo-3-chloropropane	96-12-8	5	µg/L	<5	10 µg/L	99.3	66.4	136
EP074: Hexachlorobutadiene	87-68-3	5	µg/L	<5	10 µg/L	94.9	58.0	130
EP074F: Halogenated Aromatic Compounds (QCLot: 4158307)								
EP074: Chlorobenzene	108-90-7	5	µg/L	<5	10 µg/L	101	79.0	117
EP074: Bromobenzene	108-86-1	5	µg/L	<5	10 µg/L	102	76.0	116
EP074: 2-Chlorotoluene	95-49-8	5	µg/L	<5	10 µg/L	106	73.0	119
EP074: 4-Chlorotoluene	106-43-4	5	µg/L	<5	10 µg/L	106	73.0	119
EP074: 1.3-Dichlorobenzene	541-73-1	5	µg/L	<5	10 µg/L	104	75.0	117
EP074: 1.4-Dichlorobenzene	106-46-7	5	µg/L	<5	10 µg/L	107	74.0	118
EP074: 1.2-Dichlorobenzene	95-50-1	5	µg/L	<5	10 µg/L	103	75.0	117
EP074: 1.2.4-Trichlorobenzene	120-82-1	5	µg/L	<5	10 µg/L	98.7	61.0	125
EP074: 1.2.3-Trichlorobenzene	87-61-6	5	µg/L	<5	10 µg/L	96.8	67.0	123
EP074G: Trihalomethanes (QCLot: 4158307)								
EP074: Chloroform	67-66-3	5	µg/L	<5	10 µg/L	95.8	72.0	120
EP074: Bromodichloromethane	75-27-4	5	µg/L	<5	10 µg/L	99.8	64.0	118
EP074: Dibromochloromethane	124-48-1	5	µg/L	<5	10 µg/L	103	65.0	115

Sub-Matrix: **WATER**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Acceptable Limits (%)	
				Result	Concentration	LCS	Low	High
EP074G: Trihalomethanes (QCLot: 4158307) - continued								
EP074: Bromoform	75-25-2	5	µg/L	<5	10 µg/L	107	73.5	126
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 4156302)								
EP075(SIM): Naphthalene	91-20-3	1	µg/L	<1.0	5 µg/L	71.2	50.0	94.0
EP075(SIM): Acenaphthylene	208-96-8	1	µg/L	<1.0	5 µg/L	73.6	63.6	114
EP075(SIM): Acenaphthene	83-32-9	1	µg/L	<1.0	5 µg/L	66.8	62.2	113
EP075(SIM): Fluorene	86-73-7	1	µg/L	<1.0	5 µg/L	74.6	63.9	115
EP075(SIM): Phenanthrene	85-01-8	1	µg/L	<1.0	5 µg/L	83.9	62.6	116
EP075(SIM): Anthracene	120-12-7	1	µg/L	<1.0	5 µg/L	68.3	64.3	116
EP075(SIM): Fluoranthene	206-44-0	1	µg/L	<1.0	5 µg/L	91.4	63.6	118
EP075(SIM): Pyrene	129-00-0	1	µg/L	<1.0	5 µg/L	90.6	63.1	118
EP075(SIM): Benz(a)anthracene	56-55-3	1	µg/L	<1.0	5 µg/L	87.3	64.1	117
EP075(SIM): Chrysene	218-01-9	1	µg/L	<1.0	5 µg/L	92.6	62.5	116
EP075(SIM): Benzo(b+j)fluoranthene	205-99-2 205-82-3	1	µg/L	<1.0	5 µg/L	99.2	61.7	119
EP075(SIM): Benzo(k)fluoranthene	207-08-9	1	µg/L	<1.0	5 µg/L	80.8	63.0	115
EP075(SIM): Benzo(a)pyrene	50-32-8	0.5	µg/L	<0.5	5 µg/L	83.5	63.3	117
EP075(SIM): Indeno(1.2.3.cd)pyrene	193-39-5	1	µg/L	<1.0	5 µg/L	90.9	59.9	118
EP075(SIM): Dibenz(a.h)anthracene	53-70-3	1	µg/L	<1.0	5 µg/L	92.5	61.2	117
EP075(SIM): Benzo(g.h.i)perylene	191-24-2	1	µg/L	<1.0	5 µg/L	91.8	59.1	118
EP080/071: Total Petroleum Hydrocarbons (QCLot: 4156301)								
EP071: C10 - C14 Fraction	----	50	µg/L	<50	400 µg/L	78.2	55.8	112
EP071: C15 - C28 Fraction	----	100	µg/L	<100	600 µg/L	80.9	71.6	113
EP071: C29 - C36 Fraction	----	50	µg/L	<50	400 µg/L	75.1	56.0	121
EP080/071: Total Petroleum Hydrocarbons (QCLot: 4158306)								
EP080: C6 - C9 Fraction	----	20	µg/L	<20	260 µg/L	83.1	75.0	127
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 4156301)								
EP071: >C10 - C16 Fraction	----	100	µg/L	<100	500 µg/L	79.0	57.9	119
EP071: >C16 - C34 Fraction	----	100	µg/L	<100	700 µg/L	82.3	62.5	110
EP071: >C34 - C40 Fraction	----	100	µg/L	<100	300 µg/L	67.0	61.5	121
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 4158306)								
EP080: C6 - C10 Fraction	C6_C10	20	µg/L	<20	310 µg/L	88.1	75.0	127
EP080: BTEXN (QCLot: 4158306)								
EP080: Benzene	71-43-2	1	µg/L	<1	10 µg/L	86.5	70.0	122
EP080: Toluene	108-88-3	2	µg/L	<2	10 µg/L	95.9	69.0	123
EP080: Ethylbenzene	100-41-4	2	µg/L	<2	10 µg/L	99.0	70.0	120
EP080: meta- & para-Xylene	108-38-3 106-42-3	2	µg/L	<2	10 µg/L	101	69.0	121
EP080: ortho-Xylene	95-47-6	2	µg/L	<2	10 µg/L	100	72.0	122

Sub-Matrix: **WATER**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report: Result	Laboratory Control Spike (LCS) Report: Spike Concentration	Spike Recovery (%): LCS	Acceptable Limits (%): Low	Acceptable Limits (%): High
EP080: BTEXN (QCLot: 4158306) - continued								
EP080: Naphthalene	91-20-3	5	µg/L	<5	10 µg/L	97.2	70.0	120
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 4157187)								
EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	0.25 µg/L	98.4	72.0	130
EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	<0.01	0.25 µg/L	86.2	68.0	131
EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	<0.01	0.25 µg/L	94.0	65.0	140
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4157187)								
EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L	<0.1	1.25 µg/L	98.9	73.0	129
EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	<0.02	0.25 µg/L	94.0	72.0	129
EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	<0.02	0.25 µg/L	120	72.0	129
EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	<0.02	0.25 µg/L	116	72.0	130
EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	<0.01	0.25 µg/L	108	71.0	133
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 4157187)								
EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L	<0.05	0.25 µg/L	104	63.0	143
EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.05	µg/L	<0.05	0.25 µg/L	115	64.0	140
EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.05	µg/L	<0.05	0.25 µg/L	117	67.0	138
EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.05	µg/L	<0.05	0.25 µg/L	86.0	71.4	144

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: **WATER**

Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Matrix Spike (MS) Report: Spike Concentration	SpikeRecovery(%): MS	Acceptable Limits (%): Low	Acceptable Limits (%): High
ED041G: Sulfate (Turbidimetric) as SO4 2- by DA (QCLot: 4156214)							
ES2203687-001	Anonymous	ED041G: Sulfate as SO4 - Turbidimetric	14808-79-8	10 mg/L	113	70.0	130
ED045G: Chloride by Discrete Analyser (QCLot: 4156213)							
ES2203687-001	Anonymous	ED045G: Chloride	16887-00-6	50 mg/L	107	70.0	130
EG020F: Dissolved Metals by ICP-MS (QCLot: 4160774)							
ES2203580-001	Anonymous	EG020A-F: Arsenic	7440-38-2	1 mg/L	88.6	70.0	130
		EG020A-F: Cadmium	7440-43-9	0.25 mg/L	94.5	70.0	130
		EG020A-F: Chromium	7440-47-3	1 mg/L	97.3	70.0	130
		EG020A-F: Copper	7440-50-8	1 mg/L	112	70.0	130
		EG020A-F: Lead	7439-92-1	1 mg/L	113	70.0	130
		EG020A-F: Nickel	7440-02-0	1 mg/L	95.7	70.0	130
		EG020A-F: Zinc	7440-66-6	1 mg/L	94.6	70.0	130
EG035F: Dissolved Mercury by FIMS (QCLot: 4160775)							

Sub-Matrix: **WATER**

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Acceptable Limits (%)	
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Concentration	MS	Low	High
EG035F: Dissolved Mercury by FIMS (QCLot: 4160775) - continued							
ES2203770-001	Anonymous	EG035F: Mercury	7439-97-6	0.01 mg/L	97.8	70.0	130
EK040P: Fluoride by PC Titrator (QCLot: 4158338)							
ES2203661-001	Anonymous	EK040P: Fluoride	16984-48-8	5 mg/L	98.8	70.0	130
EK055G: Ammonia as N by Discrete Analyser (QCLot: 4158982)							
ES2203887-002	Anonymous	EK055G: Ammonia as N	7664-41-7	1 mg/L	102	70.0	130
EK057G: Nitrite as N by Discrete Analyser (QCLot: 4156212)							
ES2203687-001	Anonymous	EK057G: Nitrite as N	14797-65-0	0.5 mg/L	115	70.0	130
EK059G: Nitrite plus Nitrate as N (NOx) by Discrete Analyser (QCLot: 4158983)							
ES2203887-002	Anonymous	EK059G: Nitrite + Nitrate as N	----	0.5 mg/L	89.2	70.0	130
EK061G: Total Kjeldahl Nitrogen By Discrete Analyser (QCLot: 4158989)							
ES2203937-001	SWM_BH032_220204	EK061G: Total Kjeldahl Nitrogen as N	----	10 mg/L	106	70.0	130
EK067G: Total Phosphorus as P by Discrete Analyser (QCLot: 4158988)							
ES2203937-001	SWM_BH032_220204	EK067G: Total Phosphorus as P	----	2 mg/L	104	70.0	130
EP074E: Halogenated Aliphatic Compounds (QCLot: 4158307)							
ES2203726-001	Anonymous	EP074: 1.1-Dichloroethene	75-35-4	25 µg/L	127	70.0	130
		EP074: Trichloroethene	79-01-6	25 µg/L	125	70.0	130
EP074F: Halogenated Aromatic Compounds (QCLot: 4158307)							
ES2203726-001	Anonymous	EP074: Chlorobenzene	108-90-7	25 µg/L	123	70.0	130
EP080/071: Total Petroleum Hydrocarbons (QCLot: 4158306)							
ES2203726-001	Anonymous	EP080: C6 - C9 Fraction	----	325 µg/L	109	70.0	130
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 4158306)							
ES2203726-001	Anonymous	EP080: C6 - C10 Fraction	C6_C10	375 µg/L	111	70.0	130
EP080: BTEXN (QCLot: 4158306)							
ES2203726-001	Anonymous	EP080: Benzene	71-43-2	25 µg/L	95.5	70.0	130
		EP080: Toluene	108-88-3	25 µg/L	104	70.0	130
		EP080: Ethylbenzene	100-41-4	25 µg/L	113	70.0	130
		EP080: meta- & para-Xylene	108-38-3 106-42-3	25 µg/L	116	70.0	130
		EP080: ortho-Xylene	95-47-6	25 µg/L	112	70.0	130
		EP080: Naphthalene	91-20-3	25 µg/L	92.4	70.0	130

ALS Environmental

QA/QC Compliance Assessment to assist with Quality Review

Work Order	: **ES2203937**	Page	: 1 of 9
Client	: **ENVIRONMENTAL RESOURCES MANAGEMENT (ERM)**	Laboratory	: Environmental Division Sydney
Contact	: NICHOLAS GRBICH	Telephone	: +61-2-8784 8555
Project	: AFJV SOP 0628507	Date Samples Received	: 04-Feb-2022
Site	: ----	Issue Date	: 10-Feb-2022
Sampler	: Anthony Richard	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	9	0.00	10.00	NEPM 2013 B3 & ALS QC Standard
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	0	19	0.00	10.00	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	0	5	0.00	10.00	NEPM 2013 B3 & ALS QC Standard
Matrix Spikes (MS)					
PAH/Phenols (GC/MS - SIM)	0	9	0.00	5.00	NEPM 2013 B3 & ALS QC Standard
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	0	19	0.00	5.00	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	0	5	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 / *Container / Client Sample ID(s)*	*Sample Date*	*Extraction / Preparation*			*Analysis*		
		Date extracted	*Due for extraction*	*Evaluation*	*Date analysed*	*Due for analysis*	*Evaluation*
EA015: Total Dissolved Solids dried at 180 ± 5 °C							
Clear Plastic Bottle - Natural (EA015H)							
SWM_BH032_220204	**04-Feb-2022**	**----**	----	----	**08-Feb-2022**	11-Feb-2022	✓
ED037P: Alkalinity by PC Titrator							
Clear Plastic Bottle - Natural (ED037-P)							
SWM_BH032_220204	**04-Feb-2022**	**----**	----	----	**07-Feb-2022**	18-Feb-2022	✓
ED041G: Sulfate (Turbidimetric) as SO4 2- by DA							
Clear Plastic Bottle - Natural (ED041G)							
SWM_BH032_220204	**04-Feb-2022**	**----**	----	----	**05-Feb-2022**	04-Mar-2022	✓
ED045G: Chloride by Discrete Analyser							
Clear Plastic Bottle - Natural (ED045G)							
SWM_BH032_220204	**04-Feb-2022**	**----**	----	----	**05-Feb-2022**	04-Mar-2022	✓
ED093F: Dissolved Major Cations							
Clear Plastic Bottle - Nitric Acid; Filtered (ED093F)							
SWM_BH032_220204	**04-Feb-2022**	**----**	----	----	**08-Feb-2022**	04-Mar-2022	✓
EG020F: Dissolved Metals by ICP-MS							
Clear Plastic Bottle - Nitric Acid; Filtered (EG020A-F)							
SWM_BH032_220204	**04-Feb-2022**	**----**	----	----	**08-Feb-2022**	03-Aug-2022	✓

Matrix: **WATER**

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

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EG035F: Dissolved Mercury by FIMS							
Clear Plastic Bottle - Nitric Acid; Filtered (EG035F)							
SWM_BH032_220204	**04-Feb-2022**	**----**	----	----	**09-Feb-2022**	04-Mar-2022	✓
EK040P: Fluoride by PC Titrator							
Clear Plastic Bottle - Natural (EK040P)							
SWM_BH032_220204	**04-Feb-2022**	**----**	----	----	**07-Feb-2022**	04-Mar-2022	✓
EK055G: Ammonia as N by Discrete Analyser							
Clear Plastic Bottle - Sulfuric Acid (EK055G)							
SWM_BH032_220204	**04-Feb-2022**	**----**	----	----	**08-Feb-2022**	04-Mar-2022	✓
EK057G: Nitrite as N by Discrete Analyser							
Clear Plastic Bottle - Natural (EK057G)							
SWM_BH032_220204	**04-Feb-2022**	**----**	----	----	**05-Feb-2022**	06-Feb-2022	✓
EK059G: Nitrite plus Nitrate as N (NOx) by Discrete Analyser							
Clear Plastic Bottle - Sulfuric Acid (EK059G)							
SWM_BH032_220204	**04-Feb-2022**	**----**	----	----	**08-Feb-2022**	04-Mar-2022	✓
EK061G: Total Kjeldahl Nitrogen By Discrete Analyser							
Clear Plastic Bottle - Sulfuric Acid (EK061G)							
SWM_BH032_220204	**04-Feb-2022**	**08-Feb-2022**	04-Mar-2022	✓	**08-Feb-2022**	04-Mar-2022	✓
EK067G: Total Phosphorus as P by Discrete Analyser							
Clear Plastic Bottle - Sulfuric Acid (EK067G)							
SWM_BH032_220204	**04-Feb-2022**	**08-Feb-2022**	04-Mar-2022	✓	**08-Feb-2022**	04-Mar-2022	✓
EP074A: Monocyclic Aromatic Hydrocarbons							
Amber VOC Vial - Sulfuric Acid (EP074)							
SWM_BH032_220204	**04-Feb-2022**	**08-Feb-2022**	18-Feb-2022	✓	**08-Feb-2022**	18-Feb-2022	✓
EP074B: Oxygenated Compounds							
Amber VOC Vial - Sulfuric Acid (EP074)							
SWM_BH032_220204	**04-Feb-2022**	**08-Feb-2022**	18-Feb-2022	✓	**08-Feb-2022**	18-Feb-2022	✓
EP074C: Sulfonated Compounds							
Amber VOC Vial - Sulfuric Acid (EP074)							
SWM_BH032_220204	**04-Feb-2022**	**08-Feb-2022**	18-Feb-2022	✓	**08-Feb-2022**	18-Feb-2022	✓
EP074D: Fumigants							
Amber VOC Vial - Sulfuric Acid (EP074)							
SWM_BH032_220204	**04-Feb-2022**	**08-Feb-2022**	18-Feb-2022	✓	**08-Feb-2022**	18-Feb-2022	✓
EP074E: Halogenated Aliphatic Compounds							
Amber VOC Vial - Sulfuric Acid (EP074)							
SWM_BH032_220204	**04-Feb-2022**	**08-Feb-2022**	18-Feb-2022	✓	**08-Feb-2022**	18-Feb-2022	✓
EP074F: Halogenated Aromatic Compounds							
Amber VOC Vial - Sulfuric Acid (EP074)							
SWM_BH032_220204	**04-Feb-2022**	**08-Feb-2022**	18-Feb-2022	✓	**08-Feb-2022**	18-Feb-2022	✓

Matrix: **WATER**

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

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP074G: Trihalomethanes							
Amber VOC Vial - Sulfuric Acid (EP074)							
SWM_BH032_220204	**04-Feb-2022**	**08-Feb-2022**	18-Feb-2022	✓	**08-Feb-2022**	18-Feb-2022	✓
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons							
Amber Glass Bottle - Unpreserved (EP075(SIM))							
SWM_BH032_220204	**04-Feb-2022**	**08-Feb-2022**	11-Feb-2022	✓	**09-Feb-2022**	20-Mar-2022	✓
EP080/071: Total Petroleum Hydrocarbons							
Amber Glass Bottle - Unpreserved (EP071)							
SWM_BH032_220204	**04-Feb-2022**	**08-Feb-2022**	11-Feb-2022	✓	**09-Feb-2022**	20-Mar-2022	✓
Amber VOC Vial - Sulfuric Acid (EP080)							
SWM_BH032_220204	**04-Feb-2022**	**08-Feb-2022**	18-Feb-2022	✓	**08-Feb-2022**	18-Feb-2022	✓
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions							
Amber Glass Bottle - Unpreserved (EP071)							
SWM_BH032_220204	**04-Feb-2022**	**08-Feb-2022**	11-Feb-2022	✓	**09-Feb-2022**	20-Mar-2022	✓
Amber VOC Vial - Sulfuric Acid (EP080)							
SWM_BH032_220204	**04-Feb-2022**	**08-Feb-2022**	18-Feb-2022	✓	**08-Feb-2022**	18-Feb-2022	✓
EP080: BTEXN							
Amber VOC Vial - Sulfuric Acid (EP080)							
SWM_BH032_220204	**04-Feb-2022**	**08-Feb-2022**	18-Feb-2022	✓	**08-Feb-2022**	18-Feb-2022	✓
EP231A: Perfluoroalkyl Sulfonic Acids							
HDPE (no PTFE) (EP231X)							
SWM_BH032_220204	**04-Feb-2022**	**08-Feb-2022**	03-Aug-2022	✓	**08-Feb-2022**	03-Aug-2022	✓
EP231B: Perfluoroalkyl Carboxylic Acids							
HDPE (no PTFE) (EP231X)							
SWM_BH032_220204	**04-Feb-2022**	**08-Feb-2022**	03-Aug-2022	✓	**08-Feb-2022**	03-Aug-2022	✓
EP231D: (n:2) Fluorotelomer Sulfonic Acids							
HDPE (no PTFE) (EP231X)							
SWM_BH032_220204	**04-Feb-2022**	**08-Feb-2022**	03-Aug-2022	✓	**08-Feb-2022**	03-Aug-2022	✓
EP231P: PFAS Sums							
HDPE (no PTFE) (EP231X)							
SWM_BH032_220204	**04-Feb-2022**	**08-Feb-2022**	03-Aug-2022	✓	**08-Feb-2022**	03-Aug-2022	✓

Quality Control Parameter Frequency Compliance

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

Matrix: **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)							
Alkalinity by PC Titrator	ED037-P	2	20	**10.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Ammonia as N by Discrete analyser	EK055G	1	4	**25.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Chloride by Discrete Analyser	ED045G	1	4	**25.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Dissolved Mercury by FIMS	EG035F	1	8	**12.50**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Dissolved Metals by ICP-MS - Suite A	EG020A-F	2	17	**11.76**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Fluoride by PC Titrator	EK040P	2	20	**10.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Major Cations - Dissolved	ED093F	2	15	**13.33**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Nitrite and Nitrate as N (NOx) by Discrete Analyser	EK059G	1	4	**25.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Nitrite as N by Discrete Analyser	EK057G	2	12	**16.67**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
PAH/Phenols (GC/MS - SIM)	EP075(SIM)	0	9	**0.00**	**10.00**	×	NEPM 2013 B3 & ALS QC Standard
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	0	19	**0.00**	**10.00**	×	NEPM 2013 B3 & ALS QC Standard
Sulfate (Turbidimetric) as SO4 2- by Discrete Analyser	ED041G	1	4	**25.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Dissolved Solids (High Level)	EA015H	1	4	**25.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Kjeldahl Nitrogen as N By Discrete Analyser	EK061G	1	4	**25.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Phosphorus as P By Discrete Analyser	EK067G	1	4	**25.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	0	5	**0.00**	**10.00**	×	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	2	18	**11.11**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Volatile Organic Compounds	EP074	2	11	**18.18**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Laboratory Control Samples (LCS)							
Alkalinity by PC Titrator	ED037-P	2	20	**10.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Ammonia as N by Discrete analyser	EK055G	1	4	**25.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Chloride by Discrete Analyser	ED045G	2	4	**50.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Dissolved Mercury by FIMS	EG035F	1	8	**12.50**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Dissolved Metals by ICP-MS - Suite A	EG020A-F	1	17	**5.88**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Fluoride by PC Titrator	EK040P	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Major Cations - Dissolved	ED093F	1	15	**6.67**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Nitrite and Nitrate as N (NOx) by Discrete Analyser	EK059G	1	4	**25.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Nitrite as N by Discrete Analyser	EK057G	1	12	**8.33**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
PAH/Phenols (GC/MS - SIM)	EP075(SIM)	1	9	**11.11**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	1	19	**5.26**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Sulfate (Turbidimetric) as SO4 2- by Discrete Analyser	ED041G	2	4	**50.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Dissolved Solids (High Level)	EA015H	3	4	**75.00**	**15.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Kjeldahl Nitrogen as N By Discrete Analyser	EK061G	3	4	**75.00**	**15.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Phosphorus as P By Discrete Analyser	EK067G	3	4	**75.00**	**15.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	1	5	**20.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	1	18	**5.56**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard

Matrix: **WATER**

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

Quality Control Sample Type		Count		Rate (%)			Quality Control Specification
Analytical Methods	*Method*	*QC*	*Regular*	***Actual***	***Expected***	*Evaluation*	
Laboratory Control Samples (LCS) - Continued							
Volatile Organic Compounds	EP074	1	11	**9.09**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Method Blanks (MB)							
Ammonia as N by Discrete analyser	EK055G	1	4	**25.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Chloride by Discrete Analyser	ED045G	1	4	**25.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Dissolved Mercury by FIMS	EG035F	1	8	**12.50**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Dissolved Metals by ICP-MS - Suite A	EG020A-F	1	17	**5.88**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Fluoride by PC Titrator	EK040P	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Major Cations - Dissolved	ED093F	1	15	**6.67**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Nitrite and Nitrate as N (NOx) by Discrete Analyser	EK059G	1	4	**25.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Nitrite as N by Discrete Analyser	EK057G	1	12	**8.33**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
PAH/Phenols (GC/MS - SIM)	EP075(SIM)	1	9	**11.11**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	1	19	**5.26**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Sulfate (Turbidimetric) as SO4 2- by Discrete Analyser	ED041G	1	4	**25.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Dissolved Solids (High Level)	EA015H	1	4	**25.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Kjeldahl Nitrogen as N By Discrete Analyser	EK061G	1	4	**25.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Phosphorus as P By Discrete Analyser	EK067G	1	4	**25.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	1	5	**20.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	1	18	**5.56**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Volatile Organic Compounds	EP074	1	11	**9.09**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Matrix Spikes (MS)							
Ammonia as N by Discrete analyser	EK055G	1	4	**25.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Chloride by Discrete Analyser	ED045G	1	4	**25.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Dissolved Mercury by FIMS	EG035F	1	8	**12.50**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Dissolved Metals by ICP-MS - Suite A	EG020A-F	1	17	**5.88**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Fluoride by PC Titrator	EK040P	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Nitrite and Nitrate as N (NOx) by Discrete Analyser	EK059G	1	4	**25.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Nitrite as N by Discrete Analyser	EK057G	1	12	**8.33**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
PAH/Phenols (GC/MS - SIM)	EP075(SIM)	0	9	**0.00**	**5.00**	×	NEPM 2013 B3 & ALS QC Standard
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	0	19	**0.00**	**5.00**	×	NEPM 2013 B3 & ALS QC Standard
Sulfate (Turbidimetric) as SO4 2- by Discrete Analyser	ED041G	1	4	**25.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Kjeldahl Nitrogen as N By Discrete Analyser	EK061G	1	4	**25.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Phosphorus as P By Discrete Analyser	EK067G	1	4	**25.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	0	5	**0.00**	**5.00**	×	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	1	18	**5.56**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Volatile Organic Compounds	EP074	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
Total Dissolved Solids (High Level)	EA015H	WATER	In house: Referenced to APHA 2540C. A gravimetric procedure that determines the amount of `filterable` residue in an aqueous sample. A well-mixed sample is filtered through a glass fibre filter (1.2um). The filtrate is evaporated to dryness and dried to constant weight at 180+/-5C. This method is compliant with NEPM Schedule B(3)
Alkalinity by PC Titrator	ED037-P	WATER	In house: Referenced to APHA 2320 B This procedure determines alkalinity by automated measurement (e.g. PC Titrate) on a settled supernatant aliquot of the sample using pH 4.5 for indicating the total alkalinity end-point. This method is compliant with NEPM Schedule B(3)
Sulfate (Turbidimetric) as SO4 2- by Discrete Analyser	ED041G	WATER	In house: Referenced to APHA 4500-SO4. Dissolved sulfate is determined in a 0.45um filtered sample. Sulfate ions are converted to a barium sulfate suspension in an acetic acid medium with barium chloride. Light absorbance of the BaSO4 suspension is measured by a photometer and the SO4-2 concentration is determined by comparison of the reading with a standard curve. This method is compliant with NEPM Schedule B(3)
Chloride by Discrete Analyser	ED045G	WATER	In house: Referenced to APHA 4500 Cl - G.The thiocyanate ion is liberated from mercuric thiocyanate through sequestration of mercury by the chloride ion to form non-ionised mercuric chloride.in the presence of ferric ions the librated thiocynate forms highly-coloured ferric thiocynate which is measured at 480 nm APHA seal method 2 017-1-L
Major Cations - Dissolved	ED093F	WATER	In house: Referenced to APHA 3120 and 3125; USEPA SW 846 - 6010 and 6020; Cations are determined by either ICP-AES or ICP-MS techniques. This method is compliant with NEPM Schedule B(3) Sodium Adsorption Ratio is calculated from Ca, Mg and Na which determined by ALS in house method QWI-EN/ED093F. This method is compliant with NEPM Schedule B(3) Hardness parameters are calculated based on APHA 2340 B. This method is compliant with NEPM Schedule B(3)
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 (SnCl2)(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 SnCl2 which is then purged into a heated quartz cell. Quantification is by comparing absorbance against a calibration curve. This method is compliant with NEPM Schedule B(3).
Fluoride by PC Titrator	EK040P	WATER	In house: Referenced to APHA 4500-F C: CDTA is added to the sample to provide a uniform ionic strength background, adjust pH, and break up complexes. Fluoride concentration is determined by either manual or automatic ISE measurement. This method is compliant with NEPM Schedule B(3)
Ammonia as N by Discrete analyser	EK055G	WATER	In house: Referenced to APHA 4500-NH3 G Ammonia is determined by direct colorimetry by Discrete Analyser. This method is compliant with NEPM Schedule B(3)
Nitrite as N by Discrete Analyser	EK057G	WATER	In house: Referenced to APHA 4500-NO2- B. Nitrite is determined by direct colourimetry by Discrete Analyser. This method is compliant with NEPM Schedule B(3)

Analytical Methods	Method	Matrix	Method Descriptions
Nitrate as N by Discrete Analyser	EK058G	WATER	In house: Referenced to APHA 4500-NO3- F. Nitrate is reduced to nitrite by way of a chemical reduction followed by quantification by Discrete Analyser. Nitrite is determined seperately by direct colourimetry and result for Nitrate calculated as the difference between the two results. This method is compliant with NEPM Schedule B(3)
Nitrite and Nitrate as N (NOx) by Discrete Analyser	EK059G	WATER	In house: Referenced to APHA 4500-NO3- F. Combined oxidised Nitrogen (NO2+NO3) is determined by Chemical Reduction and direct colourimetry by Discrete Analyser. This method is compliant with NEPM Schedule B(3)
Total Kjeldahl Nitrogen as N By Discrete Analyser	EK061G	WATER	In house: Referenced to APHA 4500-Norg D (In house). An aliquot of sample is digested using a high temperature Kjeldahl digestion to convert nitrogenous compounds to ammonia. Ammonia is determined colorimetrically by discrete analyser. This method is compliant with NEPM Schedule B(3)
Total Nitrogen as N (TKN + Nox) By Discrete Analyser	EK062G	WATER	In house: Referenced to APHA 4500-Norg / 4500-NO3-. This method is compliant with NEPM Schedule B(3)
Total Phosphorus as P By Discrete Analyser	EK067G	WATER	In house: Referenced to APHA 4500-P H, Jirka et al, Zhang et al. This procedure involves sulphuric acid digestion of a sample aliquot to break phosphorus down to orthophosphate. The orthophosphate reacts with ammonium molybdate and antimony potassium tartrate to form a complex which is then reduced and its concentration measured at 880nm using discrete analyser. This method is compliant with NEPM Schedule B(3)
Ionic Balance by PCT DA and Turbi SO4 DA	* EN055 - PG	WATER	In house: Referenced to APHA 1030F. 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)
Volatile Organic Compounds	EP074	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. This method is compliant with 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)
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	WATER	In-house: Analysis of fresh and saline waters by Solid Phase Extraction (SPE) followed by LC-Electrospray-MS-MS, Negative Mode using MRM and internal standard quantitation. Isotopically labelled analogues of target analytes used as internal standards and surrogates are added to the sample container. The entire contents are transferred to a solid phase extraction (SPE) cartridge. The sample container is successively rinsed with aliquots of the elution solvent. The eluted extract is combined with an equal volume of reagent water and a portion is filtered for analysis. Method procedures and data quality objectives conform to US DoD QSM 5.3, table B-15 requirements.

Preparation Methods	Method	Matrix	Method Descriptions
TKN/TP Digestion	EK061/EK067	WATER	In house: Referenced to APHA 4500 Norg - D; APHA 4500 P - H. This method is compliant with 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.
Solid Phase Extraction (SPE) for PFAS in water	ORG72	WATER	In-house: Isotopically labelled analogues of target analytes used as internal standards and surrogates are added to the sample container. The entire contents are transferred to a solid phase extraction (SPE) cartridge. The sample container is successively rinsed with aliquots of the elution solvent. The eluted extract is combined with an equal volume of reagent water and a portion is filtered for analysis. Method procedures conform to US DoD QSM 5.3, table B-15 requirements.

CHAIN OF CUSTODY

ALS Laboratory: please tick →

☐ADELAIDE 21 Burma Road Pooraka SA 5095 Ph: 08 8359 0890 E: adelaide@alsglobal.com

☐BRISBANE 2 Byth Street Stafford QLD 4053 Ph: 07 3243 7222 E: samples.brisbane@alsglobal.com

☐GLADSTONE 46 Callemondah Drive Clinton QLD 4680 Ph: 07 7471 5600 E: gladstone@alsglobal.com

☐MACKAY 78 Harbour Road Mackay QLD 4740 Ph: 07 4944 0177 E: mackay@alsglobal.com

☐MELBOURNE 2-4 Westall Road Springvale VIC 3171 Ph: 03 8549 9600 E: samples.melbourne@alsglobal.com

☐MUDGEE 1/29 Sydney Road Mudgee NSW 2850 Ph: 02 6372 6735 E: mudgee.mail@alsglobal.com

☐NEWCASTLE 5/585 Maitland Road Mayfield West NSW 2304 Ph: 02 4014 2500 E: samples.newcastle@alsglobal.com

☐NOWRA 4/13 Geary Place North Nowra NSW 2541 Ph: 02 4423 2063 E: nowra@alsglobal.com

☐PERTH 10 Hod Way Malaga WA 6090 Ph: 08 9209 7655 E: samples.perth@alsglobal.com

☒SYDNEY 277-289 Woodpark Road Smithfield NSW 2164 Ph: 02 8784 8555 E: samples.sydney@alsglobal.com

☐TOWNSVILLE 14-15 Desma Court Bohle QLD 4818 Ph: 07 4796 0600 E: townsville.environmental@alsglobal.com

☐WOLLONGONG 99 Kenny Street Wollongong NSW 2500 Ph: 02 4225 3125 E: wollongong@alsglobal.com

CLIENT: ERM	TURNAROUND REQUIREMENTS: (Standard TAT may be longer for some tests e.g., Ultra Trace Organics)	☐ Standard TAT (List due date):	FOR LABORATORY USE ONLY (Circle)
OFFICE: SYDNEY		☒ Non Standard or urgent TAT (List due date): 72 hr	Custody Seal Intact? (Yes) No N/A
PROJECT: AFJV SOP 0628507 PROJECT NO.:	ALS QUOTE NO.:	COC SEQUENCE NUMBER (Circle) COC: (1) 2 3 4 5 6 7	Free ice / frozen ice bricks present upon receipt? (Yes) No N/A
ORDER NUMBER: PURCHASE ORDER NO.:	COUNTRY OF ORIGIN: Australia	OF: (1) 2 3 4 5 6 7	Random Sample Temperature on Receipt: °C
PROJECT MANAGER: Nick Grbich/Jess L	CONTACT PH: 0419 833 925		Other comment: 4S
SAMPLER: ~~Tristan Rodrigues~~ Anthony Richard	SAMPLER MOBILE: 0427 139 735	RELINQUISHED BY:	RECEIVED BY: SOYFHIS 4S
COC Emailed to ALS? (YES (NO)	EDD FORMAT (or default):	DATE/TIME:	DATE/TIME: 04/2/22 1750
Email Reports to (will default to PM if no other addresses are listed): Nick G + Jess L		RELINQUISHED BY:	RECEIVED BY:
Email Invoice to (will default to PM if no other addresses are listed): Standard ERM		DATE/TIME:	DATE/TIME:

COMMENTS/SPECIAL HANDLING/STORAGE OR DISPOSAL: Please issue Preliminary Report.

ALS USE ONLY	SAMPLE DETAILS MATRIX: Solid(S) Water(W)			CONTAINER INFORMATION		ANALYSIS REQUIRED including SUITES (NB. Suite Codes must be listed to attract suite price) Where Metals are required, specify Total (unfiltered bottle required) or Dissolved (field filtered bottle required).								Additional Information
LAB ID	SAMPLE ID	DATE / TIME	MATRIX	TYPE & PRESERVATIVE (refer to codes below)	TOTAL JARS	TRH, BTEXN	PAH	VOC	M8 + Fe	PFAS	Ammonia, nitrate total N total P	Cations + Anions	TDS	
1	SMW_BH032_220204	4/2/22	water	P, AG, VOA	13	x	x	x	x	x	x	x	x	Comments on likely contaminant levels, dilutions, or samples requiring specific QC analysis etc.
					TOTAL									

TAT

Environmental Division
Sydney
Work Order Reference
ES2203937

Telephone : +61-2-8784 8555

Water Container Codes: P = Unpreserved Plastic; N = Nitric Preserved Plastic; ORC = Nitric Preserved ORC; SH = Sodium Hydroxide/Cd Preserved; S = Sodium Hydroxide Preserved Plastic; AG = Amber Glass Unpreserved; AP - Airfreight Unpreserved Plastic
V = VOA Vial HCl Preserved; VB = VOA Vial Sodium Bisulphate Preserved; VS = VOA Vial Sulfuric Preserved; AV = Airfreight Unpreserved Vial SG = Sulfuric Preserved Amber Glass; H = HCl preserved Plastic; HS = HCl preserved Speciation bottle; SP = Sulfuric Preserved Plastic; F = Formaldehyde Preserved Glass;
Z = Zinc Acetate Preserved Bottle; E = EDTA Preserved Bottles; ST = Sterile Bottle; ASS = Plastic Bag for Acid Sulphate Soils; B = Unpreserved Bag; LI = Lugols Iodine Preserved Bottles; STT = Sterile Sodium Thiosulfate Preserved Bottles.

ALS Environmental

CERTIFICATE OF ANALYSIS

Work Order	: **ES2204238**	Page	: 1 of 8
Client	: **ENVIRONMENTAL RESOURCES MANAGEMENT (ERM)**	Laboratory	: Environmental Division Sydney
Contact	: NICHOLAS GRBICH	Contact	: Customer Services ES
Address	: LEVEL 15 309 KENT STREET SYDNEY NSW AUSTRALIA 2000	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
Telephone	: ----	Telephone	: +61-2-8784 8555
Project	: 0628507 SOP	Date Samples Received	: 07-Feb-2022 17:26
Order number	: ----	Date Analysis Commenced	: 09-Feb-2022
C-O-C number	: ----	Issue Date	: 10-Feb-2022 19:59
Sampler	: ----		
Site	: ----		
Quote number	: EN/114		
No. of samples received	: 14		
No. of samples analysed	: 14		

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

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

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results

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*
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.

- 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	DUP04_220119	SOP_BH108_0.4_220120	SOP_BH110_0.2_220117	SOP_BH113_0.1_220118	SOP_BH115_0.1_220118
			Sampling date / time	19-Jan-2022 00:00	20-Jan-2022 00:00	17-Jan-2022 00:00	18-Jan-2022 00:00	18-Jan-2022 00:00
Compound	CAS Number	LOR	Unit	ES2204238-001	ES2204238-002	ES2204238-003	ES2204238-004	ES2204238-005
				Result	Result	Result	Result	Result
EN33: TCLP Leach - Inorganics/PFAS (Plastic Vessel)								
Initial pH	----	0.1	pH Unit	**7.0**	**8.8**	**9.2**	**9.7**	**9.8**
After HCl pH	----	0.1	pH Unit	**1.7**	**1.6**	**1.6**	**1.8**	**1.8**
Extraction Fluid Number	----	1	-	**1**	**1**	**1**	**1**	**1**
Final pH	----	0.1	pH Unit	**4.9**	**4.9**	**4.9**	**5.0**	**5.0**

Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH116_0.2_220117	SOP_BH117_0.2_220117	SOP_BH118_0.1_220117	SOP_BH119_0.2_220117	SOP_BH126_2.0_220121
				Sampling date / time	17-Jan-2022 00:00	17-Jan-2022 00:00	19-Jan-2022 00:00	17-Jan-2022 00:00	21-Jan-2022 00:00
					ES2204238-006	ES2204238-007	ES2204238-008	ES2204238-009	ES2204238-010
					Result	Result	Result	Result	Result
EN33: TCLP Leach - Inorganics/PFAS (Plastic Vessel)									
Initial pH	----	0.1	pH Unit		**9.9**	**9.7**	**10.0**	**9.8**	**7.7**
After HCl pH	----	0.1	pH Unit		**1.7**	**1.7**	**1.8**	**1.7**	**1.7**
Extraction Fluid Number	----	1	-		**1**	**1**	**1**	**1**	**1**
Final pH	----	0.1	pH Unit		**5.0**	**5.0**	**5.2**	**5.0**	**4.9**

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	SOP_BH133_0.3_220125	SOP_BH134_2.0_220125	SOP_BH141_0.3_220124	SOP_BH145_5.0_220119	----
			Sampling date / time	25-Jan-2022 00:00	25-Jan-2022 00:00	24-Jan-2022 00:00	19-Jan-2022 00:00	----
Compound	CAS Number	LOR	Unit	ES2204238-011	ES2204238-012	ES2204238-013	ES2204238-014	--------
				Result	Result	Result	Result	----
EN33: TCLP Leach - Inorganics/PFAS (Plastic Vessel)								
Initial pH	----	0.1	pH Unit	**9.2**	**6.0**	**9.3**	**7.3**	**----**
After HCl pH	----	0.1	pH Unit	**1.7**	**1.7**	**1.7**	**1.7**	**----**
Extraction Fluid Number	----	1	-	**1**	**1**	**1**	**1**	**----**
Final pH	----	0.1	pH Unit	**5.0**	**4.9**	**5.0**	**5.0**	**----**

Analytical Results

Sub-Matrix: **TREATED LEACHATE** (Matrix: **WATER**)			Sample ID	DUP04_220119	SOP_BH108_0.4_220120	SOP_BH110_0.2_220117	SOP_BH113_0.1_220118	SOP_BH115_0.1_220118
			Sampling date / time	19-Jan-2022 00:00	20-Jan-2022 00:00	17-Jan-2022 00:00	18-Jan-2022 00:00	18-Jan-2022 00:00
Compound	*CAS Number*	*LOR*	*Unit*	**ES2204238-001**	**ES2204238-002**	**ES2204238-003**	**ES2204238-004**	**ES2204238-005**
				Result	Result	Result	Result	Result
EG005(ED093)C: Leachable Metals by ICPAES								
Nickel	7440-02-0	0.1	mg/L	**0.2**	**0.1**	<0.1	**0.2**	**0.2**

Analytical Results

Sub-Matrix: **TREATED LEACHATE** (Matrix: **WATER**)			Sample ID	SOP_BH116_0.2_220117	SOP_BH117_0.2_220117	SOP_BH118_0.1_220117	SOP_BH119_0.2_220117	SOP_BH126_2.0_220121
			Sampling date / time	17-Jan-2022 00:00	17-Jan-2022 00:00	19-Jan-2022 00:00	17-Jan-2022 00:00	21-Jan-2022 00:00
Compound	*CAS Number*	*LOR*	*Unit*	**ES2204238-006**	**ES2204238-007**	**ES2204238-008**	**ES2204238-009**	**ES2204238-010**
				Result	Result	Result	Result	Result
EG005(ED093)C: Leachable Metals by ICPAES								
Nickel	7440-02-0	0.1	mg/L	<0.1	<0.1	**0.2**	<0.1	<0.1

Analytical Results

Sub-Matrix: **TREATED LEACHATE** (Matrix: **WATER**)			Sample ID	SOP_BH133_0.3_220125	SOP_BH134_2.0_220125	SOP_BH141_0.3_220124	SOP_BH145_5.0_220119	----
			Sampling date / time	25-Jan-2022 00:00	25-Jan-2022 00:00	24-Jan-2022 00:00	19-Jan-2022 00:00	----
Compound	*CAS Number*	*LOR*	*Unit*	**ES2204238-011**	**ES2204238-012**	**ES2204238-013**	**ES2204238-014**	--------
				Result	Result	Result	Result	----
EG005(ED093)C: Leachable Metals by ICPAES								
Nickel	7440-02-0	0.1	mg/L	<0.1	<0.1	<0.1	**0.2**	**----**

ALS Environmental

QUALITY CONTROL REPORT

Work Order	: **ES2204238**	Page	: 1 of 3
Client	: **ENVIRONMENTAL RESOURCES MANAGEMENT (ERM)**	Laboratory	: Environmental Division Sydney
Contact	: NICHOLAS GRBICH	Contact	: Customer Services ES
Address	: LEVEL 15 309 KENT STREET SYDNEY NSW AUSTRALIA 2000	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
Telephone	: ----	Telephone	: +61-2-8784 8555
Project	: 0628507 SOP	Date Samples Received	: 07-Feb-2022
Order number	: ----	Date Analysis Commenced	: 09-Feb-2022
C-O-C number	: ----	Issue Date	: 10-Feb-2022
Sampler	: ----		
Site	: ----		
Quote number	: EN/114		
No. of samples received	: 14		
No. of samples analysed	: 14		

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

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

This Quality Control Report contains the following information:

- Laboratory Duplicate (DUP) Report; Relative Percentage Difference (RPD) and Acceptance Limits
- Method Blank (MB) and Laboratory Control Spike (LCS) Report; Recovery and Acceptance Limits
- Matrix Spike (MS) Report; Recovery and Acceptance Limits

Signatories

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

Signatories	*Position*	*Accreditation Category*
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.

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**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Acceptable RPD (%)*
EG005(ED093)C: Leachable Metals by ICPAES (QC Lot: 4165630)									
ES2204238-001	DUP04_220119	EG005C: Nickel	7440-02-0	0.1	mg/L	0.2	0.2	0.0	No Limit
ES2204238-010	SOP_BH126_2.0_220121	EG005C: Nickel	7440-02-0	0.1	mg/L	<0.1	<0.1	0.0	No Limit

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

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

Sub-Matrix: **WATER**

				Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Acceptable Limits (%)	
Method: Compound	CAS Number	LOR	Unit	Result	Concentration	LCS	Low	High
EG005(ED093)C: Leachable Metals by ICPAES (QCLot: 4165630)								
EG005C: Nickel	7440-02-0	0.1	mg/L	<0.1	0.1 mg/L	97.3	83.0	115

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: **WATER**

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Acceptable Limits (%)	
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Concentration	MS	Low	High
EG005(ED093)C: Leachable Metals by ICPAES (QCLot: 4165630)							
ES2204238-002	SOP_BH108_0.4_220120	EG005C: Nickel	7440-02-0	1 mg/L	99.1	70.0	130

ALS Environmental

QA/QC Compliance Assessment to assist with Quality Review

Work Order	: **ES2204238**	Page	: 1 of 4
Client	: **ENVIRONMENTAL RESOURCES MANAGEMENT (ERM)**	Laboratory	: Environmental Division Sydney
Contact	: NICHOLAS GRBICH	Telephone	: +61-2-8784 8555
Project	: 0628507 SOP	Date Samples Received	: 07-Feb-2022
Site	: ----	Issue Date	: 10-Feb-2022
Sampler	: ----	No. of samples received	: 14
Order number	: ----	No. of samples analysed	: 14

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

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

Summary of Outliers

Outliers : Quality Control Samples

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

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

Outliers : Analysis Holding Time Compliance

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

Outliers : Frequency of Quality Control Samples

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

Analysis Holding Time Compliance

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

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

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

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

Matrix: **SOIL**

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

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EN33: TCLP Leach - Inorganics/PFAS (Plastic Vessel)							
Non-Volatile Leach: 180 day HT (e.g. PFAS, metals ex.Hg) (EN33a-P)							
SOP_BH110_0.2_220117, SOP_BH116_0.2_220117, SOP_BH117_0.2_220117, SOP_BH119_0.2_220117	**17-Jan-2022**	**09-Feb-2022**	16-Jul-2022	✓	**----**	----	----
Non-Volatile Leach: 180 day HT (e.g. PFAS, metals ex.Hg) (EN33a-P)							
SOP_BH113_0.1_220118, SOP_BH115_0.1_220118	**18-Jan-2022**	**09-Feb-2022**	17-Jul-2022	✓	**----**	----	----
Non-Volatile Leach: 180 day HT (e.g. PFAS, metals ex.Hg) (EN33a-P)							
DUP04_220119, SOP_BH118_0.1_220117, SOP_BH145_5.0_220119	**19-Jan-2022**	**09-Feb-2022**	18-Jul-2022	✓	**----**	----	----
Non-Volatile Leach: 180 day HT (e.g. PFAS, metals ex.Hg) (EN33a-P)							
SOP_BH108_0.4_220120	**20-Jan-2022**	**09-Feb-2022**	19-Jul-2022	✓	**----**	----	----
Non-Volatile Leach: 180 day HT (e.g. PFAS, metals ex.Hg) (EN33a-P)							
SOP_BH126_2.0_220121	**21-Jan-2022**	**09-Feb-2022**	20-Jul-2022	✓	**----**	----	----
Non-Volatile Leach: 180 day HT (e.g. PFAS, metals ex.Hg) (EN33a-P)							
SOP_BH141_0.3_220124	**24-Jan-2022**	**09-Feb-2022**	23-Jul-2022	✓	**----**	----	----
Non-Volatile Leach: 180 day HT (e.g. PFAS, metals ex.Hg) (EN33a-P)							
SOP_BH133_0.3_220125, SOP_BH134_2.0_220125	**25-Jan-2022**	**09-Feb-2022**	24-Jul-2022	✓	**----**	----	----

Matrix: **WATER**

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

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EG005(ED093)C: Leachable Metals by ICPAES							
Clear Plastic Bottle - Nitric Acid; Unfiltered (EG005C)							
DUP04_220119, SOP_BH108_0.4_220120, SOP_BH110_0.2_220117, SOP_BH113_0.1_220118, SOP_BH115_0.1_220118, SOP_BH116_0.2_220117, SOP_BH117_0.2_220117, SOP_BH118_0.1_220117, SOP_BH119_0.2_220117, SOP_BH126_2.0_220121, SOP_BH133_0.3_220125, SOP_BH134_2.0_220125, SOP_BH141_0.3_220124, SOP_BH145_5.0_220119	**09-Feb-2022**	**10-Feb-2022**	08-Aug-2022	✓	**10-Feb-2022**	08-Aug-2022	✓

Quality Control Parameter Frequency Compliance

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

Matrix: **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)							
Leachable Metals by ICPAES	EG005C	2	18	**11.11**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Laboratory Control Samples (LCS)							
Leachable Metals by ICPAES	EG005C	1	18	**5.56**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Method Blanks (MB)							
Leachable Metals by ICPAES	EG005C	1	18	**5.56**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Matrix Spikes (MS)							
Leachable Metals by ICPAES	EG005C	1	18	**5.56**	**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
Leachable Metals by ICPAES	EG005C	SOIL	In house: referenced to APHA 3120; USEPA SW 846 - 6010: The ICPAES technique ionises leachate sample atoms emitting a characteristic spectrum. This spectrum is then compared against matrix matched standards for quantification. This method is compliant with NEPM Schedule B(3).

Preparation Methods	Method	Matrix	Method Descriptions
Digestion for Total Recoverable Metals in TCLP Leachate	EN25C	SOIL	In house: Referenced to USEPA SW846-3005. Method 3005 is a Nitric/Hydrochloric acid digestion procedure used to prepare surface and ground water samples for analysis by ICPAES or ICPMS. This method is compliant with NEPM Schedule B(3)
TCLP for Non & Semivolatile Analytes - Plastic Leaching Vessel	EN33a-P	SOIL	In house QWI-EN/33 referenced to USEPA SW846-1311: The TCLP procedure is designed to determine the mobility of both organic and inorganic analytes present in wastes. The standard TCLP leach is for non-volatile and Semivolatile test parameters.

Vishal
07/02/2022
1728

Vishal Patel

From: Tyler Anderson
Sent: Monday, 7 February 2022 6:03 PM
To: rebatches.sydney; Nanthini Coilparampil; Wisam Marassa
Subject: FAST TAT REBATCH - TCLP - job number: 0628507

Hi team,

Are you able to please organise the below rebatch on a 2 day TAT:

Nickel TCLP

	Field_ID	Sampled_Date-Time	Lab_Report_Number
1	DUP04_220119	19/01/2022	ES2202264
2	SOP_BH108_0.4_220120	19/01/2022	ES2202264
3	SOP_BH110_0.2_220117	17/01/2022	ES2201683
4	SOP_BH113_0.1_220118	18/01/2022	ES2201683
5	SOP_BH115_0.1_220118	18/01/2022	ES2201683
6	SOP_BH116_0.2_220117	17/01/2022	ES2201683
7	SOP_BH117_0.2_220117	17/01/2022	ES2201683
8	SOP_BH118_0.1_220119	19/01/2022	ES2202264
9	SOP_BH119_0.2_220117	17/01/2022	ES2201683
10	SOP_BH126_2.0_220121	21/01/2022	ES2202264
11	SOP_BH133_0.3_220125	25/01/2022	ES2202692
12	SOP_BH134_2.0_220125	25/01/2022	ES2202692
13	SOP_BH141_0.3_220124	24/01/2022	ES2202692
14	SOP_BH145_5.0_220119	19/01/2022	ES2202264

Kind regards,

Tyler Anderson

ES2202264 - 20, 26, 1, 49, 16 - 5747-752
ES2201683 - 11, 17, 24, 26, 28, 30 - 5714-716
ES2202692 - 20, 23, 16 -5817-819

Environmental Division
Sydney
Work Order Reference
ES2204238

Telephone : +61-2-8784 8555

TAT

Client Services Coordinator, Environmental
Sydney

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D +61 2 8784 8501
tyler.anderson@alsglobal.com
277-289 Woodpark Road
Smithfield NSW 2164 AUSTRALIA

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EnviroMail™ 132 - BIOSOLIDS: PFAS, TOP Assay & TOF
EnviroMail™ 131 - Important Changes to the Australian Standard Leaching Procedures AS4439.2 & AS4439.3

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From: Madushani Bolonghe <Madushani.Bolonghe@erm.com>
Sent: Monday, 7 February 2022 5:28 PM
To: Tyler Anderson <tyler.anderson@alsglobal.com>
Cc: Jessica Lawrence <Jessica.Lawrence@erm.com>; Nicholas Grbich <Nicholas.Grbich@erm.com>; Tristan Rodrigues <Tristan.Rodrigues@erm.com>
Subject: [EXTERNAL] - TCLP - job number: 0628507

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Hi Tyler,

Would I please be able to get the following samples analysed for Nickel TCLP on a 2 day TAT please?

Field_ID	Sampled_Date-Time	Lab_Report_Number
DUP04_220119	19/01/2022	ES2202264
SOP_BH108_0.4_220120	19/01/2022	ES2202264
SOP_BH110_0.2_220117	17/01/2022	ES2201683
SOP_BH113_0.1_220118	18/01/2022	ES2201683
SOP_BH115_0.1_220118	18/01/2022	ES2201683
SOP_BH116_0.2_220117	17/01/2022	ES2201683

SOP_BH117_0.2_220117	17/01/2022	ES2201683
SOP_BH118_0.1_220119	19/01/2022	ES2202264
SOP_BH119_0.2_220117	17/01/2022	ES2201683
SOP_BH126_2.0_220121	21/01/2022	ES2202264
SOP_BH133_0.3_220125	25/01/2022	ES2202692
SOP_BH134_2.0_220125	25/01/2022	ES2202692
SOP_BH141_0.3_220124	24/01/2022	ES2202692
SOP_BH145_5.0_220119	19/01/2022	ES2202264

Cheers,
Madu

Madushani Bolonghe
Environmental Consultant

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Lumley House | Level 15, 309 Kent Street | Sydney NSW 2000 Australia |
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E madushani.bolonghe@erm.com | **W** www.erm.com

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ALS Environmental

CERTIFICATE OF ANALYSIS

Work Order	: **ES2204305**	Page	: 1 of 2
Client	: **ENVIRONMENTAL RESOURCES MANAGEMENT (ERM)**	Laboratory	: Environmental Division Sydney
Contact	: NICHOLAS GRBICH	Contact	: Customer Services ES
Address	: LEVEL 15 309 KENT STREET SYDNEY NSW AUSTRALIA 2000	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
Telephone	: ----	Telephone	: +61-2-8784 8555
Project	: 0628507 SOP	Date Samples Received	: 08-Feb-2022 12:20
Order number	: ----	Date Analysis Commenced	: 11-Feb-2022
C-O-C number	: ----	Issue Date	: 11-Feb-2022 13:04
Sampler	: ANTHONY RICHARD		
Site	: ----		
Quote number	: EN/114		
No. of samples received	: 5		
No. of samples analysed	: 5		

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

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

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results

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	Inorganic Chemist	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.

Analytical Results

Sub-Matrix: **SOIL** (Matrix: **SOIL**)				Sample ID	BH101_1.3	BH105_2.0	BH115_2.0	BH139_1.2	BH143_0.3
				Sampling date / time	20-Jan-2022 00:00	17-Jan-2022 00:00	18-Jan-2022 00:00	25-Jan-2022 00:00	19-Jan-2022 00:00
Compound	*CAS Number*	*LOR*	*Unit*		**ES2204305-001**	**ES2204305-002**	**ES2204305-003**	**ES2204305-004**	**ES2204305-005**
					Result	Result	Result	Result	Result
EP004: Organic Matter									
Total Organic Carbon	----	0.5	%		<0.5	<0.5	<0.5	<0.5	<0.5

Vishal
08/02/2022
1220

Vishal Patel

From: Tyler Anderson
Sent: Tuesday, 8 February 2022 1:33 PM
To: rebatches.sydney; Nanthini Coilparampil
Subject: FW: [EXTERNAL] - SOP - job number: 0628507

Hi team,

Can you please organise the below rebatch on a 3 day TAT? Nanthini, can you please confirm if 3 days is achievable?

Kind regards,

Tyler Anderson
Client Services Coordinator, Environmental
Sydney

T +61 2 8784 8555 F +61 2 8784 8500
D +61 2 8784 8501
tyler.anderson@alsglobal.com
277-289 Woodpark Road
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Environmental Division
Sydney
Work Order Reference
ES2204305

Telephone : +61-2-8784 8555

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TAT

From: Madushani Bolonghe <Madushani.Bolonghe@erm.com>
Sent: Tuesday, 8 February 2022 12:20 PM
To: Tyler Anderson <tyler.anderson@alsglobal.com>

Cc: Nicholas Grbich <Nicholas.Grbich@erm.com>
Subject: [EXTERNAL] - SOP - job number: 0628507

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Hi Tyler,

Can I also have the following samples analysed for TOC on a three day TAT please?

1 • BH101_1.3 : ES2202264
2 • BH105_2.0 : ES2201683
3 • BH115_2.0 : ES2201683
4 • BH139_1.2 : ES2202692
5 • BH143_0.3 : ES2202264

ES2202264 - 35, 10 - S747-752
ES2201683 - 8, 25. - S714-716
ES2202692. 29 - S817-819

Also just following up on the SRN for the TCLP results I requested yesterday.

Thanks,
Madu

Madushani Bolonghe
Environmental Consultant

ERM
Lumley House | Level 15, 309 Kent Street | Sydney NSW 2000 Australia |
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E madushani.bolonghe@erm.com | **W** www.erm.com

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ALS Environmental

CERTIFICATE OF ANALYSIS

Work Order	: **ES2206020**	Page	: 1 of 17
Client	: **ENVIRONMENTAL RESOURCES MANAGEMENT (ERM)**	Laboratory	: Environmental Division Sydney
Contact	: MS JESSICA LAWRENCE	Contact	: Sally Mitchell
Address	: LEVEL 15 309 KENT STREET SYDNEY NSW AUSTRALIA 2000	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
Telephone	: +61 02 8584 8888	Telephone	: +61-2-8784 8555
Project	: 0628507 AFJV GME 2	Date Samples Received	: 22-Feb-2022 14:30
Order number	: ----	Date Analysis Commenced	: 23-Feb-2022
C-O-C number	: ----	Issue Date	: 28-Feb-2022 20:07
Sampler	: TW + WO		
Site	: ----		
Quote number	: EN/114		
No. of samples received	: 8		
No. of samples analysed	: 8		

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

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results
- Surrogate Control Limits

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

Signatories

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

Signatories	*Position*	*Accreditation Category*
Ankit Joshi	Inorganic Chemist	Sydney Inorganics, Smithfield, NSW
Edwandy Fadjar	Organic Coordinator	Sydney Organics, 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.

- 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.
- 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.
- 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.
- EK057G:LOR raised due to sample matrix.
- EK059G:LOR raised due to sample matrix.
- TDS by method EA-015 may bias high for various samples due to the presence of fine particulate matter, which may pass through the prescribed GF/C paper.
- 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.
- Sodium Adsorption Ratio (where reported): Where results for Na, Ca or Mg are <LOR, a concentration at half the reported LOR is incorporated into the SAR calculation. This represents a conservative approach for Na relative to the assumption that <LOR = zero concentration and a conservative approach for Ca & Mg relative to the assumption that <LOR is equivalent to the LOR concentration.
- 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	SMW_BH019	S54	S40_d	S51	R01_20220221
				Sampling date / time	21-Feb-2022 00:00	22-Feb-2022 00:00	22-Feb-2022 00:00	22-Feb-2022 00:00	21-Feb-2022 00:00
Compound	CAS Number	LOR	Unit		ES2206020-001	ES2206020-002	ES2206020-003	ES2206020-004	ES2206020-005
					Result	Result	Result	Result	Result
EA015: Total Dissolved Solids dried at 180 ± 5 °C									
Total Dissolved Solids @180°C	----	10	mg/L		12000	10200	18500	1090	<10
ED037P: Alkalinity by PC Titrator									
Hydroxide Alkalinity as CaCO3	DMO-210-001	1	mg/L		<1	<1	<1	<1	<1
Carbonate Alkalinity as CaCO3	3812-32-6	1	mg/L		<1	<1	<1	<1	<1
Bicarbonate Alkalinity as CaCO3	71-52-3	1	mg/L		711	70	119	714	<1
Total Alkalinity as CaCO3	----	1	mg/L		711	70	119	714	<1
ED041G: Sulfate (Turbidimetric) as SO4 2- by DA									
Sulfate as SO4 - Turbidimetric	14808-79-8	1	mg/L		2	351	829	<1	<1
ED045G: Chloride by Discrete Analyser									
Chloride	16887-00-6	1	mg/L		5140	4380	7360	53	<1
ED093F: Dissolved Major Cations									
Calcium	7440-70-2	1	mg/L		338	107	273	159	<1
Magnesium	7439-95-4	1	mg/L		298	282	401	48	<1
Sodium	7440-23-5	1	mg/L		2340	2040	3490	81	<1
Potassium	7440-09-7	1	mg/L		38	90	80	22	<1
EG020F: Dissolved Metals by ICP-MS									
Arsenic	7440-38-2	0.001	mg/L		<0.001	<0.001	<0.001	0.019	<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		0.002	<0.001	0.056	0.002	<0.001
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		0.038	0.006	0.005	<0.005	<0.005
Iron	7439-89-6	0.05	mg/L		5.06	50.0	266	7.95	<0.05
EG035F: Dissolved Mercury by FIMS									
Mercury	7439-97-6	0.0001	mg/L		<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
EK055G: Ammonia as N by Discrete Analyser									
Ammonia as N	7664-41-7	0.01	mg/L		4.50	0.91	0.97	4.66	<0.01
EK057G: Nitrite as N by Discrete Analyser									
Nitrite as N	14797-65-0	0.01	mg/L		<0.01	<0.10	<0.10	<0.10	<0.01
EK058G: Nitrate as N by Discrete Analyser									
Nitrate as N	14797-55-8	0.01	mg/L		0.01	<0.10	<0.10	0.44	<0.01
EK059G: Nitrite plus Nitrate as N (NOx) by Discrete Analyser									

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	SMW_BH019	S54	S40_d	S51	R01_20220221
				Sampling date / time	21-Feb-2022 00:00	22-Feb-2022 00:00	22-Feb-2022 00:00	22-Feb-2022 00:00	21-Feb-2022 00:00
Compound	CAS Number	LOR	Unit		ES2206020-001	ES2206020-002	ES2206020-003	ES2206020-004	ES2206020-005
					Result	Result	Result	Result	Result
EK059G: Nitrite plus Nitrate as N (NOx) by Discrete Analyser - Continued									
Nitrite + Nitrate as N	----	0.01	mg/L		**0.01**	<0.10	<0.10	**0.44**	<0.01
EK061G: Total Kjeldahl Nitrogen By Discrete Analyser									
Total Kjeldahl Nitrogen as N	----	0.1	mg/L		**4.9**	**1.5**	**5.6**	**6.6**	<0.1
EK062G: Total Nitrogen as N (TKN + NOx) by Discrete Analyser									
^ Total Nitrogen as N	----	0.1	mg/L		**4.9**	**1.5**	**5.6**	**7.0**	<0.1
EK067G: Total Phosphorus as P by Discrete Analyser									
Total Phosphorus as P	----	0.01	mg/L		**0.22**	**0.40**	**0.28**	**0.96**	<0.01
EN055: Ionic Balance									
ø Total Anions	----	0.01	meq/L		**159**	**132**	**227**	**15.8**	<0.01
ø Total Cations	----	0.01	meq/L		**144**	**120**	**200**	**16.0**	<0.01
ø Ionic Balance	----	0.01	%		**4.97**	**5.03**	**6.26**	**0.66**	**----**
EP074A: Monocyclic Aromatic Hydrocarbons									
Styrene	100-42-5	5	µg/L		<5	<5	<5	<5	<5
Isopropylbenzene	98-82-8	5	µg/L		<5	<5	<5	<5	<5
n-Propylbenzene	103-65-1	5	µg/L		<5	<5	<5	<5	<5
1.3.5-Trimethylbenzene	108-67-8	5	µg/L		<5	<5	<5	<5	<5
sec-Butylbenzene	135-98-8	5	µg/L		<5	<5	<5	<5	<5
1.2.4-Trimethylbenzene	95-63-6	5	µg/L		<5	<5	<5	<5	<5
tert-Butylbenzene	98-06-6	5	µg/L		<5	<5	<5	<5	<5
p-Isopropyltoluene	99-87-6	5	µg/L		<5	<5	<5	<5	<5
n-Butylbenzene	104-51-8	5	µg/L		<5	<5	<5	<5	<5
EP074B: Oxygenated Compounds									
Vinyl Acetate	108-05-4	50	µg/L		<50	<50	<50	<50	<50
2-Butanone (MEK)	78-93-3	50	µg/L		<50	<50	<50	<50	<50
4-Methyl-2-pentanone (MIBK)	108-10-1	50	µg/L		<50	<50	<50	<50	<50
2-Hexanone (MBK)	591-78-6	50	µg/L		<50	<50	<50	<50	<50
EP074C: Sulfonated Compounds									
Carbon disulfide	75-15-0	5	µg/L		<5	<5	<5	<5	<5
EP074D: Fumigants									
2.2-Dichloropropane	594-20-7	5	µg/L		<5	<5	<5	<5	<5
1.2-Dichloropropane	78-87-5	5	µg/L		<5	<5	<5	<5	<5
cis-1.3-Dichloropropylene	10061-01-5	5	µg/L		<5	<5	<5	<5	<5
trans-1.3-Dichloropropylene	10061-02-6	5	µg/L		<5	<5	<5	<5	<5
1.2-Dibromoethane (EDB)	106-93-4	5	µg/L		<5	<5	<5	<5	<5

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	SMW_BH019	S54	S40_d	S51	R01_20220221
				Sampling date / time	21-Feb-2022 00:00	22-Feb-2022 00:00	22-Feb-2022 00:00	22-Feb-2022 00:00	21-Feb-2022 00:00
Compound	CAS Number	LOR	Unit		ES2206020-001	ES2206020-002	ES2206020-003	ES2206020-004	ES2206020-005
					Result	Result	Result	Result	Result
EP074E: Halogenated Aliphatic Compounds									
Dichlorodifluoromethane	75-71-8	50	µg/L		<50	<50	<50	<50	<50
Chloromethane	74-87-3	50	µg/L		<50	<50	<50	<50	<50
Vinyl chloride	75-01-4	50	µg/L		<50	<50	<50	<50	<50
Bromomethane	74-83-9	50	µg/L		<50	<50	<50	<50	<50
Chloroethane	75-00-3	50	µg/L		<50	<50	<50	<50	<50
Trichlorofluoromethane	75-69-4	50	µg/L		<50	<50	<50	<50	<50
1.1-Dichloroethene	75-35-4	5	µg/L		<5	<5	<5	<5	<5
Iodomethane	74-88-4	5	µg/L		<5	<5	<5	<5	<5
trans-1.2-Dichloroethene	156-60-5	5	µg/L		<5	<5	<5	<5	<5
1.1-Dichloroethane	75-34-3	5	µg/L		<5	<5	<5	<5	<5
cis-1.2-Dichloroethene	156-59-2	5	µg/L		<5	<5	<5	<5	<5
1.1.1-Trichloroethane	71-55-6	5	µg/L		<5	<5	<5	<5	<5
1.1-Dichloropropylene	563-58-6	5	µg/L		<5	<5	<5	<5	<5
Carbon Tetrachloride	56-23-5	5	µg/L		<5	<5	<5	<5	<5
1.2-Dichloroethane	107-06-2	5	µg/L		<5	<5	<5	<5	<5
Trichloroethene	79-01-6	5	µg/L		<5	<5	<5	<5	<5
Dibromomethane	74-95-3	5	µg/L		<5	<5	<5	<5	<5
1.1.2-Trichloroethane	79-00-5	5	µg/L		<5	<5	<5	<5	<5
1.3-Dichloropropane	142-28-9	5	µg/L		<5	<5	<5	<5	<5
Tetrachloroethene	127-18-4	5	µg/L		<5	<5	<5	<5	<5
1.1.1.2-Tetrachloroethane	630-20-6	5	µg/L		<5	<5	<5	<5	<5
trans-1.4-Dichloro-2-butene	110-57-6	5	µg/L		<5	<5	<5	<5	<5
cis-1.4-Dichloro-2-butene	1476-11-5	5	µg/L		<5	<5	<5	<5	<5
1.1.2.2-Tetrachloroethane	79-34-5	5	µg/L		<5	<5	<5	<5	<5
1.2.3-Trichloropropane	96-18-4	5	µg/L		<5	<5	<5	<5	<5
Pentachloroethane	76-01-7	5	µg/L		<5	<5	<5	<5	<5
1.2-Dibromo-3-chloropropane	96-12-8	5	µg/L		<5	<5	<5	<5	<5
Hexachlorobutadiene	87-68-3	5	µg/L		<5	<5	<5	<5	<5
EP074F: Halogenated Aromatic Compounds									
Chlorobenzene	108-90-7	5	µg/L		<5	<5	<5	<5	<5
Bromobenzene	108-86-1	5	µg/L		<5	<5	<5	<5	<5
2-Chlorotoluene	95-49-8	5	µg/L		<5	<5	<5	<5	<5
4-Chlorotoluene	106-43-4	5	µg/L		<5	<5	<5	<5	<5
1.3-Dichlorobenzene	541-73-1	5	µg/L		<5	<5	<5	<5	<5
1.4-Dichlorobenzene	106-46-7	5	µg/L		<5	<5	<5	<5	<5

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)			Sample ID	SMW_BH019	S54	S40_d	S51	R01_20220221
			Sampling date / time	21-Feb-2022 00:00	22-Feb-2022 00:00	22-Feb-2022 00:00	22-Feb-2022 00:00	21-Feb-2022 00:00
Compound	CAS Number	LOR	Unit	ES2206020-001	ES2206020-002	ES2206020-003	ES2206020-004	ES2206020-005
				Result	Result	Result	Result	Result
EP074F: Halogenated Aromatic Compounds - Continued								
1.2-Dichlorobenzene	95-50-1	5	µg/L	<5	<5	<5	<5	<5
1.2.4-Trichlorobenzene	120-82-1	5	µg/L	<5	<5	<5	<5	<5
1.2.3-Trichlorobenzene	87-61-6	5	µg/L	<5	<5	<5	<5	<5
EP074G: Trihalomethanes								
Chloroform	67-66-3	5	µg/L	<5	<5	<5	<5	<5
Bromodichloromethane	75-27-4	5	µg/L	<5	<5	<5	<5	<5
Dibromochloromethane	124-48-1	5	µg/L	<5	<5	<5	<5	<5
Bromoform	75-25-2	5	µg/L	<5	<5	<5	<5	<5
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
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								

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	SMW_BH019	S54	S40_d	S51	R01_20220221
				Sampling date / time	21-Feb-2022 00:00	22-Feb-2022 00:00	22-Feb-2022 00:00	22-Feb-2022 00:00	21-Feb-2022 00:00
Compound	CAS Number	LOR	Unit		ES2206020-001	ES2206020-002	ES2206020-003	ES2206020-004	ES2206020-005
					Result	Result	Result	Result	Result
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions - Continued									
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
EP231A: Perfluoroalkyl Sulfonic Acids									
Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	<0.02
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L		<0.01	<0.01	<0.01	<0.01	<0.01
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L		<0.01	<0.01	<0.01	<0.01	**0.13**
Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	<0.02
EP231B: Perfluoroalkyl Carboxylic Acids									
Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L		<0.1	<0.1	<0.1	<0.1	<0.1
Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	<0.02

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	SMW_BH019	S54	S40_d	S51	R01_20220221
				Sampling date / time	21-Feb-2022 00:00	22-Feb-2022 00:00	22-Feb-2022 00:00	22-Feb-2022 00:00	21-Feb-2022 00:00
Compound	CAS Number	LOR	Unit		ES2206020-001	ES2206020-002	ES2206020-003	ES2206020-004	ES2206020-005
					Result	Result	Result	Result	Result
EP231B: Perfluoroalkyl Carboxylic Acids - Continued									
Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L		<0.01	<0.01	<0.01	<0.01	**0.04**
Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	<0.02
Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L		<0.05	<0.05	<0.05	<0.05	<0.05
EP231C: Perfluoroalkyl Sulfonamides									
Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	<0.02
N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L		<0.05	<0.05	<0.05	<0.05	<0.05
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	µg/L		<0.05	<0.05	<0.05	<0.05	<0.05
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		**0.16**	**0.47**	**0.62**	**0.07**	<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

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)			Sample ID	SMW_BH019	S54	S40_d	S51	R01_20220221
			Sampling date / time	21-Feb-2022 00:00	22-Feb-2022 00:00	22-Feb-2022 00:00	22-Feb-2022 00:00	21-Feb-2022 00:00
Compound	CAS Number	LOR	Unit	ES2206020-001	ES2206020-002	ES2206020-003	ES2206020-004	ES2206020-005
				Result	Result	Result	Result	Result
EP231D: (n:2) Fluorotelomer Sulfonic Acids - Continued								
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	**0.16**	**0.47**	**0.62**	**0.07**	**0.17**
Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L	<0.01	<0.01	<0.01	<0.01	**0.13**
Sum of PFAS (WA DER List)	----	0.01	µg/L	**0.16**	**0.47**	**0.62**	**0.07**	**0.17**
EP074S: VOC Surrogates								
1.2-Dichloroethane-D4	17060-07-0	5	%	**105**	**105**	**108**	**89.4**	**91.5**
Toluene-D8	2037-26-5	5	%	**117**	**120**	**122**	**102**	**107**
4-Bromofluorobenzene	460-00-4	5	%	**108**	**110**	**111**	**94.6**	**96.6**
EP075(SIM)S: Phenolic Compound Surrogates								
Phenol-d6	13127-88-3	1.0	%	**25.3**	**24.9**	**25.6**	**22.3**	**22.5**
2-Chlorophenol-D4	93951-73-6	1.0	%	**52.2**	**54.3**	**50.0**	**46.9**	**49.0**
2.4.6-Tribromophenol	118-79-6	1.0	%	**59.2**	**58.7**	**62.7**	**59.4**	**54.8**
EP075(SIM)T: PAH Surrogates								
2-Fluorobiphenyl	321-60-8	1.0	%	**78.6**	**80.4**	**75.7**	**76.3**	**75.2**
Anthracene-d10	1719-06-8	1.0	%	**74.1**	**73.0**	**78.2**	**70.3**	**70.6**
4-Terphenyl-d14	1718-51-0	1.0	%	**73.2**	**69.8**	**75.0**	**67.0**	**70.9**
EP080S: TPH(V)/BTEX Surrogates								
1.2-Dichloroethane-D4	17060-07-0	2	%	**104**	**104**	**106**	**88.6**	**90.2**
Toluene-D8	2037-26-5	2	%	**118**	**122**	**123**	**104**	**108**
4-Bromofluorobenzene	460-00-4	2	%	**116**	**119**	**119**	**104**	**102**
EP231S: PFAS Surrogate								
13C4-PFOS	----	0.02	%	**104**	**98.1**	**94.0**	**97.4**	**97.5**
13C8-PFOA	----	0.02	%	**99.1**	**98.2**	**99.4**	**102**	**99.8**

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)			Sample ID	R01_20220222	Trip spike x2	Trip blank x2	----	----
			Sampling date / time	22-Feb-2022 00:00	14-Feb-2022 00:00	15-Feb-2022 00:00	----	----
Compound	CAS Number	LOR	Unit	ES2206020-006	ES2206020-007	ES2206020-008	--------	--------
				Result	Result	Result	----	----
EA015: Total Dissolved Solids dried at 180 ± 5 °C								
Total Dissolved Solids @180°C	----	10	mg/L	<10	----	----	----	----
ED037P: Alkalinity by PC Titrator								
Hydroxide Alkalinity as CaCO3	DMO-210-001	1	mg/L	<1	----	----	----	----
Carbonate Alkalinity as CaCO3	3812-32-6	1	mg/L	<1	----	----	----	----
Bicarbonate Alkalinity as CaCO3	71-52-3	1	mg/L	<1	----	----	----	----
Total Alkalinity as CaCO3	----	1	mg/L	<1	----	----	----	----
ED041G: Sulfate (Turbidimetric) as SO4 2- by DA								
Sulfate as SO4 - Turbidimetric	14808-79-8	1	mg/L	<1	----	----	----	----
ED045G: Chloride by Discrete Analyser								
Chloride	16887-00-6	1	mg/L	<1	----	----	----	----
ED093F: Dissolved Major Cations								
Calcium	7440-70-2	1	mg/L	<1	----	----	----	----
Magnesium	7439-95-4	1	mg/L	<1	----	----	----	----
Sodium	7440-23-5	1	mg/L	<1	----	----	----	----
Potassium	7440-09-7	1	mg/L	<1	----	----	----	----
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	<0.001	----	----	----	----
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	----	----	----	----
Iron	7439-89-6	0.05	mg/L	<0.05	----	----	----	----
EG035F: Dissolved Mercury by FIMS								
Mercury	7439-97-6	0.0001	mg/L	<0.0001	----	----	----	----
EK055G: Ammonia as N by Discrete Analyser								
Ammonia as N	7664-41-7	0.01	mg/L	<0.01	----	----	----	----
EK057G: Nitrite as N by Discrete Analyser								
Nitrite as N	14797-65-0	0.01	mg/L	<0.01	----	----	----	----
EK058G: Nitrate as N by Discrete Analyser								
Nitrate as N	14797-55-8	0.01	mg/L	<0.01	----	----	----	----
EK059G: Nitrite plus Nitrate as N (NOx) by Discrete Analyser								

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)			Sample ID	R01_20220222	Trip spike x2	Trip blank x2	----	----
			Sampling date / time	22-Feb-2022 00:00	14-Feb-2022 00:00	15-Feb-2022 00:00	----	----
Compound	CAS Number	LOR	Unit	ES2206020-006	ES2206020-007	ES2206020-008	--------	--------
				Result	Result	Result	----	----
EK059G: Nitrite plus Nitrate as N (NOx) by Discrete Analyser - Continued								
Nitrite + Nitrate as N	----	0.01	mg/L	<0.01	----	----	----	----
EK061G: Total Kjeldahl Nitrogen By Discrete Analyser								
Total Kjeldahl Nitrogen as N	----	0.1	mg/L	<0.1	----	----	----	----
EK062G: Total Nitrogen as N (TKN + NOx) by Discrete Analyser								
^ Total Nitrogen as N	----	0.1	mg/L	<0.1	----	----	----	----
EK067G: Total Phosphorus as P by Discrete Analyser								
Total Phosphorus as P	----	0.01	mg/L	<0.01	----	----	----	----
EN055: Ionic Balance								
ø Total Anions	----	0.01	meq/L	<0.01	----	----	----	----
ø Total Cations	----	0.01	meq/L	<0.01	----	----	----	----
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								
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	<5	----	----	----	----
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								

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	R01_20220222	Trip spike x2	Trip blank x2	----	----
				Sampling date / time	22-Feb-2022 00:00	14-Feb-2022 00:00	15-Feb-2022 00:00	----	----
Compound	CAS Number	LOR	Unit		ES2206020-006	ES2206020-007	ES2206020-008	--------	--------
					Result	Result	Result	----	----
EP074E: Halogenated Aliphatic Compounds - Continued									
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	----	----	----	----
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	----	----	----	----
Hexachlorobutadiene	87-68-3	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	----	----	----	----
1.3-Dichlorobenzene	541-73-1	5	µg/L		<5	----	----	----	----
1.4-Dichlorobenzene	106-46-7	5	µg/L		<5	----	----	----	----

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)			Sample ID	R01_20220222	Trip spike x2	Trip blank x2	----	----
			Sampling date / time	22-Feb-2022 00:00	14-Feb-2022 00:00	15-Feb-2022 00:00	----	----
Compound	CAS Number	LOR	Unit	ES2206020-006	ES2206020-007	ES2206020-008	--------	--------
				Result	Result	Result	----	----
EP074F: Halogenated Aromatic Compounds - Continued								
1.2-Dichlorobenzene	95-50-1	5	µg/L	<5	----	----	----	----
1.2.4-Trichlorobenzene	120-82-1	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)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	----	----	----	----
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	----	<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								

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	R01_20220222	Trip spike x2	Trip blank x2	----	----
				Sampling date / time	22-Feb-2022 00:00	14-Feb-2022 00:00	15-Feb-2022 00:00	----	----
Compound	CAS Number	LOR	Unit		ES2206020-006	ES2206020-007	ES2206020-008	--------	--------
					Result	Result	Result	----	----
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions - Continued									
C6 - C10 Fraction	C6_C10	20	µg/L		<20	----	<20	----	----
^ **C6 - C10 Fraction minus BTEX (F1)**	C6_C10-BTEX	20	µg/L		<20	----	<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	**16**	<1	----	----
Toluene	108-88-3	2	µg/L		<2	**18**	<2	----	----
Ethylbenzene	100-41-4	2	µg/L		<2	**17**	<2	----	----
meta- & para-Xylene	108-38-3 106-42-3	2	µg/L		<2	**17**	<2	----	----
ortho-Xylene	95-47-6	2	µg/L		<2	**18**	<2	----	----
^ **Total Xylenes**	----	2	µg/L		<2	**35**	<2	----	----
^ **Sum of BTEX**	----	1	µg/L		<1	**86**	<1	----	----
Naphthalene	91-20-3	5	µg/L		<5	**17**	<5	----	----
EP231A: Perfluoroalkyl Sulfonic Acids									
Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L		<0.02	----	----	----	----
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L		<0.02	----	----	----	----
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L		<0.01	----	----	----	----
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L		<0.02	----	----	----	----
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L		**0.12**	----	----	----	----
Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L		<0.02	----	----	----	----
EP231B: Perfluoroalkyl Carboxylic Acids									
Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L		<0.1	----	----	----	----
Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L		<0.02	----	----	----	----
Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L		<0.02	----	----	----	----

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)			Sample ID	R01_20220222	Trip spike x2	Trip blank x2	----	----
			Sampling date / time	22-Feb-2022 00:00	14-Feb-2022 00:00	15-Feb-2022 00:00	----	----
Compound	CAS Number	LOR	Unit	ES2206020-006	ES2206020-007	ES2206020-008	--------	--------
				Result	Result	Result	----	----
EP231B: Perfluoroalkyl Carboxylic Acids - Continued								
Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	<0.02	----	----	----	----
Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	**0.05**	----	----	----	----
Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L	<0.02	----	----	----	----
Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L	<0.02	----	----	----	----
Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L	<0.02	----	----	----	----
Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L	<0.02	----	----	----	----
Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L	<0.02	----	----	----	----
Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L	<0.05	----	----	----	----
EP231C: Perfluoroalkyl Sulfonamides								
Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	µg/L	<0.02	----	----	----	----
N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L	<0.05	----	----	----	----
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	µg/L	<0.05	----	----	----	----
N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L	<0.05	----	----	----	----
N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L	<0.05	----	----	----	----
N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.02	µg/L	<0.02	----	----	----	----
N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.02	µg/L	<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	----	----	----	----
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.05	µg/L	<0.05	----	----	----	----
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.05	µg/L	<0.05	----	----	----	----

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)			Sample ID	R01_20220222	Trip spike x2	Trip blank x2	----	----
			Sampling date / time	22-Feb-2022 00:00	14-Feb-2022 00:00	15-Feb-2022 00:00	----	----
Compound	CAS Number	LOR	Unit	ES2206020-006	ES2206020-007	ES2206020-008	--------	--------
				Result	Result	Result	----	----
EP231D: (n:2) Fluorotelomer Sulfonic Acids - Continued								
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.05	µg/L	<0.05	----	----	----	----
EP231P: PFAS Sums								
Sum of PFAS	----	0.01	µg/L	**0.17**	----	----	----	----
Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L	**0.12**	----	----	----	----
Sum of PFAS (WA DER List)	----	0.01	µg/L	**0.17**	----	----	----	----
EP074S: VOC Surrogates								
1.2-Dichloroethane-D4	17060-07-0	5	%	**95.1**	----	----	----	----
Toluene-D8	2037-26-5	5	%	**113**	----	----	----	----
4-Bromofluorobenzene	460-00-4	5	%	**101**	----	----	----	----
EP075(SIM)S: Phenolic Compound Surrogates								
Phenol-d6	13127-88-3	1.0	%	**26.4**	----	----	----	----
2-Chlorophenol-D4	93951-73-6	1.0	%	**56.1**	----	----	----	----
2.4.6-Tribromophenol	118-79-6	1.0	%	**64.3**	----	----	----	----
EP075(SIM)T: PAH Surrogates								
2-Fluorobiphenyl	321-60-8	1.0	%	**80.8**	----	----	----	----
Anthracene-d10	1719-06-8	1.0	%	**75.2**	----	----	----	----
4-Terphenyl-d14	1718-51-0	1.0	%	**77.1**	----	----	----	----
EP080S: TPH(V)/BTEX Surrogates								
1.2-Dichloroethane-D4	17060-07-0	2	%	**94.2**	**91.9**	**91.5**	----	----
Toluene-D8	2037-26-5	2	%	**115**	**111**	**108**	----	----
4-Bromofluorobenzene	460-00-4	2	%	**109**	**109**	**102**	----	----
EP231S: PFAS Surrogate								
13C4-PFOS	----	0.02	%	**96.1**	----	----	----	----
13C8-PFOA	----	0.02	%	**100**	----	----	----	----

Surrogate Control Limits

Sub-Matrix: **WATER**

Compound	CAS Number	Recovery Limits (%) Low	High
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
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

ALS Environmental

QUALITY CONTROL REPORT

Work Order	: **ES2206020**	Page	: 1 of 18
Client	: **ENVIRONMENTAL RESOURCES MANAGEMENT (ERM)**	Laboratory	: Environmental Division Sydney
Contact	: MS JESSICA LAWRENCE	Contact	: Sally Mitchell
Address	: LEVEL 15 309 KENT STREET SYDNEY NSW AUSTRALIA 2000	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
Telephone	: +61 02 8584 8888	Telephone	: +61-2-8784 8555
Project	: 0628507 AFJV GME 2	Date Samples Received	: 22-Feb-2022
Order number	: ----	Date Analysis Commenced	: 23-Feb-2022
C-O-C number	: ----	Issue Date	: 28-Feb-2022
Sampler	: TW + WO		
Site	: ----		
Quote number	: EN/114		
No. of samples received	: 8		
No. of samples analysed	: 8		

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

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

This Quality Control Report contains the following information:

- Laboratory Duplicate (DUP) Report; Relative Percentage Difference (RPD) and Acceptance Limits
- Method Blank (MB) and Laboratory Control Spike (LCS) Report; Recovery and Acceptance Limits
- Matrix Spike (MS) Report; Recovery and Acceptance Limits

Signatories

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

Signatories	*Position*	*Accreditation Category*
Ankit Joshi	Inorganic Chemist	Sydney Inorganics, Smithfield, NSW
Edwandy Fadjar	Organic Coordinator	Sydney Organics, 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.

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**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Acceptable RPD (%)
EA015: Total Dissolved Solids dried at 180 ± 5 °C (QC Lot: 4191802)									
ES2206020-001	SMW_BH019	EA015H: Total Dissolved Solids @180°C	----	10	mg/L	12000	12000	0.6	0% - 20%
EW2200795-002	Anonymous	EA015H: Total Dissolved Solids @180°C	----	10	mg/L	119	125	4.5	0% - 50%
ED037P: Alkalinity by PC Titrator (QC Lot: 4190678)									
ES2205877-001	Anonymous	ED037-P: Hydroxide Alkalinity as CaCO3	DMO-210-001	1	mg/L	<1	<1	0.0	No Limit
		ED037-P: Carbonate Alkalinity as CaCO3	3812-32-6	1	mg/L	<1	<1	0.0	No Limit
		ED037-P: Bicarbonate Alkalinity as CaCO3	71-52-3	1	mg/L	170	170	0.0	0% - 20%
		ED037-P: Total Alkalinity as CaCO3	----	1	mg/L	170	170	0.0	0% - 20%
ES2206061-002	Anonymous	ED037-P: Hydroxide Alkalinity as CaCO3	DMO-210-001	1	mg/L	<1	<1	0.0	No Limit
		ED037-P: Carbonate Alkalinity as CaCO3	3812-32-6	1	mg/L	<1	<1	0.0	No Limit
		ED037-P: Bicarbonate Alkalinity as CaCO3	71-52-3	1	mg/L	7	7	0.0	No Limit
		ED037-P: Total Alkalinity as CaCO3	----	1	mg/L	7	7	0.0	No Limit
ED041G: Sulfate (Turbidimetric) as SO4 2- by DA (QC Lot: 4189181)									
ES2205834-001	Anonymous	ED041G: Sulfate as SO4 - Turbidimetric	14808-79-8	1	mg/L	<1	<1	0.0	No Limit
ES2205877-002	Anonymous	ED041G: Sulfate as SO4 - Turbidimetric	14808-79-8	1	mg/L	98	98	0.0	0% - 20%
ED041G: Sulfate (Turbidimetric) as SO4 2- by DA (QC Lot: 4190817)									
ES2205995-001	Anonymous	ED041G: Sulfate as SO4 - Turbidimetric	14808-79-8	1	mg/L	32	34	6.7	No Limit
ED045G: Chloride by Discrete Analyser (QC Lot: 4189180)									
ES2205834-001	Anonymous	ED045G: Chloride	16887-00-6	1	mg/L	2	2	0.0	No Limit
ES2205877-002	Anonymous	ED045G: Chloride	16887-00-6	1	mg/L	585	588	0.4	0% - 20%
ED045G: Chloride by Discrete Analyser (QC Lot: 4190819)									
ES2206014-001	Anonymous	ED045G: Chloride	16887-00-6	1	mg/L	7520	7550	0.3	0% - 20%
ED093F: Dissolved Major Cations (QC Lot: 4191915)									
ES2205043-001	Anonymous	ED093F: Calcium	7440-70-2	1	mg/L	84	87	3.0	0% - 20%

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 (%)*
ED093F: Dissolved Major Cations (QC Lot: 4191915) - continued									
ES2205043-001	Anonymous	ED093F: Magnesium	7439-95-4	1	mg/L	<1	<1	0.0	No Limit
		ED093F: Sodium	7440-23-5	1	mg/L	200	202	1.0	0% - 20%
		ED093F: Potassium	7440-09-7	1	mg/L	16	16	0.0	0% - 50%
ES2206020-001	SMW_BH019	ED093F: Calcium	7440-70-2	1	mg/L	338	342	1.1	0% - 20%
		ED093F: Magnesium	7439-95-4	1	mg/L	298	300	0.6	0% - 20%
		ED093F: Sodium	7440-23-5	1	mg/L	2340	2360	0.8	0% - 20%
		ED093F: Potassium	7440-09-7	1	mg/L	38	38	0.0	0% - 20%
EG020F: Dissolved Metals by ICP-MS (QC Lot: 4191916)									
ES2205043-001	Anonymous	EG020A-F: Cadmium	7440-43-9	0.0001	mg/L	<0.1 ug/L	<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	0.027	0.028	0.0	0% - 20%
		EG020A-F: Copper	7440-50-8	0.001	mg/L	<1 ug/L	<0.001	0.0	No Limit
		EG020A-F: Lead	7439-92-1	0.001	mg/L	<1 ug/L	<0.001	0.0	No Limit
		EG020A-F: Nickel	7440-02-0	0.001	mg/L	<1 ug/L	<0.001	0.0	No Limit
		EG020A-F: Zinc	7440-66-6	0.005	mg/L	<5 ug/L	<0.005	0.0	No Limit
		EG020A-F: Iron	7439-89-6	0.05	mg/L	<50 ug/L	<0.05	0.0	No Limit
ES2206020-001	SMW_BH019	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	0.002	0.001	0.0	No Limit
		EG020A-F: Zinc	7440-66-6	0.005	mg/L	0.038	0.014	92.4	No Limit
		EG020A-F: Iron	7439-89-6	0.05	mg/L	5.06	5.15	1.6	0% - 20%
EG020F: Dissolved Metals by ICP-MS (QC Lot: 4191918)									
ES2206084-001	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	<0.001	<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	<0.001	<0.001	0.0	No Limit
		EG020A-F: Zinc	7440-66-6	0.005	mg/L	0.005	0.005	0.0	No Limit
		EG020A-F: Iron	7439-89-6	0.05	mg/L	<0.05	<0.05	0.0	No Limit
EW2200837-001	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	<0.001	<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	<0.001	<0.001	0.0	No Limit
		EG020A-F: Zinc	7440-66-6	0.005	mg/L	0.006	0.005	0.0	No Limit

Sub-Matrix: **WATER**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Acceptable RPD (%)*
EG020F: Dissolved Metals by ICP-MS (QC Lot: 4191918) - continued									
EW2200837-001	Anonymous	EG020A-F: Iron	7439-89-6	0.05	mg/L	<0.05	<0.05	0.0	No Limit
EG035F: Dissolved Mercury by FIMS (QC Lot: 4191917)									
ES2205834-001	Anonymous	EG035F: Mercury	7439-97-6	0.0001	mg/L	<0.0001	<0.0001	0.0	No Limit
ES2206020-001	SMW_BH019	EG035F: Mercury	7439-97-6	0.0001	mg/L	<0.0001	<0.0001	0.0	No Limit
EK055G: Ammonia as N by Discrete Analyser (QC Lot: 4191833)									
ES2205844-001	Anonymous	EK055G: Ammonia as N	7664-41-7	0.01	mg/L	0.02	0.02	0.0	No Limit
ES2206020-004	S51	EK055G: Ammonia as N	7664-41-7	0.01	mg/L	4.66	4.69	0.7	0% - 20%
EK057G: Nitrite as N by Discrete Analyser (QC Lot: 4189179)									
ES2205834-001	Anonymous	EK057G: Nitrite as N	14797-65-0	0.01	mg/L	<0.01	<0.01	0.0	No Limit
ES2205877-002	Anonymous	EK057G: Nitrite as N	14797-65-0	0.01	mg/L	0.02	0.02	0.0	No Limit
EK057G: Nitrite as N by Discrete Analyser (QC Lot: 4190815)									
ES2205983-028	Anonymous	EK057G: Nitrite as N	14797-65-0	0.01	mg/L	<0.10	<0.10	0.0	No Limit
ES2206014-001	Anonymous	EK057G: Nitrite as N	14797-65-0	0.01	mg/L	0.12	0.12	0.0	0% - 50%
EK059G: Nitrite plus Nitrate as N (NOx) by Discrete Analyser (QC Lot: 4191834)									
ES2205844-001	Anonymous	EK059G: Nitrite + Nitrate as N	----	0.01	mg/L	<0.01	<0.01	0.0	No Limit
ES2206020-004	S51	EK059G: Nitrite + Nitrate as N	----	0.01	mg/L	0.44	0.42	3.2	0% - 20%
EK061G: Total Kjeldahl Nitrogen By Discrete Analyser (QC Lot: 4191830)									
ES2205977-004	Anonymous	EK061G: Total Kjeldahl Nitrogen as N	----	0.1	mg/L	1.0	1.1	0.0	0% - 50%
ES2205844-001	Anonymous	EK061G: Total Kjeldahl Nitrogen as N	----	0.1	mg/L	<0.1	<0.1	0.0	No Limit
EK061G: Total Kjeldahl Nitrogen By Discrete Analyser (QC Lot: 4191831)									
ES2206020-006	R01_20220222	EK061G: Total Kjeldahl Nitrogen as N	----	0.1	mg/L	<0.1	<0.1	0.0	No Limit
EW2200838-001	Anonymous	EK061G: Total Kjeldahl Nitrogen as N	----	0.1	mg/L	0.8	0.6	24.3	No Limit
EK067G: Total Phosphorus as P by Discrete Analyser (QC Lot: 4191829)									
ES2205844-001	Anonymous	EK067G: Total Phosphorus as P	----	0.01	mg/L	0.01	0.02	0.0	No Limit
ES2206020-006	R01_20220222	EK067G: Total Phosphorus as P	----	0.01	mg/L	<0.01	<0.01	0.0	No Limit
EP074A: Monocyclic Aromatic Hydrocarbons (QC Lot: 4191611)									
ES2205877-001	Anonymous	EP074: Styrene	100-42-5	5	µg/L	<5	<5	0.0	No Limit
		EP074: Isopropylbenzene	98-82-8	5	µg/L	<5	<5	0.0	No Limit
		EP074: n-Propylbenzene	103-65-1	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.3.5-Trimethylbenzene	108-67-8	5	µg/L	<5	<5	0.0	No Limit
		EP074: sec-Butylbenzene	135-98-8	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.2.4-Trimethylbenzene	95-63-6	5	µg/L	<5	<5	0.0	No Limit
		EP074: tert-Butylbenzene	98-06-6	5	µg/L	<5	<5	0.0	No Limit
		EP074: p-Isopropyltoluene	99-87-6	5	µg/L	<5	<5	0.0	No Limit
		EP074: n-Butylbenzene	104-51-8	5	µg/L	<5	<5	0.0	No Limit
ES2206020-006	R01_20220222	EP074: Styrene	100-42-5	5	µg/L	<5	<5	0.0	No Limit
		EP074: Isopropylbenzene	98-82-8	5	µg/L	<5	<5	0.0	No Limit
		EP074: n-Propylbenzene	103-65-1	5	µg/L	<5	<5	0.0	No Limit

Sub-Matrix: **WATER**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Acceptable RPD (%)*
EP074A: Monocyclic Aromatic Hydrocarbons (QC Lot: 4191611) - continued									
ES2206020-006	R01_20220222	EP074: 1.3.5-Trimethylbenzene	108-67-8	5	µg/L	<5	<5	0.0	No Limit
		EP074: sec-Butylbenzene	135-98-8	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.2.4-Trimethylbenzene	95-63-6	5	µg/L	<5	<5	0.0	No Limit
		EP074: tert-Butylbenzene	98-06-6	5	µg/L	<5	<5	0.0	No Limit
		EP074: p-Isopropyltoluene	99-87-6	5	µg/L	<5	<5	0.0	No Limit
		EP074: n-Butylbenzene	104-51-8	5	µg/L	<5	<5	0.0	No Limit
EP074B: Oxygenated Compounds (QC Lot: 4191611)									
ES2205877-001	Anonymous	EP074: Vinyl Acetate	108-05-4	50	µg/L	<50	<50	0.0	No Limit
		EP074: 2-Butanone (MEK)	78-93-3	50	µg/L	<50	<50	0.0	No Limit
		EP074: 4-Methyl-2-pentanone (MIBK)	108-10-1	50	µg/L	<50	<50	0.0	No Limit
		EP074: 2-Hexanone (MBK)	591-78-6	50	µg/L	<50	<50	0.0	No Limit
ES2206020-006	R01_20220222	EP074: Vinyl Acetate	108-05-4	50	µg/L	<50	<50	0.0	No Limit
		EP074: 2-Butanone (MEK)	78-93-3	50	µg/L	<50	<50	0.0	No Limit
		EP074: 4-Methyl-2-pentanone (MIBK)	108-10-1	50	µg/L	<50	<50	0.0	No Limit
		EP074: 2-Hexanone (MBK)	591-78-6	50	µg/L	<50	<50	0.0	No Limit
EP074C: Sulfonated Compounds (QC Lot: 4191611)									
ES2205877-001	Anonymous	EP074: Carbon disulfide	75-15-0	5	µg/L	<5	<5	0.0	No Limit
ES2206020-006	R01_20220222	EP074: Carbon disulfide	75-15-0	5	µg/L	<5	<5	0.0	No Limit
EP074D: Fumigants (QC Lot: 4191611)									
ES2205877-001	Anonymous	EP074: 2.2-Dichloropropane	594-20-7	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.2-Dichloropropane	78-87-5	5	µg/L	<5	<5	0.0	No Limit
		EP074: cis-1.3-Dichloropropylene	10061-01-5	5	µg/L	<5	<5	0.0	No Limit
		EP074: trans-1.3-Dichloropropylene	10061-02-6	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.2-Dibromoethane (EDB)	106-93-4	5	µg/L	<5	<5	0.0	No Limit
ES2206020-006	R01_20220222	EP074: 2.2-Dichloropropane	594-20-7	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.2-Dichloropropane	78-87-5	5	µg/L	<5	<5	0.0	No Limit
		EP074: cis-1.3-Dichloropropylene	10061-01-5	5	µg/L	<5	<5	0.0	No Limit
		EP074: trans-1.3-Dichloropropylene	10061-02-6	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.2-Dibromoethane (EDB)	106-93-4	5	µg/L	<5	<5	0.0	No Limit
EP074E: Halogenated Aliphatic Compounds (QC Lot: 4191611)									
ES2205877-001	Anonymous	EP074: 1.1-Dichloroethene	75-35-4	5	µg/L	<5	<5	0.0	No Limit
		EP074: Iodomethane	74-88-4	5	µg/L	<5	<5	0.0	No Limit
		EP074: trans-1.2-Dichloroethene	156-60-5	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.1-Dichloroethane	75-34-3	5	µg/L	<5	<5	0.0	No Limit
		EP074: cis-1.2-Dichloroethene	156-59-2	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.1.1-Trichloroethane	71-55-6	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.1-Dichloropropylene	563-58-6	5	µg/L	<5	<5	0.0	No Limit
		EP074: Carbon Tetrachloride	56-23-5	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.2-Dichloroethane	107-06-2	5	µg/L	<5	<5	0.0	No Limit

Sub-Matrix: **WATER**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Acceptable RPD (%)*
EP074E: Halogenated Aliphatic Compounds (QC Lot: 4191611) - continued									
ES2205877-001	Anonymous	EP074: Trichloroethene	79-01-6	5	µg/L	<5	<5	0.0	No Limit
		EP074: Dibromomethane	74-95-3	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.1.2-Trichloroethane	79-00-5	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.3-Dichloropropane	142-28-9	5	µg/L	<5	<5	0.0	No Limit
		EP074: Tetrachloroethene	127-18-4	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.1.1.2-Tetrachloroethane	630-20-6	5	µg/L	<5	<5	0.0	No Limit
		EP074: trans-1.4-Dichloro-2-butene	110-57-6	5	µg/L	<5	<5	0.0	No Limit
		EP074: cis-1.4-Dichloro-2-butene	1476-11-5	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.1.2.2-Tetrachloroethane	79-34-5	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.2.3-Trichloropropane	96-18-4	5	µg/L	<5	<5	0.0	No Limit
		EP074: Pentachloroethane	76-01-7	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.2-Dibromo-3-chloropropane	96-12-8	5	µg/L	<5	<5	0.0	No Limit
		EP074: Hexachlorobutadiene	87-68-3	5	µg/L	<5	<5	0.0	No Limit
		EP074: Dichlorodifluoromethane	75-71-8	50	µg/L	<50	<50	0.0	No Limit
		EP074: Chloromethane	74-87-3	50	µg/L	<50	<50	0.0	No Limit
		EP074: Vinyl chloride	75-01-4	50	µg/L	<50	<50	0.0	No Limit
		EP074: Bromomethane	74-83-9	50	µg/L	<50	<50	0.0	No Limit
		EP074: Chloroethane	75-00-3	50	µg/L	<50	<50	0.0	No Limit
		EP074: Trichlorofluoromethane	75-69-4	50	µg/L	<50	<50	0.0	No Limit
ES2206020-006	R01_20220222	EP074: 1.1-Dichloroethene	75-35-4	5	µg/L	<5	<5	0.0	No Limit
		EP074: Iodomethane	74-88-4	5	µg/L	<5	<5	0.0	No Limit
		EP074: trans-1.2-Dichloroethene	156-60-5	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.1-Dichloroethane	75-34-3	5	µg/L	<5	<5	0.0	No Limit
		EP074: cis-1.2-Dichloroethene	156-59-2	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.1.1-Trichloroethane	71-55-6	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.1-Dichloropropylene	563-58-6	5	µg/L	<5	<5	0.0	No Limit
		EP074: Carbon Tetrachloride	56-23-5	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.2-Dichloroethane	107-06-2	5	µg/L	<5	<5	0.0	No Limit
		EP074: Trichloroethene	79-01-6	5	µg/L	<5	<5	0.0	No Limit
		EP074: Dibromomethane	74-95-3	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.1.2-Trichloroethane	79-00-5	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.3-Dichloropropane	142-28-9	5	µg/L	<5	<5	0.0	No Limit
		EP074: Tetrachloroethene	127-18-4	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.1.1.2-Tetrachloroethane	630-20-6	5	µg/L	<5	<5	0.0	No Limit
		EP074: trans-1.4-Dichloro-2-butene	110-57-6	5	µg/L	<5	<5	0.0	No Limit
		EP074: cis-1.4-Dichloro-2-butene	1476-11-5	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.1.2.2-Tetrachloroethane	79-34-5	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.2.3-Trichloropropane	96-18-4	5	µg/L	<5	<5	0.0	No Limit
		EP074: Pentachloroethane	76-01-7	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.2-Dibromo-3-chloropropane	96-12-8	5	µg/L	<5	<5	0.0	No Limit

Sub-Matrix: **WATER**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Acceptable RPD (%)*
EP074E: Halogenated Aliphatic Compounds (QC Lot: 4191611) - continued									
ES2206020-006	R01_20220222	EP074: Hexachlorobutadiene	87-68-3	5	µg/L	<5	<5	0.0	No Limit
		EP074: Dichlorodifluoromethane	75-71-8	50	µg/L	<50	<50	0.0	No Limit
		EP074: Chloromethane	74-87-3	50	µg/L	<50	<50	0.0	No Limit
		EP074: Vinyl chloride	75-01-4	50	µg/L	<50	<50	0.0	No Limit
		EP074: Bromomethane	74-83-9	50	µg/L	<50	<50	0.0	No Limit
		EP074: Chloroethane	75-00-3	50	µg/L	<50	<50	0.0	No Limit
		EP074: Trichlorofluoromethane	75-69-4	50	µg/L	<50	<50	0.0	No Limit
EP074F: Halogenated Aromatic Compounds (QC Lot: 4191611)									
ES2205877-001	Anonymous	EP074: Chlorobenzene	108-90-7	5	µg/L	<5	<5	0.0	No Limit
		EP074: Bromobenzene	108-86-1	5	µg/L	<5	<5	0.0	No Limit
		EP074: 2-Chlorotoluene	95-49-8	5	µg/L	<5	<5	0.0	No Limit
		EP074: 4-Chlorotoluene	106-43-4	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.3-Dichlorobenzene	541-73-1	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.4-Dichlorobenzene	106-46-7	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.2-Dichlorobenzene	95-50-1	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.2.4-Trichlorobenzene	120-82-1	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.2.3-Trichlorobenzene	87-61-6	5	µg/L	<5	<5	0.0	No Limit
ES2206020-006	R01_20220222	EP074: Chlorobenzene	108-90-7	5	µg/L	<5	<5	0.0	No Limit
		EP074: Bromobenzene	108-86-1	5	µg/L	<5	<5	0.0	No Limit
		EP074: 2-Chlorotoluene	95-49-8	5	µg/L	<5	<5	0.0	No Limit
		EP074: 4-Chlorotoluene	106-43-4	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.3-Dichlorobenzene	541-73-1	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.4-Dichlorobenzene	106-46-7	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.2-Dichlorobenzene	95-50-1	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.2.4-Trichlorobenzene	120-82-1	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.2.3-Trichlorobenzene	87-61-6	5	µg/L	<5	<5	0.0	No Limit
EP074G: Trihalomethanes (QC Lot: 4191611)									
ES2205877-001	Anonymous	EP074: Chloroform	67-66-3	5	µg/L	<5	<5	0.0	No Limit
		EP074: Bromodichloromethane	75-27-4	5	µg/L	<5	<5	0.0	No Limit
		EP074: Dibromochloromethane	124-48-1	5	µg/L	<5	<5	0.0	No Limit
		EP074: Bromoform	75-25-2	5	µg/L	<5	<5	0.0	No Limit
ES2206020-006	R01_20220222	EP074: Chloroform	67-66-3	5	µg/L	<5	<5	0.0	No Limit
		EP074: Bromodichloromethane	75-27-4	5	µg/L	<5	<5	0.0	No Limit
		EP074: Dibromochloromethane	124-48-1	5	µg/L	<5	<5	0.0	No Limit
		EP074: Bromoform	75-25-2	5	µg/L	<5	<5	0.0	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 4191610)									
ES2205877-001	Anonymous	EP080: C6 - C9 Fraction	----	20	µg/L	<20	<20	0.0	No Limit
ES2206020-006	R01_20220222	EP080: C6 - C9 Fraction	----	20	µg/L	<20	<20	0.0	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 4191610)									

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 (%)*
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 4191610) - continued									
ES2205877-001	Anonymous	EP080: C6 - C10 Fraction	C6_C10	20	µg/L	<20	<20	0.0	No Limit
ES2206020-006	R01_20220222	EP080: C6 - C10 Fraction	C6_C10	20	µg/L	<20	<20	0.0	No Limit
EP080: BTEXN (QC Lot: 4191610)									
ES2205877-001	Anonymous	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	108-38-3 106-42-3	2	µg/L	<2	<2	0.0	No Limit
		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
ES2206020-006	R01_20220222	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	108-38-3 106-42-3	2	µg/L	<2	<2	0.0	No Limit
		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
EP231A: Perfluoroalkyl Sulfonic Acids (QC Lot: 4189057)									
EP2201966-001	Anonymous	EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L	<0.02	<0.02	0.0	No Limit
EP231B: Perfluoroalkyl Carboxylic Acids (QC Lot: 4189057)									
EP2201966-001	Anonymous	EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L	<0.1	<0.1	0.0	No Limit
EP231C: Perfluoroalkyl Sulfonamides (QC Lot: 4189057)									
EP2201966-001	Anonymous	EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.02	µg/L	<0.02	<0.02	0.0	No Limit

Sub-Matrix: **WATER**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Acceptable RPD (%)*
EP231C: Perfluoroalkyl Sulfonamides (QC Lot: 4189057) - continued									
EP2201966-001	Anonymous	EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L	<0.05	<0.05	0.0	No Limit
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QC Lot: 4189057)									
EP2201966-001	Anonymous	EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.05	µg/L	<0.05	<0.05	0.0	No Limit
EP231P: PFAS Sums (QC Lot: 4189057)									
EP2201966-001	Anonymous	EP231X: Sum of PFAS	----	0.01	µg/L	<0.01	<0.01	0.0	No Limit

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

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

Sub-Matrix: **WATER**

				Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Acceptable Limits (%)	
Method: Compound	CAS Number	LOR	Unit	Result	Concentration	LCS	Low	High
EA015: Total Dissolved Solids dried at 180 ± 5 °C (QCLot: 4191802)								
EA015H: Total Dissolved Solids @180°C	----	10	mg/L	<10	2000 mg/L	100	87.0	109
				<10	293 mg/L	101	75.2	126
				<10	2835 mg/L	100	83.0	124
ED037P: Alkalinity by PC Titrator (QCLot: 4190678)								
ED037-P: Total Alkalinity as CaCO3	----	----	mg/L	----	200 mg/L	110	81.0	111
				----	50 mg/L	120	80.0	120
ED041G: Sulfate (Turbidimetric) as SO4 2- by DA (QCLot: 4189181)								
ED041G: Sulfate as SO4 - Turbidimetric	14808-79-8	1	mg/L	<1	25 mg/L	102	82.0	122
				<1	500 mg/L	99.7	82.0	122
ED041G: Sulfate (Turbidimetric) as SO4 2- by DA (QCLot: 4190817)								
ED041G: Sulfate as SO4 - Turbidimetric	14808-79-8	1	mg/L	<1	25 mg/L	98.6	82.0	122
				<1	500 mg/L	108	82.0	122
ED045G: Chloride by Discrete Analyser (QCLot: 4189180)								
ED045G: Chloride	16887-00-6	1	mg/L	<1	50 mg/L	96.9	80.9	127
				<1	1000 mg/L	103	80.9	127
ED045G: Chloride by Discrete Analyser (QCLot: 4190819)								
ED045G: Chloride	16887-00-6	1	mg/L	<1	50 mg/L	96.2	80.9	127
				<1	1000 mg/L	106	80.9	127
ED093F: Dissolved Major Cations (QCLot: 4191915)								
ED093F: Calcium	7440-70-2	1	mg/L	<1	50 mg/L	92.1	80.0	114
ED093F: Magnesium	7439-95-4	1	mg/L	<1	50 mg/L	97.6	90.0	116
ED093F: Sodium	7440-23-5	1	mg/L	<1	50 mg/L	95.9	82.0	120
ED093F: Potassium	7440-09-7	1	mg/L	<1	50 mg/L	97.6	85.0	113
EG020F: Dissolved Metals by ICP-MS (QCLot: 4191916)								
EG020A-F: Arsenic	7440-38-2	0.001	mg/L	<0.001	0.1 mg/L	86.8	85.0	114
EG020A-F: Cadmium	7440-43-9	0.0001	mg/L	<0.0001	0.1 mg/L	87.4	84.0	110
EG020A-F: Chromium	7440-47-3	0.001	mg/L	<0.001	0.1 mg/L	87.5	85.0	111
EG020A-F: Copper	7440-50-8	0.001	mg/L	<0.001	0.1 mg/L	84.5	81.0	111
EG020A-F: Lead	7439-92-1	0.001	mg/L	<0.001	0.1 mg/L	86.6	83.0	111
EG020A-F: Nickel	7440-02-0	0.001	mg/L	<0.001	0.1 mg/L	83.9	82.0	112
EG020A-F: Zinc	7440-66-6	0.005	mg/L	<0.005	0.1 mg/L	84.6	81.0	117
EG020A-F: Iron	7439-89-6	0.05	mg/L	<0.05	0.5 mg/L	84.3	82.0	112
EG020F: Dissolved Metals by ICP-MS (QCLot: 4191918)								
EG020A-F: Arsenic	7440-38-2	0.001	mg/L	<0.001	0.1 mg/L	90.5	85.0	114

Sub-Matrix: **WATER**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Acceptable Limits (%)	
				Result	Concentration	LCS	Low	High
EG020F: Dissolved Metals by ICP-MS (QCLot: 4191918) - continued								
EG020A-F: Cadmium	7440-43-9	0.0001	mg/L	<0.0001	0.1 mg/L	85.3	84.0	110
EG020A-F: Chromium	7440-47-3	0.001	mg/L	<0.001	0.1 mg/L	85.8	85.0	111
EG020A-F: Copper	7440-50-8	0.001	mg/L	<0.001	0.1 mg/L	84.4	81.0	111
EG020A-F: Lead	7439-92-1	0.001	mg/L	<0.001	0.1 mg/L	85.0	83.0	111
EG020A-F: Nickel	7440-02-0	0.001	mg/L	<0.001	0.1 mg/L	83.2	82.0	112
EG020A-F: Zinc	7440-66-6	0.005	mg/L	<0.005	0.1 mg/L	109	81.0	117
EG020A-F: Iron	7439-89-6	0.05	mg/L	<0.05	0.5 mg/L	104	82.0	112
EG035F: Dissolved Mercury by FIMS (QCLot: 4191917)								
EG035F: Mercury	7439-97-6	0.0001	mg/L	<0.0001	0.01 mg/L	91.7	83.0	105
EK055G: Ammonia as N by Discrete Analyser (QCLot: 4191833)								
EK055G: Ammonia as N	7664-41-7	0.01	mg/L	<0.01	1 mg/L	100	90.0	114
EK057G: Nitrite as N by Discrete Analyser (QCLot: 4189179)								
EK057G: Nitrite as N	14797-65-0	0.01	mg/L	<0.01	0.5 mg/L	101	82.0	114
EK057G: Nitrite as N by Discrete Analyser (QCLot: 4190815)								
EK057G: Nitrite as N	14797-65-0	0.01	mg/L	<0.01	0.5 mg/L	101	82.0	114
EK059G: Nitrite plus Nitrate as N (NOx) by Discrete Analyser (QCLot: 4191834)								
EK059G: Nitrite + Nitrate as N	----	0.01	mg/L	<0.01	0.5 mg/L	101	91.0	113
EK061G: Total Kjeldahl Nitrogen By Discrete Analyser (QCLot: 4191830)								
EK061G: Total Kjeldahl Nitrogen as N	----	0.1	mg/L	<0.1	10 mg/L	88.7	69.0	101
				<0.1	1 mg/L	94.9	70.0	118
				<0.1	5 mg/L	98.2	70.0	130
EK061G: Total Kjeldahl Nitrogen By Discrete Analyser (QCLot: 4191831)								
EK061G: Total Kjeldahl Nitrogen as N	----	0.1	mg/L	<0.1	10 mg/L	88.9	69.0	101
				<0.1	1 mg/L	105	70.0	118
				<0.1	5 mg/L	98.1	70.0	130
EK067G: Total Phosphorus as P by Discrete Analyser (QCLot: 4191829)								
EK067G: Total Phosphorus as P	----	0.01	mg/L	<0.01	4.42 mg/L	98.5	71.3	126
				<0.01	0.442 mg/L	107	71.3	126
				<0.01	1 mg/L	106	71.3	126
EP074A: Monocyclic Aromatic Hydrocarbons (QCLot: 4191611)								
EP074: Styrene	100-42-5	5	µg/L	<5	10 µg/L	99.5	73.0	119
EP074: Isopropylbenzene	98-82-8	5	µg/L	<5	10 µg/L	96.8	76.0	118
EP074: n-Propylbenzene	103-65-1	5	µg/L	<5	10 µg/L	96.2	69.0	119
EP074: 1.3.5-Trimethylbenzene	108-67-8	5	µg/L	<5	10 µg/L	97.4	74.0	116
EP074: sec-Butylbenzene	135-98-8	5	µg/L	<5	10 µg/L	97.5	73.0	119
EP074: 1.2.4-Trimethylbenzene	95-63-6	5	µg/L	<5	10 µg/L	97.6	74.0	116
EP074: tert-Butylbenzene	98-06-6	5	µg/L	<5	10 µg/L	96.3	72.0	116
EP074: p-Isopropyltoluene	99-87-6	5	µg/L	<5	10 µg/L	96.2	71.0	119

Sub-Matrix: **WATER**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Acceptable Limits (%)	
				Result	Concentration	LCS	Low	High
EP074A: Monocyclic Aromatic Hydrocarbons (QCLot: 4191611) - continued								
EP074: n-Butylbenzene	104-51-8	5	µg/L	<5	10 µg/L	97.2	65.0	123
EP074B: Oxygenated Compounds (QCLot: 4191611)								
EP074: Vinyl Acetate	108-05-4	50	µg/L	<50	100 µg/L	114	61.4	134
EP074: 2-Butanone (MEK)	78-93-3	50	µg/L	<50	100 µg/L	75.2	73.6	130
EP074: 4-Methyl-2-pentanone (MIBK)	108-10-1	50	µg/L	<50	100 µg/L	99.0	66.0	132
EP074: 2-Hexanone (MBK)	591-78-6	50	µg/L	<50	100 µg/L	65.2	65.0	137
EP074C: Sulfonated Compounds (QCLot: 4191611)								
EP074: Carbon disulfide	75-15-0	5	µg/L	<5	10 µg/L	92.6	72.8	127
EP074D: Fumigants (QCLot: 4191611)								
EP074: 2.2-Dichloropropane	594-20-7	5	µg/L	<5	10 µg/L	98.9	68.0	122
EP074: 1.2-Dichloropropane	78-87-5	5	µg/L	<5	10 µg/L	106	76.0	118
EP074: cis-1.3-Dichloropropylene	10061-01-5	5	µg/L	<5	10 µg/L	102	62.0	120
EP074: trans-1.3-Dichloropropylene	10061-02-6	5	µg/L	<5	10 µg/L	101	60.0	114
EP074: 1.2-Dibromoethane (EDB)	106-93-4	5	µg/L	<5	10 µg/L	109	69.0	117
EP074E: Halogenated Aliphatic Compounds (QCLot: 4191611)								
EP074: Dichlorodifluoromethane	75-71-8	50	µg/L	<50	100 µg/L	86.2	60.6	138
EP074: Chloromethane	74-87-3	50	µg/L	<50	100 µg/L	94.6	67.4	130
EP074: Vinyl chloride	75-01-4	50	µg/L	<50	100 µg/L	88.6	69.4	129
EP074: Bromomethane	74-83-9	50	µg/L	<50	100 µg/L	95.5	56.0	140
EP074: Chloroethane	75-00-3	50	µg/L	<50	100 µg/L	94.3	61.0	139
EP074: Trichlorofluoromethane	75-69-4	50	µg/L	<50	100 µg/L	96.8	69.0	131
EP074: 1.1-Dichloroethene	75-35-4	5	µg/L	<5	10 µg/L	96.9	70.0	124
EP074: Iodomethane	74-88-4	5	µg/L	<5	10 µg/L	82.5	70.2	128
EP074: trans-1.2-Dichloroethene	156-60-5	5	µg/L	<5	10 µg/L	99.1	74.0	118
EP074: 1.1-Dichloroethane	75-34-3	5	µg/L	<5	10 µg/L	102	74.0	120
EP074: cis-1.2-Dichloroethene	156-59-2	5	µg/L	<5	10 µg/L	104	77.0	119
EP074: 1.1.1-Trichloroethane	71-55-6	5	µg/L	<5	10 µg/L	101	67.0	119
EP074: 1.1-Dichloropropylene	563-58-6	5	µg/L	<5	10 µg/L	100	73.0	119
EP074: Carbon Tetrachloride	56-23-5	5	µg/L	<5	10 µg/L	99.6	62.0	120
EP074: 1.2-Dichloroethane	107-06-2	5	µg/L	<5	10 µg/L	112	73.0	123
EP074: Trichloroethene	79-01-6	5	µg/L	<5	10 µg/L	104	76.0	118
EP074: Dibromomethane	74-95-3	5	µg/L	<5	10 µg/L	110	73.0	119
EP074: 1.1.2-Trichloroethane	79-00-5	5	µg/L	<5	10 µg/L	111	72.0	126
EP074: 1.3-Dichloropropane	142-28-9	5	µg/L	<5	10 µg/L	112	71.0	129
EP074: Tetrachloroethene	127-18-4	5	µg/L	<5	10 µg/L	99.3	72.0	124
EP074: 1.1.1.2-Tetrachloroethane	630-20-6	5	µg/L	<5	10 µg/L	103	66.0	114
EP074: trans-1.4-Dichloro-2-butene	110-57-6	5	µg/L	<5	10 µg/L	111	60.0	120
EP074: cis-1.4-Dichloro-2-butene	1476-11-5	5	µg/L	<5	10 µg/L	108	70.6	128

Sub-Matrix: **WATER**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Acceptable Limits (%)	
				Result	Concentration	LCS	Low	High
EP074E: Halogenated Aliphatic Compounds (QCLot: 4191611) - continued								
EP074: 1.1.2.2-Tetrachloroethane	79-34-5	5	µg/L	<5	10 µg/L	110	70.0	124
EP074: 1.2.3-Trichloropropane	96-18-4	5	µg/L	<5	10 µg/L	111	74.0	126
EP074: Pentachloroethane	76-01-7	5	µg/L	<5	10 µg/L	107	71.8	126
EP074: 1.2-Dibromo-3-chloropropane	96-12-8	5	µg/L	<5	10 µg/L	107	66.4	136
EP074: Hexachlorobutadiene	87-68-3	5	µg/L	<5	10 µg/L	103	58.0	130
EP074F: Halogenated Aromatic Compounds (QCLot: 4191611)								
EP074: Chlorobenzene	108-90-7	5	µg/L	<5	10 µg/L	104	79.0	117
EP074: Bromobenzene	108-86-1	5	µg/L	<5	10 µg/L	102	76.0	116
EP074: 2-Chlorotoluene	95-49-8	5	µg/L	<5	10 µg/L	100	73.0	119
EP074: 4-Chlorotoluene	106-43-4	5	µg/L	<5	10 µg/L	100	73.0	119
EP074: 1.3-Dichlorobenzene	541-73-1	5	µg/L	<5	10 µg/L	103	75.0	117
EP074: 1.4-Dichlorobenzene	106-46-7	5	µg/L	<5	10 µg/L	106	74.0	118
EP074: 1.2-Dichlorobenzene	95-50-1	5	µg/L	<5	10 µg/L	106	75.0	117
EP074: 1.2.4-Trichlorobenzene	120-82-1	5	µg/L	<5	10 µg/L	102	61.0	125
EP074: 1.2.3-Trichlorobenzene	87-61-6	5	µg/L	<5	10 µg/L	107	67.0	123
EP074G: Trihalomethanes (QCLot: 4191611)								
EP074: Chloroform	67-66-3	5	µg/L	<5	10 µg/L	107	72.0	120
EP074: Bromodichloromethane	75-27-4	5	µg/L	<5	10 µg/L	102	64.0	118
EP074: Dibromochloromethane	124-48-1	5	µg/L	<5	10 µg/L	103	65.0	115
EP074: Bromoform	75-25-2	5	µg/L	<5	10 µg/L	97.6	73.5	126
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 4189675)								
EP075(SIM): Naphthalene	91-20-3	1	µg/L	<1.0	5 µg/L	74.9	50.0	94.0
EP075(SIM): Acenaphthylene	208-96-8	1	µg/L	<1.0	5 µg/L	74.1	63.6	114
EP075(SIM): Acenaphthene	83-32-9	1	µg/L	<1.0	5 µg/L	71.0	62.2	113
EP075(SIM): Fluorene	86-73-7	1	µg/L	<1.0	5 µg/L	68.5	63.9	115
EP075(SIM): Phenanthrene	85-01-8	1	µg/L	<1.0	5 µg/L	72.0	62.6	116
EP075(SIM): Anthracene	120-12-7	1	µg/L	<1.0	5 µg/L	66.7	64.3	116
EP075(SIM): Fluoranthene	206-44-0	1	µg/L	<1.0	5 µg/L	70.9	63.6	118
EP075(SIM): Pyrene	129-00-0	1	µg/L	<1.0	5 µg/L	72.6	63.1	118
EP075(SIM): Benz(a)anthracene	56-55-3	1	µg/L	<1.0	5 µg/L	75.4	64.1	117
EP075(SIM): Chrysene	218-01-9	1	µg/L	<1.0	5 µg/L	71.2	62.5	116
EP075(SIM): Benzo(b+j)fluoranthene	205-99-2 205-82-3	1	µg/L	<1.0	5 µg/L	76.6	61.7	119
EP075(SIM): Benzo(k)fluoranthene	207-08-9	1	µg/L	<1.0	5 µg/L	81.3	63.0	115
EP075(SIM): Benzo(a)pyrene	50-32-8	0.5	µg/L	<0.5	5 µg/L	69.0	63.3	117
EP075(SIM): Indeno(1.2.3.cd)pyrene	193-39-5	1	µg/L	<1.0	5 µg/L	73.7	59.9	118
EP075(SIM): Dibenz(a.h)anthracene	53-70-3	1	µg/L	<1.0	5 µg/L	74.6	61.2	117
EP075(SIM): Benzo(g.h.i)perylene	191-24-2	1	µg/L	<1.0	5 µg/L	73.7	59.1	118

Sub-Matrix: **WATER**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Acceptable Limits (%)	
				Result	Concentration	LCS	Low	High
EP080/071: Total Petroleum Hydrocarbons (QCLot: 4189676)								
EP071: C10 - C14 Fraction	----	50	µg/L	<50	400 µg/L	64.3	55.8	112
EP071: C15 - C28 Fraction	----	100	µg/L	<100	600 µg/L	96.7	71.6	113
EP071: C29 - C36 Fraction	----	50	µg/L	<50	400 µg/L	87.7	56.0	121
EP080/071: Total Petroleum Hydrocarbons (QCLot: 4191610)								
EP080: C6 - C9 Fraction	----	20	µg/L	<20	260 µg/L	92.0	75.0	127
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 4189676)								
EP071: >C10 - C16 Fraction	----	100	µg/L	<100	500 µg/L	67.2	57.9	119
EP071: >C16 - C34 Fraction	----	100	µg/L	<100	700 µg/L	101	62.5	110
EP071: >C34 - C40 Fraction	----	100	µg/L	<100	300 µg/L	84.4	61.5	121
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 4191610)								
EP080: C6 - C10 Fraction	C6_C10	20	µg/L	<20	310 µg/L	95.4	75.0	127
EP080: BTEXN (QCLot: 4191610)								
EP080: Benzene	71-43-2	1	µg/L	<1	10 µg/L	89.5	70.0	122
EP080: Toluene	108-88-3	2	µg/L	<2	10 µg/L	104	69.0	123
EP080: Ethylbenzene	100-41-4	2	µg/L	<2	10 µg/L	103	70.0	120
EP080: meta- & para-Xylene	108-38-3 106-42-3	2	µg/L	<2	10 µg/L	103	69.0	121
EP080: ortho-Xylene	95-47-6	2	µg/L	<2	10 µg/L	107	72.0	122
EP080: Naphthalene	91-20-3	5	µg/L	<5	10 µg/L	104	70.0	120
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 4189057)								
EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	0.25 µg/L	95.0	72.0	130
EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	<0.02	0.25 µg/L	87.0	71.0	127
EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	<0.01	0.25 µg/L	85.8	68.0	131
EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	<0.02	0.25 µg/L	90.6	69.0	134
EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	<0.01	0.25 µg/L	82.4	65.0	140
EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L	<0.02	0.25 µg/L	84.0	53.0	142
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4189057)								
EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L	<0.1	1.25 µg/L	77.2	73.0	129
EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	<0.02	0.25 µg/L	105	72.0	129
EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	<0.02	0.25 µg/L	110	72.0	129
EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	<0.02	0.25 µg/L	92.4	72.0	130
EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	<0.01	0.25 µg/L	91.4	71.0	133
EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L	<0.02	0.25 µg/L	91.6	69.0	130
EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L	<0.02	0.25 µg/L	87.8	71.0	129
EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L	<0.02	0.25 µg/L	86.4	69.0	133
EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L	<0.02	0.25 µg/L	100	72.0	134
EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L	<0.02	0.25 µg/L	85.8	65.0	144
EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L	<0.05	0.625 µg/L	102	71.0	132

Sub-Matrix: **WATER**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report: Result	Laboratory Control Spike (LCS) Report: Spike Concentration	Spike Recovery (%): LCS	Acceptable Limits (%): Low	Acceptable Limits (%): High
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 4189057)								
EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	µg/L	<0.02	0.25 µg/L	84.0	67.0	137
EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L	<0.05	0.625 µg/L	83.5	68.0	141
EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	µg/L	<0.05	0.625 µg/L	82.6	62.6	147
EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L	<0.05	0.625 µg/L	95.7	66.0	145
EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L	<0.05	0.625 µg/L	82.7	57.6	145
EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.02	µg/L	<0.02	0.25 µg/L	84.6	65.0	136
EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.02	µg/L	<0.02	0.25 µg/L	76.0	61.0	135
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 4189057)								
EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L	<0.05	0.25 µg/L	89.4	63.0	143
EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.05	µg/L	<0.05	0.25 µg/L	80.2	64.0	140
EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.05	µg/L	<0.05	0.25 µg/L	101	67.0	138
EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.05	µg/L	<0.05	0.25 µg/L	82.6	71.4	144

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: **WATER**

Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Matrix Spike (MS) Report: Spike Concentration	SpikeRecovery(%): MS	Acceptable Limits (%): Low	Acceptable Limits (%): High
ED041G: Sulfate (Turbidimetric) as SO4 2- by DA (QCLot: 4189181)							
ES2205834-001	Anonymous	ED041G: Sulfate as SO4 - Turbidimetric	14808-79-8	10 mg/L	105	70.0	130
ED041G: Sulfate (Turbidimetric) as SO4 2- by DA (QCLot: 4190817)							
ES2205995-001	Anonymous	ED041G: Sulfate as SO4 - Turbidimetric	14808-79-8	100 mg/L	109	70.0	130
ED045G: Chloride by Discrete Analyser (QCLot: 4189180)							
ES2205834-001	Anonymous	ED045G: Chloride	16887-00-6	50 mg/L	105	70.0	130
ED045G: Chloride by Discrete Analyser (QCLot: 4190819)							
ES2206014-001	Anonymous	ED045G: Chloride	16887-00-6	50 mg/L	# Not Determined	70.0	130
EG020F: Dissolved Metals by ICP-MS (QCLot: 4191916)							
ES2205778-001	Anonymous	EG020A-F: Arsenic	7440-38-2	1 mg/L	96.4	70.0	130
		EG020A-F: Cadmium	7440-43-9	0.25 mg/L	96.8	70.0	130
		EG020A-F: Chromium	7440-47-3	1 mg/L	97.0	70.0	130

Sub-Matrix: **WATER**

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Acceptable Limits (%)	
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Concentration	MS	Low	High
EG020F: Dissolved Metals by ICP-MS (QCLot: 4191916) - continued							
ES2205778-001	Anonymous	EG020A-F: Copper	7440-50-8	1 mg/L	95.7	70.0	130
		EG020A-F: Lead	7439-92-1	1 mg/L	107	70.0	130
		EG020A-F: Nickel	7440-02-0	1 mg/L	96.3	70.0	130
		EG020A-F: Zinc	7440-66-6	1 mg/L	96.4	70.0	130
EG020F: Dissolved Metals by ICP-MS (QCLot: 4191918)							
ES2206022-001	Anonymous	EG020A-F: Arsenic	7440-38-2	1 mg/L	84.9	70.0	130
		EG020A-F: Cadmium	7440-43-9	0.25 mg/L	88.1	70.0	130
		EG020A-F: Chromium	7440-47-3	1 mg/L	89.0	70.0	130
		EG020A-F: Copper	7440-50-8	1 mg/L	88.6	70.0	130
		EG020A-F: Lead	7439-92-1	1 mg/L	92.2	70.0	130
		EG020A-F: Nickel	7440-02-0	1 mg/L	85.1	70.0	130
		EG020A-F: Zinc	7440-66-6	1 mg/L	# Not Determined	70.0	130
EG035F: Dissolved Mercury by FIMS (QCLot: 4191917)							
ES2205043-002	Anonymous	EG035F: Mercury	7439-97-6	0.01 mg/L	91.7	70.0	130
EK055G: Ammonia as N by Discrete Analyser (QCLot: 4191833)							
ES2205844-001	Anonymous	EK055G: Ammonia as N	7664-41-7	1 mg/L	80.3	70.0	130
EK057G: Nitrite as N by Discrete Analyser (QCLot: 4189179)							
ES2205834-001	Anonymous	EK057G: Nitrite as N	14797-65-0	0.5 mg/L	97.7	70.0	130
EK057G: Nitrite as N by Discrete Analyser (QCLot: 4190815)							
ES2205983-028	Anonymous	EK057G: Nitrite as N	14797-65-0	0.5 mg/L	111	70.0	130
EK059G: Nitrite plus Nitrate as N (NOx) by Discrete Analyser (QCLot: 4191834)							
ES2205844-001	Anonymous	EK059G: Nitrite + Nitrate as N	----	0.5 mg/L	91.6	70.0	130
EK061G: Total Kjeldahl Nitrogen By Discrete Analyser (QCLot: 4191830)							
ES2205914-001	Anonymous	EK061G: Total Kjeldahl Nitrogen as N	----	5 mg/L	# Not Determined	70.0	130
EK061G: Total Kjeldahl Nitrogen By Discrete Analyser (QCLot: 4191831)							
EW2200804-001	Anonymous	EK061G: Total Kjeldahl Nitrogen as N	----	5 mg/L	98.2	70.0	130
EK067G: Total Phosphorus as P by Discrete Analyser (QCLot: 4191829)							
ES2205914-001	Anonymous	EK067G: Total Phosphorus as P	----	1 mg/L	# Not Determined	70.0	130
EP074E: Halogenated Aliphatic Compounds (QCLot: 4191611)							
ES2205877-001	Anonymous	EP074: 1.1-Dichloroethene	75-35-4	25 µg/L	91.7	70.0	130
		EP074: Trichloroethene	79-01-6	25 µg/L	94.5	70.0	130
EP074F: Halogenated Aromatic Compounds (QCLot: 4191611)							

Sub-Matrix: **WATER**

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Acceptable Limits (%)	
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Concentration	MS	Low	High
EP074F: Halogenated Aromatic Compounds (QCLot: 4191611) - continued							
ES2205877-001	Anonymous	EP074: Chlorobenzene	108-90-7	25 µg/L	112	70.0	130
EP080/071: Total Petroleum Hydrocarbons (QCLot: 4191610)							
ES2205877-001	Anonymous	EP080: C6 - C9 Fraction	----	325 µg/L	114	70.0	130
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 4191610)							
ES2205877-001	Anonymous	EP080: C6 - C10 Fraction	C6_C10	375 µg/L	115	70.0	130
EP080: BTEXN (QCLot: 4191610)							
ES2205877-001	Anonymous	EP080: Benzene	71-43-2	25 µg/L	114	70.0	130
		EP080: Toluene	108-88-3	25 µg/L	111	70.0	130
		EP080: Ethylbenzene	100-41-4	25 µg/L	114	70.0	130
		EP080: meta- & para-Xylene	108-38-3 106-42-3	25 µg/L	114	70.0	130
		EP080: ortho-Xylene	95-47-6	25 µg/L	118	70.0	130
		EP080: Naphthalene	91-20-3	25 µg/L	101	70.0	130
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 4189057)							
EP2201966-003	Anonymous	EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.25 µg/L	85.6	72.0	130
		EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.25 µg/L	80.0	71.0	127
		EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.25 µg/L	77.6	68.0	131
		EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.25 µg/L	75.0	69.0	134
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.25 µg/L	73.6	65.0	140
		EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.25 µg/L	85.0	53.0	142
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4189057)							
EP2201966-003	Anonymous	EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	1.25 µg/L	75.7	73.0	129
		EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.25 µg/L	99.6	72.0	129
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.25 µg/L	103	72.0	129
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.25 µg/L	90.6	72.0	130
		EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.25 µg/L	89.2	71.0	133
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.25 µg/L	86.8	69.0	130
		EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.25 µg/L	81.4	71.0	129
		EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.25 µg/L	83.2	69.0	133
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.25 µg/L	92.6	72.0	134
		EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.25 µg/L	78.0	65.0	144
		EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.625 µg/L	99.8	71.0	132
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 4189057)							
EP2201966-003	Anonymous	EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.25 µg/L	86.6	67.0	137
		EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.625 µg/L	88.7	68.0	141
		EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.625 µg/L	79.2	62.6	147

Sub-Matrix: **WATER**

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Acceptable Limits (%)	
Laboratory sample ID	*Sample ID*	*Method: Compound*	*CAS Number*	*Concentration*	*MS*	*Low*	*High*
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 4189057) - continued							
EP2201966-003	Anonymous	EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.625 µg/L	87.6	66.0	145
		EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.625 µg/L	84.1	57.6	145
		EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.25 µg/L	83.4	65.0	136
		EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.25 µg/L	66.8	61.0	135
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 4189057)							
EP2201966-003	Anonymous	EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.25 µg/L	68.6	63.0	143
		EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.25 µg/L	75.8	64.0	140
		EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.25 µg/L	84.6	67.0	138
		EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.25 µg/L	72.6	71.4	144

ALS Environmental

QA/QC Compliance Assessment to assist with Quality Review

Work Order	: **ES2206020**	Page	: 1 of 12
Client	: **ENVIRONMENTAL RESOURCES MANAGEMENT (ERM)**	Laboratory	: Environmental Division Sydney
Contact	: MS JESSICA LAWRENCE	Telephone	: +61-2-8784 8555
Project	: 0628507 AFJV GME 2	Date Samples Received	: 22-Feb-2022
Site	: ----	Issue Date	: 28-Feb-2022
Sampler	: TW + WO	No. of samples received	: 8
Order number	: ----	No. of samples analysed	: 8

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

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

Summary of Outliers

Outliers : Quality Control Samples

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

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

Outliers : Analysis Holding Time Compliance

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

Outliers : Frequency of Quality Control Samples

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

Outliers : Quality Control Samples

Duplicates, Method Blanks, Laboratory Control Samples and Matrix Spikes

Matrix: **WATER**

Compound Group Name	Laboratory Sample ID	Client Sample ID	Analyte	CAS Number	Data	Limits	Comment
Matrix Spike (MS) Recoveries							
ED045G: Chloride by Discrete Analyser	ES2206014--001	Anonymous	**Chloride**	16887-00-6	Not Determined	----	**MS recovery not determined, background level greater than or equal to 4x spike level.**
EG020F: Dissolved Metals by ICP-MS	ES2206022--001	Anonymous	**Zinc**	7440-66-6	Not Determined	----	**MS recovery not determined, background level greater than or equal to 4x spike level.**
EK061G: Total Kjeldahl Nitrogen By Discrete Analyser	ES2205914--001	Anonymous	**Total Kjeldahl Nitrogen as N**	----	Not Determined	----	**MS recovery not determined, background level greater than or equal to 4x spike level.**
EK067G: Total Phosphorus as P by Discrete Analyser	ES2205914--001	Anonymous	**Total Phosphorus as P**	----	Not Determined	----	**MS recovery not determined, background level greater than or equal to 4x spike level.**

Outliers : Frequency of Quality Control Samples

Matrix: **WATER**

Quality Control Sample Type / Method	Count QC	Count Regular	Rate (%) Actual	Rate (%) Expected	Quality Control Specification
Laboratory Duplicates (DUP)					
PAH/Phenols (GC/MS - SIM)	0	12	0.00	10.00	NEPM 2013 B3 & ALS QC Standard
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	1	15	6.67	10.00	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	0	16	0.00	10.00	NEPM 2013 B3 & ALS QC Standard
Matrix Spikes (MS)					
PAH/Phenols (GC/MS - SIM)	0	12	0.00	5.00	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	0	16	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 / *Container / Client Sample ID(s)*	*Sample Date*	*Extraction / Preparation* Date extracted	Due for extraction	Evaluation	*Analysis* Date analysed	Due for analysis	Evaluation

Matrix: **WATER**

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

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EA015: Total Dissolved Solids dried at 180 ± 5 °C							
Clear Plastic Bottle - Natural (EA015H)							
SMW_BH019, R01_20220221	**21-Feb-2022**	**----**	----	----	**24-Feb-2022**	28-Feb-2022	✓
Clear Plastic Bottle - Natural (EA015H)							
S54, S40_d, S51, R01_20220222	**22-Feb-2022**	**----**	----	----	**24-Feb-2022**	01-Mar-2022	✓
ED037P: Alkalinity by PC Titrator							
Clear Plastic Bottle - Natural (ED037-P)							
SMW_BH019, R01_20220221	**21-Feb-2022**	**----**	----	----	**23-Feb-2022**	07-Mar-2022	✓
Clear Plastic Bottle - Natural (ED037-P)							
S54, S40_d, S51, R01_20220222	**22-Feb-2022**	**----**	----	----	**23-Feb-2022**	08-Mar-2022	✓
ED041G: Sulfate (Turbidimetric) as SO4 2- by DA							
Clear Plastic Bottle - Natural (ED041G)							
SMW_BH019, R01_20220221	**21-Feb-2022**	**----**	----	----	**23-Feb-2022**	21-Mar-2022	✓
Clear Plastic Bottle - Natural (ED041G)							
S54, S40_d, S51, R01_20220222	**22-Feb-2022**	**----**	----	----	**23-Feb-2022**	22-Mar-2022	✓
ED045G: Chloride by Discrete Analyser							
Clear Plastic Bottle - Natural (ED045G)							
SMW_BH019, R01_20220221	**21-Feb-2022**	**----**	----	----	**23-Feb-2022**	21-Mar-2022	✓
Clear Plastic Bottle - Natural (ED045G)							
S54, S40_d, S51, R01_20220222	**22-Feb-2022**	**----**	----	----	**23-Feb-2022**	22-Mar-2022	✓
ED093F: Dissolved Major Cations							
Clear Plastic Bottle - Nitric Acid; Filtered (ED093F)							
SMW_BH019, R01_20220221	**21-Feb-2022**	**----**	----	----	**24-Feb-2022**	21-Mar-2022	✓
Clear Plastic Bottle - Nitric Acid; Filtered (ED093F)							
S54, S40_d, S51, R01_20220222	**22-Feb-2022**	**----**	----	----	**24-Feb-2022**	22-Mar-2022	✓
EG020F: Dissolved Metals by ICP-MS							
Clear Plastic Bottle - Nitric Acid; Filtered (EG020A-F)							
SMW_BH019, R01_20220221	**21-Feb-2022**	**----**	----	----	**24-Feb-2022**	20-Aug-2022	✓
Clear Plastic Bottle - Nitric Acid; Filtered (EG020A-F)							
S54, S40_d, S51, R01_20220222	**22-Feb-2022**	**----**	----	----	**24-Feb-2022**	21-Aug-2022	✓
EG035F: Dissolved Mercury by FIMS							
Clear Plastic Bottle - Nitric Acid; Filtered (EG035F)							
SMW_BH019, R01_20220221	**21-Feb-2022**	**----**	----	----	**25-Feb-2022**	21-Mar-2022	✓
Clear Plastic Bottle - Nitric Acid; Filtered (EG035F)							
S54, S40_d, S51, R01_20220222	**22-Feb-2022**	**----**	----	----	**25-Feb-2022**	22-Mar-2022	✓

Matrix: **WATER**

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

Method / Container / Client Sample ID(s)		Sample Date	Extraction / Preparation			Analysis		
			Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EK055G: Ammonia as N by Discrete Analyser								
Clear Plastic Bottle - Sulfuric Acid (EK055G)								
SMW_BH019,	R01_20220221	**21-Feb-2022**	**----**	----	----	**24-Feb-2022**	21-Mar-2022	✓
Clear Plastic Bottle - Sulfuric Acid (EK055G)								
S54,	S40_d,	**22-Feb-2022**	**----**	----	----	**24-Feb-2022**	22-Mar-2022	✓
S51,	R01_20220222							
EK057G: Nitrite as N by Discrete Analyser								
Clear Plastic Bottle - Natural (EK057G)								
SMW_BH019,	R01_20220221	**21-Feb-2022**	**----**	----	----	**23-Feb-2022**	23-Feb-2022	✓
Clear Plastic Bottle - Natural (EK057G)								
S54,	S40_d,	**22-Feb-2022**	**----**	----	----	**23-Feb-2022**	24-Feb-2022	✓
S51,	R01_20220222							
EK059G: Nitrite plus Nitrate as N (NOx) by Discrete Analyser								
Clear Plastic Bottle - Sulfuric Acid (EK059G)								
SMW_BH019,	R01_20220221	**21-Feb-2022**	**----**	----	----	**24-Feb-2022**	21-Mar-2022	✓
Clear Plastic Bottle - Sulfuric Acid (EK059G)								
S54,	S40_d,	**22-Feb-2022**	**----**	----	----	**24-Feb-2022**	22-Mar-2022	✓
S51,	R01_20220222							
EK061G: Total Kjeldahl Nitrogen By Discrete Analyser								
Clear Plastic Bottle - Sulfuric Acid (EK061G)								
SMW_BH019,	R01_20220221	**21-Feb-2022**	**24-Feb-2022**	21-Mar-2022	✓	**24-Feb-2022**	21-Mar-2022	✓
Clear Plastic Bottle - Sulfuric Acid (EK061G)								
S54,	S40_d,	**22-Feb-2022**	**24-Feb-2022**	22-Mar-2022	✓	**24-Feb-2022**	22-Mar-2022	✓
S51,	R01_20220222							
EK067G: Total Phosphorus as P by Discrete Analyser								
Clear Plastic Bottle - Sulfuric Acid (EK067G)								
SMW_BH019,	R01_20220221	**21-Feb-2022**	**24-Feb-2022**	21-Mar-2022	✓	**24-Feb-2022**	21-Mar-2022	✓
Clear Plastic Bottle - Sulfuric Acid (EK067G)								
S54,	S40_d,	**22-Feb-2022**	**24-Feb-2022**	22-Mar-2022	✓	**24-Feb-2022**	22-Mar-2022	✓
S51,	R01_20220222							
EP074A: Monocyclic Aromatic Hydrocarbons								
Amber VOC Vial - Sulfuric Acid (EP074)								
SMW_BH019,	R01_20220221	**21-Feb-2022**	**25-Feb-2022**	07-Mar-2022	✓	**25-Feb-2022**	07-Mar-2022	✓
Amber VOC Vial - Sulfuric Acid (EP074)								
S54,	S40_d,	**22-Feb-2022**	**25-Feb-2022**	08-Mar-2022	✓	**25-Feb-2022**	08-Mar-2022	✓
S51,	R01_20220222							
EP074B: Oxygenated Compounds								
Amber VOC Vial - Sulfuric Acid (EP074)								
SMW_BH019,	R01_20220221	**21-Feb-2022**	**25-Feb-2022**	07-Mar-2022	✓	**25-Feb-2022**	07-Mar-2022	✓
Amber VOC Vial - Sulfuric Acid (EP074)								
S54,	S40_d,	**22-Feb-2022**	**25-Feb-2022**	08-Mar-2022	✓	**25-Feb-2022**	08-Mar-2022	✓
S51,	R01_20220222							

Matrix: **WATER**

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

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP074C: Sulfonated Compounds							
Amber VOC Vial - Sulfuric Acid (EP074)							
SMW_BH019, R01_20220221	**21-Feb-2022**	**25-Feb-2022**	07-Mar-2022	✓	**25-Feb-2022**	07-Mar-2022	✓
Amber VOC Vial - Sulfuric Acid (EP074)							
S54, S40_d, S51, R01_20220222	**22-Feb-2022**	**25-Feb-2022**	08-Mar-2022	✓	**25-Feb-2022**	08-Mar-2022	✓
EP074D: Fumigants							
Amber VOC Vial - Sulfuric Acid (EP074)							
SMW_BH019, R01_20220221	**21-Feb-2022**	**25-Feb-2022**	07-Mar-2022	✓	**25-Feb-2022**	07-Mar-2022	✓
Amber VOC Vial - Sulfuric Acid (EP074)							
S54, S40_d, S51, R01_20220222	**22-Feb-2022**	**25-Feb-2022**	08-Mar-2022	✓	**25-Feb-2022**	08-Mar-2022	✓
EP074E: Halogenated Aliphatic Compounds							
Amber VOC Vial - Sulfuric Acid (EP074)							
SMW_BH019, R01_20220221	**21-Feb-2022**	**25-Feb-2022**	07-Mar-2022	✓	**25-Feb-2022**	07-Mar-2022	✓
Amber VOC Vial - Sulfuric Acid (EP074)							
S54, S40_d, S51, R01_20220222	**22-Feb-2022**	**25-Feb-2022**	08-Mar-2022	✓	**25-Feb-2022**	08-Mar-2022	✓
EP074F: Halogenated Aromatic Compounds							
Amber VOC Vial - Sulfuric Acid (EP074)							
SMW_BH019, R01_20220221	**21-Feb-2022**	**25-Feb-2022**	07-Mar-2022	✓	**25-Feb-2022**	07-Mar-2022	✓
Amber VOC Vial - Sulfuric Acid (EP074)							
S54, S40_d, S51, R01_20220222	**22-Feb-2022**	**25-Feb-2022**	08-Mar-2022	✓	**25-Feb-2022**	08-Mar-2022	✓
EP074G: Trihalomethanes							
Amber VOC Vial - Sulfuric Acid (EP074)							
SMW_BH019, R01_20220221	**21-Feb-2022**	**25-Feb-2022**	07-Mar-2022	✓	**25-Feb-2022**	07-Mar-2022	✓
Amber VOC Vial - Sulfuric Acid (EP074)							
S54, S40_d, S51, R01_20220222	**22-Feb-2022**	**25-Feb-2022**	08-Mar-2022	✓	**25-Feb-2022**	08-Mar-2022	✓
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons							
Amber Glass Bottle - Unpreserved (EP075(SIM))							
SMW_BH019, R01_20220221	**21-Feb-2022**	**23-Feb-2022**	28-Feb-2022	✓	**25-Feb-2022**	04-Apr-2022	✓
Amber Glass Bottle - Unpreserved (EP075(SIM))							
S54, S40_d, S51, R01_20220222	**22-Feb-2022**	**23-Feb-2022**	01-Mar-2022	✓	**25-Feb-2022**	04-Apr-2022	✓

Matrix: **WATER**

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

Method / Container / Client Sample ID(s)		Sample Date	Extraction / Preparation			Analysis		
			Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP080/071: Total Petroleum Hydrocarbons								
Amber Glass Bottle - Unpreserved (EP071)								
SMW_BH019,	R01_20220221	**21-Feb-2022**	**23-Feb-2022**	28-Feb-2022	✓	**25-Feb-2022**	04-Apr-2022	✓
Amber Glass Bottle - Unpreserved (EP071)								
S54,	S40_d,	**22-Feb-2022**	**23-Feb-2022**	01-Mar-2022	✓	**25-Feb-2022**	04-Apr-2022	✓
S51,	R01_20220222							
Amber VOC Vial - Sulfuric Acid (EP080)								
Trip blank x2		**15-Feb-2022**	**25-Feb-2022**	01-Mar-2022	✓	**25-Feb-2022**	01-Mar-2022	✓
Amber VOC Vial - Sulfuric Acid (EP080)								
SMW_BH019,	R01_20220221	**21-Feb-2022**	**25-Feb-2022**	07-Mar-2022	✓	**25-Feb-2022**	07-Mar-2022	✓
Amber VOC Vial - Sulfuric Acid (EP080)								
S54,	S40_d,	**22-Feb-2022**	**25-Feb-2022**	08-Mar-2022	✓	**25-Feb-2022**	08-Mar-2022	✓
S51,	R01_20220222							
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions								
Amber Glass Bottle - Unpreserved (EP071)								
SMW_BH019,	R01_20220221	**21-Feb-2022**	**23-Feb-2022**	28-Feb-2022	✓	**25-Feb-2022**	04-Apr-2022	✓
Amber Glass Bottle - Unpreserved (EP071)								
S54,	S40_d,	**22-Feb-2022**	**23-Feb-2022**	01-Mar-2022	✓	**25-Feb-2022**	04-Apr-2022	✓
S51,	R01_20220222							
Amber VOC Vial - Sulfuric Acid (EP080)								
Trip blank x2		**15-Feb-2022**	**25-Feb-2022**	01-Mar-2022	✓	**25-Feb-2022**	01-Mar-2022	✓
Amber VOC Vial - Sulfuric Acid (EP080)								
SMW_BH019,	R01_20220221	**21-Feb-2022**	**25-Feb-2022**	07-Mar-2022	✓	**25-Feb-2022**	07-Mar-2022	✓
Amber VOC Vial - Sulfuric Acid (EP080)								
S54,	S40_d,	**22-Feb-2022**	**25-Feb-2022**	08-Mar-2022	✓	**25-Feb-2022**	08-Mar-2022	✓
S51,	R01_20220222							
EP080: BTEXN								
Amber VOC Vial - Sulfuric Acid (EP080)								
Trip spike x2		**14-Feb-2022**	**25-Feb-2022**	28-Feb-2022	✓	**25-Feb-2022**	28-Feb-2022	✓
Amber VOC Vial - Sulfuric Acid (EP080)								
Trip blank x2		**15-Feb-2022**	**25-Feb-2022**	01-Mar-2022	✓	**25-Feb-2022**	01-Mar-2022	✓
Amber VOC Vial - Sulfuric Acid (EP080)								
SMW_BH019,	R01_20220221	**21-Feb-2022**	**25-Feb-2022**	07-Mar-2022	✓	**25-Feb-2022**	07-Mar-2022	✓
Amber VOC Vial - Sulfuric Acid (EP080)								
S54,	S40_d,	**22-Feb-2022**	**25-Feb-2022**	08-Mar-2022	✓	**25-Feb-2022**	08-Mar-2022	✓
S51,	R01_20220222							
EP231A: Perfluoroalkyl Sulfonic Acids								
HDPE (no PTFE) (EP231X)								
SMW_BH019,	R01_20220221	**21-Feb-2022**	**23-Feb-2022**	20-Aug-2022	✓	**24-Feb-2022**	20-Aug-2022	✓
HDPE (no PTFE) (EP231X)								
S54,	S40_d,	**22-Feb-2022**	**23-Feb-2022**	21-Aug-2022	✓	**24-Feb-2022**	21-Aug-2022	✓
S51,	R01_20220222							

Matrix: **WATER**

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

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP231B: Perfluoroalkyl Carboxylic Acids							
HDPE (no PTFE) (EP231X)							
SMW_BH019, R01_20220221	**21-Feb-2022**	**23-Feb-2022**	20-Aug-2022	✓	**24-Feb-2022**	20-Aug-2022	✓
HDPE (no PTFE) (EP231X)							
S54, S40_d, S51, R01_20220222	**22-Feb-2022**	**23-Feb-2022**	21-Aug-2022	✓	**24-Feb-2022**	21-Aug-2022	✓
EP231C: Perfluoroalkyl Sulfonamides							
HDPE (no PTFE) (EP231X)							
SMW_BH019, R01_20220221	**21-Feb-2022**	**23-Feb-2022**	20-Aug-2022	✓	**24-Feb-2022**	20-Aug-2022	✓
HDPE (no PTFE) (EP231X)							
S54, S40_d, S51, R01_20220222	**22-Feb-2022**	**23-Feb-2022**	21-Aug-2022	✓	**24-Feb-2022**	21-Aug-2022	✓
EP231D: (n:2) Fluorotelomer Sulfonic Acids							
HDPE (no PTFE) (EP231X)							
SMW_BH019, R01_20220221	**21-Feb-2022**	**23-Feb-2022**	20-Aug-2022	✓	**24-Feb-2022**	20-Aug-2022	✓
HDPE (no PTFE) (EP231X)							
S54, S40_d, S51, R01_20220222	**22-Feb-2022**	**23-Feb-2022**	21-Aug-2022	✓	**24-Feb-2022**	21-Aug-2022	✓
EP231P: PFAS Sums							
HDPE (no PTFE) (EP231X)							
SMW_BH019, R01_20220221	**21-Feb-2022**	**23-Feb-2022**	20-Aug-2022	✓	**24-Feb-2022**	20-Aug-2022	✓
HDPE (no PTFE) (EP231X)							
S54, S40_d, S51, R01_20220222	**22-Feb-2022**	**23-Feb-2022**	21-Aug-2022	✓	**24-Feb-2022**	21-Aug-2022	✓

Quality Control Parameter Frequency Compliance

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

Matrix: **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)							
Alkalinity by PC Titrator	ED037-P	2	20	**10.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Ammonia as N by Discrete analyser	EK055G	2	20	**10.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Chloride by Discrete Analyser	ED045G	3	27	**11.11**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
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	4	39	**10.26**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Major Cations - Dissolved	ED093F	2	20	**10.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Nitrite and Nitrate as N (NOx) by Discrete Analyser	EK059G	2	20	**10.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Nitrite as N by Discrete Analyser	EK057G	4	40	**10.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
PAH/Phenols (GC/MS - SIM)	EP075(SIM)	0	12	**0.00**	**10.00**	×	NEPM 2013 B3 & ALS QC Standard
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	1	15	**6.67**	**10.00**	×	NEPM 2013 B3 & ALS QC Standard
Sulfate (Turbidimetric) as SO4 2- by Discrete Analyser	ED041G	3	28	**10.71**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Dissolved Solids (High Level)	EA015H	2	20	**10.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Kjeldahl Nitrogen as N By Discrete Analyser	EK061G	4	33	**12.12**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Phosphorus as P By Discrete Analyser	EK067G	2	20	**10.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	0	16	**0.00**	**10.00**	×	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	2	18	**11.11**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Volatile Organic Compounds	EP074	2	11	**18.18**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Laboratory Control Samples (LCS)							
Alkalinity by PC Titrator	ED037-P	2	20	**10.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Ammonia as N by Discrete analyser	EK055G	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Chloride by Discrete Analyser	ED045G	4	27	**14.81**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
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	2	39	**5.13**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Major Cations - Dissolved	ED093F	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Nitrite and Nitrate as N (NOx) by Discrete Analyser	EK059G	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Nitrite as N by Discrete Analyser	EK057G	2	40	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
PAH/Phenols (GC/MS - SIM)	EP075(SIM)	1	12	**8.33**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	1	15	**6.67**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Sulfate (Turbidimetric) as SO4 2- by Discrete Analyser	ED041G	4	28	**14.29**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Dissolved Solids (High Level)	EA015H	3	20	**15.00**	**15.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Kjeldahl Nitrogen as N By Discrete Analyser	EK061G	6	33	**18.18**	**15.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Phosphorus as P By Discrete Analyser	EK067G	3	20	**15.00**	**15.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	1	16	**6.25**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	1	18	**5.56**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Volatile Organic Compounds	EP074	1	11	**9.09**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Method Blanks (MB)							

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*	
Method Blanks (MB) - Continued							
Ammonia as N by Discrete analyser	EK055G	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Chloride by Discrete Analyser	ED045G	2	27	**7.41**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
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	2	39	**5.13**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Major Cations - Dissolved	ED093F	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Nitrite and Nitrate as N (NOx) by Discrete Analyser	EK059G	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Nitrite as N by Discrete Analyser	EK057G	2	40	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
PAH/Phenols (GC/MS - SIM)	EP075(SIM)	1	12	**8.33**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	1	15	**6.67**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Sulfate (Turbidimetric) as SO4 2- by Discrete Analyser	ED041G	2	28	**7.14**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Dissolved Solids (High Level)	EA015H	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Kjeldahl Nitrogen as N By Discrete Analyser	EK061G	2	33	**6.06**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Phosphorus as P By Discrete Analyser	EK067G	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	1	16	**6.25**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	1	18	**5.56**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Volatile Organic Compounds	EP074	1	11	**9.09**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Matrix Spikes (MS)							
Ammonia as N by Discrete analyser	EK055G	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Chloride by Discrete Analyser	ED045G	2	27	**7.41**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
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	2	39	**5.13**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Nitrite and Nitrate as N (NOx) by Discrete Analyser	EK059G	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Nitrite as N by Discrete Analyser	EK057G	2	40	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
PAH/Phenols (GC/MS - SIM)	EP075(SIM)	0	12	**0.00**	**5.00**	×	NEPM 2013 B3 & ALS QC Standard
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	1	15	**6.67**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Sulfate (Turbidimetric) as SO4 2- by Discrete Analyser	ED041G	2	28	**7.14**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Kjeldahl Nitrogen as N By Discrete Analyser	EK061G	2	33	**6.06**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Phosphorus as P By Discrete Analyser	EK067G	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	0	16	**0.00**	**5.00**	×	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	1	18	**5.56**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Volatile Organic Compounds	EP074	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
Total Dissolved Solids (High Level)	EA015H	WATER	In house: Referenced to APHA 2540C. A gravimetric procedure that determines the amount of `filterable` residue in an aqueous sample. A well-mixed sample is filtered through a glass fibre filter (1.2um). The filtrate is evaporated to dryness and dried to constant weight at 180+/-5C. This method is compliant with NEPM Schedule B(3)
Alkalinity by PC Titrator	ED037-P	WATER	In house: Referenced to APHA 2320 B This procedure determines alkalinity by automated measurement (e.g. PC Titrate) on a settled supernatant aliquot of the sample using pH 4.5 for indicating the total alkalinity end-point. This method is compliant with NEPM Schedule B(3)
Sulfate (Turbidimetric) as SO4 2- by Discrete Analyser	ED041G	WATER	In house: Referenced to APHA 4500-SO4. Dissolved sulfate is determined in a 0.45um filtered sample. Sulfate ions are converted to a barium sulfate suspension in an acetic acid medium with barium chloride. Light absorbance of the BaSO4 suspension is measured by a photometer and the SO4-2 concentration is determined by comparison of the reading with a standard curve. This method is compliant with NEPM Schedule B(3)
Chloride by Discrete Analyser	ED045G	WATER	In house: Referenced to APHA 4500 Cl - G.The thiocyanate ion is liberated from mercuric thiocyanate through sequestration of mercury by the chloride ion to form non-ionised mercuric chloride.in the presence of ferric ions the librated thiocynate forms highly-coloured ferric thiocynate which is measured at 480 nm APHA seal method 2 017-1-L
Major Cations - Dissolved	ED093F	WATER	In house: Referenced to APHA 3120 and 3125; USEPA SW 846 - 6010 and 6020; Cations are determined by either ICP-AES or ICP-MS techniques. This method is compliant with NEPM Schedule B(3) Sodium Adsorption Ratio is calculated from Ca, Mg and Na which determined by ALS in house method QWI-EN/ED093F. This method is compliant with NEPM Schedule B(3) Hardness parameters are calculated based on APHA 2340 B. This method is compliant with NEPM Schedule B(3)
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 (SnCl2)(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 SnCl2 which is then purged into a heated quartz cell. Quantification is by comparing absorbance against a calibration curve. This method is compliant with NEPM Schedule B(3).
Ammonia as N by Discrete analyser	EK055G	WATER	In house: Referenced to APHA 4500-NH3 G Ammonia is determined by direct colorimetry by Discrete Analyser. This method is compliant with NEPM Schedule B(3)
Nitrite as N by Discrete Analyser	EK057G	WATER	In house: Referenced to APHA 4500-NO2- B. Nitrite is determined by direct colourimetry by Discrete Analyser. This method is compliant with NEPM Schedule B(3)
Nitrate as N by Discrete Analyser	EK058G	WATER	In house: Referenced to APHA 4500-NO3- F. Nitrate is reduced to nitrite by way of a chemical reduction followed by quantification by Discrete Analyser. Nitrite is determined seperately by direct colourimetry and result for Nitrate calculated as the difference between the two results. This method is compliant with NEPM Schedule B(3)

Analytical Methods	Method	Matrix	Method Descriptions
Nitrite and Nitrate as N (NOx) by Discrete Analyser	EK059G	WATER	In house: Referenced to APHA 4500-NO3- F. Combined oxidised Nitrogen (NO2+NO3) is determined by Chemical Reduction and direct colourimetry by Discrete Analyser. This method is compliant with NEPM Schedule B(3)
Total Kjeldahl Nitrogen as N By Discrete Analyser	EK061G	WATER	In house: Referenced to APHA 4500-Norg D (In house). An aliquot of sample is digested using a high temperature Kjeldahl digestion to convert nitrogenous compounds to ammonia. Ammonia is determined colorimetrically by discrete analyser. This method is compliant with NEPM Schedule B(3)
Total Nitrogen as N (TKN + Nox) By Discrete Analyser	EK062G	WATER	In house: Referenced to APHA 4500-Norg / 4500-NO3-. This method is compliant with NEPM Schedule B(3)
Total Phosphorus as P By Discrete Analyser	EK067G	WATER	In house: Referenced to APHA 4500-P H, Jirka et al, Zhang et al. This procedure involves sulphuric acid digestion of a sample aliquot to break phosphorus down to orthophosphate. The orthophosphate reacts with ammonium molybdate and antimony potassium tartrate to form a complex which is then reduced and its concentration measured at 880nm using discrete analyser. This method is compliant with NEPM Schedule B(3)
Ionic Balance by PCT DA and Turbi SO4 DA	* EN055 - PG	WATER	In house: Referenced to APHA 1030F. 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)
Volatile Organic Compounds	EP074	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. This method is compliant with 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)
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	WATER	In-house: Analysis of fresh and saline waters by Solid Phase Extraction (SPE) followed by LC-Electrospray-MS-MS, Negative Mode using MRM and internal standard quantitation. Isotopically labelled analogues of target analytes used as internal standards and surrogates are added to the sample container. The entire contents are transferred to a solid phase extraction (SPE) cartridge. The sample container is successively rinsed with aliquots of the elution solvent. The eluted extract is combined with an equal volume of reagent water and a portion is filtered for analysis. Method procedures and data quality objectives conform to US DoD QSM 5.3, table B-15 requirements.

Preparation Methods	Method	Matrix	Method Descriptions
TKN/TP Digestion	EK061/EK067	WATER	In house: Referenced to APHA 4500 Norg - D; APHA 4500 P - H. This method is compliant with NEPM Schedule B(3)
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.

Preparation Methods	Method	Matrix	Method Descriptions
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.
Solid Phase Extraction (SPE) for PFAS in water	ORG72	WATER	In-house: Isotopically labelled analogues of target analytes used as internal standards and surrogates are added to the sample container. The entire contents are transferred to a solid phase extraction (SPE) cartridge. The sample container is successively rinsed with aliquots of the elution solvent. The eluted extract is combined with an equal volume of reagent water and a portion is filtered for analysis. Method procedures conform to US DoD QSM 5.3, table B-15 requirements.

HT

CHAIN OF CUSTODY

ALS Laboratory: please tick →

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WOLLONGONG 99 Kenny Street Wollongong NSW 2500 Ph: 02 4225 3125 E: samples.wollongong@alsglobal.com

CLIENT: ERM	**TURNAROUND REQUIREMENTS :** ☐ Standard TAT (List due date):		**FOR LABORATORY USE ONLY (Circle)**
OFFICE: Sydney	(Standard TAT may be longer for some tests e.g. Ultra Trace Organics) ☐ Non Standard or urgent TAT (List due date):		Custody Seal Intact? Yes No N/A
PROJECT: 0628507 AFJV GME 2	**ALS QUOTE NO.:** ERM Standard Quote	COC SEQUENCE NUMBER (Circle)	Free ice / frozen ice bricks present upon receipt? Yes No N/A
ORDER NUMBER:		COC: 1 2 3 4 5 6 7	Random Sample Temperature on Receipt: 0 → 1 °C
PROJECT MANAGER: Jessica Lawrence, Nicholas Grbich	**CONTACT PH:** 0415833925	OF: 1 2 3 4 5 6 7	Other comment:

SAMPLER: TM + WO	**SAMPLER MOBILE:** 0467295082	**RELINQUISHED BY:** Will Oh	**RECEIVED BY:** [signature]	**RELINQUISHED BY:**
COC emailed to ALS? (YES / NO)	**EDD FORMAT (or default):**			
Email Reports to (will default to PM if no other addresses are listed): taj.morison@erm.com, PM's		DATE/TIME: 22/02/2022	DATE/TIME: 22/2/22 1430	DATE/TIME:
Email Invoice to (will default to PM if no other addresses are listed): PM				**RECEIVED BY:** DATE/TIME:

COMMENTS/SPECIAL HANDLING/STORAGE OR DISPOSAL:

ALS USE	SAMPLE DETAILS MATRIX: SOLID (S) WATER (W)			CONTAINER INFORMATION	ANALYSIS REQUIRED including SUITES (NB. Suite Codes must be listed to attract suite price) Where Metals are required, specify Total (unfiltered bottle required) or Dissolved (field filtered bottle required).								Additional Information
LAB ID	SAMPLE ID	DATE / TIME	MATRIX	TYPE & PRESERVATIVE *(refer to codes below)*	TOTAL CONTAINERS	TRH and BTEXN	VOCs	PAHs	PFAS	Heavy Metals + Iron	Ammonia, nitrate, total nitrogen, total phosphurous	Major Anions and Cations	TDS	Comments on likely contaminant levels, dilutions, or samples requiring specific QC analysis etc.
	SMW_BH019	21/02/2022	W		9	X	X	X	X	X	X	X	X	
	S54	22/02/2022	W		9	X	X	X	X	X	X	X	X	
	S40_d	22/02/2022	W		9	X	X	X	X	X	X	X	X	
	S51	22/02/2022	W		9	X	X	X	X	X	X	X	X	
	R01_20220221	21/02/2022	W		9	X	X	X	X	X	X	X	X	
	R01_20220222	22/02/2022	W		9	X	X	X	X	X	X	X	X	
	Trip spike x2	22/02/2022	W		9	X								
	Trip blank x2	2202/2022	W		9	X								
				TOTAL	72	8	6	6	6	6	6	6	6	

Water Container Codes: P = Unpreserved Plastic; N = Nitric Preserved Plastic; ORC = Nitric Preserved ORC; SH = Sodium Hydroxide/Cd Preserved; S = Sodium Hydroxide Preserved Plastic; AG = Amber Glass Unpreserved; AP - Airfreight Unpreserved Plastic V = VOA Vial HCl Preserved; VB = VOA Vial Sodium Bisulphate Preserved; VS = VOA Vial Sulfuric Preserved; AV = Airfreight Unpreserved Vial SG = Sulfuric Preserved Amber Glass; H = HCl preserved Plastic; HS = HCl preserved Speciation bottle; SP = Sulfuric Preserved Plasl Z = Zinc Acetate Preserved Bottle; E = EDTA Preserved Bottles; ST = Sterile Bottle; ASS = Plastic Bag for Acid Sulphate Soils; B = Unpreserved Bag.

Environmental Division Sydney
Work Order Reference
ES2206020

Telephone : +61-2-8784 8555

ALS Environmental

CERTIFICATE OF ANALYSIS

Work Order	: **ES2209170**	Page	: 1 of 10
Client	: **ENVIRONMENTAL RESOURCES MANAGEMENT (ERM)**	Laboratory	: Environmental Division Sydney
Contact	: MS JESSICA LAWRENCE	Contact	: Customer Services ES
Address	: UNIT 11/277 LANE COVE ROAD MACQUARIE PARK 2113	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
Telephone	: +61 02 8584 8888	Telephone	: +61-2-8784 8555
Project	: 0628507 AFJV-SMW	Date Samples Received	: 15-Mar-2022 18:30
Order number	: N/A	Date Analysis Commenced	: 16-Mar-2022
C-O-C number	: ----	Issue Date	: 23-Mar-2022 19:28
Sampler	: WILLIAM OH		
Site	: ----		
Quote number	: EN/114		
No. of samples received	: 9		
No. of samples analysed	: 5		

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

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

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results
- Surrogate Control Limits

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

Signatories

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

Signatories	*Position*	*Accreditation Category*
Ankit Joshi	Senior Chemist - Inorganics	Sydney Inorganics, Smithfield, NSW
Edwandy Fadjar	Organic Coordinator	Sydney Organics, Smithfield, NSW
Franco Lentini	LCMS Coordinator	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.

- 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.
- 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.
- 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.
- EK055G, EK061G: It has been noted that Ammonia is greater than TKN for sample no:2, however this difference is within the limits of experimental variation.
- EK067G:LOR raised due to sample matrix.
- TDS by method EA-015 may bias high for various samples due to the presence of fine particulate matter, which may pass through the prescribed GF/C paper.
- It has been noted that Nitrite is greater than NOX, however this difference is within the limits of experimental variation.
- EN055: Ionic Balance out of acceptable limits for sample ES2209170-#001 due to analytes not quantified in this report.
- 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.
- Sodium Adsorption Ratio (where reported): Where results for Na, Ca or Mg are <LOR, a concentration at half the reported LOR is incorporated into the SAR calculation. This represents a conservative approach for Na relative to the assumption that <LOR = zero concentration and a conservative approach for Ca & Mg relative to the assumption that <LOR is equivalent to the LOR concentration.
- 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	SMW_BH019	SMW_BH038	R01_20220315	TS	TB
			Sampling date / time	15-Mar-2022 00:00	15-Mar-2022 00:00	15-Mar-2022 00:00	07-Mar-2022 00:00	09-Mar-2022 00:00
Compound	CAS Number	LOR	Unit	ES2209170-001	ES2209170-002	ES2209170-007	ES2209170-010	ES2209170-011
				Result	Result	Result	Result	Result
EA015: Total Dissolved Solids dried at 180 ± 5 °C								
Total Dissolved Solids @180°C	----	10	mg/L	**168**	**4600**	<10	----	----
ED037P: Alkalinity by PC Titrator								
Hydroxide Alkalinity as CaCO3	DMO-210-001	1	mg/L	<1	<1	<1	----	----
Carbonate Alkalinity as CaCO3	3812-32-6	1	mg/L	<1	<1	<1	----	----
Bicarbonate Alkalinity as CaCO3	71-52-3	1	mg/L	**75**	**198**	<1	----	----
Total Alkalinity as CaCO3	----	1	mg/L	**75**	**198**	<1	----	----
ED041G: Sulfate (Turbidimetric) as SO4 2- by DA								
Sulfate as SO4 - Turbidimetric	14808-79-8	1	mg/L	**64**	**282**	<1	----	----
ED045G: Chloride by Discrete Analyser								
Chloride	16887-00-6	1	mg/L	**12**	**2150**	<1	----	----
ED093F: Dissolved Major Cations								
Calcium	7440-70-2	1	mg/L	**18**	**114**	<1	----	----
Magnesium	7439-95-4	1	mg/L	**5**	**108**	<1	----	----
Sodium	7440-23-5	1	mg/L	**16**	**1180**	<1	----	----
Potassium	7440-09-7	1	mg/L	**6**	**21**	<1	----	----
EG020F: Dissolved Metals by ICP-MS								
Arsenic	7440-38-2	0.001	mg/L	**0.027**	**0.004**	<0.001	----	----
Cadmium	7440-43-9	0.0001	mg/L	<0.0001	<0.0001	<0.0001	----	----
Chromium	7440-47-3	0.001	mg/L	<0.001	<0.001	<0.001	----	----
Copper	7440-50-8	0.001	mg/L	**0.004**	**0.006**	<0.001	----	----
Lead	7439-92-1	0.001	mg/L	<0.001	<0.001	<0.001	----	----
Nickel	7440-02-0	0.001	mg/L	**0.004**	**0.002**	<0.001	----	----
Zinc	7440-66-6	0.005	mg/L	**0.016**	<0.005	<0.005	----	----
EG035F: Dissolved Mercury by FIMS								
Mercury	7439-97-6	0.0001	mg/L	<0.0001	<0.0001	<0.0001	----	----
EG051G: Ferrous Iron by Discrete Analyser								
Ferrous Iron	----	0.05	mg/L	**0.10**	**0.05**	<0.05	----	----
EK055G: Ammonia as N by Discrete Analyser								
Ammonia as N	7664-41-7	0.01	mg/L	**0.08**	**1.92**	<0.01	----	----
EK057G: Nitrite as N by Discrete Analyser								
Nitrite as N	14797-65-0	0.01	mg/L	**0.03**	**0.02**	<0.01	----	----
EK058G: Nitrate as N by Discrete Analyser								
Nitrate as N	14797-55-8	0.01	mg/L	**0.13**	<0.01	<0.01	----	----

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)			Sample ID	SMW_BH019	SMW_BH038	R01_20220315	TS	TB
			Sampling date / time	15-Mar-2022 00:00	15-Mar-2022 00:00	15-Mar-2022 00:00	07-Mar-2022 00:00	09-Mar-2022 00:00
Compound	CAS Number	LOR	Unit	ES2209170-001	ES2209170-002	ES2209170-007	ES2209170-010	ES2209170-011
				Result	Result	Result	Result	Result
EK059G: Nitrite plus Nitrate as N (NOx) by Discrete Analyser								
Nitrite + Nitrate as N	----	0.01	mg/L	**0.16**	<0.01	<0.01	----	----
EK061G: Total Kjeldahl Nitrogen By Discrete Analyser								
Total Kjeldahl Nitrogen as N	----	0.1	mg/L	**1.0**	**1.8**	<0.1	----	----
EK062G: Total Nitrogen as N (TKN + NOx) by Discrete Analyser								
^ Total Nitrogen as N	----	0.1	mg/L	**1.2**	**1.8**	<0.1	----	----
EK067G: Total Phosphorus as P by Discrete Analyser								
Total Phosphorus as P	----	0.01	mg/L	**0.76**	<0.02	<0.01	----	----
EN055: Ionic Balance								
ø Total Anions	----	0.01	meq/L	**3.17**	**70.5**	<0.01	----	----
ø Total Cations	----	0.01	meq/L	**2.16**	**66.4**	<0.01	----	----
ø Ionic Balance	----	0.01	%	**19.0**	**2.95**	----	----	----
EP033: C1 - C4 Hydrocarbon Gases								
Methane	74-82-8	10	µg/L	**10**	----	----	----	----
EP074A: Monocyclic Aromatic Hydrocarbons								
Styrene	100-42-5	5	µg/L	<5	<5	<5	----	----
Isopropylbenzene	98-82-8	5	µg/L	<5	<5	<5	----	----
n-Propylbenzene	103-65-1	5	µg/L	<5	<5	<5	----	----
1.3.5-Trimethylbenzene	108-67-8	5	µg/L	<5	<5	<5	----	----
sec-Butylbenzene	135-98-8	5	µg/L	<5	<5	<5	----	----
1.2.4-Trimethylbenzene	95-63-6	5	µg/L	<5	<5	<5	----	----
tert-Butylbenzene	98-06-6	5	µg/L	<5	<5	<5	----	----
p-Isopropyltoluene	99-87-6	5	µg/L	<5	<5	<5	----	----
n-Butylbenzene	104-51-8	5	µg/L	<5	<5	<5	----	----
EP074B: Oxygenated Compounds								
Vinyl Acetate	108-05-4	50	µg/L	<50	<50	<50	----	----
2-Butanone (MEK)	78-93-3	50	µg/L	<50	<50	<50	----	----
4-Methyl-2-pentanone (MIBK)	108-10-1	50	µg/L	<50	<50	<50	----	----
2-Hexanone (MBK)	591-78-6	50	µg/L	<50	<50	<50	----	----
EP074C: Sulfonated Compounds								
Carbon disulfide	75-15-0	5	µg/L	<5	<5	<5	----	----
EP074D: Fumigants								
2.2-Dichloropropane	594-20-7	5	µg/L	<5	<5	<5	----	----
1.2-Dichloropropane	78-87-5	5	µg/L	<5	<5	<5	----	----
cis-1.3-Dichloropropylene	10061-01-5	5	µg/L	<5	<5	<5	----	----

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)			Sample ID	SMW_BH019	SMW_BH038	R01_20220315	TS	TB
			Sampling date / time	15-Mar-2022 00:00	15-Mar-2022 00:00	15-Mar-2022 00:00	07-Mar-2022 00:00	09-Mar-2022 00:00
Compound	CAS Number	LOR	Unit	ES2209170-001	ES2209170-002	ES2209170-007	ES2209170-010	ES2209170-011
				Result	Result	Result	Result	Result
EP074D: Fumigants - Continued								
trans-1.3-Dichloropropylene	10061-02-6	5	µg/L	<5	<5	<5	----	----
1.2-Dibromoethane (EDB)	106-93-4	5	µg/L	<5	<5	<5	----	----
EP074E: Halogenated Aliphatic Compounds								
Dichlorodifluoromethane	75-71-8	50	µg/L	<50	<50	<50	----	----
Chloromethane	74-87-3	50	µg/L	<50	<50	<50	----	----
Vinyl chloride	75-01-4	50	µg/L	<50	<50	<50	----	----
Bromomethane	74-83-9	50	µg/L	<50	<50	<50	----	----
Chloroethane	75-00-3	50	µg/L	<50	<50	<50	----	----
Trichlorofluoromethane	75-69-4	50	µg/L	<50	<50	<50	----	----
1.1-Dichloroethene	75-35-4	5	µg/L	<5	<5	<5	----	----
Iodomethane	74-88-4	5	µg/L	<5	<5	<5	----	----
trans-1.2-Dichloroethene	156-60-5	5	µg/L	<5	<5	<5	----	----
1.1-Dichloroethane	75-34-3	5	µg/L	<5	<5	<5	----	----
cis-1.2-Dichloroethene	156-59-2	5	µg/L	<5	<5	<5	----	----
1.1.1-Trichloroethane	71-55-6	5	µg/L	<5	<5	<5	----	----
1.1-Dichloropropylene	563-58-6	5	µg/L	<5	<5	<5	----	----
Carbon Tetrachloride	56-23-5	5	µg/L	<5	<5	<5	----	----
1.2-Dichloroethane	107-06-2	5	µg/L	<5	<5	<5	----	----
Trichloroethene	79-01-6	5	µg/L	<5	<5	<5	----	----
Dibromomethane	74-95-3	5	µg/L	<5	<5	<5	----	----
1.1.2-Trichloroethane	79-00-5	5	µg/L	<5	<5	<5	----	----
1.3-Dichloropropane	142-28-9	5	µg/L	<5	<5	<5	----	----
Tetrachloroethene	127-18-4	5	µg/L	<5	<5	<5	----	----
1.1.1.2-Tetrachloroethane	630-20-6	5	µg/L	<5	<5	<5	----	----
trans-1.4-Dichloro-2-butene	110-57-6	5	µg/L	<5	<5	<5	----	----
cis-1.4-Dichloro-2-butene	1476-11-5	5	µg/L	<5	<5	<5	----	----
1.1.2.2-Tetrachloroethane	79-34-5	5	µg/L	<5	<5	<5	----	----
1.2.3-Trichloropropane	96-18-4	5	µg/L	<5	<5	<5	----	----
Pentachloroethane	76-01-7	5	µg/L	<5	<5	<5	----	----
1.2-Dibromo-3-chloropropane	96-12-8	5	µg/L	<5	<5	<5	----	----
Hexachlorobutadiene	87-68-3	5	µg/L	<5	<5	<5	----	----
EP074F: Halogenated Aromatic Compounds								
Chlorobenzene	108-90-7	5	µg/L	<5	<5	<5	----	----
Bromobenzene	108-86-1	5	µg/L	<5	<5	<5	----	----

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)			Sample ID	SMW_BH019	SMW_BH038	R01_20220315	TS	TB
			Sampling date / time	15-Mar-2022 00:00	15-Mar-2022 00:00	15-Mar-2022 00:00	07-Mar-2022 00:00	09-Mar-2022 00:00
Compound	CAS Number	LOR	Unit	ES2209170-001	ES2209170-002	ES2209170-007	ES2209170-010	ES2209170-011
				Result	Result	Result	Result	Result
EP074F: Halogenated Aromatic Compounds - Continued								
2-Chlorotoluene	95-49-8	5	µg/L	<5	<5	<5	----	----
4-Chlorotoluene	106-43-4	5	µg/L	<5	<5	<5	----	----
1.3-Dichlorobenzene	541-73-1	5	µg/L	<5	<5	<5	----	----
1.4-Dichlorobenzene	106-46-7	5	µg/L	<5	<5	<5	----	----
1.2-Dichlorobenzene	95-50-1	5	µg/L	<5	<5	<5	----	----
1.2.4-Trichlorobenzene	120-82-1	5	µg/L	<5	<5	<5	----	----
1.2.3-Trichlorobenzene	87-61-6	5	µg/L	<5	<5	<5	----	----
EP074G: Trihalomethanes								
Chloroform	67-66-3	5	µg/L	<5	<5	<5	----	----
Bromodichloromethane	75-27-4	5	µg/L	<5	<5	<5	----	----
Dibromochloromethane	124-48-1	5	µg/L	<5	<5	<5	----	----
Bromoform	75-25-2	5	µg/L	<5	<5	<5	----	----
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons								
Naphthalene	91-20-3	1.0	µg/L	<1.0	<1.0	<1.0	----	----
Acenaphthylene	208-96-8	1.0	µg/L	<1.0	<1.0	<1.0	----	----
Acenaphthene	83-32-9	1.0	µg/L	<1.0	<1.0	<1.0	----	----
Fluorene	86-73-7	1.0	µg/L	<1.0	<1.0	<1.0	----	----
Phenanthrene	85-01-8	1.0	µg/L	<1.0	<1.0	<1.0	----	----
Anthracene	120-12-7	1.0	µg/L	<1.0	<1.0	<1.0	----	----
Fluoranthene	206-44-0	1.0	µg/L	<1.0	<1.0	<1.0	----	----
Pyrene	129-00-0	1.0	µg/L	<1.0	<1.0	<1.0	----	----
Benz(a)anthracene	56-55-3	1.0	µg/L	<1.0	<1.0	<1.0	----	----
Chrysene	218-01-9	1.0	µg/L	<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	----	----
Benzo(k)fluoranthene	207-08-9	1.0	µg/L	<1.0	<1.0	<1.0	----	----
Benzo(a)pyrene	50-32-8	0.5	µg/L	<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	----	----
Dibenz(a.h)anthracene	53-70-3	1.0	µg/L	<1.0	<1.0	<1.0	----	----
Benzo(g.h.i)perylene	191-24-2	1.0	µg/L	<1.0	<1.0	<1.0	----	----
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	µg/L	<0.5	<0.5	<0.5	----	----
^ Benzo(a)pyrene TEQ (zero)	----	0.5	µg/L	<0.5	<0.5	<0.5	----	----
EP080/071: Total Petroleum Hydrocarbons								
C6 - C9 Fraction	----	20	µg/L	<20	<20	<20	----	<20
C10 - C14 Fraction	----	50	µg/L	<50	<50	<50	----	----

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)			Sample ID	SMW_BH019	SMW_BH038	R01_20220315	TS	TB
			Sampling date / time	15-Mar-2022 00:00	15-Mar-2022 00:00	15-Mar-2022 00:00	07-Mar-2022 00:00	09-Mar-2022 00:00
Compound	CAS Number	LOR	Unit	ES2209170-001	ES2209170-002	ES2209170-007	ES2209170-010	ES2209170-011
				Result	Result	Result	Result	Result
EP080/071: Total Petroleum Hydrocarbons - Continued								
C15 - C28 Fraction	----	100	µg/L	<100	<100	<100	----	----
C29 - C36 Fraction	----	50	µg/L	<50	<50	<50	----	----
^ C10 - C36 Fraction (sum)	----	50	µg/L	<50	<50	<50	----	----
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions								
C6 - C10 Fraction	C6_C10	20	µg/L	<20	<20	<20	----	<20
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	20	µg/L	<20	<20	<20	----	<20
>C10 - C16 Fraction	----	100	µg/L	<100	<100	<100	----	----
>C16 - C34 Fraction	----	100	µg/L	<100	<100	<100	----	----
>C34 - C40 Fraction	----	100	µg/L	<100	<100	<100	----	----
^ >C10 - C40 Fraction (sum)	----	100	µg/L	<100	<100	<100	----	----
^ >C10 - C16 Fraction minus Naphthalene (F2)	----	100	µg/L	<100	<100	<100	----	----
EP080: BTEXN								
Benzene	71-43-2	1	µg/L	<1	<1	<1	**16**	<1
Toluene	108-88-3	2	µg/L	<2	<2	<2	**14**	<2
Ethylbenzene	100-41-4	2	µg/L	<2	<2	<2	**14**	<2
meta- & para-Xylene	108-38-3 106-42-3	2	µg/L	<2	<2	<2	**14**	<2
ortho-Xylene	95-47-6	2	µg/L	<2	<2	<2	**15**	<2
^ Total Xylenes	----	2	µg/L	<2	<2	<2	**29**	<2
^ Sum of BTEX	----	1	µg/L	<1	<1	<1	**73**	<1
Naphthalene	91-20-3	5	µg/L	<5	<5	<5	**17**	<5
EP231A: Perfluoroalkyl Sulfonic Acids								
Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	<0.02	<0.02	----	----
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	<0.02	<0.02	<0.02	----	----
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	<0.01	<0.01	<0.01	----	----
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	<0.02	<0.02	<0.02	----	----
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	**0.02**	<0.01	<0.01	----	----
Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L	<0.02	<0.02	<0.02	----	----

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)			Sample ID	SMW_BH019	SMW_BH038	R01_20220315	TS	TB
			Sampling date / time	15-Mar-2022 00:00	15-Mar-2022 00:00	15-Mar-2022 00:00	07-Mar-2022 00:00	09-Mar-2022 00:00
Compound	CAS Number	LOR	Unit	ES2209170-001	ES2209170-002	ES2209170-007	ES2209170-010	ES2209170-011
				Result	Result	Result	Result	Result
EP231B: Perfluoroalkyl Carboxylic Acids								
Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L	<0.1	<0.1	<0.1	----	----
Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	<0.02	<0.02	<0.02	----	----
Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	<0.02	<0.02	<0.02	----	----
Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	<0.02	<0.02	<0.02	----	----
Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	<0.01	<0.01	<0.01	----	----
Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L	<0.02	<0.02	<0.02	----	----
Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L	<0.02	<0.02	<0.02	----	----
Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L	<0.02	<0.02	<0.02	----	----
Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L	<0.02	<0.02	<0.02	----	----
Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L	<0.02	<0.02	<0.02	----	----
Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L	<0.05	<0.05	<0.05	----	----
EP231C: Perfluoroalkyl Sulfonamides								
Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	µg/L	<0.02	<0.02	<0.02	----	----
N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L	<0.05	<0.05	<0.05	----	----
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	µg/L	<0.05	<0.05	<0.05	----	----
N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L	<0.05	<0.05	<0.05	----	----
N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L	<0.05	<0.05	<0.05	----	----
N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.02	µg/L	<0.02	<0.02	<0.02	----	----
N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.02	µg/L	<0.02	<0.02	<0.02	----	----
EP231D: (n:2) Fluorotelomer Sulfonic Acids								
4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L	<0.05	<0.05	<0.05	----	----

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)			Sample ID	SMW_BH019	SMW_BH038	R01_20220315	TS	TB
			Sampling date / time	15-Mar-2022 00:00	15-Mar-2022 00:00	15-Mar-2022 00:00	07-Mar-2022 00:00	09-Mar-2022 00:00
Compound	CAS Number	LOR	Unit	ES2209170-001	ES2209170-002	ES2209170-007	ES2209170-010	ES2209170-011
				Result	Result	Result	Result	Result
EP231D: (n:2) Fluorotelomer Sulfonic Acids - Continued								
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.05	µg/L	<0.05	<0.05	<0.05	----	----
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.05	µg/L	<0.05	<0.05	<0.05	----	----
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.05	µg/L	<0.05	<0.05	<0.05	----	----
EP231P: PFAS Sums								
Sum of PFAS	----	0.01	µg/L	**0.02**	<0.01	<0.01	----	----
Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L	**0.02**	<0.01	<0.01	----	----
Sum of PFAS (WA DER List)	----	0.01	µg/L	**0.02**	<0.01	<0.01	----	----
EP074S: VOC Surrogates								
1.2-Dichloroethane-D4	17060-07-0	5	%	**93.3**	**109**	**104**	----	----
Toluene-D8	2037-26-5	5	%	**90.0**	**110**	**100**	----	----
4-Bromofluorobenzene	460-00-4	5	%	**81.8**	**93.6**	**87.8**	----	----
EP075(SIM)S: Phenolic Compound Surrogates								
Phenol-d6	13127-88-3	1.0	%	**26.0**	**22.8**	**21.2**	----	----
2-Chlorophenol-D4	93951-73-6	1.0	%	**58.7**	**45.5**	**49.1**	----	----
2.4.6-Tribromophenol	118-79-6	1.0	%	**70.0**	**44.9**	**48.4**	----	----
EP075(SIM)T: PAH Surrogates								
2-Fluorobiphenyl	321-60-8	1.0	%	**76.5**	**63.6**	**59.3**	----	----
Anthracene-d10	1719-06-8	1.0	%	**80.3**	**65.0**	**60.0**	----	----
4-Terphenyl-d14	1718-51-0	1.0	%	**84.8**	**62.6**	**57.8**	----	----
EP080S: TPH(V)/BTEX Surrogates								
1.2-Dichloroethane-D4	17060-07-0	2	%	**93.7**	**109**	**104**	**123**	**105**
Toluene-D8	2037-26-5	2	%	**85.8**	**105**	**96.1**	**130**	**109**
4-Bromofluorobenzene	460-00-4	2	%	**84.4**	**99.5**	**92.8**	**123**	**106**
EP231S: PFAS Surrogate								
13C4-PFOS	----	0.02	%	**82.9**	**80.9**	**84.4**	----	----
13C8-PFOA	----	0.02	%	**112**	**115**	**117**	----	----

Surrogate Control Limits

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

ALS Environmental

QUALITY CONTROL REPORT

Work Order	: **ES2209170**	Page	: 1 of 18
Client	: **ENVIRONMENTAL RESOURCES MANAGEMENT (ERM)**	Laboratory	: Environmental Division Sydney
Contact	: MS JESSICA LAWRENCE	Contact	: Customer Services ES
Address	: UNIT 11/277 LANE COVE ROAD MACQUARIE PARK 2113	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
Telephone	: +61 02 8584 8888	Telephone	: +61-2-8784 8555
Project	: 0628507 AFJV-SMW	Date Samples Received	: 15-Mar-2022
Order number	: N/A	Date Analysis Commenced	: 16-Mar-2022
C-O-C number	: ----	Issue Date	: 23-Mar-2022
Sampler	: WILLIAM OH		
Site	: ----		
Quote number	: EN/114		
No. of samples received	: 9		
No. of samples analysed	: 5		

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

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

This Quality Control Report contains the following information:

- Laboratory Duplicate (DUP) Report; Relative Percentage Difference (RPD) and Acceptance Limits
- Method Blank (MB) and Laboratory Control Spike (LCS) Report; Recovery and Acceptance Limits
- Matrix Spike (MS) Report; Recovery and Acceptance Limits

Signatories

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

Signatories	*Position*	*Accreditation Category*
Ankit Joshi	Senior Chemist - Inorganics	Sydney Inorganics, Smithfield, NSW
Edwandy Fadjar	Organic Coordinator	Sydney Organics, Smithfield, NSW
Franco Lentini	LCMS Coordinator	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.

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**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Acceptable RPD (%)
EA015: Total Dissolved Solids dried at 180 ± 5 °C (QC Lot: 4240031)									
ES2209170-001	SMW_BH019	EA015H: Total Dissolved Solids @180°C	----	10	mg/L	168	164	2.3	0% - 50%
ES2209368-002	Anonymous	EA015H: Total Dissolved Solids @180°C	----	10	mg/L	11800	12400	4.9	0% - 20%
ED037P: Alkalinity by PC Titrator (QC Lot: 4233640)									
ES2208669-006	Anonymous	ED037-P: Hydroxide Alkalinity as CaCO3	DMO-210-001	1	mg/L	<1	<1	0.0	No Limit
		ED037-P: Carbonate Alkalinity as CaCO3	3812-32-6	1	mg/L	<1	<1	0.0	No Limit
		ED037-P: Bicarbonate Alkalinity as CaCO3	71-52-3	1	mg/L	267	269	0.7	0% - 20%
		ED037-P: Total Alkalinity as CaCO3	----	1	mg/L	267	269	0.7	0% - 20%
ES2209161-001	Anonymous	ED037-P: Hydroxide Alkalinity as CaCO3	DMO-210-001	1	mg/L	<1	<1	0.0	No Limit
		ED037-P: Carbonate Alkalinity as CaCO3	3812-32-6	1	mg/L	<1	<1	0.0	No Limit
		ED037-P: Bicarbonate Alkalinity as CaCO3	71-52-3	1	mg/L	42	41	0.0	0% - 20%
		ED037-P: Total Alkalinity as CaCO3	----	1	mg/L	42	41	0.0	0% - 20%
ED041G: Sulfate (Turbidimetric) as SO4 2- by DA (QC Lot: 4229855)									
ES2208708-005	Anonymous	ED041G: Sulfate as SO4 - Turbidimetric	14808-79-8	1	mg/L	<10	<10	0.0	No Limit
ES2208708-014	Anonymous	ED041G: Sulfate as SO4 - Turbidimetric	14808-79-8	1	mg/L	2	2	0.0	No Limit
ED041G: Sulfate (Turbidimetric) as SO4 2- by DA (QC Lot: 4229860)									
ES2209170-007	R01_20220315	ED041G: Sulfate as SO4 - Turbidimetric	14808-79-8	1	mg/L	<1	<1	0.0	No Limit
ED045G: Chloride by Discrete Analyser (QC Lot: 4229858)									
ES2209170-001	SMW_BH019	ED045G: Chloride	16887-00-6	1	mg/L	12	12	0.0	0% - 50%
ED093F: Dissolved Major Cations (QC Lot: 4238245)									
ES2209170-001	SMW_BH019	ED093F: Calcium	7440-70-2	1	mg/L	18	18	0.0	0% - 50%
		ED093F: Magnesium	7439-95-4	1	mg/L	5	5	0.0	No Limit
		ED093F: Sodium	7440-23-5	1	mg/L	16	16	0.0	0% - 50%
		ED093F: Potassium	7440-09-7	1	mg/L	6	6	0.0	No Limit

Sub-Matrix: **WATER**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Acceptable RPD (%)
ED093F: Dissolved Major Cations (QC Lot: 4238245) - continued									
ES2209299-004	Anonymous	ED093F: Calcium	7440-70-2	1	mg/L	2	2	0.0	No Limit
		ED093F: Magnesium	7439-95-4	1	mg/L	<1	<1	0.0	No Limit
		ED093F: Sodium	7440-23-5	1	mg/L	253	252	0.5	0% - 20%
		ED093F: Potassium	7440-09-7	1	mg/L	7	7	0.0	No Limit
EG020F: Dissolved Metals by ICP-MS (QC Lot: 4238244)									
ES2209170-001	SMW_BH019	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	0.027	0.027	0.0	0% - 20%
		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	0.004	0.004	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	0.004	0.004	0.0	No Limit
		EG020A-F: Zinc	7440-66-6	0.005	mg/L	0.016	0.015	0.0	No Limit
ES2209299-004	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	0.021	0.021	0.0	0% - 20%
		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	<0.001	<0.001	0.0	No Limit
		EG020A-F: Zinc	7440-66-6	0.005	mg/L	0.006	0.006	0.0	No Limit
EG035F: Dissolved Mercury by FIMS (QC Lot: 4238246)									
ES2209187-001	Anonymous	EG035F: Mercury	7439-97-6	0.0001	mg/L	<0.0001	<0.0001	0.0	No Limit
ES2209187-011	Anonymous	EG035F: Mercury	7439-97-6	0.0001	mg/L	<0.0001	<0.0001	0.0	No Limit
EG051G: Ferrous Iron by Discrete Analyser (QC Lot: 4232112)									
ES2208926-003	Anonymous	EG051G: Ferrous Iron	----	0.05	mg/L	8.66	8.67	0.0	0% - 20%
--------		EG051G: Ferrous Iron	----	0.05	mg/L	----	0.14	60.6	No Limit
EK055G: Ammonia as N by Discrete Analyser (QC Lot: 4237905)									
ES2207081-001	Anonymous	EK055G: Ammonia as N	7664-41-7	0.01	mg/L	0.01	<0.01	0.0	No Limit
ES2209153-004	Anonymous	EK055G: Ammonia as N	7664-41-7	0.01	mg/L	<0.10	<0.10	0.0	No Limit
EK057G: Nitrite as N by Discrete Analyser (QC Lot: 4229859)									
ES2209170-001	SMW_BH019	EK057G: Nitrite as N	14797-65-0	0.01	mg/L	0.03	0.03	0.0	No Limit
EW2201280-001	Anonymous	EK057G: Nitrite as N	14797-65-0	0.01	mg/L	0.02	0.02	0.0	No Limit
EK059G: Nitrite plus Nitrate as N (NOx) by Discrete Analyser (QC Lot: 4237906)									
ES2207081-001	Anonymous	EK059G: Nitrite + Nitrate as N	----	0.01	mg/L	<0.01	<0.01	0.0	No Limit
ES2209153-004	Anonymous	EK059G: Nitrite + Nitrate as N	----	0.01	mg/L	<0.10	<0.10	0.0	No Limit
EK061G: Total Kjeldahl Nitrogen By Discrete Analyser (QC Lot: 4237902)									
ES2207081-001	Anonymous	EK061G: Total Kjeldahl Nitrogen as N	----	0.1	mg/L	0.1	<0.1	0.0	No Limit
ES2209187-001	Anonymous	EK061G: Total Kjeldahl Nitrogen as N	----	0.1	mg/L	0.9	0.6	48.7	No Limit
EK067G: Total Phosphorus as P by Discrete Analyser (QC Lot: 4237901)									
ES2209153-001	Anonymous	EK067G: Total Phosphorus as P	----	0.01	mg/L	5.31	5.17	2.7	0% - 20%

Sub-Matrix: **WATER**

Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Laboratory Duplicate (DUP) Report					
				LOR	Unit	Original Result	Duplicate Result	RPD (%)	Acceptable RPD (%)
EK067G: Total Phosphorus as P by Discrete Analyser (QC Lot: 4237901) - continued									
ES2207081-001	Anonymous	EK067G: Total Phosphorus as P	----	0.01	mg/L	0.04	0.04	0.0	No Limit
EP033: C1 - C4 Hydrocarbon Gases (QC Lot: 4230872)									
EB2207005-001	Anonymous	EP033: Methane	74-82-8	10	µg/L	496	496	0.0	0% - 20%
EP074A: Monocyclic Aromatic Hydrocarbons (QC Lot: 4229780)									
ES2208177-001	Anonymous	EP074: Styrene	100-42-5	5	µg/L	<5	<5	0.0	No Limit
		EP074: Isopropylbenzene	98-82-8	5	µg/L	<5	<5	0.0	No Limit
		EP074: n-Propylbenzene	103-65-1	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.3.5-Trimethylbenzene	108-67-8	5	µg/L	<5	<5	0.0	No Limit
		EP074: sec-Butylbenzene	135-98-8	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.2.4-Trimethylbenzene	95-63-6	5	µg/L	<5	<5	0.0	No Limit
		EP074: tert-Butylbenzene	98-06-6	5	µg/L	<5	<5	0.0	No Limit
		EP074: p-Isopropyltoluene	99-87-6	5	µg/L	<5	<5	0.0	No Limit
		EP074: n-Butylbenzene	104-51-8	5	µg/L	<5	<5	0.0	No Limit
ES2208957-001	Anonymous	EP074: Styrene	100-42-5	5	µg/L	<5	<5	0.0	No Limit
		EP074: Isopropylbenzene	98-82-8	5	µg/L	<5	<5	0.0	No Limit
		EP074: n-Propylbenzene	103-65-1	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.3.5-Trimethylbenzene	108-67-8	5	µg/L	<5	<5	0.0	No Limit
		EP074: sec-Butylbenzene	135-98-8	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.2.4-Trimethylbenzene	95-63-6	5	µg/L	<5	<5	0.0	No Limit
		EP074: tert-Butylbenzene	98-06-6	5	µg/L	<5	<5	0.0	No Limit
		EP074: p-Isopropyltoluene	99-87-6	5	µg/L	<5	<5	0.0	No Limit
		EP074: n-Butylbenzene	104-51-8	5	µg/L	<5	<5	0.0	No Limit
EP074B: Oxygenated Compounds (QC Lot: 4229780)									
ES2208177-001	Anonymous	EP074: Vinyl Acetate	108-05-4	50	µg/L	<50	<50	0.0	No Limit
		EP074: 2-Butanone (MEK)	78-93-3	50	µg/L	<50	<50	0.0	No Limit
		EP074: 4-Methyl-2-pentanone (MIBK)	108-10-1	50	µg/L	<50	<50	0.0	No Limit
		EP074: 2-Hexanone (MBK)	591-78-6	50	µg/L	<50	<50	0.0	No Limit
ES2208957-001	Anonymous	EP074: Vinyl Acetate	108-05-4	50	µg/L	<50	<50	0.0	No Limit
		EP074: 2-Butanone (MEK)	78-93-3	50	µg/L	<50	<50	0.0	No Limit
		EP074: 4-Methyl-2-pentanone (MIBK)	108-10-1	50	µg/L	<50	<50	0.0	No Limit
		EP074: 2-Hexanone (MBK)	591-78-6	50	µg/L	<50	<50	0.0	No Limit
EP074C: Sulfonated Compounds (QC Lot: 4229780)									
ES2208177-001	Anonymous	EP074: Carbon disulfide	75-15-0	5	µg/L	<5	<5	0.0	No Limit
ES2208957-001	Anonymous	EP074: Carbon disulfide	75-15-0	5	µg/L	<5	<5	0.0	No Limit
EP074D: Fumigants (QC Lot: 4229780)									
ES2208177-001	Anonymous	EP074: 2.2-Dichloropropane	594-20-7	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.2-Dichloropropane	78-87-5	5	µg/L	<5	<5	0.0	No Limit
		EP074: cis-1.3-Dichloropropylene	10061-01-5	5	µg/L	<5	<5	0.0	No Limit
		EP074: trans-1.3-Dichloropropylene	10061-02-6	5	µg/L	<5	<5	0.0	No Limit

Sub-Matrix: **WATER**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Acceptable RPD (%)*
EP074D: Fumigants (QC Lot: 4229780) - continued									
ES2208177-001	Anonymous	EP074: 1.2-Dibromoethane (EDB)	106-93-4	5	µg/L	<5	<5	0.0	No Limit
ES2208957-001	Anonymous	EP074: 2.2-Dichloropropane	594-20-7	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.2-Dichloropropane	78-87-5	5	µg/L	<5	<5	0.0	No Limit
		EP074: cis-1.3-Dichloropropylene	10061-01-5	5	µg/L	<5	<5	0.0	No Limit
		EP074: trans-1.3-Dichloropropylene	10061-02-6	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.2-Dibromoethane (EDB)	106-93-4	5	µg/L	<5	<5	0.0	No Limit
EP074E: Halogenated Aliphatic Compounds (QC Lot: 4229780)									
ES2208177-001	Anonymous	EP074: 1.1-Dichloroethene	75-35-4	5	µg/L	<5	<5	0.0	No Limit
		EP074: Iodomethane	74-88-4	5	µg/L	<5	<5	0.0	No Limit
		EP074: trans-1.2-Dichloroethene	156-60-5	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.1-Dichloroethane	75-34-3	5	µg/L	<5	<5	0.0	No Limit
		EP074: cis-1.2-Dichloroethene	156-59-2	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.1.1-Trichloroethane	71-55-6	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.1-Dichloropropylene	563-58-6	5	µg/L	<5	<5	0.0	No Limit
		EP074: Carbon Tetrachloride	56-23-5	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.2-Dichloroethane	107-06-2	5	µg/L	<5	<5	0.0	No Limit
		EP074: Trichloroethene	79-01-6	5	µg/L	<5	<5	0.0	No Limit
		EP074: Dibromomethane	74-95-3	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.1.2-Trichloroethane	79-00-5	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.3-Dichloropropane	142-28-9	5	µg/L	<5	<5	0.0	No Limit
		EP074: Tetrachloroethene	127-18-4	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.1.1.2-Tetrachloroethane	630-20-6	5	µg/L	<5	<5	0.0	No Limit
		EP074: trans-1.4-Dichloro-2-butene	110-57-6	5	µg/L	<5	<5	0.0	No Limit
		EP074: cis-1.4-Dichloro-2-butene	1476-11-5	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.1.2.2-Tetrachloroethane	79-34-5	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.2.3-Trichloropropane	96-18-4	5	µg/L	<5	<5	0.0	No Limit
		EP074: Pentachloroethane	76-01-7	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.2-Dibromo-3-chloropropane	96-12-8	5	µg/L	<5	<5	0.0	No Limit
		EP074: Hexachlorobutadiene	87-68-3	5	µg/L	<5	<5	0.0	No Limit
		EP074: Dichlorodifluoromethane	75-71-8	50	µg/L	<50	<50	0.0	No Limit
		EP074: Chloromethane	74-87-3	50	µg/L	<50	<50	0.0	No Limit
		EP074: Vinyl chloride	75-01-4	50	µg/L	<50	<50	0.0	No Limit
		EP074: Bromomethane	74-83-9	50	µg/L	<50	<50	0.0	No Limit
		EP074: Chloroethane	75-00-3	50	µg/L	<50	<50	0.0	No Limit
		EP074: Trichlorofluoromethane	75-69-4	50	µg/L	<50	<50	0.0	No Limit
ES2208957-001	Anonymous	EP074: 1.1-Dichloroethene	75-35-4	5	µg/L	<5	<5	0.0	No Limit
		EP074: Iodomethane	74-88-4	5	µg/L	<5	<5	0.0	No Limit
		EP074: trans-1.2-Dichloroethene	156-60-5	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.1-Dichloroethane	75-34-3	5	µg/L	<5	<5	0.0	No Limit
		EP074: cis-1.2-Dichloroethene	156-59-2	5	µg/L	<5	<5	0.0	No Limit

Sub-Matrix: **WATER**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Acceptable RPD (%)
EP074E: Halogenated Aliphatic Compounds (QC Lot: 4229780) - continued									
ES2208957-001	Anonymous	EP074: 1.1.1-Trichloroethane	71-55-6	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.1-Dichloropropylene	563-58-6	5	µg/L	<5	<5	0.0	No Limit
		EP074: Carbon Tetrachloride	56-23-5	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.2-Dichloroethane	107-06-2	5	µg/L	<5	<5	0.0	No Limit
		EP074: Trichloroethene	79-01-6	5	µg/L	<5	<5	0.0	No Limit
		EP074: Dibromomethane	74-95-3	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.1.2-Trichloroethane	79-00-5	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.3-Dichloropropane	142-28-9	5	µg/L	<5	<5	0.0	No Limit
		EP074: Tetrachloroethene	127-18-4	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.1.1.2-Tetrachloroethane	630-20-6	5	µg/L	<5	<5	0.0	No Limit
		EP074: trans-1.4-Dichloro-2-butene	110-57-6	5	µg/L	<5	<5	0.0	No Limit
		EP074: cis-1.4-Dichloro-2-butene	1476-11-5	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.1.2.2-Tetrachloroethane	79-34-5	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.2.3-Trichloropropane	96-18-4	5	µg/L	<5	<5	0.0	No Limit
		EP074: Pentachloroethane	76-01-7	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.2-Dibromo-3-chloropropane	96-12-8	5	µg/L	<5	<5	0.0	No Limit
		EP074: Hexachlorobutadiene	87-68-3	5	µg/L	<5	<5	0.0	No Limit
		EP074: Dichlorodifluoromethane	75-71-8	50	µg/L	<50	<50	0.0	No Limit
		EP074: Chloromethane	74-87-3	50	µg/L	<50	<50	0.0	No Limit
		EP074: Vinyl chloride	75-01-4	50	µg/L	<50	<50	0.0	No Limit
		EP074: Bromomethane	74-83-9	50	µg/L	<50	<50	0.0	No Limit
		EP074: Chloroethane	75-00-3	50	µg/L	<50	<50	0.0	No Limit
		EP074: Trichlorofluoromethane	75-69-4	50	µg/L	<50	<50	0.0	No Limit
EP074F: Halogenated Aromatic Compounds (QC Lot: 4229780)									
ES2208177-001	Anonymous	EP074: Chlorobenzene	108-90-7	5	µg/L	<5	<5	0.0	No Limit
		EP074: Bromobenzene	108-86-1	5	µg/L	<5	<5	0.0	No Limit
		EP074: 2-Chlorotoluene	95-49-8	5	µg/L	<5	<5	0.0	No Limit
		EP074: 4-Chlorotoluene	106-43-4	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.3-Dichlorobenzene	541-73-1	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.4-Dichlorobenzene	106-46-7	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.2-Dichlorobenzene	95-50-1	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.2.4-Trichlorobenzene	120-82-1	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.2.3-Trichlorobenzene	87-61-6	5	µg/L	<5	<5	0.0	No Limit
ES2208957-001	Anonymous	EP074: Chlorobenzene	108-90-7	5	µg/L	<5	<5	0.0	No Limit
		EP074: Bromobenzene	108-86-1	5	µg/L	<5	<5	0.0	No Limit
		EP074: 2-Chlorotoluene	95-49-8	5	µg/L	<5	<5	0.0	No Limit
		EP074: 4-Chlorotoluene	106-43-4	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.3-Dichlorobenzene	541-73-1	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.4-Dichlorobenzene	106-46-7	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.2-Dichlorobenzene	95-50-1	5	µg/L	<5	<5	0.0	No Limit

Sub-Matrix: **WATER**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Acceptable RPD (%)*
EP074F: Halogenated Aromatic Compounds (QC Lot: 4229780) - continued									
ES2208957-001	Anonymous	EP074: 1.2.4-Trichlorobenzene	120-82-1	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.2.3-Trichlorobenzene	87-61-6	5	µg/L	<5	<5	0.0	No Limit
EP074G: Trihalomethanes (QC Lot: 4229780)									
ES2208177-001	Anonymous	EP074: Chloroform	67-66-3	5	µg/L	<5	<5	0.0	No Limit
		EP074: Bromodichloromethane	75-27-4	5	µg/L	<5	<5	0.0	No Limit
		EP074: Dibromochloromethane	124-48-1	5	µg/L	<5	<5	0.0	No Limit
		EP074: Bromoform	75-25-2	5	µg/L	<5	<5	0.0	No Limit
ES2208957-001	Anonymous	EP074: Chloroform	67-66-3	5	µg/L	<5	<5	0.0	No Limit
		EP074: Bromodichloromethane	75-27-4	5	µg/L	<5	<5	0.0	No Limit
		EP074: Dibromochloromethane	124-48-1	5	µg/L	<5	<5	0.0	No Limit
		EP074: Bromoform	75-25-2	5	µg/L	<5	<5	0.0	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 4229779)									
ES2208177-001	Anonymous	EP080: C6 - C9 Fraction	----	20	µg/L	<20	<20	0.0	No Limit
ES2208957-001	Anonymous	EP080: C6 - C9 Fraction	----	20	µg/L	<20	<20	0.0	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 4238752)									
ES2209190-001	Anonymous	EP080: C6 - C9 Fraction	----	20	µg/L	<20	<20	0.0	No Limit
ES2209190-004	Anonymous	EP080: C6 - C9 Fraction	----	20	µg/L	60	60	0.0	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 4229779)									
ES2208177-001	Anonymous	EP080: C6 - C10 Fraction	C6_C10	20	µg/L	<20	<20	0.0	No Limit
ES2208957-001	Anonymous	EP080: C6 - C10 Fraction	C6_C10	20	µg/L	<20	<20	0.0	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 4238752)									
ES2209190-001	Anonymous	EP080: C6 - C10 Fraction	C6_C10	20	µg/L	<20	<20	0.0	No Limit
ES2209190-004	Anonymous	EP080: C6 - C10 Fraction	C6_C10	20	µg/L	40	40	0.0	No Limit
EP080: BTEXN (QC Lot: 4229779)									
ES2208177-001	Anonymous	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	108-38-3 106-42-3	2	µg/L	<2	<2	0.0	No Limit
		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
ES2208957-001	Anonymous	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	108-38-3 106-42-3	2	µg/L	<2	<2	0.0	No Limit
		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
EP080: BTEXN (QC Lot: 4238752)									

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: 4238752) - continued									
ES2209190-001	Anonymous	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	108-38-3 106-42-3	2	µg/L	<2	<2	0.0	No Limit
		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
ES2209190-004	Anonymous	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	108-38-3 106-42-3	2	µg/L	<2	<2	0.0	No Limit
		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
EP231A: Perfluoroalkyl Sulfonic Acids (QC Lot: 4237105)									
EP2203094-013	Anonymous	EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L	<0.02	<0.02	0.0	No Limit
EP231B: Perfluoroalkyl Carboxylic Acids (QC Lot: 4237105)									
EP2203094-013	Anonymous	EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L	<0.1	<0.1	0.0	No Limit
EP231C: Perfluoroalkyl Sulfonamides (QC Lot: 4237105)									
EP2203094-013	Anonymous	EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.02	µg/L	<0.02	<0.02	0.0	No Limit

Sub-Matrix: **WATER**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Acceptable RPD (%)*
EP231C: Perfluoroalkyl Sulfonamides (QC Lot: 4237105) - continued									
EP2203094-013	Anonymous	EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L	<0.05	<0.05	0.0	No Limit
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QC Lot: 4237105)									
EP2203094-013	Anonymous	EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.05	µg/L	<0.05	<0.05	0.0	No Limit
EP231P: PFAS Sums (QC Lot: 4237105)									
EP2203094-013	Anonymous	EP231X: Sum of PFAS	----	0.01	µg/L	<0.01	<0.01	0.0	No Limit

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

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

Sub-Matrix: **WATER**

				Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Acceptable Limits (%)	
Method: Compound	CAS Number	LOR	Unit	Result	Concentration	LCS	Low	High
EA015: Total Dissolved Solids dried at 180 ± 5 °C (QCLot: 4240031)								
EA015H: Total Dissolved Solids @180°C	----	10	mg/L	<10	2000 mg/L	101	87.0	109
				<10	293 mg/L	103	75.2	126
				<10	2835 mg/L	104	83.0	124
ED037P: Alkalinity by PC Titrator (QCLot: 4233640)								
ED037-P: Total Alkalinity as CaCO3	----	----	mg/L	----	200 mg/L	100	81.0	111
				----	50 mg/L	114	80.0	120
ED041G: Sulfate (Turbidimetric) as SO4 2- by DA (QCLot: 4229855)								
ED041G: Sulfate as SO4 - Turbidimetric	14808-79-8	1	mg/L	<1	25 mg/L	95.5	82.0	122
				<1	500 mg/L	108	82.0	122
ED041G: Sulfate (Turbidimetric) as SO4 2- by DA (QCLot: 4229860)								
ED041G: Sulfate as SO4 - Turbidimetric	14808-79-8	1	mg/L	<1	25 mg/L	95.6	82.0	122
				<1	500 mg/L	108	82.0	122
ED045G: Chloride by Discrete Analyser (QCLot: 4229858)								
ED045G: Chloride	16887-00-6	1	mg/L	<1	50 mg/L	95.7	80.9	127
				<1	1000 mg/L	98.0	80.9	127
ED093F: Dissolved Major Cations (QCLot: 4238245)								
ED093F: Calcium	7440-70-2	1	mg/L	<1	50 mg/L	106	80.0	114
ED093F: Magnesium	7439-95-4	1	mg/L	<1	50 mg/L	95.8	90.0	116
ED093F: Sodium	7440-23-5	1	mg/L	<1	50 mg/L	97.8	82.0	120
ED093F: Potassium	7440-09-7	1	mg/L	<1	50 mg/L	104	85.0	113
EG020F: Dissolved Metals by ICP-MS (QCLot: 4238244)								
EG020A-F: Arsenic	7440-38-2	0.001	mg/L	<0.001	0.1 mg/L	91.2	85.0	114
EG020A-F: Cadmium	7440-43-9	0.0001	mg/L	<0.0001	0.1 mg/L	91.3	84.0	110
EG020A-F: Chromium	7440-47-3	0.001	mg/L	<0.001	0.1 mg/L	91.5	85.0	111
EG020A-F: Copper	7440-50-8	0.001	mg/L	<0.001	0.1 mg/L	90.9	81.0	111
EG020A-F: Lead	7439-92-1	0.001	mg/L	<0.001	0.1 mg/L	88.0	83.0	111
EG020A-F: Nickel	7440-02-0	0.001	mg/L	<0.001	0.1 mg/L	92.0	82.0	112
EG020A-F: Zinc	7440-66-6	0.005	mg/L	<0.005	0.1 mg/L	90.9	81.0	117
EG035F: Dissolved Mercury by FIMS (QCLot: 4238246)								
EG035F: Mercury	7439-97-6	0.0001	mg/L	<0.0001	0.01 mg/L	97.8	83.0	105
EG051G: Ferrous Iron by Discrete Analyser (QCLot: 4232112)								
EG051G: Ferrous Iron	----	0.05	mg/L	<0.05	2 mg/L	94.6	89.0	117
EK055G: Ammonia as N by Discrete Analyser (QCLot: 4237905)								

Sub-Matrix: **WATER**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Acceptable Limits (%)	
				Result	Concentration	LCS	Low	High
EK055G: Ammonia as N by Discrete Analyser (QCLot: 4237905) - continued								
EK055G: Ammonia as N	7664-41-7	0.01	mg/L	<0.01	1 mg/L	105	90.0	114
EK057G: Nitrite as N by Discrete Analyser (QCLot: 4229859)								
EK057G: Nitrite as N	14797-65-0	0.01	mg/L	<0.01	0.5 mg/L	101	82.0	114
EK059G: Nitrite plus Nitrate as N (NOx) by Discrete Analyser (QCLot: 4237906)								
EK059G: Nitrite + Nitrate as N	----	0.01	mg/L	<0.01	0.5 mg/L	103	91.0	113
EK061G: Total Kjeldahl Nitrogen By Discrete Analyser (QCLot: 4237902)								
EK061G: Total Kjeldahl Nitrogen as N	----	0.1	mg/L	<0.1	10 mg/L	91.5	69.0	101
				<0.1	1 mg/L	95.6	70.0	118
				<0.1	5 mg/L	95.1	70.0	130
EK067G: Total Phosphorus as P by Discrete Analyser (QCLot: 4237901)								
EK067G: Total Phosphorus as P	----	0.01	mg/L	<0.01	4.42 mg/L	92.4	71.3	126
				<0.01	0.442 mg/L	95.4	71.3	126
				<0.01	1 mg/L	94.4	71.3	126
EP033: C1 - C4 Hydrocarbon Gases (QCLot: 4230872)								
EP033: Methane	74-82-8	10	µg/L	<10	28.48 µg/L	103	86.0	114
EP074A: Monocyclic Aromatic Hydrocarbons (QCLot: 4229780)								
EP074: Styrene	100-42-5	5	µg/L	<5	10 µg/L	100	73.0	119
EP074: Isopropylbenzene	98-82-8	5	µg/L	<5	10 µg/L	104	76.0	118
EP074: n-Propylbenzene	103-65-1	5	µg/L	<5	10 µg/L	105	69.0	119
EP074: 1.3.5-Trimethylbenzene	108-67-8	5	µg/L	<5	10 µg/L	106	74.0	116
EP074: sec-Butylbenzene	135-98-8	5	µg/L	<5	10 µg/L	103	73.0	119
EP074: 1.2.4-Trimethylbenzene	95-63-6	5	µg/L	<5	10 µg/L	101	74.0	116
EP074: tert-Butylbenzene	98-06-6	5	µg/L	<5	10 µg/L	102	72.0	116
EP074: p-Isopropyltoluene	99-87-6	5	µg/L	<5	10 µg/L	108	71.0	119
EP074: n-Butylbenzene	104-51-8	5	µg/L	<5	10 µg/L	107	65.0	123
EP074B: Oxygenated Compounds (QCLot: 4229780)								
EP074: Vinyl Acetate	108-05-4	50	µg/L	<50	100 µg/L	125	61.4	134
EP074: 2-Butanone (MEK)	78-93-3	50	µg/L	<50	100 µg/L	74.5	73.6	130
EP074: 4-Methyl-2-pentanone (MIBK)	108-10-1	50	µg/L	<50	100 µg/L	89.4	66.0	132
EP074: 2-Hexanone (MBK)	591-78-6	50	µg/L	<50	100 µg/L	65.8	65.0	137
EP074C: Sulfonated Compounds (QCLot: 4229780)								
EP074: Carbon disulfide	75-15-0	5	µg/L	<5	10 µg/L	99.6	72.8	127
EP074D: Fumigants (QCLot: 4229780)								
EP074: 2.2-Dichloropropane	594-20-7	5	µg/L	<5	10 µg/L	105	68.0	122
EP074: 1.2-Dichloropropane	78-87-5	5	µg/L	<5	10 µg/L	103	76.0	118
EP074: cis-1.3-Dichloropropylene	10061-01-5	5	µg/L	<5	10 µg/L	99.0	62.0	120
EP074: trans-1.3-Dichloropropylene	10061-02-6	5	µg/L	<5	10 µg/L	98.4	60.0	114
EP074: 1.2-Dibromoethane (EDB)	106-93-4	5	µg/L	<5	10 µg/L	104	69.0	117

Sub-Matrix: **WATER**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Acceptable Limits (%)	
				Result	Concentration	LCS	Low	High
EP074E: Halogenated Aliphatic Compounds (QCLot: 4229780)								
EP074: Dichlorodifluoromethane	75-71-8	50	µg/L	<50	100 µg/L	106	60.6	138
EP074: Chloromethane	74-87-3	50	µg/L	<50	100 µg/L	104	67.4	130
EP074: Vinyl chloride	75-01-4	50	µg/L	<50	100 µg/L	106	69.4	129
EP074: Bromomethane	74-83-9	50	µg/L	<50	100 µg/L	92.9	56.0	140
EP074: Chloroethane	75-00-3	50	µg/L	<50	100 µg/L	103	61.0	139
EP074: Trichlorofluoromethane	75-69-4	50	µg/L	<50	100 µg/L	103	69.0	131
EP074: 1.1-Dichloroethene	75-35-4	5	µg/L	<5	10 µg/L	102	70.0	124
EP074: Iodomethane	74-88-4	5	µg/L	<5	10 µg/L	86.9	70.2	128
EP074: trans-1.2-Dichloroethene	156-60-5	5	µg/L	<5	10 µg/L	103	74.0	118
EP074: 1.1-Dichloroethane	75-34-3	5	µg/L	<5	10 µg/L	102	74.0	120
EP074: cis-1.2-Dichloroethene	156-59-2	5	µg/L	<5	10 µg/L	105	77.0	119
EP074: 1.1.1-Trichloroethane	71-55-6	5	µg/L	<5	10 µg/L	100	67.0	119
EP074: 1.1-Dichloropropylene	563-58-6	5	µg/L	<5	10 µg/L	104	73.0	119
EP074: Carbon Tetrachloride	56-23-5	5	µg/L	<5	10 µg/L	103	62.0	120
EP074: 1.2-Dichloroethane	107-06-2	5	µg/L	<5	10 µg/L	106	73.0	123
EP074: Trichloroethene	79-01-6	5	µg/L	<5	10 µg/L	103	76.0	118
EP074: Dibromomethane	74-95-3	5	µg/L	<5	10 µg/L	110	73.0	119
EP074: 1.1.2-Trichloroethane	79-00-5	5	µg/L	<5	10 µg/L	104	72.0	126
EP074: 1.3-Dichloropropane	142-28-9	5	µg/L	<5	10 µg/L	101	71.0	129
EP074: Tetrachloroethene	127-18-4	5	µg/L	<5	10 µg/L	82.9	72.0	124
EP074: 1.1.1.2-Tetrachloroethane	630-20-6	5	µg/L	<5	10 µg/L	103	66.0	114
EP074: trans-1.4-Dichloro-2-butene	110-57-6	5	µg/L	<5	10 µg/L	101	60.0	120
EP074: cis-1.4-Dichloro-2-butene	1476-11-5	5	µg/L	<5	10 µg/L	95.7	70.6	128
EP074: 1.1.2.2-Tetrachloroethane	79-34-5	5	µg/L	<5	10 µg/L	108	70.0	124
EP074: 1.2.3-Trichloropropane	96-18-4	5	µg/L	<5	10 µg/L	99.1	74.0	126
EP074: Pentachloroethane	76-01-7	5	µg/L	<5	10 µg/L	125	71.8	126
EP074: 1.2-Dibromo-3-chloropropane	96-12-8	5	µg/L	<5	10 µg/L	104	66.4	136
EP074: Hexachlorobutadiene	87-68-3	5	µg/L	<5	10 µg/L	106	58.0	130
EP074F: Halogenated Aromatic Compounds (QCLot: 4229780)								
EP074: Chlorobenzene	108-90-7	5	µg/L	<5	10 µg/L	106	79.0	117
EP074: Bromobenzene	108-86-1	5	µg/L	<5	10 µg/L	106	76.0	116
EP074: 2-Chlorotoluene	95-49-8	5	µg/L	<5	10 µg/L	108	73.0	119
EP074: 4-Chlorotoluene	106-43-4	5	µg/L	<5	10 µg/L	105	73.0	119
EP074: 1.3-Dichlorobenzene	541-73-1	5	µg/L	<5	10 µg/L	103	75.0	117
EP074: 1.4-Dichlorobenzene	106-46-7	5	µg/L	<5	10 µg/L	103	74.0	118
EP074: 1.2-Dichlorobenzene	95-50-1	5	µg/L	<5	10 µg/L	106	75.0	117
EP074: 1.2.4-Trichlorobenzene	120-82-1	5	µg/L	<5	10 µg/L	109	61.0	125
EP074: 1.2.3-Trichlorobenzene	87-61-6	5	µg/L	<5	10 µg/L	114	67.0	123
EP074G: Trihalomethanes (QCLot: 4229780)								

Sub-Matrix: **WATER**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Acceptable Limits (%)	
				Result	Concentration	LCS	Low	High
EP074G: Trihalomethanes (QCLot: 4229780) - continued								
EP074: Chloroform	67-66-3	5	µg/L	<5	10 µg/L	104	72.0	120
EP074: Bromodichloromethane	75-27-4	5	µg/L	<5	10 µg/L	101	64.0	118
EP074: Dibromochloromethane	124-48-1	5	µg/L	<5	10 µg/L	100	65.0	115
EP074: Bromoform	75-25-2	5	µg/L	<5	10 µg/L	99.4	73.5	126
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 4229931)								
EP075(SIM): Naphthalene	91-20-3	1	µg/L	<1.0	5 µg/L	58.7	50.0	94.0
EP075(SIM): Acenaphthylene	208-96-8	1	µg/L	<1.0	5 µg/L	65.4	63.6	114
EP075(SIM): Acenaphthene	83-32-9	1	µg/L	<1.0	5 µg/L	65.1	62.2	113
EP075(SIM): Fluorene	86-73-7	1	µg/L	<1.0	5 µg/L	70.3	63.9	115
EP075(SIM): Phenanthrene	85-01-8	1	µg/L	<1.0	5 µg/L	78.4	62.6	116
EP075(SIM): Anthracene	120-12-7	1	µg/L	<1.0	5 µg/L	67.8	64.3	116
EP075(SIM): Fluoranthene	206-44-0	1	µg/L	<1.0	5 µg/L	93.8	63.6	118
EP075(SIM): Pyrene	129-00-0	1	µg/L	<1.0	5 µg/L	94.9	63.1	118
EP075(SIM): Benz(a)anthracene	56-55-3	1	µg/L	<1.0	5 µg/L	85.7	64.1	117
EP075(SIM): Chrysene	218-01-9	1	µg/L	<1.0	5 µg/L	94.1	62.5	116
EP075(SIM): Benzo(b+j)fluoranthene	205-99-2 205-82-3	1	µg/L	<1.0	5 µg/L	104	61.7	119
EP075(SIM): Benzo(k)fluoranthene	207-08-9	1	µg/L	<1.0	5 µg/L	76.2	63.0	115
EP075(SIM): Benzo(a)pyrene	50-32-8	0.5	µg/L	<0.5	5 µg/L	87.6	63.3	117
EP075(SIM): Indeno(1.2.3.cd)pyrene	193-39-5	1	µg/L	<1.0	5 µg/L	88.6	59.9	118
EP075(SIM): Dibenz(a.h)anthracene	53-70-3	1	µg/L	<1.0	5 µg/L	90.4	61.2	117
EP075(SIM): Benzo(g.h.i)perylene	191-24-2	1	µg/L	<1.0	5 µg/L	86.5	59.1	118
EP080/071: Total Petroleum Hydrocarbons (QCLot: 4229779)								
EP080: C6 - C9 Fraction	----	20	µg/L	<20	260 µg/L	81.2	75.0	127
EP080/071: Total Petroleum Hydrocarbons (QCLot: 4229930)								
EP071: C10 - C14 Fraction	----	50	µg/L	<50	400 µg/L	74.4	55.8	112
EP071: C15 - C28 Fraction	----	100	µg/L	<100	600 µg/L	87.6	71.6	113
EP071: C29 - C36 Fraction	----	50	µg/L	<50	400 µg/L	85.3	56.0	121
EP080/071: Total Petroleum Hydrocarbons (QCLot: 4238752)								
EP080: C6 - C9 Fraction	----	20	µg/L	<20	260 µg/L	94.7	75.0	127
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 4229779)								
EP080: C6 - C10 Fraction	C6_C10	20	µg/L	<20	310 µg/L	75.2	75.0	127
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 4229930)								
EP071: >C10 - C16 Fraction	----	100	µg/L	<100	500 µg/L	71.5	57.9	119
EP071: >C16 - C34 Fraction	----	100	µg/L	<100	700 µg/L	83.6	62.5	110
EP071: >C34 - C40 Fraction	----	100	µg/L	<100	300 µg/L	80.9	61.5	121
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 4238752)								
EP080: C6 - C10 Fraction	C6_C10	20	µg/L	<20	310 µg/L	96.4	75.0	127

Sub-Matrix: **WATER**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Acceptable Limits (%)	
				Result	Concentration	LCS	Low	High
EP080: BTEXN (QCLot: 4229779)								
EP080: Benzene	71-43-2	1	µg/L	<1	10 µg/L	99.0	70.0	122
EP080: Toluene	108-88-3	2	µg/L	<2	10 µg/L	97.4	69.0	123
EP080: Ethylbenzene	100-41-4	2	µg/L	<2	10 µg/L	96.6	70.0	120
EP080: meta- & para-Xylene	108-38-3 106-42-3	2	µg/L	<2	10 µg/L	98.2	69.0	121
EP080: ortho-Xylene	95-47-6	2	µg/L	<2	10 µg/L	98.0	72.0	122
EP080: Naphthalene	91-20-3	5	µg/L	<5	10 µg/L	110	70.0	120
EP080: BTEXN (QCLot: 4238752)								
EP080: Benzene	71-43-2	1	µg/L	<1	10 µg/L	107	70.0	122
EP080: Toluene	108-88-3	2	µg/L	<2	10 µg/L	106	69.0	123
EP080: Ethylbenzene	100-41-4	2	µg/L	<2	10 µg/L	112	70.0	120
EP080: meta- & para-Xylene	108-38-3 106-42-3	2	µg/L	<2	10 µg/L	114	69.0	121
EP080: ortho-Xylene	95-47-6	2	µg/L	<2	10 µg/L	116	72.0	122
EP080: Naphthalene	91-20-3	5	µg/L	<5	10 µg/L	114	70.0	120
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 4237105)								
EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	0.25 µg/L	110	72.0	130
EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	<0.02	0.25 µg/L	117	71.0	127
EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	<0.01	0.25 µg/L	110	68.0	131
EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	<0.02	0.25 µg/L	110	69.0	134
EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	<0.01	0.25 µg/L	87.2	65.0	140
EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L	<0.02	0.25 µg/L	114	53.0	142
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4237105)								
EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L	<0.1	1.25 µg/L	91.1	73.0	129
EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	<0.02	0.25 µg/L	113	72.0	129
EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	<0.02	0.25 µg/L	124	72.0	129
EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	<0.02	0.25 µg/L	115	72.0	130
EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	<0.01	0.25 µg/L	101	71.0	133
EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L	<0.02	0.25 µg/L	95.0	69.0	130
EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L	<0.02	0.25 µg/L	81.6	71.0	129
EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L	<0.02	0.25 µg/L	85.0	69.0	133
EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L	<0.02	0.25 µg/L	122	72.0	134
EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L	<0.02	0.25 µg/L	103	65.0	144
EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L	<0.05	0.625 µg/L	123	71.0	132
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 4237105)								
EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	µg/L	<0.02	0.25 µg/L	111	67.0	137
EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L	<0.05	0.625 µg/L	102	68.0	141
EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	µg/L	<0.05	0.625 µg/L	117	62.6	147

Sub-Matrix: **WATER**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report: Result	Laboratory Control Spike (LCS) Report: Spike Concentration	Spike Recovery (%): LCS	Acceptable Limits (%): Low	Acceptable Limits (%): High
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 4237105) - continued								
EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L	<0.05	0.625 µg/L	123	66.0	145
EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L	<0.05	0.625 µg/L	115	57.6	145
EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.02	µg/L	<0.02	0.25 µg/L	108	65.0	136
EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.02	µg/L	<0.02	0.25 µg/L	101	61.0	135
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 4237105)								
EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L	<0.05	0.25 µg/L	118	63.0	143
EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.05	µg/L	<0.05	0.25 µg/L	124	64.0	140
EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.05	µg/L	<0.05	0.25 µg/L	112	67.0	138
EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.05	µg/L	<0.05	0.25 µg/L	100	71.4	144

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: **WATER**

Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Matrix Spike (MS) Report: Spike Concentration	SpikeRecovery(%): MS	Acceptable Limits (%): Low	Acceptable Limits (%): High
ED041G: Sulfate (Turbidimetric) as SO4 2- by DA (QCLot: 4229855)							
ES2208708-005	Anonymous	ED041G: Sulfate as SO4 - Turbidimetric	14808-79-8	10 mg/L	98.2	70.0	130
ED041G: Sulfate (Turbidimetric) as SO4 2- by DA (QCLot: 4229860)							
ES2209170-007	R01_20220315	ED041G: Sulfate as SO4 - Turbidimetric	14808-79-8	10 mg/L	103	70.0	130
ED045G: Chloride by Discrete Analyser (QCLot: 4229858)							
ES2209170-001	SMW_BH019	ED045G: Chloride	16887-00-6	50 mg/L	120	70.0	130
EG020F: Dissolved Metals by ICP-MS (QCLot: 4238244)							
ES2209170-007	R01_20220315	EG020A-F: Arsenic	7440-38-2	1 mg/L	88.1	70.0	130
		EG020A-F: Cadmium	7440-43-9	0.25 mg/L	91.8	70.0	130
		EG020A-F: Chromium	7440-47-3	1 mg/L	88.9	70.0	130
		EG020A-F: Copper	7440-50-8	1 mg/L	90.4	70.0	130
		EG020A-F: Lead	7439-92-1	1 mg/L	100	70.0	130
		EG020A-F: Nickel	7440-02-0	1 mg/L	92.0	70.0	130
		EG020A-F: Zinc	7440-66-6	1 mg/L	90.6	70.0	130
EG035F: Dissolved Mercury by FIMS (QCLot: 4238246)							
ES2209170-002	SMW_BH038	EG035F: Mercury	7439-97-6	0.01 mg/L	101	70.0	130

Sub-Matrix: **WATER**

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Acceptable Limits (%)	
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Concentration	MS	Low	High
EG051G: Ferrous Iron by Discrete Analyser (QCLot: 4232112)							
ES2208926-003	Anonymous	EG051G: Ferrous Iron	----	1 mg/L	# Not Determined	70.0	130
EK055G: Ammonia as N by Discrete Analyser (QCLot: 4237905)							
ES2207081-001	Anonymous	EK055G: Ammonia as N	7664-41-7	1 mg/L	92.2	70.0	130
EK057G: Nitrite as N by Discrete Analyser (QCLot: 4229859)							
ES2209170-001	SMW_BH019	EK057G: Nitrite as N	14797-65-0	0.5 mg/L	115	70.0	130
EK059G: Nitrite plus Nitrate as N (NOx) by Discrete Analyser (QCLot: 4237906)							
ES2207081-001	Anonymous	EK059G: Nitrite + Nitrate as N	----	0.5 mg/L	89.4	70.0	130
EK061G: Total Kjeldahl Nitrogen By Discrete Analyser (QCLot: 4237902)							
ES2207081-002	Anonymous	EK061G: Total Kjeldahl Nitrogen as N	----	5 mg/L	90.0	70.0	130
EK067G: Total Phosphorus as P by Discrete Analyser (QCLot: 4237901)							
ES2207081-002	Anonymous	EK067G: Total Phosphorus as P	----	1 mg/L	93.5	70.0	130
EP033: C1 - C4 Hydrocarbon Gases (QCLot: 4230872)							
EM2204227-001	Anonymous	EP033: Methane	74-82-8	28.48 µg/L	104	70.0	130
EP074E: Halogenated Aliphatic Compounds (QCLot: 4229780)							
ES2208177-001	Anonymous	EP074: 1.1-Dichloroethene	75-35-4	25 µg/L	95.3	70.0	130
		EP074: Trichloroethene	79-01-6	25 µg/L	102	70.0	130
EP074F: Halogenated Aromatic Compounds (QCLot: 4229780)							
ES2208177-001	Anonymous	EP074: Chlorobenzene	108-90-7	25 µg/L	107	70.0	130
EP080/071: Total Petroleum Hydrocarbons (QCLot: 4229779)							
ES2208177-001	Anonymous	EP080: C6 - C9 Fraction	----	325 µg/L	76.8	70.0	130
EP080/071: Total Petroleum Hydrocarbons (QCLot: 4238752)							
ES2209190-001	Anonymous	EP080: C6 - C9 Fraction	----	325 µg/L	88.1	70.0	130
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 4229779)							
ES2208177-001	Anonymous	EP080: C6 - C10 Fraction	C6_C10	375 µg/L	75.6	70.0	130
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 4238752)							
ES2209190-001	Anonymous	EP080: C6 - C10 Fraction	C6_C10	375 µg/L	87.7	70.0	130
EP080: BTEXN (QCLot: 4229779)							
ES2208177-001	Anonymous	EP080: Benzene	71-43-2	25 µg/L	91.1	70.0	130
		EP080: Toluene	108-88-3	25 µg/L	91.4	70.0	130
		EP080: Ethylbenzene	100-41-4	25 µg/L	92.9	70.0	130
		EP080: meta- & para-Xylene	108-38-3 106-42-3	25 µg/L	94.3	70.0	130
		EP080: ortho-Xylene	95-47-6	25 µg/L	95.5	70.0	130

Sub-Matrix: **WATER**

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Acceptable Limits (%)	
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Concentration	MS	Low	High
EP080: BTEXN (QCLot: 4229779) - continued							
ES2208177-001	Anonymous	EP080: Naphthalene	91-20-3	25 µg/L	90.5	70.0	130
EP080: BTEXN (QCLot: 4238752)							
ES2209190-001	Anonymous	EP080: Benzene	71-43-2	25 µg/L	93.6	70.0	130
		EP080: Toluene	108-88-3	25 µg/L	91.4	70.0	130
		EP080: Ethylbenzene	100-41-4	25 µg/L	94.0	70.0	130
		EP080: meta- & para-Xylene	108-38-3 106-42-3	25 µg/L	93.8	70.0	130
		EP080: ortho-Xylene	95-47-6	25 µg/L	96.4	70.0	130
		EP080: Naphthalene	91-20-3	25 µg/L	94.6	70.0	130
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 4237105)							
EP2203094-002	Anonymous	EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.25 µg/L	122	72.0	130
		EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.25 µg/L	120	71.0	127
		EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.25 µg/L	112	68.0	131
		EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.25 µg/L	110	69.0	134
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.25 µg/L	88.6	65.0	140
		EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.25 µg/L	109	53.0	142
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4237105)							
EP2203094-002	Anonymous	EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	1.25 µg/L	94.7	73.0	129
		EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.25 µg/L	121	72.0	129
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.25 µg/L	121	72.0	129
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.25 µg/L	117	72.0	130
		EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.25 µg/L	98.0	71.0	133
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.25 µg/L	93.4	69.0	130
		EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.25 µg/L	80.4	71.0	129
		EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.25 µg/L	82.6	69.0	133
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.25 µg/L	122	72.0	134
		EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.25 µg/L	97.8	65.0	144
		EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.625 µg/L	125	71.0	132
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 4237105)							
EP2203094-002	Anonymous	EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.25 µg/L	97.6	67.0	137
		EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.625 µg/L	110	68.0	141
		EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.625 µg/L	121	62.6	147
		EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.625 µg/L	117	66.0	145
		EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.625 µg/L	113	57.6	145

Sub-Matrix: **WATER**

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Acceptable Limits (%)	
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Concentration	MS	Low	High
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 4237105) - continued							
EP2203094-002	Anonymous	EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.25 µg/L	117	65.0	136
		EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.25 µg/L	109	61.0	135
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 4237105)							
EP2203094-002	Anonymous	EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.25 µg/L	102	63.0	143
		EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.25 µg/L	125	64.0	140
		EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.25 µg/L	123	67.0	138
		EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.25 µg/L	101	71.4	144

ALS Environmental

QA/QC Compliance Assessment to assist with Quality Review

Work Order	: **ES2209170**	Page	: 1 of 11
Client	: **ENVIRONMENTAL RESOURCES MANAGEMENT (ERM)**	Laboratory	: Environmental Division Sydney
Contact	: MS JESSICA LAWRENCE	Telephone	: +61-2-8784 8555
Project	: 0628507 AFJV-SMW	Date Samples Received	: 15-Mar-2022
Site	: ----	Issue Date	: 23-Mar-2022
Sampler	: WILLIAM OH	No. of samples received	: 9
Order number	: N/A	No. of samples analysed	: 5

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

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

Summary of Outliers

Outliers : Quality Control Samples

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

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

Outliers : Analysis Holding Time Compliance

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

Outliers : Frequency of Quality Control Samples

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

Outliers : Quality Control Samples

Duplicates, Method Blanks, Laboratory Control Samples and Matrix Spikes

Matrix: **WATER**

Compound Group Name	Laboratory Sample ID	Client Sample ID	Analyte	CAS Number	Data	Limits	Comment
Matrix Spike (MS) Recoveries							
EG051G: Ferrous Iron by Discrete Analyser	ES2208926--003	Anonymous	**Ferrous Iron**	----	Not Determined	----	**MS recovery not determined, background level greater than or equal to 4x spike level.**

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	3	0.00	10.00	NEPM 2013 B3 & ALS QC Standard
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	1	19	5.26	10.00	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	0	11	0.00	10.00	NEPM 2013 B3 & ALS QC Standard
Matrix Spikes (MS)					
PAH/Phenols (GC/MS - SIM)	0	3	0.00	5.00	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	0	11	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 / *Container* / Client Sample ID(s)		*Sample Date*	*Extraction / Preparation*			*Analysis*		
			Date extracted	*Due for extraction*	*Evaluation*	*Date analysed*	*Due for analysis*	*Evaluation*
EA015: Total Dissolved Solids dried at 180 ± 5 °C								
Clear Plastic Bottle - Natural (EA015H)								
SMW_BH019, R01_20220315	SMW_BH038,	**15-Mar-2022**	**----**	----	----	**21-Mar-2022**	22-Mar-2022	✓
ED037P: Alkalinity by PC Titrator								
Clear Plastic Bottle - Natural (ED037-P)								
SMW_BH019, R01_20220315	SMW_BH038,	**15-Mar-2022**	**----**	----	----	**17-Mar-2022**	29-Mar-2022	✓
ED041G: Sulfate (Turbidimetric) as SO4 2- by DA								
Clear Plastic Bottle - Natural (ED041G)								
SMW_BH019, R01_20220315	SMW_BH038,	**15-Mar-2022**	**----**	----	----	**16-Mar-2022**	12-Apr-2022	✓

Matrix: **WATER**

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

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
ED045G: Chloride by Discrete Analyser							
Clear Plastic Bottle - Natural (ED045G)							
SMW_BH019, SMW_BH038, R01_20220315	**15-Mar-2022**	**----**	----	----	**16-Mar-2022**	12-Apr-2022	✓
ED093F: Dissolved Major Cations							
Clear Plastic Bottle - Natural (ED093F)							
R01_20220315	**15-Mar-2022**	**----**	----	----	**21-Mar-2022**	22-Mar-2022	✓
Clear Plastic Bottle - Nitric Acid; Filtered (ED093F)							
SMW_BH019, SMW_BH038	**15-Mar-2022**	**----**	----	----	**21-Mar-2022**	12-Apr-2022	✓
EG020F: Dissolved Metals by ICP-MS							
Clear Plastic Bottle - Natural (EG020A-F)							
R01_20220315	**15-Mar-2022**	**----**	----	----	**21-Mar-2022**	11-Sep-2022	✓
Clear Plastic Bottle - Nitric Acid; Filtered (EG020A-F)							
SMW_BH019, SMW_BH038	**15-Mar-2022**	**----**	----	----	**21-Mar-2022**	11-Sep-2022	✓
EG035F: Dissolved Mercury by FIMS							
Clear Plastic Bottle - Natural (EG035F)							
R01_20220315	**15-Mar-2022**	**----**	----	----	**22-Mar-2022**	12-Apr-2022	✓
Clear Plastic Bottle - Nitric Acid; Filtered (EG035F)							
SMW_BH019, SMW_BH038	**15-Mar-2022**	**----**	----	----	**22-Mar-2022**	12-Apr-2022	✓
EG051G: Ferrous Iron by Discrete Analyser							
Clear Plastic Bottle - HCl - Filtered (EG051G)							
SMW_BH019, SMW_BH038, R01_20220315	**15-Mar-2022**	**----**	----	----	**19-Mar-2022**	22-Mar-2022	✓
EK055G: Ammonia as N by Discrete Analyser							
Clear Plastic Bottle - Sulfuric Acid (EK055G)							
SMW_BH019, SMW_BH038, R01_20220315	**15-Mar-2022**	**----**	----	----	**20-Mar-2022**	12-Apr-2022	✓
EK057G: Nitrite as N by Discrete Analyser							
Clear Plastic Bottle - Natural (EK057G)							
SMW_BH019, SMW_BH038, R01_20220315	**15-Mar-2022**	**----**	----	----	**16-Mar-2022**	17-Mar-2022	✓
EK059G: Nitrite plus Nitrate as N (NOx) by Discrete Analyser							
Clear Plastic Bottle - Sulfuric Acid (EK059G)							
SMW_BH019, SMW_BH038, R01_20220315	**15-Mar-2022**	**----**	----	----	**20-Mar-2022**	12-Apr-2022	✓
EK061G: Total Kjeldahl Nitrogen By Discrete Analyser							
Clear Plastic Bottle - Sulfuric Acid (EK061G)							
SMW_BH019, SMW_BH038, R01_20220315	**15-Mar-2022**	**20-Mar-2022**	12-Apr-2022	✓	**20-Mar-2022**	12-Apr-2022	✓

Matrix: **WATER**

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

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EK067G: Total Phosphorus as P by Discrete Analyser							
Clear Plastic Bottle - Sulfuric Acid (EK067G)							
SMW_BH019, SMW_BH038, R01_20220315	**15-Mar-2022**	**20-Mar-2022**	12-Apr-2022	✓	**20-Mar-2022**	12-Apr-2022	✓
EP033: C1 - C4 Hydrocarbon Gases							
Amber VOC Vial - Sulfuric Acid (EP033)							
SMW_BH019	**15-Mar-2022**	**----**	----	----	**16-Mar-2022**	29-Mar-2022	✓
EP074A: Monocyclic Aromatic Hydrocarbons							
Amber VOC Vial - Sulfuric Acid (EP074)							
SMW_BH019, SMW_BH038, R01_20220315	**15-Mar-2022**	**21-Mar-2022**	29-Mar-2022	✓	**21-Mar-2022**	29-Mar-2022	✓
EP074B: Oxygenated Compounds							
Amber VOC Vial - Sulfuric Acid (EP074)							
SMW_BH019, SMW_BH038, R01_20220315	**15-Mar-2022**	**21-Mar-2022**	29-Mar-2022	✓	**21-Mar-2022**	29-Mar-2022	✓
EP074C: Sulfonated Compounds							
Amber VOC Vial - Sulfuric Acid (EP074)							
SMW_BH019, SMW_BH038, R01_20220315	**15-Mar-2022**	**21-Mar-2022**	29-Mar-2022	✓	**21-Mar-2022**	29-Mar-2022	✓
EP074D: Fumigants							
Amber VOC Vial - Sulfuric Acid (EP074)							
SMW_BH019, SMW_BH038, R01_20220315	**15-Mar-2022**	**21-Mar-2022**	29-Mar-2022	✓	**21-Mar-2022**	29-Mar-2022	✓
EP074E: Halogenated Aliphatic Compounds							
Amber VOC Vial - Sulfuric Acid (EP074)							
SMW_BH019, SMW_BH038, R01_20220315	**15-Mar-2022**	**21-Mar-2022**	29-Mar-2022	✓	**21-Mar-2022**	29-Mar-2022	✓
EP074F: Halogenated Aromatic Compounds							
Amber VOC Vial - Sulfuric Acid (EP074)							
SMW_BH019, SMW_BH038, R01_20220315	**15-Mar-2022**	**21-Mar-2022**	29-Mar-2022	✓	**21-Mar-2022**	29-Mar-2022	✓
EP074G: Trihalomethanes							
Amber VOC Vial - Sulfuric Acid (EP074)							
SMW_BH019, SMW_BH038, R01_20220315	**15-Mar-2022**	**21-Mar-2022**	29-Mar-2022	✓	**21-Mar-2022**	29-Mar-2022	✓
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons							
Amber Glass Bottle - Unpreserved (EP075(SIM))							
SMW_BH019, SMW_BH038, R01_20220315	**15-Mar-2022**	**18-Mar-2022**	22-Mar-2022	✓	**21-Mar-2022**	27-Apr-2022	✓

Matrix: **WATER**

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

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP080/071: Total Petroleum Hydrocarbons							
Amber Glass Bottle - Unpreserved (EP071)							
SMW_BH019, SMW_BH038, R01_20220315	**15-Mar-2022**	**18-Mar-2022**	22-Mar-2022	✓	**21-Mar-2022**	27-Apr-2022	✓
Amber VOC Vial - Sulfuric Acid (EP080)							
TB	**09-Mar-2022**	**21-Mar-2022**	23-Mar-2022	✓	**21-Mar-2022**	23-Mar-2022	✓
Amber VOC Vial - Sulfuric Acid (EP080)							
SMW_BH019, SMW_BH038, R01_20220315	**15-Mar-2022**	**21-Mar-2022**	29-Mar-2022	✓	**21-Mar-2022**	29-Mar-2022	✓
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions							
Amber Glass Bottle - Unpreserved (EP071)							
SMW_BH019, SMW_BH038, R01_20220315	**15-Mar-2022**	**18-Mar-2022**	22-Mar-2022	✓	**21-Mar-2022**	27-Apr-2022	✓
Amber VOC Vial - Sulfuric Acid (EP080)							
TB	**09-Mar-2022**	**21-Mar-2022**	23-Mar-2022	✓	**21-Mar-2022**	23-Mar-2022	✓
Amber VOC Vial - Sulfuric Acid (EP080)							
SMW_BH019, SMW_BH038, R01_20220315	**15-Mar-2022**	**21-Mar-2022**	29-Mar-2022	✓	**21-Mar-2022**	29-Mar-2022	✓
EP080: BTEXN							
Amber VOC Vial - Sulfuric Acid (EP080)							
TS	**07-Mar-2022**	**21-Mar-2022**	21-Mar-2022	✓	**21-Mar-2022**	21-Mar-2022	✓
Amber VOC Vial - Sulfuric Acid (EP080)							
TB	**09-Mar-2022**	**21-Mar-2022**	23-Mar-2022	✓	**21-Mar-2022**	23-Mar-2022	✓
Amber VOC Vial - Sulfuric Acid (EP080)							
SMW_BH019, SMW_BH038, R01_20220315	**15-Mar-2022**	**21-Mar-2022**	29-Mar-2022	✓	**21-Mar-2022**	29-Mar-2022	✓
EP231A: Perfluoroalkyl Sulfonic Acids							
HDPE (no PTFE) (EP231X)							
SMW_BH019, SMW_BH038, R01_20220315	**15-Mar-2022**	**21-Mar-2022**	11-Sep-2022	✓	**21-Mar-2022**	11-Sep-2022	✓
EP231B: Perfluoroalkyl Carboxylic Acids							
HDPE (no PTFE) (EP231X)							
SMW_BH019, SMW_BH038, R01_20220315	**15-Mar-2022**	**21-Mar-2022**	11-Sep-2022	✓	**21-Mar-2022**	11-Sep-2022	✓
EP231C: Perfluoroalkyl Sulfonamides							
HDPE (no PTFE) (EP231X)							
SMW_BH019, SMW_BH038, R01_20220315	**15-Mar-2022**	**21-Mar-2022**	11-Sep-2022	✓	**21-Mar-2022**	11-Sep-2022	✓
EP231D: (n:2) Fluorotelomer Sulfonic Acids							
HDPE (no PTFE) (EP231X)							
SMW_BH019, SMW_BH038, R01_20220315	**15-Mar-2022**	**21-Mar-2022**	11-Sep-2022	✓	**21-Mar-2022**	11-Sep-2022	✓

Matrix: **WATER**

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

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP231P: PFAS Sums							
HDPE (no PTFE) (EP231X)							
SMW_BH019, SMW_BH038, R01_20220315	**15-Mar-2022**	**21-Mar-2022**	11-Sep-2022	✓	**21-Mar-2022**	11-Sep-2022	✓

Quality Control Parameter Frequency Compliance

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

Matrix: **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)							
Alkalinity by PC Titrator	ED037-P	2	17	**11.76**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Ammonia as N by Discrete analyser	EK055G	2	20	**10.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
C1 - C4 Gases	EP033	1	5	**20.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Chloride by Discrete Analyser	ED045G	1	6	**16.67**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
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
Ferrous Iron by Discrete Analyser	EG051G	2	13	**15.38**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Major Cations - Dissolved	ED093F	2	20	**10.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Nitrite and Nitrate as N (NOx) by Discrete Analyser	EK059G	2	20	**10.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Nitrite as N by Discrete Analyser	EK057G	2	10	**20.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
PAH/Phenols (GC/MS - SIM)	EP075(SIM)	0	3	**0.00**	**10.00**	×	NEPM 2013 B3 & ALS QC Standard
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	1	19	**5.26**	**10.00**	×	NEPM 2013 B3 & ALS QC Standard
Sulfate (Turbidimetric) as SO4 2- by Discrete Analyser	ED041G	3	26	**11.54**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Dissolved Solids (High Level)	EA015H	2	20	**10.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Kjeldahl Nitrogen as N By Discrete Analyser	EK061G	2	20	**10.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Phosphorus as P By Discrete Analyser	EK067G	2	20	**10.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	0	11	**0.00**	**10.00**	×	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	4	36	**11.11**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Volatile Organic Compounds	EP074	2	14	**14.29**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Laboratory Control Samples (LCS)							
Alkalinity by PC Titrator	ED037-P	2	17	**11.76**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Ammonia as N by Discrete analyser	EK055G	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
C1 - C4 Gases	EP033	1	5	**20.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Chloride by Discrete Analyser	ED045G	2	6	**33.33**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
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
Ferrous Iron by Discrete Analyser	EG051G	1	13	**7.69**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Major Cations - Dissolved	ED093F	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Nitrite and Nitrate as N (NOx) by Discrete Analyser	EK059G	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Nitrite as N by Discrete Analyser	EK057G	1	10	**10.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
PAH/Phenols (GC/MS - SIM)	EP075(SIM)	1	3	**33.33**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	1	19	**5.26**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Sulfate (Turbidimetric) as SO4 2- by Discrete Analyser	ED041G	4	26	**15.38**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Dissolved Solids (High Level)	EA015H	3	20	**15.00**	**15.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Kjeldahl Nitrogen as N By Discrete Analyser	EK061G	3	20	**15.00**	**15.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Phosphorus as P By Discrete Analyser	EK067G	3	20	**15.00**	**15.00**	✓	NEPM 2013 B3 & ALS QC Standard

Matrix: **WATER**

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

Quality Control Sample Type		Count		Rate (%)			Quality Control Specification
Analytical Methods	*Method*	*QC*	*Regular*	***Actual***	***Expected***	*Evaluation*	
Laboratory Control Samples (LCS) - Continued							
TRH - Semivolatile Fraction	EP071	1	11	**9.09**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	2	36	**5.56**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Volatile Organic Compounds	EP074	1	14	**7.14**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Method Blanks (MB)							
Ammonia as N by Discrete analyser	EK055G	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
C1 - C4 Gases	EP033	1	5	**20.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Chloride by Discrete Analyser	ED045G	1	6	**16.67**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
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
Ferrous Iron by Discrete Analyser	EG051G	1	13	**7.69**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Major Cations - Dissolved	ED093F	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Nitrite and Nitrate as N (NOx) by Discrete Analyser	EK059G	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Nitrite as N by Discrete Analyser	EK057G	1	10	**10.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
PAH/Phenols (GC/MS - SIM)	EP075(SIM)	1	3	**33.33**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	1	19	**5.26**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Sulfate (Turbidimetric) as SO4 2- by Discrete Analyser	ED041G	2	26	**7.69**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Dissolved Solids (High Level)	EA015H	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Kjeldahl Nitrogen as N By Discrete Analyser	EK061G	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Phosphorus as P By Discrete Analyser	EK067G	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	1	11	**9.09**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	2	36	**5.56**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Volatile Organic Compounds	EP074	1	14	**7.14**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Matrix Spikes (MS)							
Ammonia as N by Discrete analyser	EK055G	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
C1 - C4 Gases	EP033	1	5	**20.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Chloride by Discrete Analyser	ED045G	1	6	**16.67**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
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
Ferrous Iron by Discrete Analyser	EG051G	1	13	**7.69**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Nitrite and Nitrate as N (NOx) by Discrete Analyser	EK059G	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Nitrite as N by Discrete Analyser	EK057G	1	10	**10.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
PAH/Phenols (GC/MS - SIM)	EP075(SIM)	0	3	**0.00**	**5.00**	×	NEPM 2013 B3 & ALS QC Standard
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	1	19	**5.26**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Sulfate (Turbidimetric) as SO4 2- by Discrete Analyser	ED041G	2	26	**7.69**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Kjeldahl Nitrogen as N By Discrete Analyser	EK061G	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Phosphorus as P By Discrete Analyser	EK067G	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	0	11	**0.00**	**5.00**	×	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	2	36	**5.56**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Volatile Organic Compounds	EP074	1	14	**7.14**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard

Brief Method Summaries

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

Analytical Methods	Method	Matrix	Method Descriptions
Total Dissolved Solids (High Level)	EA015H	WATER	In house: Referenced to APHA 2540C. A gravimetric procedure that determines the amount of `filterable` residue in an aqueous sample. A well-mixed sample is filtered through a glass fibre filter (1.2um). The filtrate is evaporated to dryness and dried to constant weight at 180+/-5C. This method is compliant with NEPM Schedule B(3)
Alkalinity by PC Titrator	ED037-P	WATER	In house: Referenced to APHA 2320 B This procedure determines alkalinity by automated measurement (e.g. PC Titrate) on a settled supernatant aliquot of the sample using pH 4.5 for indicating the total alkalinity end-point. This method is compliant with NEPM Schedule B(3)
Sulfate (Turbidimetric) as SO4 2- by Discrete Analyser	ED041G	WATER	In house: Referenced to APHA 4500-SO4. Dissolved sulfate is determined in a 0.45um filtered sample. Sulfate ions are converted to a barium sulfate suspension in an acetic acid medium with barium chloride. Light absorbance of the BaSO4 suspension is measured by a photometer and the SO4-2 concentration is determined by comparison of the reading with a standard curve. This method is compliant with NEPM Schedule B(3)
Chloride by Discrete Analyser	ED045G	WATER	In house: Referenced to APHA 4500 Cl - G.The thiocyanate ion is liberated from mercuric thiocyanate through sequestration of mercury by the chloride ion to form non-ionised mercuric chloride.in the presence of ferric ions the librated thiocynate forms highly-coloured ferric thiocynate which is measured at 480 nm APHA seal method 2 017-1-L
Major Cations - Dissolved	ED093F	WATER	In house: Referenced to APHA 3120 and 3125; USEPA SW 846 - 6010 and 6020; Cations are determined by either ICP-AES or ICP-MS techniques. This method is compliant with NEPM Schedule B(3) Sodium Adsorption Ratio is calculated from Ca, Mg and Na which determined by ALS in house method QWI-EN/ED093F. This method is compliant with NEPM Schedule B(3) Hardness parameters are calculated based on APHA 2340 B. This method is compliant with NEPM Schedule B(3)
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 (SnCl2)(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 SnCl2 which is then purged into a heated quartz cell. Quantification is by comparing absorbance against a calibration curve. This method is compliant with NEPM Schedule B(3).
Ferrous Iron by Discrete Analyser	EG051G	WATER	In house: Referenced to APHA 3500 Fe-B. A colorimetric determination based on the reaction between phenanthroline and ferrous iron at pH 3.2-3.3 to form an orange-red complex that is measured against a five-point calibration curve. This method is compliant with NEPM Schedule B(3).
Ammonia as N by Discrete analyser	EK055G	WATER	In house: Referenced to APHA 4500-NH3 G Ammonia is determined by direct colorimetry by Discrete Analyser. This method is compliant with NEPM Schedule B(3)
Nitrite as N by Discrete Analyser	EK057G	WATER	In house: Referenced to APHA 4500-NO2- B. Nitrite is determined by direct colourimetry by Discrete Analyser. This method is compliant with NEPM Schedule B(3)

Analytical Methods	Method	Matrix	Method Descriptions
Nitrate as N by Discrete Analyser	EK058G	WATER	In house: Referenced to APHA 4500-NO3- F. Nitrate is reduced to nitrite by way of a chemical reduction followed by quantification by Discrete Analyser. Nitrite is determined seperately by direct colourimetry and result for Nitrate calculated as the difference between the two results. This method is compliant with NEPM Schedule B(3)
Nitrite and Nitrate as N (NOx) by Discrete Analyser	EK059G	WATER	In house: Referenced to APHA 4500-NO3- F. Combined oxidised Nitrogen (NO2+NO3) is determined by Chemical Reduction and direct colourimetry by Discrete Analyser. This method is compliant with NEPM Schedule B(3)
Total Kjeldahl Nitrogen as N By Discrete Analyser	EK061G	WATER	In house: Referenced to APHA 4500-Norg D (In house). An aliquot of sample is digested using a high temperature Kjeldahl digestion to convert nitrogenous compounds to ammonia. Ammonia is determined colorimetrically by discrete analyser. This method is compliant with NEPM Schedule B(3)
Total Nitrogen as N (TKN + Nox) By Discrete Analyser	EK062G	WATER	In house: Referenced to APHA 4500-Norg / 4500-NO3-. This method is compliant with NEPM Schedule B(3)
Total Phosphorus as P By Discrete Analyser	EK067G	WATER	In house: Referenced to APHA 4500-P H, Jirka et al, Zhang et al. This procedure involves sulphuric acid digestion of a sample aliquot to break phosphorus down to orthophosphate. The orthophosphate reacts with ammonium molybdate and antimony potassium tartrate to form a complex which is then reduced and its concentration measured at 880nm using discrete analyser. This method is compliant with NEPM Schedule B(3)
Ionic Balance by PCT DA and Turbi SO4 DA	* EN055 - PG	WATER	In house: Referenced to APHA 1030F. This method is compliant with NEPM Schedule B(3)
C1 - C4 Gases	EP033	WATER	Technical Guidance for the Natural Attenuation Indicators: Methane, Ethane, and Ethene, US EPA - Region 1, EPA New England, July 2001. Automated static headspace, dual column GC/FID. A 12 mL sample is pipetted into a 20 mL headspace vial containing 3g of sodium chloride and sealed. Each sample is equilibrated with shaking at 40 degrees C for 10 minutes prior to analysis by GC/FID using a pair of PLOT columns of different polarity.
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)
Volatile Organic Compounds	EP074	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. This method is compliant with 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)

Analytical Methods	Method	Matrix	Method Descriptions
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	WATER	In-house: Analysis of fresh and saline waters by Solid Phase Extraction (SPE) followed by LC-Electrospray-MS-MS, Negative Mode using MRM and internal standard quantitation. Isotopically labelled analogues of target analytes used as internal standards and surrogates are added to the sample container. The entire contents are transferred to a solid phase extraction (SPE) cartridge. The sample container is successively rinsed with aliquots of the elution solvent. The eluted extract is combined with an equal volume of reagent water and a portion is filtered for analysis. Method procedures and data quality objectives conform to US DoD QSM 5.3, table B-15 requirements.

Preparation Methods	Method	Matrix	Method Descriptions
TKN/TP Digestion	EK061/EK067	WATER	In house: Referenced to APHA 4500 Norg - D; APHA 4500 P - H. This method is compliant with NEPM Schedule B(3)
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.
Solid Phase Extraction (SPE) for PFAS in water	ORG72	WATER	In-house: Isotopically labelled analogues of target analytes used as internal standards and surrogates are added to the sample container. The entire contents are transferred to a solid phase extraction (SPE) cartridge. The sample container is successively rinsed with aliquots of the elution solvent. The eluted extract is combined with an equal volume of reagent water and a portion is filtered for analysis. Method procedures conform to US DoD QSM 5.3, table B-15 requirements.

CHAIN OF CUSTODY

ALS Laboratory: please tick →

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WOLLONGONG 99 Kenny Street Wollongong NSW 2500 Ph: 02 4225 3125 E: wollongong@alsglobal.com

CLIENT: ERM Services Australia	TURNAROUND REQUIREMENTS: (Standard TAT may be longer for some tests e.g. Ultra Trace Organics)	☑ Standard TAT (List due date): Standard TAT ☐ Non Standard or urgent TAT (List due date):	FOR LABORATORY USE ONLY (Circle) Custody Seal Intact? Yes / No / N/A Free ice/frozen ice bricks present upon receipt? Yes / No / N/A Random Sample Temperature on Receipt: °C Other comment: S-2
OFFICE: Macquarie Park			
PROJECT: AFJV-SMW — PROJECT NO. 0628507	ALS QUOTE NO.: ERM Std	COC SEQUENCE NUMBER (Circle) COC: 1 2 3 4 5 6 7 OF: 1 2 3 4 5 6 7	
ORDER NUMBER: — PURCHASE ORDER NO.:	COUNTRY OF ORIGIN: Australia		
PROJECT MANAGER: Jessica Lawrence — CONTACT PH:			
SAMPLER: Tristan Rodrigues & William Oh — SAMPLER MOBILE: 0480 327 311	RELINQUISHED BY:	RECEIVED BY: [signature] Yes	RELINQUISHED BY: — RECEIVED BY:
COC Emailed to ALS? (YES / NO) — EDD FORMAT (or default):	DATE/TIME:	DATE/TIME: 15/3/22 1830	DATE/TIME: — DATE/TIME:
Email Reports to (will default to PM if no other addresses are listed): PM and Tristan.Rodrigues@erm.com			
Email Invoice to (will default to PM if no other addresses are listed):			

COMMENTS/SPECIAL HANDLING/STORAGE OR DISPOSAL:

ALS USE ONLY	SAMPLE DETAILS MATRIX: Solid(S) Water(W)			CONTAINER INFORMATION		ANALYSIS REQUIRED including SUITES (NB. Suite Codes must be listed to attract suite price) Where Metals are required, specify Total (unfiltered bottle required) or Dissolved (field filtered bottle required).							Additional Information
LAB ID	SAMPLE ID	DATE / TIME	MATRIX	TYPE & PRESERVATIVE (refer to codes below)	TOTAL JARS								Comments on likely contaminant levels, dilutions, or samples requiring specific QC analysis etc.
1	SMW_BH019	15/3/22	W	P, N, AG, VS, H,	12	BTEX, TRH, VOC, PAH, PFAS, Metals, Hex, Ammonia nitrate, ~~total N~~							only for BH019 (Dissolved methane)
2	SMW_BH038	↓	↓	↓	10	total P, major cations, anions, TPS, total N							
3	SMW-BH044				10	↓							
4	SMW-BH046_S				10	↓							
5/6	TS/TB			—	2								
7	R01_20220315			P, N, AG, VS, H	10	"							
8	SMW_BH051	received as extra sample 15/03/22											
9	SMW_BH051_S	received as extra sample 15/03/22											
		extra samples leave on hold as per W.I.L CHK				17/3/22							
					TOTAL 1								

SNR
SNR
SNR 5/6

HT

Environmental Division
Sydney
Work Order Reference
ES2209170

Telephone : +61-2-8784 8555

Water Container Codes: P = Unpreserved Plastic; N = Nitric Preserved Plastic; ORC = Nitric Preserved ORC; SH = Sodium Hydroxide/Cd Preserved; S = Sodium Hydroxide Preserved Plastic; AG = Amber Glass Unpreserved; AP - Airfreight Unpreserved Plastic
V = VOA Vial HCl Preserved; VB = VOA Vial Sodium Bisulphate Preserved; VS = VOA Vial Sulfuric Preserved; AV = Airfreight Unpreserved Vial SG = Sulfuric Preserved Amber Glass; H = HCl preserved Plastic; HS = HCl preserved Speciation bottle; SP = Sulfuric Preserved Plastic; F = Formaldehyde Preserved Glass;
Z = Zinc Acetate Preserved Bottle; E = EDTA Preserved Bottles; ST = Sterile Bottle; ASS = Plastic Bag for Acid Sulphate Soils; B = Unpreserved Bag; LI = Lugols Iodine Preserved Bottles; STT = Sterile Sodium Thiosulfate Preserved Bottles.

ALS Environmental

CERTIFICATE OF ANALYSIS

Work Order	: **ES2209368**	Page	: 1 of 17
Amendment	: **1**		
Client	: **ENVIRONMENTAL RESOURCES MANAGEMENT (ERM)**	Laboratory	: Environmental Division Sydney
Contact	: MS JESSICA LAWRENCE	Contact	: Customer Services ES
Address	: UNIT 11/277 LANE COVE ROAD MACQUARIE PARK 2113	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
Telephone	: +61 02 8584 8888	Telephone	: +61-2-8784 8555
Project	: 0628507 AFJV-SMW	Date Samples Received	: 16-Mar-2022 16:50
Order number	: ----	Date Analysis Commenced	: 17-Mar-2022
C-O-C number	: ----	Issue Date	: 30-Mar-2022 18:04
Sampler	: WILLIAM OH		
Site	: ----		
Quote number	: EN/114		
No. of samples received	: 7		
No. of samples analysed	: 7		

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

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

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results
- Surrogate Control Limits

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

Signatories

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

Signatories	*Position*	*Accreditation Category*
Ankit Joshi	Senior Chemist - Inorganics	Sydney Inorganics, Smithfield, NSW
Edwandy Fadjar	Organic Coordinator	Sydney Organics, Smithfield, NSW
Franco Lentini	LCMS Coordinator	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.

- 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.
- 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.
- 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.
- TDS by method EA-015 may bias high for various samples due to the presence of fine particulate matter, which may pass through the prescribed GF/C paper.
- Amendment (30/03/2022): This report has been amended as a result of a request to change sample identification numbers (IDs) received from Willaim Oh on 30/03/2022, for sample 003. All analysis results are as per the previous report.
- 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.
- Sodium Adsorption Ratio (where reported): Where results for Na, Ca or Mg are <LOR, a concentration at half the reported LOR is incorporated into the SAR calculation. This represents a conservative approach for Na relative to the assumption that <LOR = zero concentration and a conservative approach for Ca & Mg relative to the assumption that <LOR is equivalent to the LOR concentration.
- 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	Sub-W1	SMW_BH035	SMW_BH035_S	TS	TB
			Sampling date / time	16-Mar-2022 00:00	16-Mar-2022 00:00	16-Mar-2022 00:00	07-Mar-2022 00:00	09-Mar-2022 00:00
Compound	CAS Number	LOR	Unit	ES2209368-001	ES2209368-002	ES2209368-003	ES2209368-004	ES2209368-005
				Result	Result	Result	Result	Result
EA015: Total Dissolved Solids dried at 180 ± 5 °C								
Total Dissolved Solids @180°C	----	10	mg/L	2750	11800	845	----	----
ED037P: Alkalinity by PC Titrator								
Hydroxide Alkalinity as CaCO3	DMO-210-001	1	mg/L	<1	<1	<1	----	----
Carbonate Alkalinity as CaCO3	3812-32-6	1	mg/L	<1	<1	<1	----	----
Bicarbonate Alkalinity as CaCO3	71-52-3	1	mg/L	775	649	242	----	----
Total Alkalinity as CaCO3	----	1	mg/L	775	649	242	----	----
ED041G: Sulfate (Turbidimetric) as SO4 2- by DA								
Sulfate as SO4 - Turbidimetric	14808-79-8	1	mg/L	579	11	201	----	----
ED045G: Chloride by Discrete Analyser								
Chloride	16887-00-6	1	mg/L	538	5650	52	----	----
ED093F: Dissolved Major Cations								
Calcium	7440-70-2	1	mg/L	77	561	26	----	----
Magnesium	7439-95-4	1	mg/L	52	312	5	----	----
Sodium	7440-23-5	1	mg/L	727	2190	200	----	----
Potassium	7440-09-7	1	mg/L	14	41	4	----	----
EG020F: Dissolved Metals by ICP-MS								
Aluminium	7429-90-5	0.01	mg/L	<0.01	<0.01	0.14	----	----
Arsenic	7440-38-2	0.001	mg/L	<0.001	0.001	<0.001	----	----
Cadmium	7440-43-9	0.0001	mg/L	<0.0001	<0.0001	<0.0001	----	----
Chromium	7440-47-3	0.001	mg/L	<0.001	<0.001	<0.001	----	----
Copper	7440-50-8	0.001	mg/L	0.002	0.001	0.005	----	----
Nickel	7440-02-0	0.001	mg/L	0.009	0.021	0.005	----	----
Lead	7439-92-1	0.001	mg/L	<0.001	<0.001	<0.001	----	----
Selenium	7782-49-2	0.01	mg/L	<0.01	<0.01	<0.01	----	----
Zinc	7440-66-6	0.005	mg/L	<0.005	0.026	0.023	----	----
Iron	7439-89-6	0.05	mg/L	<0.05	2.01	0.08	----	----
EG035F: Dissolved Mercury by FIMS								
Mercury	7439-97-6	0.0001	mg/L	<0.0001	<0.0001	<0.0001	----	----
EK055G: Ammonia as N by Discrete Analyser								
Ammonia as N	7664-41-7	0.01	mg/L	0.25	1.70	0.02	----	----
EK057G: Nitrite as N by Discrete Analyser								
Nitrite as N	14797-65-0	0.01	mg/L	<0.01	<0.01	<0.01	----	----
EK058G: Nitrate as N by Discrete Analyser								
Nitrate as N	14797-55-8	0.01	mg/L	0.14	0.61	0.04	----	----

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)			Sample ID	Sub-W1	SMW_BH035	SMW_BH035_S	TS	TB
			Sampling date / time	16-Mar-2022 00:00	16-Mar-2022 00:00	16-Mar-2022 00:00	07-Mar-2022 00:00	09-Mar-2022 00:00
Compound	CAS Number	LOR	Unit	ES2209368-001	ES2209368-002	ES2209368-003	ES2209368-004	ES2209368-005
				Result	Result	Result	Result	Result
EK059G: Nitrite plus Nitrate as N (NOx) by Discrete Analyser								
Nitrite + Nitrate as N	----	0.01	mg/L	**0.14**	**0.61**	**0.04**	----	----
EK061G: Total Kjeldahl Nitrogen By Discrete Analyser								
Total Kjeldahl Nitrogen as N	----	0.1	mg/L	**2.4**	**5.8**	**0.9**	----	----
EK062G: Total Nitrogen as N (TKN + NOx) by Discrete Analyser								
^ Total Nitrogen as N	----	0.1	mg/L	**2.5**	**6.4**	**0.9**	----	----
EK067G: Total Phosphorus as P by Discrete Analyser								
Total Phosphorus as P	----	0.01	mg/L	**0.51**	**1.11**	**0.44**	----	----
EN055: Ionic Balance								
ø Total Anions	----	0.01	meq/L	**42.7**	**172**	**10.5**	----	----
ø Total Cations	----	0.01	meq/L	**40.1**	**150**	**10.5**	----	----
ø Ionic Balance	----	0.01	%	**3.16**	**7.00**	**0.11**	----	----
EP033: C1 - C4 Hydrocarbon Gases								
Methane	74-82-8	10	µg/L	<10	----	----	----	----
EP074A: Monocyclic Aromatic Hydrocarbons								
Styrene	100-42-5	5	µg/L	<5	<5	<5	----	----
Isopropylbenzene	98-82-8	5	µg/L	<5	<5	<5	----	----
n-Propylbenzene	103-65-1	5	µg/L	<5	<5	<5	----	----
1.3.5-Trimethylbenzene	108-67-8	5	µg/L	<5	<5	<5	----	----
sec-Butylbenzene	135-98-8	5	µg/L	<5	<5	<5	----	----
1.2.4-Trimethylbenzene	95-63-6	5	µg/L	<5	<5	<5	----	----
tert-Butylbenzene	98-06-6	5	µg/L	<5	<5	<5	----	----
p-Isopropyltoluene	99-87-6	5	µg/L	<5	<5	<5	----	----
n-Butylbenzene	104-51-8	5	µg/L	<5	<5	<5	----	----
EP074B: Oxygenated Compounds								
Vinyl Acetate	108-05-4	50	µg/L	<50	<50	<50	----	----
2-Butanone (MEK)	78-93-3	50	µg/L	<50	<50	<50	----	----
4-Methyl-2-pentanone (MIBK)	108-10-1	50	µg/L	<50	<50	<50	----	----
2-Hexanone (MBK)	591-78-6	50	µg/L	<50	<50	<50	----	----
EP074C: Sulfonated Compounds								
Carbon disulfide	75-15-0	5	µg/L	<5	<5	<5	----	----
EP074D: Fumigants								
2.2-Dichloropropane	594-20-7	5	µg/L	<5	<5	<5	----	----
1.2-Dichloropropane	78-87-5	5	µg/L	<5	<5	<5	----	----
cis-1.3-Dichloropropylene	10061-01-5	5	µg/L	<5	<5	<5	----	----

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)			Sample ID	Sub-W1	SMW_BH035	SMW_BH035_S	TS	TB
			Sampling date / time	16-Mar-2022 00:00	16-Mar-2022 00:00	16-Mar-2022 00:00	07-Mar-2022 00:00	09-Mar-2022 00:00
Compound	CAS Number	LOR	Unit	ES2209368-001	ES2209368-002	ES2209368-003	ES2209368-004	ES2209368-005
				Result	Result	Result	Result	Result
EP074D: Fumigants - Continued								
trans-1.3-Dichloropropylene	10061-02-6	5	µg/L	<5	<5	<5	----	----
1.2-Dibromoethane (EDB)	106-93-4	5	µg/L	<5	<5	<5	----	----
EP074E: Halogenated Aliphatic Compounds								
Dichlorodifluoromethane	75-71-8	50	µg/L	<50	<50	<50	----	----
Chloromethane	74-87-3	50	µg/L	<50	<50	<50	----	----
Vinyl chloride	75-01-4	50	µg/L	<50	<50	<50	----	----
Bromomethane	74-83-9	50	µg/L	<50	<50	<50	----	----
Chloroethane	75-00-3	50	µg/L	<50	<50	<50	----	----
Trichlorofluoromethane	75-69-4	50	µg/L	<50	<50	<50	----	----
1.1-Dichloroethene	75-35-4	5	µg/L	<5	<5	<5	----	----
Iodomethane	74-88-4	5	µg/L	<5	<5	<5	----	----
trans-1.2-Dichloroethene	156-60-5	5	µg/L	<5	<5	<5	----	----
1.1-Dichloroethane	75-34-3	5	µg/L	<5	<5	<5	----	----
cis-1.2-Dichloroethene	156-59-2	5	µg/L	<5	<5	<5	----	----
1.1.1-Trichloroethane	71-55-6	5	µg/L	<5	<5	<5	----	----
1.1-Dichloropropylene	563-58-6	5	µg/L	<5	<5	<5	----	----
Carbon Tetrachloride	56-23-5	5	µg/L	<5	<5	<5	----	----
1.2-Dichloroethane	107-06-2	5	µg/L	<5	<5	<5	----	----
Trichloroethene	79-01-6	5	µg/L	<5	<5	<5	----	----
Dibromomethane	74-95-3	5	µg/L	<5	<5	<5	----	----
1.1.2-Trichloroethane	79-00-5	5	µg/L	<5	<5	<5	----	----
1.3-Dichloropropane	142-28-9	5	µg/L	<5	<5	<5	----	----
Tetrachloroethene	127-18-4	5	µg/L	<5	<5	<5	----	----
1.1.1.2-Tetrachloroethane	630-20-6	5	µg/L	<5	<5	<5	----	----
trans-1.4-Dichloro-2-butene	110-57-6	5	µg/L	<5	<5	<5	----	----
cis-1.4-Dichloro-2-butene	1476-11-5	5	µg/L	<5	<5	<5	----	----
1.1.2.2-Tetrachloroethane	79-34-5	5	µg/L	<5	<5	<5	----	----
1.2.3-Trichloropropane	96-18-4	5	µg/L	<5	<5	<5	----	----
Pentachloroethane	76-01-7	5	µg/L	<5	<5	<5	----	----
1.2-Dibromo-3-chloropropane	96-12-8	5	µg/L	<5	<5	<5	----	----
Hexachlorobutadiene	87-68-3	5	µg/L	<5	<5	<5	----	----
EP074F: Halogenated Aromatic Compounds								
Chlorobenzene	108-90-7	5	µg/L	<5	<5	<5	----	----
Bromobenzene	108-86-1	5	µg/L	<5	<5	<5	----	----

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)			Sample ID	Sub-W1	SMW_BH035	SMW_BH035_S	TS	TB
			Sampling date / time	16-Mar-2022 00:00	16-Mar-2022 00:00	16-Mar-2022 00:00	07-Mar-2022 00:00	09-Mar-2022 00:00
Compound	CAS Number	LOR	Unit	ES2209368-001	ES2209368-002	ES2209368-003	ES2209368-004	ES2209368-005
				Result	Result	Result	Result	Result
EP074F: Halogenated Aromatic Compounds - Continued								
2-Chlorotoluene	95-49-8	5	µg/L	<5	<5	<5	----	----
4-Chlorotoluene	106-43-4	5	µg/L	<5	<5	<5	----	----
1.3-Dichlorobenzene	541-73-1	5	µg/L	<5	<5	<5	----	----
1.4-Dichlorobenzene	106-46-7	5	µg/L	<5	<5	<5	----	----
1.2-Dichlorobenzene	95-50-1	5	µg/L	<5	<5	<5	----	----
1.2.4-Trichlorobenzene	120-82-1	5	µg/L	<5	<5	<5	----	----
1.2.3-Trichlorobenzene	87-61-6	5	µg/L	<5	<5	<5	----	----
EP074G: Trihalomethanes								
Chloroform	67-66-3	5	µg/L	<5	<5	<5	----	----
Bromodichloromethane	75-27-4	5	µg/L	<5	<5	<5	----	----
Dibromochloromethane	124-48-1	5	µg/L	<5	<5	<5	----	----
Bromoform	75-25-2	5	µg/L	<5	<5	<5	----	----
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons								
Naphthalene	91-20-3	1.0	µg/L	<1.0	<1.0	<1.0	----	----
Acenaphthylene	208-96-8	1.0	µg/L	<1.0	<1.0	<1.0	----	----
Acenaphthene	83-32-9	1.0	µg/L	<1.0	<1.0	<1.0	----	----
Fluorene	86-73-7	1.0	µg/L	<1.0	<1.0	<1.0	----	----
Phenanthrene	85-01-8	1.0	µg/L	<1.0	<1.0	<1.0	----	----
Anthracene	120-12-7	1.0	µg/L	<1.0	<1.0	<1.0	----	----
Fluoranthene	206-44-0	1.0	µg/L	<1.0	<1.0	<1.0	----	----
Pyrene	129-00-0	1.0	µg/L	<1.0	<1.0	<1.0	----	----
Benz(a)anthracene	56-55-3	1.0	µg/L	<1.0	<1.0	<1.0	----	----
Chrysene	218-01-9	1.0	µg/L	<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	----	----
Benzo(k)fluoranthene	207-08-9	1.0	µg/L	<1.0	<1.0	<1.0	----	----
Benzo(a)pyrene	50-32-8	0.5	µg/L	<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	----	----
Dibenz(a.h)anthracene	53-70-3	1.0	µg/L	<1.0	<1.0	<1.0	----	----
Benzo(g.h.i)perylene	191-24-2	1.0	µg/L	<1.0	<1.0	<1.0	----	----
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	µg/L	<0.5	<0.5	<0.5	----	----
^ Benzo(a)pyrene TEQ (zero)	----	0.5	µg/L	<0.5	<0.5	<0.5	----	----
EP080/071: Total Petroleum Hydrocarbons								
C6 - C9 Fraction	----	20	µg/L	<20	<20	<20	----	<20
C10 - C14 Fraction	----	50	µg/L	<50	<50	<50	----	----

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)			Sample ID	Sub-W1	SMW_BH035	SMW_BH035_S	TS	TB
			Sampling date / time	16-Mar-2022 00:00	16-Mar-2022 00:00	16-Mar-2022 00:00	07-Mar-2022 00:00	09-Mar-2022 00:00
Compound	CAS Number	LOR	Unit	ES2209368-001	ES2209368-002	ES2209368-003	ES2209368-004	ES2209368-005
				Result	Result	Result	Result	Result
EP080/071: Total Petroleum Hydrocarbons - Continued								
C15 - C28 Fraction	----	100	µg/L	<100	<100	<100	----	----
C29 - C36 Fraction	----	50	µg/L	<50	<50	<50	----	----
^ C10 - C36 Fraction (sum)	----	50	µg/L	<50	<50	<50	----	----
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions								
C6 - C10 Fraction	C6_C10	20	µg/L	**40**	<20	<20	----	<20
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	20	µg/L	**40**	<20	<20	----	<20
>C10 - C16 Fraction	----	100	µg/L	<100	<100	<100	----	----
>C16 - C34 Fraction	----	100	µg/L	<100	<100	<100	----	----
>C34 - C40 Fraction	----	100	µg/L	<100	<100	<100	----	----
^ >C10 - C40 Fraction (sum)	----	100	µg/L	<100	<100	<100	----	----
^ >C10 - C16 Fraction minus Naphthalene (F2)	----	100	µg/L	<100	<100	<100	----	----
EP080: BTEXN								
Benzene	71-43-2	1	µg/L	<1	<1	<1	**17**	<1
Toluene	108-88-3	2	µg/L	<2	<2	<2	**16**	<2
Ethylbenzene	100-41-4	2	µg/L	<2	<2	<2	**14**	<2
meta- & para-Xylene	108-38-3 106-42-3	2	µg/L	<2	<2	<2	**14**	<2
ortho-Xylene	95-47-6	2	µg/L	<2	<2	<2	**15**	<2
^ Total Xylenes	----	2	µg/L	<2	<2	<2	**29**	<2
^ Sum of BTEX	----	1	µg/L	<1	<1	<1	**76**	<1
Naphthalene	91-20-3	5	µg/L	<5	<5	<5	**17**	<5
EP231A: Perfluoroalkyl Sulfonic Acids								
Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	**0.03**	<0.02	<0.02	----	----
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	<0.02	<0.02	<0.02	----	----
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	**0.04**	<0.01	**0.02**	----	----
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	<0.02	<0.02	<0.02	----	----
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	**0.02**	<0.01	**0.03**	----	----
Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L	<0.02	<0.02	<0.02	----	----

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)			Sample ID	Sub-W1	SMW_BH035	SMW_BH035_S	TS	TB
			Sampling date / time	16-Mar-2022 00:00	16-Mar-2022 00:00	16-Mar-2022 00:00	07-Mar-2022 00:00	09-Mar-2022 00:00
Compound	CAS Number	LOR	Unit	ES2209368-001	ES2209368-002	ES2209368-003	ES2209368-004	ES2209368-005
				Result	Result	Result	Result	Result
EP231B: Perfluoroalkyl Carboxylic Acids								
Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L	<0.1	<0.1	<0.1	----	----
Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	**0.14**	<0.02	<0.02	----	----
Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	**0.15**	<0.02	**0.02**	----	----
Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	**0.03**	<0.02	<0.02	----	----
Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	**0.05**	<0.01	**0.03**	----	----
Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L	<0.02	<0.02	<0.02	----	----
Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L	<0.02	<0.02	<0.02	----	----
Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L	<0.02	<0.02	<0.02	----	----
Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L	<0.02	<0.02	<0.02	----	----
Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L	<0.02	<0.02	<0.02	----	----
Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L	<0.05	<0.05	<0.05	----	----
EP231C: Perfluoroalkyl Sulfonamides								
Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	µg/L	<0.02	<0.02	<0.02	----	----
N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L	<0.05	<0.05	<0.05	----	----
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	µg/L	<0.05	<0.05	<0.05	----	----
N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L	<0.05	<0.05	<0.05	----	----
N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L	<0.05	<0.05	<0.05	----	----
N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.02	µg/L	<0.02	<0.02	<0.02	----	----
N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.02	µg/L	<0.02	<0.02	<0.02	----	----
EP231D: (n:2) Fluorotelomer Sulfonic Acids								
4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L	<0.05	<0.05	<0.05	----	----

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)			Sample ID	Sub-W1	SMW_BH035	SMW_BH035_S	TS	TB
			Sampling date / time	16-Mar-2022 00:00	16-Mar-2022 00:00	16-Mar-2022 00:00	07-Mar-2022 00:00	09-Mar-2022 00:00
Compound	CAS Number	LOR	Unit	ES2209368-001	ES2209368-002	ES2209368-003	ES2209368-004	ES2209368-005
				Result	Result	Result	Result	Result
EP231D: (n:2) Fluorotelomer Sulfonic Acids - Continued								
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.05	µg/L	<0.05	<0.05	<0.05	----	----
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.05	µg/L	<0.05	<0.05	<0.05	----	----
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.05	µg/L	<0.05	<0.05	<0.05	----	----
EP231P: PFAS Sums								
Sum of PFAS	----	0.01	µg/L	**0.46**	<0.01	**0.10**	----	----
Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L	**0.06**	<0.01	**0.05**	----	----
Sum of PFAS (WA DER List)	----	0.01	µg/L	**0.46**	<0.01	**0.10**	----	----
EP074S: VOC Surrogates								
1.2-Dichloroethane-D4	17060-07-0	5	%	**101**	**104**	**106**	----	----
Toluene-D8	2037-26-5	5	%	**101**	**107**	**106**	----	----
4-Bromofluorobenzene	460-00-4	5	%	**92.0**	**94.0**	**100**	----	----
EP075(SIM)S: Phenolic Compound Surrogates								
Phenol-d6	13127-88-3	1.0	%	**20.2**	**23.5**	**23.9**	----	----
2-Chlorophenol-D4	93951-73-6	1.0	%	**44.6**	**52.0**	**53.9**	----	----
2.4.6-Tribromophenol	118-79-6	1.0	%	**47.4**	**56.1**	**56.8**	----	----
EP075(SIM)T: PAH Surrogates								
2-Fluorobiphenyl	321-60-8	1.0	%	**54.4**	**60.6**	**62.8**	----	----
Anthracene-d10	1719-06-8	1.0	%	**63.0**	**71.6**	**71.6**	----	----
4-Terphenyl-d14	1718-51-0	1.0	%	**62.7**	**69.6**	**70.2**	----	----
EP080S: TPH(V)/BTEX Surrogates								
1.2-Dichloroethane-D4	17060-07-0	2	%	**101**	**104**	**106**	**108**	**103**
Toluene-D8	2037-26-5	2	%	**96.6**	**102**	**102**	**103**	**104**
4-Bromofluorobenzene	460-00-4	2	%	**98.5**	**99.9**	**106**	**98.1**	**103**
EP231S: PFAS Surrogate								
13C4-PFOS	----	0.02	%	**80.5**	**77.6**	**86.0**	----	----
13C8-PFOA	----	0.02	%	**115**	**112**	**114**	----	----

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)			Sample ID	R01_20220316	Sub_W2	----	----	----
			Sampling date / time	16-Mar-2022 00:00	16-Mar-2022 00:00	----	----	----
Compound	CAS Number	LOR	Unit	ES2209368-006	ES2209368-007	--------	--------	--------
				Result	Result	----	----	----
EA015: Total Dissolved Solids dried at 180 ± 5 °C								
Total Dissolved Solids @180°C	----	10	mg/L	<10	----	----	----	----
ED037P: Alkalinity by PC Titrator								
Hydroxide Alkalinity as CaCO3	DMO-210-001	1	mg/L	<1	----	----	----	----
Carbonate Alkalinity as CaCO3	3812-32-6	1	mg/L	<1	----	----	----	----
Bicarbonate Alkalinity as CaCO3	71-52-3	1	mg/L	<1	----	----	----	----
Total Alkalinity as CaCO3	----	1	mg/L	<1	----	----	----	----
ED041G: Sulfate (Turbidimetric) as SO4 2- by DA								
Sulfate as SO4 - Turbidimetric	14808-79-8	1	mg/L	<1	----	----	----	----
ED045G: Chloride by Discrete Analyser								
Chloride	16887-00-6	1	mg/L	<1	----	----	----	----
ED093F: Dissolved Major Cations								
Calcium	7440-70-2	1	mg/L	<1	----	----	----	----
Magnesium	7439-95-4	1	mg/L	<1	----	----	----	----
Sodium	7440-23-5	1	mg/L	<1	----	----	----	----
Potassium	7440-09-7	1	mg/L	<1	----	----	----	----
EG020F: Dissolved Metals by ICP-MS								
Aluminium	7429-90-5	0.01	mg/L	<0.01	----	----	----	----
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	----	----	----	----
Selenium	7782-49-2	0.01	mg/L	<0.01	----	----	----	----
Zinc	7440-66-6	0.005	mg/L	<0.005	----	----	----	----
Iron	7439-89-6	0.05	mg/L	<0.05	----	----	----	----
EG035F: Dissolved Mercury by FIMS								
Mercury	7439-97-6	0.0001	mg/L	<0.0001	----	----	----	----
EK055G: Ammonia as N by Discrete Analyser								
Ammonia as N	7664-41-7	0.01	mg/L	<0.01	----	----	----	----
EK057G: Nitrite as N by Discrete Analyser								
Nitrite as N	14797-65-0	0.01	mg/L	<0.01	----	----	----	----
EK058G: Nitrate as N by Discrete Analyser								
Nitrate as N	14797-55-8	0.01	mg/L	<0.01	----	----	----	----

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)			Sample ID	R01_20220316	Sub_W2	----	----	----
			Sampling date / time	16-Mar-2022 00:00	16-Mar-2022 00:00	----	----	----
Compound	CAS Number	LOR	Unit	ES2209368-006	ES2209368-007	--------	--------	--------
				Result	Result	----	----	----
EK059G: Nitrite plus Nitrate as N (NOx) by Discrete Analyser								
Nitrite + Nitrate as N	----	0.01	mg/L	<0.01	----	----	----	----
EK061G: Total Kjeldahl Nitrogen By Discrete Analyser								
Total Kjeldahl Nitrogen as N	----	0.1	mg/L	<0.1	----	----	----	----
EK062G: Total Nitrogen as N (TKN + NOx) by Discrete Analyser								
^ Total Nitrogen as N	----	0.1	mg/L	<0.1	----	----	----	----
EK067G: Total Phosphorus as P by Discrete Analyser								
Total Phosphorus as P	----	0.01	mg/L	<0.01	----	----	----	----
EN055: Ionic Balance								
ø Total Anions	----	0.01	meq/L	<0.01	----	----	----	----
ø Total Cations	----	0.01	meq/L	<0.01	----	----	----	----
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								
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	<5	----	----	----	----
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								

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	R01_20220316	Sub_W2	----	----	----
				Sampling date / time	16-Mar-2022 00:00	16-Mar-2022 00:00	----	----	----
Compound	CAS Number	LOR	Unit		ES2209368-006	ES2209368-007	--------	--------	--------
					Result	Result	----	----	----
EP074E: Halogenated Aliphatic Compounds - Continued									
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	----	----	----	----
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	----	----	----	----
Hexachlorobutadiene	87-68-3	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	----	----	----	----
1.3-Dichlorobenzene	541-73-1	5	µg/L		<5	----	----	----	----
1.4-Dichlorobenzene	106-46-7	5	µg/L		<5	----	----	----	----

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)			Sample ID	R01_20220316	Sub_W2	----	----	----
			Sampling date / time	16-Mar-2022 00:00	16-Mar-2022 00:00	----	----	----
Compound	CAS Number	LOR	Unit	ES2209368-006	ES2209368-007	--------	--------	--------
				Result	Result	----	----	----
EP074F: Halogenated Aromatic Compounds - Continued								
1.2-Dichlorobenzene	95-50-1	5	µg/L	<5	----	----	----	----
1.2.4-Trichlorobenzene	120-82-1	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)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	----	----	----	----
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								

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)			Sample ID	R01_20220316	Sub_W2	----	----	----
			Sampling date / time	16-Mar-2022 00:00	16-Mar-2022 00:00	----	----	----
Compound	CAS Number	LOR	Unit	ES2209368-006	ES2209368-007	--------	--------	--------
				Result	Result	----	----	----
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions - Continued								
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	----	----	----	----
EP231A: Perfluoroalkyl Sulfonic Acids								
Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	<0.02	----	----	----
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	<0.02	<0.02	----	----	----
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	<0.01	<0.01	----	----	----
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	<0.02	<0.02	----	----	----
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	<0.01	<0.01	----	----	----
Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L	<0.02	<0.02	----	----	----
EP231B: Perfluoroalkyl Carboxylic Acids								
Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L	<0.1	<0.1	----	----	----
Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	<0.02	<0.02	----	----	----
Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	<0.02	<0.02	----	----	----

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	R01_20220316	Sub_W2	----	----	----
				Sampling date / time	16-Mar-2022 00:00	16-Mar-2022 00:00	----	----	----
Compound	CAS Number	LOR	Unit		ES2209368-006	ES2209368-007	--------	--------	--------
					Result	Result	----	----	----
EP231B: Perfluoroalkyl Carboxylic Acids - Continued									
Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L		<0.02	<0.02	----	----	----
Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L		<0.01	<0.01	----	----	----
Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L		<0.02	<0.02	----	----	----
Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L		<0.02	<0.02	----	----	----
Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L		<0.02	<0.02	----	----	----
Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L		<0.02	<0.02	----	----	----
Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L		<0.02	<0.02	----	----	----
Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L		<0.05	<0.05	----	----	----
EP231C: Perfluoroalkyl Sulfonamides									
Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	µg/L		<0.02	<0.02	----	----	----
N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L		<0.05	<0.05	----	----	----
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	µg/L		<0.05	<0.05	----	----	----
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	----	----	----

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)			Sample ID	R01_20220316	Sub_W2	----	----	----
			Sampling date / time	16-Mar-2022 00:00	16-Mar-2022 00:00	----	----	----
Compound	CAS Number	LOR	Unit	ES2209368-006	ES2209368-007	--------	--------	--------
				Result	Result	----	----	----
EP231D: (n:2) Fluorotelomer Sulfonic Acids - Continued								
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.05	µg/L	<0.05	<0.05	----	----	----
EP231P: PFAS Sums								
Sum of PFAS	----	0.01	µg/L	<0.01	<0.01	----	----	----
Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L	<0.01	<0.01	----	----	----
Sum of PFAS (WA DER List)	----	0.01	µg/L	<0.01	<0.01	----	----	----
EP074S: VOC Surrogates								
1.2-Dichloroethane-D4	17060-07-0	5	%	102	----	----	----	----
Toluene-D8	2037-26-5	5	%	104	----	----	----	----
4-Bromofluorobenzene	460-00-4	5	%	91.4	----	----	----	----
EP075(SIM)S: Phenolic Compound Surrogates								
Phenol-d6	13127-88-3	1.0	%	22.2	----	----	----	----
2-Chlorophenol-D4	93951-73-6	1.0	%	52.2	----	----	----	----
2.4.6-Tribromophenol	118-79-6	1.0	%	55.6	----	----	----	----
EP075(SIM)T: PAH Surrogates								
2-Fluorobiphenyl	321-60-8	1.0	%	62.6	----	----	----	----
Anthracene-d10	1719-06-8	1.0	%	88.6	----	----	----	----
4-Terphenyl-d14	1718-51-0	1.0	%	70.5	----	----	----	----
EP080S: TPH(V)/BTEX Surrogates								
1.2-Dichloroethane-D4	17060-07-0	2	%	102	----	----	----	----
Toluene-D8	2037-26-5	2	%	99.6	----	----	----	----
4-Bromofluorobenzene	460-00-4	2	%	97.4	----	----	----	----
EP231S: PFAS Surrogate								
13C4-PFOS	----	0.02	%	77.8	81.6	----	----	----
13C8-PFOA	----	0.02	%	114	118	----	----	----

Surrogate Control Limits

Sub-Matrix: **WATER**

Compound	CAS Number	Recovery Limits (%) Low	High
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
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

ALS Environmental

QUALITY CONTROL REPORT

Work Order	: **ES2209368**	Page	: 1 of 15
Amendment	: **1**		
Client	: **ENVIRONMENTAL RESOURCES MANAGEMENT (ERM)**	Laboratory	: Environmental Division Sydney
Contact	: MS JESSICA LAWRENCE	Contact	: Customer Services ES
Address	: UNIT 11/277 LANE COVE ROAD MACQUARIE PARK 2113	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
Telephone	: +61 02 8584 8888	Telephone	: +61-2-8784 8555
Project	: 0628507 AFJV-SMW	Date Samples Received	: 16-Mar-2022
Order number	: ----	Date Analysis Commenced	: 17-Mar-2022
C-O-C number	: ----	Issue Date	: 30-Mar-2022
Sampler	: WILLIAM OH		
Site	: ----		
Quote number	: EN/114		
No. of samples received	: 7		
No. of samples analysed	: 7		

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

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

This Quality Control Report contains the following information:

- Laboratory Duplicate (DUP) Report; Relative Percentage Difference (RPD) and Acceptance Limits
- Method Blank (MB) and Laboratory Control Spike (LCS) Report; Recovery and Acceptance Limits
- Matrix Spike (MS) Report; Recovery and Acceptance Limits

Signatories

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

Signatories	*Position*	*Accreditation Category*
Ankit Joshi	Senior Chemist - Inorganics	Sydney Inorganics, Smithfield, NSW
Edwandy Fadjar	Organic Coordinator	Sydney Organics, Smithfield, NSW
Franco Lentini	LCMS Coordinator	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.

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**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Acceptable RPD (%)
EA015: Total Dissolved Solids dried at 180 ± 5 °C (QC Lot: 4240031)									
ES2209170-001	Anonymous	EA015H: Total Dissolved Solids @180°C	----	10	mg/L	168	164	2.3	0% - 50%
ES2209368-002	SMW_BH035	EA015H: Total Dissolved Solids @180°C	----	10	mg/L	11800	12400	4.9	0% - 20%
ED037P: Alkalinity by PC Titrator (QC Lot: 4236342)									
ES2209337-004	Anonymous	ED037-P: Hydroxide Alkalinity as CaCO3	DMO-210-001	1	mg/L	<1	<1	0.0	No Limit
		ED037-P: Carbonate Alkalinity as CaCO3	3812-32-6	1	mg/L	<1	<1	0.0	No Limit
		ED037-P: Bicarbonate Alkalinity as CaCO3	71-52-3	1	mg/L	<1	<1	0.0	No Limit
		ED037-P: Total Alkalinity as CaCO3	----	1	mg/L	<1	<1	0.0	No Limit
ES2209362-006	Anonymous	ED037-P: Hydroxide Alkalinity as CaCO3	DMO-210-001	1	mg/L	<1	<1	0.0	No Limit
		ED037-P: Carbonate Alkalinity as CaCO3	3812-32-6	1	mg/L	<1	<1	0.0	No Limit
		ED037-P: Bicarbonate Alkalinity as CaCO3	71-52-3	1	mg/L	324	326	0.6	0% - 20%
		ED037-P: Total Alkalinity as CaCO3	----	1	mg/L	324	326	0.6	0% - 20%
ED041G: Sulfate (Turbidimetric) as SO4 2- by DA (QC Lot: 4234158)									
ES2209375-003	Anonymous	ED041G: Sulfate as SO4 - Turbidimetric	14808-79-8	1	mg/L	<1	<1	0.0	No Limit
ES2209354-002	Anonymous	ED041G: Sulfate as SO4 - Turbidimetric	14808-79-8	1	mg/L	1	<1	0.0	No Limit
ED045G: Chloride by Discrete Analyser (QC Lot: 4234159)									
ES2209375-003	Anonymous	ED045G: Chloride	16887-00-6	1	mg/L	8	8	0.0	No Limit
ES2209354-002	Anonymous	ED045G: Chloride	16887-00-6	1	mg/L	34	34	0.0	0% - 20%
ED093F: Dissolved Major Cations (QC Lot: 4238245)									
ES2209170-001	Anonymous	ED093F: Calcium	7440-70-2	1	mg/L	18	18	0.0	0% - 50%
		ED093F: Magnesium	7439-95-4	1	mg/L	5	5	0.0	No Limit
		ED093F: Sodium	7440-23-5	1	mg/L	16	16	0.0	0% - 50%
		ED093F: Potassium	7440-09-7	1	mg/L	6	6	0.0	No Limit
ES2209299-004	Anonymous	ED093F: Calcium	7440-70-2	1	mg/L	2	2	0.0	No Limit

Sub-Matrix: **WATER**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Acceptable RPD (%)*
ED093F: Dissolved Major Cations (QC Lot: 4238245) - continued									
ES2209299-004	Anonymous	ED093F: Magnesium	7439-95-4	1	mg/L	<1	<1	0.0	No Limit
		ED093F: Sodium	7440-23-5	1	mg/L	253	252	0.5	0% - 20%
		ED093F: Potassium	7440-09-7	1	mg/L	7	7	0.0	No Limit
EG020F: Dissolved Metals by ICP-MS (QC Lot: 4238244)									
ES2209170-001	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	0.027	0.027	0.0	0% - 20%
		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	0.004	0.004	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	0.004	0.004	0.0	No Limit
		EG020A-F: Zinc	7440-66-6	0.005	mg/L	0.016	0.015	0.0	No Limit
		EG020A-F: Aluminium	7429-90-5	0.01	mg/L	0.02	0.02	0.0	No Limit
		EG020A-F: Selenium	7782-49-2	0.01	mg/L	<0.01	<0.01	0.0	No Limit
		EG020A-F: Iron	7439-89-6	0.05	mg/L	0.12	0.12	0.0	No Limit
ES2209299-004	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	0.021	0.021	0.0	0% - 20%
		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	<0.001	<0.001	0.0	No Limit
		EG020A-F: Zinc	7440-66-6	0.005	mg/L	0.006	0.006	0.0	No Limit
		EG020A-F: Aluminium	7429-90-5	0.01	mg/L	<0.01	<0.01	0.0	No Limit
		EG020A-F: Selenium	7782-49-2	0.01	mg/L	<0.01	<0.01	0.0	No Limit
		EG020A-F: Iron	7439-89-6	0.05	mg/L	0.28	0.28	0.0	No Limit
EG035F: Dissolved Mercury by FIMS (QC Lot: 4238246)									
ES2209187-001	Anonymous	EG035F: Mercury	7439-97-6	0.0001	mg/L	<0.0001	<0.0001	0.0	No Limit
ES2209187-011	Anonymous	EG035F: Mercury	7439-97-6	0.0001	mg/L	<0.0001	<0.0001	0.0	No Limit
EK055G: Ammonia as N by Discrete Analyser (QC Lot: 4238038)									
ES2209375-005	Anonymous	EK055G: Ammonia as N	7664-41-7	0.01	mg/L	0.05	0.05	0.0	No Limit
ES2209368-001	Sub-W1	EK055G: Ammonia as N	7664-41-7	0.01	mg/L	0.25	0.25	0.0	0% - 20%
EK057G: Nitrite as N by Discrete Analyser (QC Lot: 4234157)									
ES2209375-003	Anonymous	EK057G: Nitrite as N	14797-65-0	0.01	mg/L	<0.01	<0.01	0.0	No Limit
ES2209354-002	Anonymous	EK057G: Nitrite as N	14797-65-0	0.01	mg/L	<0.01	<0.01	0.0	No Limit
EK059G: Nitrite plus Nitrate as N (NOx) by Discrete Analyser (QC Lot: 4238039)									
ES2209375-005	Anonymous	EK059G: Nitrite + Nitrate as N	----	0.01	mg/L	0.02	0.02	0.0	No Limit
ES2209368-001	Sub-W1	EK059G: Nitrite + Nitrate as N	----	0.01	mg/L	0.14	0.14	0.0	0% - 50%
EK061G: Total Kjeldahl Nitrogen By Discrete Analyser (QC Lot: 4238043)									
ES2209359-001	Anonymous	EK061G: Total Kjeldahl Nitrogen as N	----	0.1	mg/L	10.8	10.4	3.0	0% - 50%
ES2209375-006	Anonymous	EK061G: Total Kjeldahl Nitrogen as N	----	0.1	mg/L	<0.1	<0.1	0.0	No Limit

Sub-Matrix: **WATER**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Acceptable RPD (%)*
EK067G: Total Phosphorus as P by Discrete Analyser (QC Lot: 4238042)									
ES2209359-001	Anonymous	EK067G: Total Phosphorus as P	----	0.01	mg/L	3.04	2.95	2.9	0% - 20%
ES2209375-006	Anonymous	EK067G: Total Phosphorus as P	----	0.01	mg/L	<0.05	<0.05	0.0	No Limit
EP033: C1 - C4 Hydrocarbon Gases (QC Lot: 4235699)									
EM2204340-011	Anonymous	EP033: Methane	74-82-8	10	µg/L	16	16	0.0	No Limit
EM2204492-002	Anonymous	EP033: Methane	74-82-8	10	µg/L	<10	<10	0.0	No Limit
EP074A: Monocyclic Aromatic Hydrocarbons (QC Lot: 4238756)									
ES2209368-001	Sub-W1	EP074: Styrene	100-42-5	5	µg/L	<5	<5	0.0	No Limit
		EP074: Isopropylbenzene	98-82-8	5	µg/L	<5	<5	0.0	No Limit
		EP074: n-Propylbenzene	103-65-1	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.3.5-Trimethylbenzene	108-67-8	5	µg/L	<5	<5	0.0	No Limit
		EP074: sec-Butylbenzene	135-98-8	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.2.4-Trimethylbenzene	95-63-6	5	µg/L	<5	<5	0.0	No Limit
		EP074: tert-Butylbenzene	98-06-6	5	µg/L	<5	<5	0.0	No Limit
		EP074: p-Isopropyltoluene	99-87-6	5	µg/L	<5	<5	0.0	No Limit
		EP074: n-Butylbenzene	104-51-8	5	µg/L	<5	<5	0.0	No Limit
EP074B: Oxygenated Compounds (QC Lot: 4238756)									
ES2209368-001	Sub-W1	EP074: Vinyl Acetate	108-05-4	50	µg/L	<50	<50	0.0	No Limit
		EP074: 2-Butanone (MEK)	78-93-3	50	µg/L	<50	<50	0.0	No Limit
		EP074: 4-Methyl-2-pentanone (MIBK)	108-10-1	50	µg/L	<50	<50	0.0	No Limit
		EP074: 2-Hexanone (MBK)	591-78-6	50	µg/L	<50	<50	0.0	No Limit
EP074C: Sulfonated Compounds (QC Lot: 4238756)									
ES2209368-001	Sub-W1	EP074: Carbon disulfide	75-15-0	5	µg/L	<5	<5	0.0	No Limit
EP074D: Fumigants (QC Lot: 4238756)									
ES2209368-001	Sub-W1	EP074: 2.2-Dichloropropane	594-20-7	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.2-Dichloropropane	78-87-5	5	µg/L	<5	<5	0.0	No Limit
		EP074: cis-1.3-Dichloropropylene	10061-01-5	5	µg/L	<5	<5	0.0	No Limit
		EP074: trans-1.3-Dichloropropylene	10061-02-6	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.2-Dibromoethane (EDB)	106-93-4	5	µg/L	<5	<5	0.0	No Limit
EP074E: Halogenated Aliphatic Compounds (QC Lot: 4238756)									
ES2209368-001	Sub-W1	EP074: 1.1-Dichloroethene	75-35-4	5	µg/L	<5	<5	0.0	No Limit
		EP074: Iodomethane	74-88-4	5	µg/L	<5	<5	0.0	No Limit
		EP074: trans-1.2-Dichloroethene	156-60-5	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.1-Dichloroethane	75-34-3	5	µg/L	<5	<5	0.0	No Limit
		EP074: cis-1.2-Dichloroethene	156-59-2	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.1.1-Trichloroethane	71-55-6	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.1-Dichloropropylene	563-58-6	5	µg/L	<5	<5	0.0	No Limit
		EP074: Carbon Tetrachloride	56-23-5	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.2-Dichloroethane	107-06-2	5	µg/L	<5	<5	0.0	No Limit
		EP074: Trichloroethene	79-01-6	5	µg/L	<5	<5	0.0	No Limit

Sub-Matrix: **WATER**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Acceptable RPD (%)*
EP074E: Halogenated Aliphatic Compounds (QC Lot: 4238756) - continued									
ES2209368-001	Sub-W1	EP074: Dibromomethane	74-95-3	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.1.2-Trichloroethane	79-00-5	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.3-Dichloropropane	142-28-9	5	µg/L	<5	<5	0.0	No Limit
		EP074: Tetrachloroethene	127-18-4	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.1.1.2-Tetrachloroethane	630-20-6	5	µg/L	<5	<5	0.0	No Limit
		EP074: trans-1.4-Dichloro-2-butene	110-57-6	5	µg/L	<5	<5	0.0	No Limit
		EP074: cis-1.4-Dichloro-2-butene	1476-11-5	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.1.2.2-Tetrachloroethane	79-34-5	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.2.3-Trichloropropane	96-18-4	5	µg/L	<5	<5	0.0	No Limit
		EP074: Pentachloroethane	76-01-7	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.2-Dibromo-3-chloropropane	96-12-8	5	µg/L	<5	<5	0.0	No Limit
		EP074: Hexachlorobutadiene	87-68-3	5	µg/L	<5	<5	0.0	No Limit
		EP074: Dichlorodifluoromethane	75-71-8	50	µg/L	<50	<50	0.0	No Limit
		EP074: Chloromethane	74-87-3	50	µg/L	<50	<50	0.0	No Limit
		EP074: Vinyl chloride	75-01-4	50	µg/L	<50	<50	0.0	No Limit
		EP074: Bromomethane	74-83-9	50	µg/L	<50	<50	0.0	No Limit
		EP074: Chloroethane	75-00-3	50	µg/L	<50	<50	0.0	No Limit
		EP074: Trichlorofluoromethane	75-69-4	50	µg/L	<50	<50	0.0	No Limit
EP074F: Halogenated Aromatic Compounds (QC Lot: 4238756)									
ES2209368-001	Sub-W1	EP074: Chlorobenzene	108-90-7	5	µg/L	<5	<5	0.0	No Limit
		EP074: Bromobenzene	108-86-1	5	µg/L	<5	<5	0.0	No Limit
		EP074: 2-Chlorotoluene	95-49-8	5	µg/L	<5	<5	0.0	No Limit
		EP074: 4-Chlorotoluene	106-43-4	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.3-Dichlorobenzene	541-73-1	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.4-Dichlorobenzene	106-46-7	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.2-Dichlorobenzene	95-50-1	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.2.4-Trichlorobenzene	120-82-1	5	µg/L	<5	<5	0.0	No Limit
		EP074: 1.2.3-Trichlorobenzene	87-61-6	5	µg/L	<5	<5	0.0	No Limit
EP074G: Trihalomethanes (QC Lot: 4238756)									
ES2209368-001	Sub-W1	EP074: Chloroform	67-66-3	5	µg/L	<5	<5	0.0	No Limit
		EP074: Bromodichloromethane	75-27-4	5	µg/L	<5	<5	0.0	No Limit
		EP074: Dibromochloromethane	124-48-1	5	µg/L	<5	<5	0.0	No Limit
		EP074: Bromoform	75-25-2	5	µg/L	<5	<5	0.0	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 4238755)									
ES2209423-006	Anonymous	EP080: C6 - C9 Fraction	----	20	µg/L	<20	<20	0.0	No Limit
ES2209368-001	Sub-W1	EP080: C6 - C9 Fraction	----	20	µg/L	<20	<20	0.0	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 4238755)									
ES2209423-006	Anonymous	EP080: C6 - C10 Fraction	C6_C10	20	µg/L	<20	<20	0.0	No Limit
ES2209368-001	Sub-W1	EP080: C6 - C10 Fraction	C6_C10	20	µg/L	40	40	0.0	No Limit

Sub-Matrix: **WATER**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Acceptable RPD (%)*
EP080: BTEXN (QC Lot: 4238755)									
ES2209423-006	Anonymous	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	108-38-3 106-42-3	2	µg/L	<2	<2	0.0	No Limit
		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
ES2209368-001	Sub-W1	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	108-38-3 106-42-3	2	µg/L	<2	<2	0.0	No Limit
		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
EP231A: Perfluoroalkyl Sulfonic Acids (QC Lot: 4237105)									
EP2203094-013	Anonymous	EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L	<0.02	<0.02	0.0	No Limit
EP231B: Perfluoroalkyl Carboxylic Acids (QC Lot: 4237105)									
EP2203094-013	Anonymous	EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	<0.01	<0.01	0.0	No Limit
		EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L	<0.1	<0.1	0.0	No Limit
EP231C: Perfluoroalkyl Sulfonamides (QC Lot: 4237105)									
EP2203094-013	Anonymous	EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.02	µg/L	<0.02	<0.02	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.02	µg/L	<0.02	<0.02	0.0	No Limit

Sub-Matrix: **WATER**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Acceptable RPD (%)*
EP231C: Perfluoroalkyl Sulfonamides (QC Lot: 4237105) - continued									
EP2203094-013	Anonymous	EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L	<0.05	<0.05	0.0	No Limit
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QC Lot: 4237105)									
EP2203094-013	Anonymous	EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.05	µg/L	<0.05	<0.05	0.0	No Limit
		EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.05	µg/L	<0.05	<0.05	0.0	No Limit
EP231P: PFAS Sums (QC Lot: 4237105)									
EP2203094-013	Anonymous	EP231X: Sum of PFAS	----	0.01	µg/L	<0.01	<0.01	0.0	No Limit

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

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

Sub-Matrix: **WATER**

				Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Acceptable Limits (%)	
Method: Compound	CAS Number	LOR	Unit	Result	Concentration	LCS	Low	High
EA015: Total Dissolved Solids dried at 180 ± 5 °C (QCLot: 4240031)								
EA015H: Total Dissolved Solids @180°C	----	10	mg/L	<10	2000 mg/L	101	87.0	109
				<10	293 mg/L	103	75.2	126
				<10	2835 mg/L	104	83.0	124
ED037P: Alkalinity by PC Titrator (QCLot: 4236342)								
ED037-P: Total Alkalinity as CaCO3	----	----	mg/L	----	200 mg/L	98.4	81.0	111
				----	50 mg/L	113	80.0	120
ED041G: Sulfate (Turbidimetric) as SO4 2- by DA (QCLot: 4234158)								
ED041G: Sulfate as SO4 - Turbidimetric	14808-79-8	1	mg/L	<1	25 mg/L	103	82.0	122
				<1	500 mg/L	102	82.0	122
ED045G: Chloride by Discrete Analyser (QCLot: 4234159)								
ED045G: Chloride	16887-00-6	1	mg/L	<1	50 mg/L	98.2	80.9	127
				<1	1000 mg/L	98.4	80.9	127
ED093F: Dissolved Major Cations (QCLot: 4238245)								
ED093F: Calcium	7440-70-2	1	mg/L	<1	50 mg/L	106	80.0	114
ED093F: Magnesium	7439-95-4	1	mg/L	<1	50 mg/L	95.8	90.0	116
ED093F: Sodium	7440-23-5	1	mg/L	<1	50 mg/L	97.8	82.0	120
ED093F: Potassium	7440-09-7	1	mg/L	<1	50 mg/L	104	85.0	113
EG020F: Dissolved Metals by ICP-MS (QCLot: 4238244)								
EG020A-F: Aluminium	7429-90-5	0.01	mg/L	<0.01	0.5 mg/L	90.5	80.0	116
EG020A-F: Arsenic	7440-38-2	0.001	mg/L	<0.001	0.1 mg/L	91.2	85.0	114
EG020A-F: Cadmium	7440-43-9	0.0001	mg/L	<0.0001	0.1 mg/L	91.3	84.0	110
EG020A-F: Chromium	7440-47-3	0.001	mg/L	<0.001	0.1 mg/L	91.5	85.0	111
EG020A-F: Copper	7440-50-8	0.001	mg/L	<0.001	0.1 mg/L	90.9	81.0	111
EG020A-F: Lead	7439-92-1	0.001	mg/L	<0.001	0.1 mg/L	88.0	83.0	111
EG020A-F: Nickel	7440-02-0	0.001	mg/L	<0.001	0.1 mg/L	92.0	82.0	112
EG020A-F: Selenium	7782-49-2	0.01	mg/L	<0.01	0.1 mg/L	86.5	85.0	115
EG020A-F: Zinc	7440-66-6	0.005	mg/L	<0.005	0.1 mg/L	90.9	81.0	117
EG020A-F: Iron	7439-89-6	0.05	mg/L	<0.05	0.5 mg/L	94.0	82.0	112
EG035F: Dissolved Mercury by FIMS (QCLot: 4238246)								
EG035F: Mercury	7439-97-6	0.0001	mg/L	<0.0001	0.01 mg/L	97.8	83.0	105
EK055G: Ammonia as N by Discrete Analyser (QCLot: 4238038)								
EK055G: Ammonia as N	7664-41-7	0.01	mg/L	<0.01	1 mg/L	99.1	90.0	114
EK057G: Nitrite as N by Discrete Analyser (QCLot: 4234157)								

Sub-Matrix: **WATER**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Acceptable Limits (%)	
				Result	Concentration	LCS	Low	High
EK057G: Nitrite as N by Discrete Analyser (QCLot: 4234157) - continued								
EK057G: Nitrite as N	14797-65-0	0.01	mg/L	<0.01	0.5 mg/L	96.5	82.0	114
EK059G: Nitrite plus Nitrate as N (NOx) by Discrete Analyser (QCLot: 4238039)								
EK059G: Nitrite + Nitrate as N	----	0.01	mg/L	<0.01	0.5 mg/L	98.5	91.0	113
EK061G: Total Kjeldahl Nitrogen By Discrete Analyser (QCLot: 4238043)								
EK061G: Total Kjeldahl Nitrogen as N	----	0.1	mg/L	<0.1	10 mg/L	87.5	69.0	101
				<0.1	1 mg/L	95.1	70.0	118
				<0.1	5 mg/L	96.1	70.0	130
EK067G: Total Phosphorus as P by Discrete Analyser (QCLot: 4238042)								
EK067G: Total Phosphorus as P	----	0.01	mg/L	<0.01	4.42 mg/L	89.4	71.3	126
				<0.01	0.442 mg/L	102	71.3	126
				<0.01	1 mg/L	106	71.3	126
EP033: C1 - C4 Hydrocarbon Gases (QCLot: 4235699)								
EP033: Methane	74-82-8	10	µg/L	<10	28.48 µg/L	102	86.0	114
EP074A: Monocyclic Aromatic Hydrocarbons (QCLot: 4238756)								
EP074: Styrene	100-42-5	5	µg/L	<5	10 µg/L	104	73.0	119
EP074: Isopropylbenzene	98-82-8	5	µg/L	<5	10 µg/L	106	76.0	118
EP074: n-Propylbenzene	103-65-1	5	µg/L	<5	10 µg/L	109	69.0	119
EP074: 1.3.5-Trimethylbenzene	108-67-8	5	µg/L	<5	10 µg/L	107	74.0	116
EP074: sec-Butylbenzene	135-98-8	5	µg/L	<5	10 µg/L	110	73.0	119
EP074: 1.2.4-Trimethylbenzene	95-63-6	5	µg/L	<5	10 µg/L	108	74.0	116
EP074: tert-Butylbenzene	98-06-6	5	µg/L	<5	10 µg/L	110	72.0	116
EP074: p-Isopropyltoluene	99-87-6	5	µg/L	<5	10 µg/L	112	71.0	119
EP074: n-Butylbenzene	104-51-8	5	µg/L	<5	10 µg/L	110	65.0	123
EP074B: Oxygenated Compounds (QCLot: 4238756)								
EP074: Vinyl Acetate	108-05-4	50	µg/L	<50	100 µg/L	101	61.4	134
EP074: 2-Butanone (MEK)	78-93-3	50	µg/L	<50	100 µg/L	103	73.6	130
EP074: 4-Methyl-2-pentanone (MIBK)	108-10-1	50	µg/L	<50	100 µg/L	98.2	66.0	132
EP074: 2-Hexanone (MBK)	591-78-6	50	µg/L	<50	100 µg/L	98.5	65.0	137
EP074C: Sulfonated Compounds (QCLot: 4238756)								
EP074: Carbon disulfide	75-15-0	5	µg/L	<5	10 µg/L	113	72.8	127
EP074D: Fumigants (QCLot: 4238756)								
EP074: 2.2-Dichloropropane	594-20-7	5	µg/L	<5	10 µg/L	111	68.0	122
EP074: 1.2-Dichloropropane	78-87-5	5	µg/L	<5	10 µg/L	105	76.0	118
EP074: cis-1.3-Dichloropropylene	10061-01-5	5	µg/L	<5	10 µg/L	102	62.0	120
EP074: trans-1.3-Dichloropropylene	10061-02-6	5	µg/L	<5	10 µg/L	104	60.0	114
EP074: 1.2-Dibromoethane (EDB)	106-93-4	5	µg/L	<5	10 µg/L	102	69.0	117
EP074E: Halogenated Aliphatic Compounds (QCLot: 4238756)								
EP074: Dichlorodifluoromethane	75-71-8	50	µg/L	<50	100 µg/L	116	60.6	138

Sub-Matrix: **WATER**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Acceptable Limits (%)	
				Result	Concentration	LCS	Low	High
EP074E: Halogenated Aliphatic Compounds (QCLot: 4238756) - continued								
EP074: Chloromethane	74-87-3	50	µg/L	<50	100 µg/L	109	67.4	130
EP074: Vinyl chloride	75-01-4	50	µg/L	<50	100 µg/L	116	69.4	129
EP074: Bromomethane	74-83-9	50	µg/L	<50	100 µg/L	109	56.0	140
EP074: Chloroethane	75-00-3	50	µg/L	<50	100 µg/L	107	61.0	139
EP074: Trichlorofluoromethane	75-69-4	50	µg/L	<50	100 µg/L	111	69.0	131
EP074: 1.1-Dichloroethene	75-35-4	5	µg/L	<5	10 µg/L	111	70.0	124
EP074: Iodomethane	74-88-4	5	µg/L	<5	10 µg/L	106	70.2	128
EP074: trans-1.2-Dichloroethene	156-60-5	5	µg/L	<5	10 µg/L	105	74.0	118
EP074: 1.1-Dichloroethane	75-34-3	5	µg/L	<5	10 µg/L	106	74.0	120
EP074: cis-1.2-Dichloroethene	156-59-2	5	µg/L	<5	10 µg/L	105	77.0	119
EP074: 1.1.1-Trichloroethane	71-55-6	5	µg/L	<5	10 µg/L	108	67.0	119
EP074: 1.1-Dichloropropylene	563-58-6	5	µg/L	<5	10 µg/L	110	73.0	119
EP074: Carbon Tetrachloride	56-23-5	5	µg/L	<5	10 µg/L	108	62.0	120
EP074: 1.2-Dichloroethane	107-06-2	5	µg/L	<5	10 µg/L	102	73.0	123
EP074: Trichloroethene	79-01-6	5	µg/L	<5	10 µg/L	105	76.0	118
EP074: Dibromomethane	74-95-3	5	µg/L	<5	10 µg/L	102	73.0	119
EP074: 1.1.2-Trichloroethane	79-00-5	5	µg/L	<5	10 µg/L	103	72.0	126
EP074: 1.3-Dichloropropane	142-28-9	5	µg/L	<5	10 µg/L	105	71.0	129
EP074: Tetrachloroethene	127-18-4	5	µg/L	<5	10 µg/L	111	72.0	124
EP074: 1.1.1.2-Tetrachloroethane	630-20-6	5	µg/L	<5	10 µg/L	104	66.0	114
EP074: trans-1.4-Dichloro-2-butene	110-57-6	5	µg/L	<5	10 µg/L	94.8	60.0	120
EP074: cis-1.4-Dichloro-2-butene	1476-11-5	5	µg/L	<5	10 µg/L	100	70.6	128
EP074: 1.1.2.2-Tetrachloroethane	79-34-5	5	µg/L	<5	10 µg/L	101	70.0	124
EP074: 1.2.3-Trichloropropane	96-18-4	5	µg/L	<5	10 µg/L	99.6	74.0	126
EP074: Pentachloroethane	76-01-7	5	µg/L	<5	10 µg/L	108	71.8	126
EP074: 1.2-Dibromo-3-chloropropane	96-12-8	5	µg/L	<5	10 µg/L	102	66.4	136
EP074: Hexachlorobutadiene	87-68-3	5	µg/L	<5	10 µg/L	116	58.0	130
EP074F: Halogenated Aromatic Compounds (QCLot: 4238756)								
EP074: Chlorobenzene	108-90-7	5	µg/L	<5	10 µg/L	102	79.0	117
EP074: Bromobenzene	108-86-1	5	µg/L	<5	10 µg/L	107	76.0	116
EP074: 2-Chlorotoluene	95-49-8	5	µg/L	<5	10 µg/L	110	73.0	119
EP074: 4-Chlorotoluene	106-43-4	5	µg/L	<5	10 µg/L	109	73.0	119
EP074: 1.3-Dichlorobenzene	541-73-1	5	µg/L	<5	10 µg/L	106	75.0	117
EP074: 1.4-Dichlorobenzene	106-46-7	5	µg/L	<5	10 µg/L	103	74.0	118
EP074: 1.2-Dichlorobenzene	95-50-1	5	µg/L	<5	10 µg/L	106	75.0	117
EP074: 1.2.4-Trichlorobenzene	120-82-1	5	µg/L	<5	10 µg/L	110	61.0	125
EP074: 1.2.3-Trichlorobenzene	87-61-6	5	µg/L	<5	10 µg/L	111	67.0	123
EP074G: Trihalomethanes (QCLot: 4238756)								
EP074: Chloroform	67-66-3	5	µg/L	<5	10 µg/L	105	72.0	120

Sub-Matrix: **WATER**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Acceptable Limits (%)	
				Result	Concentration	LCS	Low	High
EP074G: Trihalomethanes (QCLot: 4238756) - continued								
EP074: Bromodichloromethane	75-27-4	5	µg/L	<5	10 µg/L	103	64.0	118
EP074: Dibromochloromethane	124-48-1	5	µg/L	<5	10 µg/L	102	65.0	115
EP074: Bromoform	75-25-2	5	µg/L	<5	10 µg/L	100	73.5	126
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 4233613)								
EP075(SIM): Naphthalene	91-20-3	1	µg/L	<1.0	5 µg/L	68.7	50.0	94.0
EP075(SIM): Acenaphthylene	208-96-8	1	µg/L	<1.0	5 µg/L	73.0	63.6	114
EP075(SIM): Acenaphthene	83-32-9	1	µg/L	<1.0	5 µg/L	71.5	62.2	113
EP075(SIM): Fluorene	86-73-7	1	µg/L	<1.0	5 µg/L	78.0	63.9	115
EP075(SIM): Phenanthrene	85-01-8	1	µg/L	<1.0	5 µg/L	92.9	62.6	116
EP075(SIM): Anthracene	120-12-7	1	µg/L	<1.0	5 µg/L	81.0	64.3	116
EP075(SIM): Fluoranthene	206-44-0	1	µg/L	<1.0	5 µg/L	107	63.6	118
EP075(SIM): Pyrene	129-00-0	1	µg/L	<1.0	5 µg/L	108	63.1	118
EP075(SIM): Benz(a)anthracene	56-55-3	1	µg/L	<1.0	5 µg/L	101	64.1	117
EP075(SIM): Chrysene	218-01-9	1	µg/L	<1.0	5 µg/L	111	62.5	116
EP075(SIM): Benzo(b+j)fluoranthene	205-99-2 205-82-3	1	µg/L	<1.0	5 µg/L	106	61.7	119
EP075(SIM): Benzo(k)fluoranthene	207-08-9	1	µg/L	<1.0	5 µg/L	87.0	63.0	115
EP075(SIM): Benzo(a)pyrene	50-32-8	0.5	µg/L	<0.5	5 µg/L	105	63.3	117
EP075(SIM): Indeno(1.2.3.cd)pyrene	193-39-5	1	µg/L	<1.0	5 µg/L	104	59.9	118
EP075(SIM): Dibenz(a.h)anthracene	53-70-3	1	µg/L	<1.0	5 µg/L	106	61.2	117
EP075(SIM): Benzo(g.h.i)perylene	191-24-2	1	µg/L	<1.0	5 µg/L	102	59.1	118
EP080/071: Total Petroleum Hydrocarbons (QCLot: 4233614)								
EP071: C10 - C14 Fraction	----	50	µg/L	<50	400 µg/L	67.2	55.8	112
EP071: C15 - C28 Fraction	----	100	µg/L	<100	600 µg/L	91.8	71.6	113
EP071: C29 - C36 Fraction	----	50	µg/L	<50	400 µg/L	94.5	56.0	121
EP080/071: Total Petroleum Hydrocarbons (QCLot: 4238755)								
EP080: C6 - C9 Fraction	----	20	µg/L	<20	260 µg/L	77.6	75.0	127
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 4233614)								
EP071: >C10 - C16 Fraction	----	100	µg/L	<100	500 µg/L	72.6	57.9	119
EP071: >C16 - C34 Fraction	----	100	µg/L	<100	700 µg/L	97.0	62.5	110
EP071: >C34 - C40 Fraction	----	100	µg/L	<100	300 µg/L	104	61.5	121
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 4238755)								
EP080: C6 - C10 Fraction	C6_C10	20	µg/L	<20	310 µg/L	78.7	75.0	127
EP080: BTEXN (QCLot: 4238755)								
EP080: Benzene	71-43-2	1	µg/L	<1	10 µg/L	93.1	70.0	122
EP080: Toluene	108-88-3	2	µg/L	<2	10 µg/L	91.1	69.0	123
EP080: Ethylbenzene	100-41-4	2	µg/L	<2	10 µg/L	89.7	70.0	120

Sub-Matrix: **WATER**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Acceptable Limits (%)	
				Result	Concentration	LCS	Low	High
EP080: BTEXN (QCLot: 4238755) - continued								
EP080: meta- & para-Xylene	108-38-3 106-42-3	2	µg/L	<2	10 µg/L	90.5	69.0	121
EP080: ortho-Xylene	95-47-6	2	µg/L	<2	10 µg/L	91.7	72.0	122
EP080: Naphthalene	91-20-3	5	µg/L	<5	10 µg/L	97.5	70.0	120
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 4237105)								
EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	0.25 µg/L	110	72.0	130
EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	<0.02	0.25 µg/L	117	71.0	127
EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	<0.01	0.25 µg/L	110	68.0	131
EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	<0.02	0.25 µg/L	110	69.0	134
EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	<0.01	0.25 µg/L	87.2	65.0	140
EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L	<0.02	0.25 µg/L	114	53.0	142
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4237105)								
EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L	<0.1	1.25 µg/L	91.1	73.0	129
EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	<0.02	0.25 µg/L	113	72.0	129
EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	<0.02	0.25 µg/L	124	72.0	129
EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	<0.02	0.25 µg/L	115	72.0	130
EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	<0.01	0.25 µg/L	101	71.0	133
EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L	<0.02	0.25 µg/L	95.0	69.0	130
EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L	<0.02	0.25 µg/L	81.6	71.0	129
EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L	<0.02	0.25 µg/L	85.0	69.0	133
EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L	<0.02	0.25 µg/L	122	72.0	134
EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L	<0.02	0.25 µg/L	103	65.0	144
EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L	<0.05	0.625 µg/L	123	71.0	132
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 4237105)								
EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	µg/L	<0.02	0.25 µg/L	111	67.0	137
EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L	<0.05	0.625 µg/L	102	68.0	141
EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	µg/L	<0.05	0.625 µg/L	117	62.6	147
EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L	<0.05	0.625 µg/L	123	66.0	145
EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L	<0.05	0.625 µg/L	115	57.6	145
EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.02	µg/L	<0.02	0.25 µg/L	108	65.0	136
EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.02	µg/L	<0.02	0.25 µg/L	101	61.0	135
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 4237105)								
EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L	<0.05	0.25 µg/L	118	63.0	143
EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.05	µg/L	<0.05	0.25 µg/L	124	64.0	140
EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.05	µg/L	<0.05	0.25 µg/L	112	67.0	138

Sub-Matrix: **WATER**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report: Result	Laboratory Control Spike (LCS) Report: Spike Concentration	Spike Recovery (%): LCS	Acceptable Limits (%): Low	Acceptable Limits (%): High
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 4237105) - continued								
EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.05	µg/L	<0.05	0.25 µg/L	100	71.4	144

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: **WATER**

Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Matrix Spike (MS) Report: Spike Concentration	SpikeRecovery(%): MS	Acceptable Limits (%): Low	Acceptable Limits (%): High
ED041G: Sulfate (Turbidimetric) as SO4 2- by DA (QCLot: 4234158)							
ES2209354-002	Anonymous	ED041G: Sulfate as SO4 - Turbidimetric	14808-79-8	10 mg/L	120	70.0	130
ED045G: Chloride by Discrete Analyser (QCLot: 4234159)							
ES2209354-002	Anonymous	ED045G: Chloride	16887-00-6	50 mg/L	102	70.0	130
EG020F: Dissolved Metals by ICP-MS (QCLot: 4238244)							
ES2209170-007	Anonymous	EG020A-F: Arsenic	7440-38-2	1 mg/L	88.1	70.0	130
		EG020A-F: Cadmium	7440-43-9	0.25 mg/L	91.8	70.0	130
		EG020A-F: Chromium	7440-47-3	1 mg/L	88.9	70.0	130
		EG020A-F: Copper	7440-50-8	1 mg/L	90.4	70.0	130
		EG020A-F: Lead	7439-92-1	1 mg/L	100	70.0	130
		EG020A-F: Nickel	7440-02-0	1 mg/L	92.0	70.0	130
		EG020A-F: Zinc	7440-66-6	1 mg/L	90.6	70.0	130
EG035F: Dissolved Mercury by FIMS (QCLot: 4238246)							
ES2209170-002	Anonymous	EG035F: Mercury	7439-97-6	0.01 mg/L	101	70.0	130
EK055G: Ammonia as N by Discrete Analyser (QCLot: 4238038)							
ES2209368-001	Sub-W1	EK055G: Ammonia as N	7664-41-7	1 mg/L	84.3	70.0	130
EK057G: Nitrite as N by Discrete Analyser (QCLot: 4234157)							
ES2209354-002	Anonymous	EK057G: Nitrite as N	14797-65-0	0.5 mg/L	109	70.0	130
EK059G: Nitrite plus Nitrate as N (NOx) by Discrete Analyser (QCLot: 4238039)							
ES2209368-001	Sub-W1	EK059G: Nitrite + Nitrate as N	----	0.5 mg/L	84.8	70.0	130
EK061G: Total Kjeldahl Nitrogen By Discrete Analyser (QCLot: 4238043)							
ES2209368-001	Sub-W1	EK061G: Total Kjeldahl Nitrogen as N	----	25 mg/L	95.4	70.0	130
EK067G: Total Phosphorus as P by Discrete Analyser (QCLot: 4238042)							
ES2209368-001	Sub-W1	EK067G: Total Phosphorus as P	----	5 mg/L	106	70.0	130
EP033: C1 - C4 Hydrocarbon Gases (QCLot: 4235699)							
EM2204340-012	Anonymous	EP033: Methane	74-82-8	28.48 µg/L	104	70.0	130

Sub-Matrix: **WATER**

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Acceptable Limits (%)	
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Concentration	MS	Low	High
EP074E: Halogenated Aliphatic Compounds (QCLot: 4238756)							
ES2209368-001	Sub-W1	EP074: 1.1-Dichloroethene	75-35-4	25 µg/L	94.3	70.0	130
		EP074: Trichloroethene	79-01-6	25 µg/L	100	70.0	130
EP074F: Halogenated Aromatic Compounds (QCLot: 4238756)							
ES2209368-001	Sub-W1	EP074: Chlorobenzene	108-90-7	25 µg/L	109	70.0	130
EP080/071: Total Petroleum Hydrocarbons (QCLot: 4238755)							
ES2209368-001	Sub-W1	EP080: C6 - C9 Fraction	----	325 µg/L	79.8	70.0	130
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 4238755)							
ES2209368-001	Sub-W1	EP080: C6 - C10 Fraction	C6_C10	375 µg/L	79.2	70.0	130
EP080: BTEXN (QCLot: 4238755)							
ES2209368-001	Sub-W1	EP080: Benzene	71-43-2	25 µg/L	84.8	70.0	130
		EP080: Toluene	108-88-3	25 µg/L	86.1	70.0	130
		EP080: Ethylbenzene	100-41-4	25 µg/L	87.4	70.0	130
		EP080: meta- & para-Xylene	108-38-3 106-42-3	25 µg/L	87.7	70.0	130
		EP080: ortho-Xylene	95-47-6	25 µg/L	89.8	70.0	130
		EP080: Naphthalene	91-20-3	25 µg/L	87.9	70.0	130
EP231A: Perfluoroalkyl Sulfonic Acids (QCLot: 4237105)							
EP2203094-002	Anonymous	EP231X: Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.25 µg/L	122	72.0	130
		EP231X: Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.25 µg/L	120	71.0	127
		EP231X: Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.25 µg/L	112	68.0	131
		EP231X: Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.25 µg/L	110	69.0	134
		EP231X: Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.25 µg/L	88.6	65.0	140
		EP231X: Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.25 µg/L	109	53.0	142
EP231B: Perfluoroalkyl Carboxylic Acids (QCLot: 4237105)							
EP2203094-002	Anonymous	EP231X: Perfluorobutanoic acid (PFBA)	375-22-4	1.25 µg/L	94.7	73.0	129
		EP231X: Perfluoropentanoic acid (PFPeA)	2706-90-3	0.25 µg/L	121	72.0	129
		EP231X: Perfluorohexanoic acid (PFHxA)	307-24-4	0.25 µg/L	121	72.0	129
		EP231X: Perfluoroheptanoic acid (PFHpA)	375-85-9	0.25 µg/L	117	72.0	130
		EP231X: Perfluorooctanoic acid (PFOA)	335-67-1	0.25 µg/L	98.0	71.0	133
		EP231X: Perfluorononanoic acid (PFNA)	375-95-1	0.25 µg/L	93.4	69.0	130
		EP231X: Perfluorodecanoic acid (PFDA)	335-76-2	0.25 µg/L	80.4	71.0	129
		EP231X: Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.25 µg/L	82.6	69.0	133
		EP231X: Perfluorododecanoic acid (PFDoDA)	307-55-1	0.25 µg/L	122	72.0	134
		EP231X: Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.25 µg/L	97.8	65.0	144
		EP231X: Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.625 µg/L	125	71.0	132
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 4237105)							
EP2203094-002	Anonymous	EP231X: Perfluorooctane sulfonamide (FOSA)	754-91-6	0.25 µg/L	97.6	67.0	137

Sub-Matrix: **WATER**

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Acceptable Limits (%)	
Laboratory sample ID	*Sample ID*	*Method: Compound*	*CAS Number*	*Concentration*	*MS*	*Low*	*High*
EP231C: Perfluoroalkyl Sulfonamides (QCLot: 4237105) - continued							
EP2203094-002	Anonymous	EP231X: N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.625 µg/L	110	68.0	141
		EP231X: N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.625 µg/L	121	62.6	147
		EP231X: N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.625 µg/L	117	66.0	145
		EP231X: N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.625 µg/L	113	57.6	145
		EP231X: N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.25 µg/L	117	65.0	136
		EP231X: N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.25 µg/L	109	61.0	135
EP231D: (n:2) Fluorotelomer Sulfonic Acids (QCLot: 4237105)							
EP2203094-002	Anonymous	EP231X: 4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.25 µg/L	102	63.0	143
		EP231X: 6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.25 µg/L	125	64.0	140
		EP231X: 8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.25 µg/L	123	67.0	138
		EP231X: 10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.25 µg/L	101	71.4	144

ALS Environmental

QA/QC Compliance Assessment to assist with Quality Review

Work Order	: **ES2209368**	Page	: 1 of 10
Amendment	: **1**		
Client	: **ENVIRONMENTAL RESOURCES MANAGEMENT (ERM)**	Laboratory	: Environmental Division Sydney
Contact	: MS JESSICA LAWRENCE	Telephone	: +61-2-8784 8555
Project	: 0628507 AFJV-SMW	Date Samples Received	: 16-Mar-2022
Site	: ----	Issue Date	: 30-Mar-2022
Sampler	: WILLIAM OH	No. of samples received	: 7
Order number	: ----	No. of samples analysed	: 7

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 / Method	Count QC	Count Regular	Rate (%) Actual	Rate (%) Expected	Quality Control Specification
Laboratory Duplicates (DUP)					
PAH/Phenols (GC/MS - SIM)	0	4	0.00	10.00	NEPM 2013 B3 & ALS QC Standard
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	1	19	5.26	10.00	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	0	13	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
TRH - Semivolatile Fraction	0	13	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 / *Container / Client Sample ID(s)*		*Sample Date*	*Extraction / Preparation* Date extracted	Due for extraction	Evaluation	*Analysis* Date analysed	Due for analysis	Evaluation
EA015: Total Dissolved Solids dried at 180 ± 5 °C								
Clear Plastic Bottle - Natural (EA015H)								
Sub-W1, SMW_BH035_S,	SMW_BH035, R01_20220316	**16-Mar-2022**	**----**	----	----	**21-Mar-2022**	23-Mar-2022	✓
ED037P: Alkalinity by PC Titrator								
Clear Plastic Bottle - Natural (ED037-P)								
Sub-W1, SMW_BH035_S,	SMW_BH035, R01_20220316	**16-Mar-2022**	**----**	----	----	**18-Mar-2022**	30-Mar-2022	✓
ED041G: Sulfate (Turbidimetric) as SO4 2- by DA								
Clear Plastic Bottle - Natural (ED041G)								
Sub-W1, SMW_BH035_S,	SMW_BH035, R01_20220316	**16-Mar-2022**	**----**	----	----	**17-Mar-2022**	13-Apr-2022	✓
ED045G: Chloride by Discrete Analyser								
Clear Plastic Bottle - Natural (ED045G)								
Sub-W1, SMW_BH035_S,	SMW_BH035, R01_20220316	**16-Mar-2022**	**----**	----	----	**17-Mar-2022**	13-Apr-2022	✓
ED093F: Dissolved Major Cations								
Clear Plastic Bottle - Nitric Acid; Filtered (ED093F)								
Sub-W1, SMW_BH035_S,	SMW_BH035, R01_20220316	**16-Mar-2022**	**----**	----	----	**21-Mar-2022**	13-Apr-2022	✓

Matrix: **WATER**

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

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EG020F: Dissolved Metals by ICP-MS							
Clear Plastic Bottle - Nitric Acid; Filtered (EG020A-F)							
Sub-W1, SMW_BH035, SMW_BH035_S, R01_20220316	**16-Mar-2022**	**----**	----	----	**21-Mar-2022**	12-Sep-2022	✓
EG035F: Dissolved Mercury by FIMS							
Clear Plastic Bottle - Nitric Acid; Filtered (EG035F)							
Sub-W1, SMW_BH035, SMW_BH035_S, R01_20220316	**16-Mar-2022**	**----**	----	----	**22-Mar-2022**	13-Apr-2022	✓
EK055G: Ammonia as N by Discrete Analyser							
Clear Plastic Bottle - Sulfuric Acid (EK055G)							
Sub-W1, SMW_BH035, SMW_BH035_S, R01_20220316	**16-Mar-2022**	**----**	----	----	**20-Mar-2022**	13-Apr-2022	✓
EK057G: Nitrite as N by Discrete Analyser							
Clear Plastic Bottle - Natural (EK057G)							
Sub-W1, SMW_BH035, SMW_BH035_S, R01_20220316	**16-Mar-2022**	**----**	----	----	**17-Mar-2022**	18-Mar-2022	✓
EK059G: Nitrite plus Nitrate as N (NOx) by Discrete Analyser							
Clear Plastic Bottle - Sulfuric Acid (EK059G)							
Sub-W1, SMW_BH035, SMW_BH035_S, R01_20220316	**16-Mar-2022**	**----**	----	----	**20-Mar-2022**	13-Apr-2022	✓
EK061G: Total Kjeldahl Nitrogen By Discrete Analyser							
Clear Plastic Bottle - Sulfuric Acid (EK061G)							
Sub-W1, SMW_BH035, SMW_BH035_S, R01_20220316	**16-Mar-2022**	**20-Mar-2022**	13-Apr-2022	✓	**20-Mar-2022**	13-Apr-2022	✓
EK067G: Total Phosphorus as P by Discrete Analyser							
Clear Plastic Bottle - Sulfuric Acid (EK067G)							
Sub-W1, SMW_BH035, SMW_BH035_S, R01_20220316	**16-Mar-2022**	**20-Mar-2022**	13-Apr-2022	✓	**20-Mar-2022**	13-Apr-2022	✓
EP033: C1 - C4 Hydrocarbon Gases							
Amber VOC Vial - Sulfuric Acid (EP033)							
Sub-W1	**16-Mar-2022**	**----**	----	----	**18-Mar-2022**	30-Mar-2022	✓
EP074A: Monocyclic Aromatic Hydrocarbons							
Amber VOC Vial - Sulfuric Acid (EP074)							
Sub-W1, SMW_BH035, SMW_BH035_S, R01_20220316	**16-Mar-2022**	**21-Mar-2022**	30-Mar-2022	✓	**21-Mar-2022**	30-Mar-2022	✓
EP074B: Oxygenated Compounds							
Amber VOC Vial - Sulfuric Acid (EP074)							
Sub-W1, SMW_BH035, SMW_BH035_S, R01_20220316	**16-Mar-2022**	**21-Mar-2022**	30-Mar-2022	✓	**21-Mar-2022**	30-Mar-2022	✓

Matrix: **WATER**

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

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP074C: Sulfonated Compounds							
Amber VOC Vial - Sulfuric Acid (EP074)							
Sub-W1, SMW_BH035, SMW_BH035_S, R01_20220316	**16-Mar-2022**	**21-Mar-2022**	30-Mar-2022	✓	**21-Mar-2022**	30-Mar-2022	✓
EP074D: Fumigants							
Amber VOC Vial - Sulfuric Acid (EP074)							
Sub-W1, SMW_BH035, SMW_BH035_S, R01_20220316	**16-Mar-2022**	**21-Mar-2022**	30-Mar-2022	✓	**21-Mar-2022**	30-Mar-2022	✓
EP074E: Halogenated Aliphatic Compounds							
Amber VOC Vial - Sulfuric Acid (EP074)							
Sub-W1, SMW_BH035, SMW_BH035_S, R01_20220316	**16-Mar-2022**	**21-Mar-2022**	30-Mar-2022	✓	**21-Mar-2022**	30-Mar-2022	✓
EP074F: Halogenated Aromatic Compounds							
Amber VOC Vial - Sulfuric Acid (EP074)							
Sub-W1, SMW_BH035, SMW_BH035_S, R01_20220316	**16-Mar-2022**	**21-Mar-2022**	30-Mar-2022	✓	**21-Mar-2022**	30-Mar-2022	✓
EP074G: Trihalomethanes							
Amber VOC Vial - Sulfuric Acid (EP074)							
Sub-W1, SMW_BH035, SMW_BH035_S, R01_20220316	**16-Mar-2022**	**21-Mar-2022**	30-Mar-2022	✓	**21-Mar-2022**	30-Mar-2022	✓
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons							
Amber Glass Bottle - Unpreserved (EP075(SIM))							
Sub-W1, SMW_BH035, SMW_BH035_S, R01_20220316	**16-Mar-2022**	**22-Mar-2022**	23-Mar-2022	✓	**23-Mar-2022**	01-May-2022	✓
EP080/071: Total Petroleum Hydrocarbons							
Amber Glass Bottle - Unpreserved (EP071)							
Sub-W1, SMW_BH035, SMW_BH035_S, R01_20220316	**16-Mar-2022**	**22-Mar-2022**	23-Mar-2022	✓	**22-Mar-2022**	01-May-2022	✓
Amber VOC Vial - Sulfuric Acid (EP080)							
TB	**09-Mar-2022**	**21-Mar-2022**	23-Mar-2022	✓	**21-Mar-2022**	23-Mar-2022	✓
Amber VOC Vial - Sulfuric Acid (EP080)							
Sub-W1, SMW_BH035, SMW_BH035_S, R01_20220316	**16-Mar-2022**	**21-Mar-2022**	30-Mar-2022	✓	**21-Mar-2022**	30-Mar-2022	✓
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions							
Amber Glass Bottle - Unpreserved (EP071)							
Sub-W1, SMW_BH035, SMW_BH035_S, R01_20220316	**16-Mar-2022**	**22-Mar-2022**	23-Mar-2022	✓	**22-Mar-2022**	01-May-2022	✓
Amber VOC Vial - Sulfuric Acid (EP080)							
TB	**09-Mar-2022**	**21-Mar-2022**	23-Mar-2022	✓	**21-Mar-2022**	23-Mar-2022	✓
Amber VOC Vial - Sulfuric Acid (EP080)							
Sub-W1, SMW_BH035, SMW_BH035_S, R01_20220316	**16-Mar-2022**	**21-Mar-2022**	30-Mar-2022	✓	**21-Mar-2022**	30-Mar-2022	✓

Matrix: **WATER**

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

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP080: BTEXN							
Amber VOC Vial - Sulfuric Acid (EP080)							
TS	**07-Mar-2022**	**21-Mar-2022**	21-Mar-2022	✓	**21-Mar-2022**	21-Mar-2022	✓
Amber VOC Vial - Sulfuric Acid (EP080)							
TB	**09-Mar-2022**	**21-Mar-2022**	23-Mar-2022	✓	**21-Mar-2022**	23-Mar-2022	✓
Amber VOC Vial - Sulfuric Acid (EP080)							
Sub-W1, SMW_BH035, SMW_BH035_S, R01_20220316	**16-Mar-2022**	**21-Mar-2022**	30-Mar-2022	✓	**21-Mar-2022**	30-Mar-2022	✓
EP231A: Perfluoroalkyl Sulfonic Acids							
HDPE (no PTFE) (EP231X)							
Sub-W1, SMW_BH035, SMW_BH035_S, R01_20220316, Sub_W2	**16-Mar-2022**	**21-Mar-2022**	12-Sep-2022	✓	**21-Mar-2022**	12-Sep-2022	✓
EP231B: Perfluoroalkyl Carboxylic Acids							
HDPE (no PTFE) (EP231X)							
Sub-W1, SMW_BH035, SMW_BH035_S, R01_20220316, Sub_W2	**16-Mar-2022**	**21-Mar-2022**	12-Sep-2022	✓	**21-Mar-2022**	12-Sep-2022	✓
EP231C: Perfluoroalkyl Sulfonamides							
HDPE (no PTFE) (EP231X)							
Sub-W1, SMW_BH035, SMW_BH035_S, R01_20220316, Sub_W2	**16-Mar-2022**	**21-Mar-2022**	12-Sep-2022	✓	**21-Mar-2022**	12-Sep-2022	✓
EP231D: (n:2) Fluorotelomer Sulfonic Acids							
HDPE (no PTFE) (EP231X)							
Sub-W1, SMW_BH035, SMW_BH035_S, R01_20220316, Sub_W2	**16-Mar-2022**	**21-Mar-2022**	12-Sep-2022	✓	**21-Mar-2022**	12-Sep-2022	✓
EP231P: PFAS Sums							
HDPE (no PTFE) (EP231X)							
Sub-W1, SMW_BH035, SMW_BH035_S, R01_20220316, Sub_W2	**16-Mar-2022**	**21-Mar-2022**	12-Sep-2022	✓	**21-Mar-2022**	12-Sep-2022	✓

Quality Control Parameter Frequency Compliance

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

Matrix: **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)							
Alkalinity by PC Titrator	ED037-P	2	19	**10.53**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Ammonia as N by Discrete analyser	EK055G	2	20	**10.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
C1 - C4 Gases	EP033	2	20	**10.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Chloride by Discrete Analyser	ED045G	2	20	**10.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
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
Major Cations - Dissolved	ED093F	2	20	**10.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Nitrite and Nitrate as N (NOx) by Discrete Analyser	EK059G	2	20	**10.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Nitrite as N by Discrete Analyser	EK057G	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
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	1	19	**5.26**	**10.00**	×	NEPM 2013 B3 & ALS QC Standard
Sulfate (Turbidimetric) as SO4 2- by Discrete Analyser	ED041G	2	20	**10.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Dissolved Solids (High Level)	EA015H	2	20	**10.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Kjeldahl Nitrogen as N By Discrete Analyser	EK061G	2	20	**10.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Phosphorus as P By Discrete Analyser	EK067G	2	20	**10.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	0	13	**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
Volatile Organic Compounds	EP074	1	10	**10.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Laboratory Control Samples (LCS)							
Alkalinity by PC Titrator	ED037-P	2	19	**10.53**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Ammonia as N by Discrete analyser	EK055G	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
C1 - C4 Gases	EP033	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Chloride by Discrete Analyser	ED045G	2	20	**10.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
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
Major Cations - Dissolved	ED093F	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Nitrite and Nitrate as N (NOx) by Discrete Analyser	EK059G	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Nitrite as N by Discrete Analyser	EK057G	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
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	1	19	**5.26**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Sulfate (Turbidimetric) as SO4 2- by Discrete Analyser	ED041G	2	20	**10.00**	**10.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Dissolved Solids (High Level)	EA015H	3	20	**15.00**	**15.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Kjeldahl Nitrogen as N By Discrete Analyser	EK061G	3	20	**15.00**	**15.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Phosphorus as P By Discrete Analyser	EK067G	3	20	**15.00**	**15.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	1	13	**7.69**	**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: **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 Control Samples (LCS) - Continued							
Volatile Organic Compounds	EP074	1	10	**10.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Method Blanks (MB)							
Ammonia as N by Discrete analyser	EK055G	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
C1 - C4 Gases	EP033	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Chloride by Discrete Analyser	ED045G	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
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
Major Cations - Dissolved	ED093F	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Nitrite and Nitrate as N (NOx) by Discrete Analyser	EK059G	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Nitrite as N by Discrete Analyser	EK057G	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
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	1	19	**5.26**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Sulfate (Turbidimetric) as SO4 2- by Discrete Analyser	ED041G	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Dissolved Solids (High Level)	EA015H	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Kjeldahl Nitrogen as N By Discrete Analyser	EK061G	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Phosphorus as P By Discrete Analyser	EK067G	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	1	13	**7.69**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Volatile Organic Compounds	EP074	1	10	**10.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Matrix Spikes (MS)							
Ammonia as N by Discrete analyser	EK055G	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
C1 - C4 Gases	EP033	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Chloride by Discrete Analyser	ED045G	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
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
Nitrite and Nitrate as N (NOx) by Discrete Analyser	EK059G	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Nitrite as N by Discrete Analyser	EK057G	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
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	1	19	**5.26**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Sulfate (Turbidimetric) as SO4 2- by Discrete Analyser	ED041G	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Kjeldahl Nitrogen as N By Discrete Analyser	EK061G	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
Total Phosphorus as P By Discrete Analyser	EK067G	1	20	**5.00**	**5.00**	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	0	13	**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
Volatile Organic Compounds	EP074	1	10	**10.00**	**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
Total Dissolved Solids (High Level)	EA015H	WATER	In house: Referenced to APHA 2540C. A gravimetric procedure that determines the amount of `filterable` residue in an aqueous sample. A well-mixed sample is filtered through a glass fibre filter (1.2um). The filtrate is evaporated to dryness and dried to constant weight at 180+/-5C. This method is compliant with NEPM Schedule B(3)
Alkalinity by PC Titrator	ED037-P	WATER	In house: Referenced to APHA 2320 B This procedure determines alkalinity by automated measurement (e.g. PC Titrate) on a settled supernatant aliquot of the sample using pH 4.5 for indicating the total alkalinity end-point. This method is compliant with NEPM Schedule B(3)
Sulfate (Turbidimetric) as SO4 2- by Discrete Analyser	ED041G	WATER	In house: Referenced to APHA 4500-SO4. Dissolved sulfate is determined in a 0.45um filtered sample. Sulfate ions are converted to a barium sulfate suspension in an acetic acid medium with barium chloride. Light absorbance of the BaSO4 suspension is measured by a photometer and the SO4-2 concentration is determined by comparison of the reading with a standard curve. This method is compliant with NEPM Schedule B(3)
Chloride by Discrete Analyser	ED045G	WATER	In house: Referenced to APHA 4500 Cl - G.The thiocyanate ion is liberated from mercuric thiocyanate through sequestration of mercury by the chloride ion to form non-ionised mercuric chloride.in the presence of ferric ions the librated thiocynate forms highly-coloured ferric thiocynate which is measured at 480 nm APHA seal method 2 017-1-L
Major Cations - Dissolved	ED093F	WATER	In house: Referenced to APHA 3120 and 3125; USEPA SW 846 - 6010 and 6020; Cations are determined by either ICP-AES or ICP-MS techniques. This method is compliant with NEPM Schedule B(3) Sodium Adsorption Ratio is calculated from Ca, Mg and Na which determined by ALS in house method QWI-EN/ED093F. This method is compliant with NEPM Schedule B(3) Hardness parameters are calculated based on APHA 2340 B. This method is compliant with NEPM Schedule B(3)
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 (SnCl2)(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 SnCl2 which is then purged into a heated quartz cell. Quantification is by comparing absorbance against a calibration curve. This method is compliant with NEPM Schedule B(3).
Ammonia as N by Discrete analyser	EK055G	WATER	In house: Referenced to APHA 4500-NH3 G Ammonia is determined by direct colorimetry by Discrete Analyser. This method is compliant with NEPM Schedule B(3)
Nitrite as N by Discrete Analyser	EK057G	WATER	In house: Referenced to APHA 4500-NO2- B. Nitrite is determined by direct colourimetry by Discrete Analyser. This method is compliant with NEPM Schedule B(3)
Nitrate as N by Discrete Analyser	EK058G	WATER	In house: Referenced to APHA 4500-NO3- F. Nitrate is reduced to nitrite by way of a chemical reduction followed by quantification by Discrete Analyser. Nitrite is determined seperately by direct colourimetry and result for Nitrate calculated as the difference between the two results. This method is compliant with NEPM Schedule B(3)

Analytical Methods	Method	Matrix	Method Descriptions
Nitrite and Nitrate as N (NOx) by Discrete Analyser	EK059G	WATER	In house: Referenced to APHA 4500-NO3- F. Combined oxidised Nitrogen (NO2+NO3) is determined by Chemical Reduction and direct colourimetry by Discrete Analyser. This method is compliant with NEPM Schedule B(3)
Total Kjeldahl Nitrogen as N By Discrete Analyser	EK061G	WATER	In house: Referenced to APHA 4500-Norg D (In house). An aliquot of sample is digested using a high temperature Kjeldahl digestion to convert nitrogenous compounds to ammonia. Ammonia is determined colorimetrically by discrete analyser. This method is compliant with NEPM Schedule B(3)
Total Nitrogen as N (TKN + Nox) By Discrete Analyser	EK062G	WATER	In house: Referenced to APHA 4500-Norg / 4500-NO3-. This method is compliant with NEPM Schedule B(3)
Total Phosphorus as P By Discrete Analyser	EK067G	WATER	In house: Referenced to APHA 4500-P H, Jirka et al, Zhang et al. This procedure involves sulphuric acid digestion of a sample aliquot to break phosphorus down to orthophosphate. The orthophosphate reacts with ammonium molybdate and antimony potassium tartrate to form a complex which is then reduced and its concentration measured at 880nm using discrete analyser. This method is compliant with NEPM Schedule B(3)
Ionic Balance by PCT DA and Turbi SO4 DA	* EN055 - PG	WATER	In house: Referenced to APHA 1030F. This method is compliant with NEPM Schedule B(3)
C1 - C4 Gases	EP033	WATER	Technical Guidance for the Natural Attenuation Indicators: Methane, Ethane, and Ethene, US EPA - Region 1, EPA New England, July 2001. Automated static headspace, dual column GC/FID. A 12 mL sample is pipetted into a 20 mL headspace vial containing 3g of sodium chloride and sealed. Each sample is equilibrated with shaking at 40 degrees C for 10 minutes prior to analysis by GC/FID using a pair of PLOT columns of different polarity.
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)
Volatile Organic Compounds	EP074	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. This method is compliant with 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)
Per- and Polyfluoroalkyl Substances (PFAS) by LCMSMS	EP231X	WATER	In-house: Analysis of fresh and saline waters by Solid Phase Extraction (SPE) followed by LC-Electrospray-MS-MS, Negative Mode using MRM and internal standard quantitation. Isotopically labelled analogues of target analytes used as internal standards and surrogates are added to the sample container. The entire contents are transferred to a solid phase extraction (SPE) cartridge. The sample container is successively rinsed with aliquots of the elution solvent. The eluted extract is combined with an equal volume of reagent water and a portion is filtered for analysis. Method procedures and data quality objectives conform to US DoD QSM 5.3, table B-15 requirements.

Preparation Methods	Method	Matrix	Method Descriptions

Preparation Methods	Method	Matrix	Method Descriptions
TKN/TP Digestion	EK061/EK067	WATER	In house: Referenced to APHA 4500 Norg - D; APHA 4500 P - H. This method is compliant with NEPM Schedule B(3)
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.
Solid Phase Extraction (SPE) for PFAS in water	ORG72	WATER	In-house: Isotopically labelled analogues of target analytes used as internal standards and surrogates are added to the sample container. The entire contents are transferred to a solid phase extraction (SPE) cartridge. The sample container is successively rinsed with aliquots of the elution solvent. The eluted extract is combined with an equal volume of reagent water and a portion is filtered for analysis. Method procedures conform to US DoD QSM 5.3, table B-15 requirements.

CHAIN OF CUSTODY

ALS Laboratory: please tick →

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WOLLONGONG 99 Kenny Street Wollongong NSW 2500 Ph 02 4225 3125 E wollongong@alsglobal.com

CLIENT: ERM Services Australia	TURNAROUND REQUIREMENTS: (Standard TAT may be longer for some tests e.g. Ultra Trace Organics)	☑ Standard TAT (List due date): Standard TAT ☐ Non Standard or urgent TAT (List due date):	FOR LABORATORY USE ONLY (Circle) Custody Seal Intact? Yes No N/A Free ice / frozen ice bricks present upon receipt? Yes No N/A Random Sample Temperature on Receipt: °C Other comment: 2.6
OFFICE: Macquarie Park			
PROJECT: AFJV-SMW PROJECT NO. 0628507	ALS QUOTE NO.: ERM Std	COC SEQUENCE NUMBER (Circle) COC: 1 2 3 4 5 6 7 OF: 1 2 3 4 5 6 7	
ORDER NUMBER: PURCHASE ORDER NO.:	COUNTRY OF ORIGIN: Australia		
PROJECT MANAGER: Jessica Lawrence CONTACT PH: 0404 935 554			
SAMPLER: ~~Tristan Rodrigues~~ William OH SAMPLER MOBILE: 0480 327 311	RELINQUISHED BY: William OH	RECEIVED BY:	RELINQUISHED BY: RECEIVED BY:
COC Emailed to ALS? (YES / NO) EDD FORMAT (or default):	DATE/TIME: 16/3/22	DATE/TIME: 16/3/22 1650	DATE/TIME: DATE/TIME:
Email Reports to (will default to PM if no other addresses are listed): PM and Tristan.Rodrigues@erm.com			
Email Invoice to (will default to PM if no other addresses are listed):			

COMMENTS/SPECIAL HANDLING/STORAGE OR DISPOSAL:

ALS USE ONLY	SAMPLE DETAILS MATRIX: Solid(S) Water(W)			CONTAINER INFORMATION		ANALYSIS REQUIRED including SUITES (NB. Suite Codes must be listed to attract suite price) Where Metals are required, specify Total (unfiltered bottle required) or Dissolved (field filtered bottle required).								Additional Information
LAB ID	SAMPLE ID	DATE / TIME	MATRIX	TYPE & PRESERVATIVE (refer to codes below)	TOTAL JARS									Comments on likely contaminant levels, dilutions, or samples requiring specific QC analysis etc.
	Sub_W1	16/3/22	W	P,N, AG, VS, H,	12	BTEX, TRH, VOC, PAH, PFAS, Metals (11), Iron, Ammonia, nitrate, Total N, total P, Major anions, Cations, TDS)								Sub_W1 (dissolved metals)
	~~Sub~~ SMW_BH035			P,N, AG, VS, H	10									
	SMW_BH035			P,N, AG, VS, H	10			11						
	TS/TB			TS/TB	2			TS/TB						
	R01_20220316			P,N, AG, VS, H	10			11						
	Sub_W2			P	2	PFAS			Rec					
				TOTAL	1									

HT

Environmental Division Sydney
Work Order Reference
ES2209368

Telephone : + 61-2-8784 8555

Water Container Codes: P = Unpreserved Plastic; N = Nitric Preserved Plastic; ORC = Nitric Preserved ORC; SH = Sodium Hydroxide/Cd Preserved; S = Sodium Hydroxide Preserved Plastic; AG = Amber Glass Unpreserved; AP = Airfreight Unpreserved Plastic
V = VOA Vial HCl Preserved; VB = VOA Vial Sodium Bisulphate Preserved; VS = VOA Vial Sulfuric Preserved; AV = Airfreight Unpreserved Vial SG = Sulfuric Preserved Amber Glass; H = HCl preserved Plastic; HS = HCl preserved Speciation bottle; SP = Sulfuric Preserved Plastic; F = Formaldehyde Preserved Glass;
Z = Zinc Acetate Preserved Bottle; E = EDTA Preserved Bottles; ST = Sterile Bottle; ASS = Plastic Bag for Acid Sulphate Soils; B = Unpreserved Bag; LI = Lugols Iodine Preserved Bottles; STT = Sterile Sodium Thiosulfate Preserved Bottles

From: Nicholas Grbich
To: Jessica Lawrence
Subject: FW: [EXTERNAL] - RE: ES2201979 -Trip spike control
Date: Tuesday, 1 March 2022 8:22:29 AM
Attachments: image001.jpg
image002.png
image003.png
image004.png
image005.png
image006.png
image007.png
image008.png
image009.jpg
image010.png
image011.png
image012.png
image013.png

Hi Jess, see below email chain,

This was picked up by Thavone, the lab incorrectly labelled a spike as a blank

Nicholas Grbich
Senior Environmental Scientist

ERM
Level 15 | 309 Kent Street | Sydney NSW 2000
T +61 2 8586 8776 | **M** +61 415 833 925
E Nicholas.Grbich@erm.com | **W** www.erm.com

From: Olivia Barbato <olivia.barbato@ALSGlobal.com>
Sent: Tuesday, February 22, 2022 2:10 PM
To: Nicholas Grbich <Nicholas.Grbich@erm.com>; Thavone List <Thavone.List@erm.com>; Taj Morison <Taj.Morison@erm.com>
Subject: RE: [EXTERNAL] - RE: ES2201979 -Trip spike control

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Hi Nicholas,

No problems, please let me know if you require anything further from me

Thanks!

Kind Regards,

Olivia Barbato
Client Services Officer, Environmental
Sydney

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F +61 2 8784 8500
olivia.barbato@alsglobal.com
277-289 Woodpark Road
Smithfield NSW 2164 AUSTRALIA

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From: Nicholas Grbich <Nicholas.Grbich@erm.com>
Sent: Tuesday, 22 February 2022 1:56 PM
To: Olivia Barbato <olivia.barbato@ALSGlobal.com>; Thavone List <Thavone.List@erm.com>; Taj Morison <Taj.Morison@erm.com>
Subject: RE: [EXTERNAL] - RE: ES2201979 -Trip spike control

Hi Olivia,

Samples are out of holding time so rerunning them isn't really viable for the loss of volatiles which has already occured, we will just have to discuss the results in our report.

Kind regards,

Nicholas Grbich
Senior Environmental Scientist

ERM
Level 15 | 309 Kent Street | Sydney NSW 2000
T +61 2 8586 8776 | **M** +61 415 833 925
E Nicholas.Grbich@erm.com | **W** www.erm.com

From: Olivia Barbato <olivia.barbato@ALSGlobal.com>
Sent: Friday, February 18, 2022 9:11 AM
To: Thavone List <Thavone.List@erm.com>; Taj Morison <Taj.Morison@erm.com>; Nicholas Grbich <Nicholas.Grbich@erm.com>
Subject: RE: [EXTERNAL] - RE: ES2201979 -Trip spike control

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No worries Thavone.

Hi @Taj Morison @Nicholas Grbich,

Please let me know how you would like to proceed and let me know which Trip Spike and Blank you would like to use for the analysis so we can re-run and report accordingly.

Thanks!

Kind Regards,

Olivia Barbato
Client Services Officer, Environmental
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From: Thavone List <Thavone.List@erm.com>
Sent: Thursday, 17 February 2022 9:08 PM
To: Olivia Barbato <olivia.barbato@ALSGlobal.com>
Cc: Taj Morison <Taj.Morison@erm.com>; Nicholas Grbich <Nicholas.Grbich@erm.com>
Subject: RE: [EXTERNAL] - RE: ES2201979 -Trip spike control

Thanks for looking into this Olivia.
I'll leave this for Taj and Nicholas to advise where to go from here as they're closer to the project.

Kind regards,
Thavone.

From: Olivia Barbato <olivia.barbato@ALSGlobal.com>
Sent: Thursday, February 17, 2022 4:01 PM
To: Thavone List <Thavone.List@erm.com>
Cc: Taj Morison <Taj.Morison@erm.com>; Nicholas Grbich <Nicholas.Grbich@erm.com>
Subject: RE: [EXTERNAL] - RE: ES2201979 -Trip spike control

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Hi Thavone,

So sorry I was supposed to attached the photos for your reference

Kind Regards,

Olivia Barbato
Client Services Officer, Environmental
Sydney

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From: Olivia Barbato
Sent: Thursday, 17 February 2022 3:55 PM
To: Thavone List <Thavone.List@erm.com>
Cc: Taj Morison <Taj.Morison@erm.com>; Nicholas Grbich <Nicholas.Grbich@erm.com>
Subject: RE: [EXTERNAL] - RE: ES2201979 -Trip spike control

Hi Thavone,

After further investigation we have figured out what the problem is.

For some reason we have labelled the samples incorrectly.

There were two spikes and two blanks provided and we have logged then in incorrectly.

Can you please confirm which Spike and which blank you would like us to analyse.

Please keep I mind that all of the vials except Trip Spike #5 have already been opened so volatile analysis will be breached now.

I have also spoken to the person who logged and labelled this work order as we should have picked up on the fact that there were two different spikes.

Let me know if you have any further questions or feel free to give me a call if it is easier.

I do apologise for the confusion caused.

Thanks

Kind Regards,

Olivia Barbato
Client Services Officer, Environmental
Sydney

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From: Olivia Barbato
Sent: Thursday, 17 February 2022 11:05 AM
To: Thavone List <Thavone.List@erm.com>
Cc: Taj Morison <Taj.Morison@erm.com>; Nicholas Grbich <Nicholas.Grbich@erm.com>
Subject: RE: [EXTERNAL] - RE: ES2201979 -Trip spike control

Hi Thavone,

I am just checking with the lab because from my understanding there should definitely be a comment like the below in work order ES2201979.

I have asked that we amend the work order now to include the comment for you.

Apologies for the confusion, I think once this has been fixed it will clear up your questions for you.

Thanks!

Kind Regards,

Olivia Barbato
Client Services Officer, Environmental
Sydney

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Smithfield NSW 2164 AUSTRALIA

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From: Thavone List <Thavone.List@erm.com>
Sent: Wednesday, 16 February 2022 10:15 PM
To: Olivia Barbato <olivia.barbato@ALSGlobal.com>
Cc: Taj Morison <Taj.Morison@erm.com>; Nicholas Grbich <Nicholas.Grbich@erm.com>
Subject: RE: [EXTERNAL] - RE: ES2201979 -Trip spike control

Hi Olivia,
Ok, for some reason I had thought TSC were applicable to any trip spike, but perhaps I'm using the incorrect terminology.

The other batch associated with this project is ES2202047. In the General comments section of this report, it says that the Trip spike sample was spiked with a known

concentration of BTEX compounds.

There's no such comment for batch ES2201979.
Should the COA be updated to say the same thing? If so, the trip spike results are <LOR, which means we have 0% recovery – which would be surprising, and why it would be prudent to confirm these results.
The only other alternative I can think of is that perhaps this samples wasn't (?) a spike sample prepared by you?? And perhaps a trip blank incorrectly labelled?

Do you have any insight to any of these scenarios?

1. a. The Trip spike sample was in fact spiked with 20 ug/L for BTEXN, and the comments in the report need to be updated
   b. spike results show a total loss of volatiles and results are confirmed to be correct.
2. There is the potential for the spike sample to have been incorrectly labelled and was actually a trip blank.?

Thanks
Thavone

From: Olivia Barbato <olivia.barbato@ALSGlobal.com>
Sent: Wednesday, February 16, 2022 4:49 PM
To: Thavone List <Thavone.List@erm.com>
Cc: Taj Morison <Taj.Morison@erm.com>; Nicholas Grbich <Nicholas.Grbich@erm.com>
Subject: RE: [EXTERNAL] - RE: ES2201979 -Trip spike control

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HI Thavone,

For Trip Spike Waters, we do not have a Trip Spike Control. This is only applicable to Soil Spikes.

As for the Trip Spike as per the below results in your COA. It has come back below LOR. Is this what you are referring to?

cid:image001.png@01D82380.C3C281C0

Thanks!

Kind Regards,

Olivia Barbato
Client Services Officer, Environmental
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From: Thavone List <Thavone.List@erm.com>
Sent: Wednesday, 16 February 2022 12:00 PM
To: ALSEnviro Sydney <ALSEnviro.Sydney@ALSGlobal.com>
Cc: Taj Morison <Taj.Morison@erm.com>; Nicholas Grbich <Nicholas.Grbich@erm.com>
Subject: [EXTERNAL] - RE: ES2201979 -Trip spike control

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Hello,
While you're looking into this - are you able to confirm the TS results were all below LOR
Thank you

From: Thavone List
Sent: Wednesday, February 16, 2022 11:25 AM
To: alsenviro.sydney@alsglobal.com
Cc: Taj Morison <Taj.Morison@erm.com>; Nicholas Grbich <Nicholas.Grbich@erm.com>
Subject: ES2201979 -Trip spike control

Good morning,

I can't seem to find the TSC concentration for the ES2201979 trip spike.
Are you able to advise?

Thanks

cid:image009.png@01D82380.C3C281C0

Thavone List
Environmental Scientist

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E Thavone.List@erm.com | **W** www.erm.com

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APPENDIX G HISTORICAL GROUNDWATER DATA

							Well ID	SMW_BH001	SMW_BH002	SMW_BH003	SMW_BH003s	SMW_BH007	SMW_BH007s	SMW_BH009	SMW_BH009s	SMW_BH009s	SMW_BH011	SMW_BH011s	SMW_BH014	SMW_BH015
							Sample ID	SMW_BH001	SMW_BH002	SMW_BH003	SMW_BH003s	SMW_BH007	SMW_BH007s	SMW_BH009	SMW_BH009s	SMW_BH100 [8]	SMW_BH011	SMW_BH011s	SMW_BH014	SMW_BH015
			Adopted Groundwater Screening Levels				Sample Date	03-09-18	04-09-18	18-09-18	04-09-18	04-09-18	04-09-18	12-09-18	03-09-18	03-09-18	18-09-18	18-09-18	03-09-18	11-09-18
			Drinking Water	Recreational /Direct Contact [7]	95% Protection of species	Long-Term Irrigation	Comm/ Ind HSL D (2-4 m)																	
Analyte	**Units**	**EQL**	**NHMRC 2011**	**NHMRC 2008**	**ANZG 2018**	***ANZECC 2000***	**NEPM 2013, CRC 2011**																	
General Parameters																								
Electrical Conductivity @ 25°C	µS/cm	1						5780	7680	7440	754	10,700	1020	11,000	880	860	10,500	15,100	6610	17,100
pH (Lab)		0.01				*6-8.5*		8.19	6.74	7.44	7.24	6.92	6.82	6.97	8.01	7.93	6.23	6.16	*5.45*	7.05
Total Dissolved Solids @180°C	mg/L	5						3140	5310	3880	1690	6740	832	6990	524	502	5380	9180	5310	11,300
Major Ions																								
Sodium (Filtered)	mg/L	0.5						928	1030	1260	132	1520	141	1790	129	131	1320	2670	854	3000
Potassium (Filtered)	mg/L	0.5						27	40	19	4	30	4	24	5	5	36	4	25	41
Calcium (Filtered)	mg/L	0.5						50	386	129	17	377	62	169	41	42	516	78	380	415
Magnesium (Filtered)	mg/L	0.5						107	102	67	5	279	8	259	12	12	151	244	161	269
Chloride	mg/L	1						1510	2480	2350	43	3420	40	3560	114	117	3270	5270	845	5140
Fluoride	mg/L	0.1	**1.5**	15		*1*		0.6		0.1				0.6	***1.6***	*1.4*	<0.1	<0.1	0.2	0.2
Sulphate (as SO4)	mg/L	1						230	8	307	154	196	237	401	25	20	590	706	3190	1090
Bicarbonate Alkalinity (as CaCO3)	mg/L	1						439	631	331	160	787	251	686	252	250	708	120	102	737
Carbonate Alkalinity (as CaCO3)	mg/L	1						<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Hydroxide Alkalinity (as CaCO3)	mg/L	1						<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Total Alkalinity (as CaCO3)	mg/L	1						439	631	331	160	787	251	686	252	250	708	120	102	737
Total Anions	meq/L	0.01						56.2	82.7	79.3	7.62	116	11.1	122	8.77	8.71	119	166	92.3	182
Total Cations	meq/L	0.01						52.4	73.5	67.2	7.1	109	9.99	108	8.77	8.91	96.5	140	99.5	174
Ionic Balance (Lab)	%	0.01						3.5	5.92	8.22	3.48	3.39	5.17	6.18	<0.01	1.12	10.3	8.35	3.75	2.25
Nutrients																								
Nitrate (as N)	ug/L	5	**50**	500				**70**	**100**	<10	**3530**	20	**1320**	**370**	10	30	<50	<10	**200**	**610**
Nitrite (as N)	ug/L	5	**3**	30				<10	<10	<10	**60**	<10	**30**	<10	<10	<10	<50	<10	<10	<10
Nitrogen (Total Oxidised)	ug/L	10						70	100	<10	3590	20	1350	370	10	30	<50	<10	200	610
Ammonia (as N)	ug/L	10			910			370	3450	710	280	1580	20	1350	100	110	1820	70	1310	3590
Total Kjeldahl Nitrogen (as N)	ug/L	100						400	3400	800	2100	1700	1900	1900	300	300	4600	300	1900	3900
Nitrogen (Total)	ug/L	100				*5000*		500	3500	800	*5700*	1700	3200	2300	300	300	4600	300	2100	4500
Reactive Phosphorus (as P)	ug/L	10						60	40	<10	<10	<10	<10	<10	30	50	<50	<10	<10	<10
Total Phosphorus (as P)	ug/L	10				*50*		*50*	10	10	*240*	*420*	*160*	<10	*170*	*140*	*210*	<20	40	<20
Metals																								
Arsenic (Filtered)	µg/L	1	**10**	100	24 [1] / 13 [2]	*100*		<1	<1	1	<1	1	<1	<1	<1	<1	<1	<1	**19**	6
Cadmium (Filtered)	µg/L	0.1	**2**	20	5.5	*10*		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chromium (Filtered)	µg/L	1						<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	2	<1
Chromium (hexavalent) (Filtered)	µg/L	10	**50**	500	4.4	*100*						<10	<10				<10	<10		
Cobalt (Filtered)	µg/L	1			1	*50*		3	<1	<1	<1	1	1	26	12	12	4	*101*	*60*	40
Copper (Filtered)	µg/L	1	**2000**	20000	1.3	*200*		<1	<1	6	<1	<1	1	1	<1	<1	<1	<1	<1	<1
Iron (Filtered)	µg/L	10				*200*		<50	*1280*	*1470*	100	*12,300*	120	<50	<50	*290*	*59,700*	*730*	*556,000*	*2830*
Lead (Filtered)	µg/L	1	**10**	100	4.4 [3]	*2000*		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	**10**	<1
Manganese (Filtered)	µg/L	1	**500**	5000	80 [3]	*200*		176	*478*	154	54	***625***	88	*374*	***2320***	***2410***	***1540***	*280*	***14,400***	***607***
Mercury (Filtered)	µg/L	0.05	**1**	10	0.4	*2*		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Nickel (Filtered)	µg/L	1	**20**	200	70	*200*		3	<1	<1	<1	1	1	19	8	8	8	**31**	**117**	**52**
Zinc (Filtered)	µg/L	1			15	*2000*		11	<5	<5	<5	5	10	33	<5	14	<5	58	64	<5
Heavy Metals (Organo)																								
Tributyltin	ngSn/L	2			6															
Dissolved Gases																								
Methane	µg/L	10	**1600** [4]																	<10

GOLDER Douglas Partners

Appendix C-6 Analytical Results

							Well ID	SMW_BH001	SMW_BH002	SMW_BH003	SMW_BH003s	SMW_BH007	SMW_BH007s	SMW_BH009	SMW_BH009s	SMW_BH009s	SMW_BH011	SMW_BH011s	SMW_BH014	SMW_BH015
							Sample ID	SMW_BH001	SMW_BH002	SMW_BH003	SMW_BH003s	SMW_BH007	SMW_BH007s	SMW_BH009	SMW_BH009s	SMW_BH100 [8]	SMW_BH011	SMW_BH011s	SMW_BH014	SMW_BH015
			Adopted Groundwater Screening Levels				Sample Date	03-09-18	04-09-18	18-09-18	04-09-18	04-09-18	04-09-18	12-09-18	03-09-18	03-09-18	18-09-18	18-09-18	03-09-18	11-09-18
			Drinking Water	Recreational /Direct Contact [7]	95% Protection of species	Long-Term Irrigation	Comm/ Ind HSL D (2-4 m)																
Analyte	**Units**	**EQL**	**NHMRC 2011**	**NHMRC 2008**	**ANZG 2018**	***ANZECC 2000***	**NEPM 2013, CRC 2011**																
Per- and polyfluoroalkyl substances (PFAS)																							
Sum of PFHxS and PFOS (lab reported)	ug/L	0.01	**0.07** [5]	0.7 [5]								<0.05	**0.08**				<0.05	<0.05		<0.01
10:2 Fluorotelomer sulfonic acid	µg/L	0.05										<0.05	<0.05				<0.05	<0.05		<0.05
4:2 Fluorotelomer sulfonic acid	µg/L	0.05										<0.05	<0.05				<0.05	<0.05		<0.05
8:2 Fluorotelomer sulfonate	µg/L	0.05										<0.05	<0.05				<0.05	<0.05		<0.05
Perfluorobutanoic acid (PFBA)	µg/L	0.1										<0.2	<0.1				<0.2	<0.2		<0.1
Perfluoroheptane sulfonic acid	µg/L	0.02										<0.05	<0.02				<0.05	<0.05		<0.02
Perfluoro-n-pentanoic acid (PFPeA)	µg/L	0.02										<0.05	<0.02				<0.05	0.05		<0.02
Perfluoropentane sulfonic acid	µg/L	0.02										<0.05	<0.02				<0.05	<0.05		<0.02
N-Et-FOSA	µg/L	0.05										<0.12	<0.05				<0.12	<0.12		<0.05
N-Et-FOSE	µg/L	0.05										<0.12	<0.05				<0.12	<0.12		<0.05
N-Me-FOSA	µg/L	0.05										<0.12	<0.05				<0.12	<0.12		<0.05
N-Me-FOSE	µg/L	0.05										<0.12	<0.05				<0.12	<0.12		<0.05
PFDcS	ug/L	0.02										<0.05	<0.02							<0.02
N-methyl-perfluorooctanesulfonamidoacetic acid	µg/L	0.02										<0.05	<0.02				<0.05	<0.05		<0.02
Perfluorobutanesulfonic acid (PFBS)	µg/L	0.02										<0.05	<0.02				<0.05	<0.05		<0.02
Perfluorodecanesulfonic acid (PFDS)	µg/L	0.02															<0.05	<0.05		
Perfluorodecanoic acid (PFDA)	µg/L	0.02										<0.05	<0.02				<0.05	<0.05		<0.02
Perfluorododecanoic acid (PFDoA)	µg/L	0.02										<0.05	<0.02				<0.05	<0.05		<0.02
Perfluoroheptanoic acid (PFHpA)	µg/L	0.02										<0.05	<0.02				<0.05	0.24		<0.02
Perfluorooctanesulfonic acid (PFOS)	µg/L	0.01			0.13 [5]							<0.05	0.03				<0.05	<0.05		<0.01
Perfluorooctanoate (PFOA)	µg/L	0.01	**0.56** [5]	5.6 [5]	220 [5]							<0.05	0.01				<0.05	0.1		<0.01
Perfluorohexanesulfonic acid (PFHxS)	µg/L	0.02										<0.05	0.05				<0.05	<0.05		<0.02
Perfluorononanoic acid (PFNA)	µg/L	0.02										<0.05	<0.02				<0.05	<0.05		<0.02
Perfluorohexanoic acid (PFHxA)	µg/L	0.02										<0.05	0.02				<0.05	0.1		<0.02
6:2 Fluorotelomer Sulfonate (6:2 FtS)	µg/L	0.05										<0.05	<0.05				<0.05	<0.05		<0.05
N-ethyl-perfluorooctanesulfonamidoacetic acid	µg/L	0.02										<0.05	<0.02				<0.05	<0.05		<0.02
Perfluorooctanesulfonamide (PFOSA)	µg/L	0.02										<0.05	<0.02				<0.05	<0.05		<0.02
Perfluorotetradecanoic acid (PFTeDA)	µg/L	0.05										<0.12	<0.05				<0.12	<0.12		<0.05
Perfluorotridecanoic acid (PFTrDA)	µg/L	0.02										<0.05	<0.02				<0.05	<0.05		<0.02
Perfluoroundecanoic acid (PFUnA)	µg/L	0.02										<0.05	<0.02				<0.05	<0.05		<0.02
Total Recoverable Hydrocarbons (TRHs)																							
TRH C10 - C14 Fraction	µg/L	50						<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50			
TRH C15 - C28 Fraction	µg/L	100						<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	220	<100			
TRH C29 - C36 Fraction	µg/L	50						<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50			
TRH+C10 - C36 (Sum of total) (Lab Reported)	µg/L	50						<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	220	<50			
TRH >C10 - C16 Fraction F2	µg/L	50						<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100			
TRH >C10 - C16 Fraction Less Naphthalene (F2)	µg/L	50	**100** [6]	1000			NL	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100			
TRH >C16 - C34 Fraction F3	µg/L	100	**800** [6]	8000				<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	240	<100			
TRH >C34 - C40 Fraction F4	µg/L	100	**800** [6]	8000				<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100			
TRH+C10 - C40 (Sum of total) (Lab Reported)	µg/L	100						<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	240	<100			
Volatile Petroleum Hydrocarbons (PHCs)																							
TRH C6 - C9 Fraction	µg/L	10						<20	<20	30	<20	<20	<20	<20	<20	<20	70	<20	80	<20			
TRH C6 - C10 Fraction F1	µg/L	10						<20	<20	30	<20	<20	<20	<20	<20	<20	70	<20	80	<20			
TRH C6 - C10 Fraction Less BTEX F1	µg/L	10	**1300** [6]	13,000			6000	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	30	<20			
BTEX																							
Benzene	µg/L	1	**1**	10	700		5000	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1			
Toluene	µg/L	1	**800**	8000	180 [3]		NL	<2	<2	14	<2	<2	<2	<2	<2	<2	51	<2	53	<2			
Ethylbenzene	µg/L	1	**300**	3000	5 [3]		NL	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2			
Xylenes (m & p)	µg/L	2			m-xylene: 75 [3]			<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2			
Xylene (o)	µg/L	1			350 [3]			<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2			
Xylenes (Sum of total) (Lab Reported)	µg/L	2	**600**	6000			NL	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2			
Naphthalene	ug/L	1-5*			70		NL	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5			
Total BTEX	µg/L	1						<1	<1	14	<1	<1	<1	<1	<1	<1	51	<1	53	<1			

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Appendix C-6 Analytical Results

							Well ID	SMW_BH001	SMW_BH002	SMW_BH003	SMW_BH003s	SMW_BH007	SMW_BH007s	SMW_BH009	SMW_BH009s	SMW_BH009s	SMW_BH011	SMW_BH011s	SMW_BH014	SMW_BH015
							Sample ID	SMW_BH001	SMW_BH002	SMW_BH003	SMW_BH003s	SMW_BH007	SMW_BH007s	SMW_BH009	SMW_BH009s	SMW_BH100 [8]	SMW_BH011	SMW_BH011s	SMW_BH014	SMW_BH015
			Adopted Groundwater Screening Levels				Sample Date	03-09-18	04-09-18	18-09-18	04-09-18	04-09-18	04-09-18	12-09-18	03-09-18	03-09-18	18-09-18	18-09-18	03-09-18	11-09-18
			Drinking Water	Recreational /Direct Contact [7]	95% Protection of species	Long-Term Irrigation	Comm/ Ind HSL D (2-4 m)																	
Analyte	**Units**	**EQL**	**NHMRC 2011**	**NHMRC 2008**	**ANZG 2018**	***ANZECC 2000***	**NEPM 2013, CRC 2011**																	
Organochlorine Pesticides																								
a-BHC	µg/L	0.5												<0.5	<0.5	<0.5				
Aldrin	µg/L	0.5			0.003 [3]									<0.5	<0.5	<0.5				
Dieldrin	µg/L	0.5			0.01 [3]									<0.5	<0.5	<0.5				
Aldrin & Dieldrin (Sum of total) (Lab Reported)	µg/L	0.5	**0.3**	3										<0.5	<0.5	<0.5				
b-BHC	µg/L	0.5												<0.5	<0.5	<0.5				
cis-Chlordane	µg/L	0.5												<0.5	<0.5	<0.5				
trans-Chlordane	µg/L	0.5												<0.5	<0.5	<0.5				
Chlordane (Sum of total)	µg/L	0.5	**2**	20	0.001 [3]									<0.5	<0.5	<0.5				
d-BHC	µg/L	0.5												<0.5	<0.5	<0.5				
DDD	µg/L	0.5												<0.5	<0.5	<0.5				
DDE	µg/L	0.5			0.0005 [3]									<0.5	<0.5	<0.5				
DDT	µg/L	2	**9**	90	0.0004 [3]									<2	<2	<2				
DDT+DDE+DDD (Sum of total) (Lab Reported)	µg/L	0.5												<0.5	<0.5	<0.5				
Endosulfan I	µg/L	0.5												<0.5	<0.5	<0.5				
Endosulfan II	µg/L	0.5												<0.5	<0.5	<0.5				
Endosulfan (as sum of Endosulfan I and Endosulfan II)	µg/L	-	**20**	200										<0.5	<0.5	<0.5				
Endosulfan sulphate	µg/L	0.5												<0.5	<0.5	<0.5				
Endrin	µg/L	0.5			0.008									<0.5	<0.5	<0.5				
Endrin aldehyde	µg/L	0.5												<0.5	<0.5	<0.5				
Endrin ketone	µg/L	0.5												<0.5	<0.5	<0.5				
g-BHC	µg/L	0.5	**10**	100	0.007 [3]									<0.5	<0.5	<0.5				
Heptachlor	µg/L	0.5	**0.3**	3	0.0004 [3]									<0.5	<0.5	<0.5				
Heptachlor epoxide	µg/L	0.5												<0.5	<0.5	<0.5				
Hexachlorobenzene	µg/L	0.5			0.05 [3]									<0.5	<0.5	<0.5				
Methoxychlor	µg/L	2	**300**	3000	0.004 [3]									<2	<2	<2				
Organophosphorous Pesticides																								
Azinphos-methyl	µg/L	0.5	**30**	300	0.01 [3]									<0.5	<0.5	<0.5				
Bromophos-ethyl	µg/L	0.5	**10**	100										<0.5	<0.5	<0.5				
Carbophenothion	µg/L	0.5	**0.5**	5										<0.5	<0.5	<0.5				
Chlorfenvinphos	µg/L	0.5	**2**	20										<0.5	<0.5	<0.5				
Chlorpyriphos	µg/L	0.5	**10**	100	0.009									<0.5	<0.5	<0.5				
Chlorpyriphos-methyl	µg/L	0.5												<0.5	<0.5	<0.5				
Demeton-s-methyl	µg/L	0.5			4 [3]									<0.5	<0.5	<0.5				
Diazinon	µg/L	0.5	**4**	40	0.01 [3]									<0.5	<0.5	<0.5				
Dichlorvos	µg/L	0.5	**5**	50										<0.5	<0.5	<0.5				
Dimethoate	µg/L	0.5	**7**	70	0.15 [3]									<0.5	<0.5	<0.5				
Ethion	µg/L	0.5	**4**	40										<0.5	<0.5	<0.5				
Fenamiphos	µg/L	0.5	**0.5**	5										<0.5	<0.5	<0.5				
Fenthion	µg/L	0.5	**7**	70										<0.5	<0.5	<0.5				
Malathion	µg/L	0.5	**70**	700	0.05 [3]									<0.5	<0.5	<0.5				
Parathion-methyl	µg/L	2	**0.7**	7										<2	<2	<2				
Monocrotophos	µg/L	2	**2**	20										<2	<2	<2				
Parathion	µg/L	2	**20**	200	0.004 [3]									<2	<2	<2				
Pirimphos-ethyl	µg/L	0.5	**0.5**	5										<0.5	<0.5	<0.5				
Prothiofos	µg/L	0.5												<0.5	<0.5	<0.5				
PAH																								
Benzo(a)pyrene (TEQs)	µg/L	5																						
Benzo(b+j) & Benzo(k)fluoranthene	µg/L	2																						
Acenaphthene	µg/L	1						<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Acenaphthylene	µg/L	1						<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Anthracene	µg/L	1			0.1 [3]			<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Benz(a)anthracene	µg/L	1						<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Benzo(a)pyrene	µg/L	0.5	**0.01**	0.1	0.2 [3]			<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ (lower bound)*	µg/L	0.5						<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(b)&(j)fluoranthene	µg/L	1						<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Benzo(g,h,i)perylene	µg/L	1						<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Benzo(k)fluoranthene	µg/L	1						<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chrysene	µg/L	1						<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Dibenz(a,h)anthracene	µg/L	1						<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Fluoranthene	µg/L	1			1 [3]			<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Fluorene	µg/L	1						<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Indeno(1,2,3-c,d)pyrene	µg/L	1						<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Naphthalene	µg/L	1			70		NL	<1	<1	<1	<1	<1	<1	<1	<1	3.2	<1	<1	<1	<1
Phenanthrene	µg/L	1			0.6 [3]			<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Pyrene	µg/L	1						<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PAH (Sum of Common 16 PAHs - Lab Reported)	µg/L	0.5						<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	3.2	<0.5	<0.5	<0.5	<0.5
Total PAH (NEPM/WHO 16)	µg/L	1																		

GOLDER Douglas Partners

Appendix C-6 Analytical Results

							Well ID	SMW_BH001	SMW_BH002	SMW_BH003	SMW_BH003s	SMW_BH007	SMW_BH007s	SMW_BH009	SMW_BH009s	SMW_BH009s	SMW_BH011	SMW_BH011s	SMW_BH014	SMW_BH015
							Sample ID	SMW_BH001	SMW_BH002	SMW_BH003	SMW_BH003s	SMW_BH007	SMW_BH007s	SMW_BH009	SMW_BH009s	SMW_BH100 [8]	SMW_BH011	SMW_BH011s	SMW_BH014	SMW_BH015
			Adopted Groundwater Screening Levels				Sample Date	03-09-18	04-09-18	18-09-18	04-09-18	04-09-18	04-09-18	12-09-18	03-09-18	03-09-18	18-09-18	18-09-18	03-09-18	11-09-18
			Drinking Water	Recreational /Direct Contact [7]	95% Protection of species	Long-Term Irrigation	Comm/ Ind HSL D (2-4 m)																	
Analyte	**Units**	**EQL**	**NHMRC 2011**	**NHMRC 2008**	**ANZG 2018**	***ANZECC 2000***	**NEPM 2013, CRC 2011**																	
Phenols																								
Phenolics (Sum of total)	µg/L	50							<50	<50	<50									300	<50			
2,4,5-Trichlorophenol	µg/L	1			4 [3]																			
2,4,6-Trichlorophenol	µg/L	1	**20**	200	3 [3]																			
2,4-Dichlorophenol	µg/L	1	**200**	2000	120 [3]																			
2,6-Dichlorophenol	µg/L	1			34 [3]																			
2-Chlorophenol	µg/L	1	**300**	3000	340 [3]																			
4-Chloro-3-methylphenol	µg/L	1																						
Pentachlorophenol	µg/L	2	**10**	100	22																			
2,4-Dimethylphenol	µg/L	1			2 [3]																			
2-Methylphenol	µg/L	1																						
2-Nitrophenol	µg/L	1																						
3- & 4- Methylphenol	µg/L	2																						
Phenol	µg/L	1			400																			
Polychlorinated Biphenyls																								
PCB (Sum of Total-Lab Reported)	µg/L	1																						
SVOCs																								
Cyclohexane	µg/L	1																						
Volatile Organic Compounds																								
1,4-Dichlorobenzene	µg/L	1	**40**	400	60 [3]				<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5		<5			
4-Chlorotoluene	µg/L	1							<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5		<5			
1,2,3-Trichlorobenzene	µg/L	1			3 [3]				<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5		<5			
1,2,4-Trichlorobenzene	µg/L	1			80				<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5		<5			
1,2-Dichlorobenzene	µg/L	1	**1500**	15000	160 [3]				<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5		<5			
1,3-Dichlorobenzene	µg/L	1			260 [3]				<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5		<5			
2-Chlorotoluene	µg/L	1							<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5		<5			
Bromobenzene	µg/L	1							<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5		<5			
Chlorobenzene	µg/L	1	**300**	3000	55 [3]				<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5		<5			
1,2,4-trimethylbenzene	µg/L	1							<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5		<5			
1,3,5-Trimethylbenzene	µg/L	1							<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5		<5			
Isopropylbenzene	µg/L	1			30 [3]				<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5		<5			
n-Butylbenzene	µg/L	1							<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5		<5			
n-Propylbenzene	µg/L	1							<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5		<5			
p-Isopropyltoluene	µg/L	1							<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5		<5			
sec-Butylbenzene	µg/L	1							<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5		<5			
Styrene	µg/L	1	**30**	300					<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5		<5			
tert-Butylbenzene	µg/L	1							<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5		<5			
Methyl Ethyl Ketone	µg/L	50							<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50		<50			
2-Hexanone	µg/L	50							<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50		<50			
Methyl iso-butyl ketone	µg/L	50							<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50		<50			
Vinyl acetate	µg/L	50							<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50		<50			
1,1,1,2-Tetrachloroethane	µg/L	1							<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5		<5			
1,1,2,2-Tetrachloroethane	µg/L	1							<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5		<5			
1,1,1-Trichloroethane	µg/L	1			270 [3]				<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5		<5			
1,1,2-Trichloroethane	µg/L	1			1900				<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5		<5			
1,2,3-Trichloropropane	µg/L	1							<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5		<5			
1,2-Dibromo-3-chloropropane	µg/L	1							<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5		<5			
1,2-Dibromoethane	µg/L	1	**1**	10					<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5		<5			
1,1-Dichloroethane	µg/L	1							<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5		<5			
1,2-Dichloroethane	µg/L	1	**3**	30	1900 [3]				<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5		<5			
1,1-Dichloroethene	µg/L	1	**30**	300	700 [3]				<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5		<5			
cis-1,2-Dichloroethene	µg/L	1							<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5		<5			
trans-1,2-dichloroethene	µg/L	1							<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5		<5			
1,2 - Dichloroethene (as sum of cis-1,2-Dichloroethene and trans-1,2-dichloroethene)	µg/L	-	**60**	600					<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5		<5			
1,2-Dichloropropane	µg/L	1			900 [3]				<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5		<5			
1,3-Dichloropropane	µg/L	1			1100 [3]				<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5		<5			
2,2-Dichloropropane	µg/L	1							<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5		<5			
1,1-Dichloropropene	µg/L	1							<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5		<5			
cis-1,3-Dichloropropene	µg/L	1							<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5		<5			
trans-1,3-dichloropropene	µg/L	1							<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5		<5			
1,3-dichloropropene (as sum of cis-1,3-Dichloropropene and trans-1,3-dichloropropene)	µg/L	-	**100**		0.8 [3]				<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5		<5			

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Appendix C-6 Analytical Results

			Adopted Groundwater Screening Levels					Well ID	SMW_BH001	SMW_BH002	SMW_BH003	SMW_BH003s	SMW_BH007	SMW_BH007s	SMW_BH009	SMW_BH009s	SMW_BH009s	SMW_BH011	SMW_BH011s	SMW_BH014	SMW_BH015
								Sample ID	SMW_BH001	SMW_BH002	SMW_BH003	SMW_BH003s	SMW_BH007	SMW_BH007s	SMW_BH009	SMW_BH009s	SMW_BH100 [8]	SMW_BH011	SMW_BH011s	SMW_BH014	SMW_BH015
								Sample Date	03-09-18	04-09-18	18-09-18	04-09-18	04-09-18	04-09-18	12-09-18	03-09-18	03-09-18	18-09-18	18-09-18	03-09-18	11-09-18
			Drinking Water	Recreational /Direct Contact [7]	95% Protection of species	Long-Term Irrigation	Comm/ Ind HSL D (2-4 m)														
Analyte	**Units**	**EQL**	**NHMRC 2011**	**NHMRC 2008**	**ANZG 2018**	***ANZECC 2000***	**NEPM 2013, CRC 2011**														
cis-1,4-Dichloro-2-butene	µg/L	5							<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5		<5
trans-1,4-Dichloro-2-butene	µg/L	5							<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5		<5
Bromochloromethane	µg/L	1																			
Bromodichloromethane	µg/L	1							<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5		<5
Bromoform	µg/L	1							<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5		<5
Bromomethane	µg/L	10	**1**	10					<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50		<50
Carbon disulfide	µg/L	5							<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5		<5
Carbon tetrachloride	µg/L	1	**3**	30	240 [3]				<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5		<5
Chlorodibromomethane	µg/L	1							<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5		<5
Chloroethane	µg/L	10							<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50		<50
Chloroform	µg/L	1			370 [3]				<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5		<5
Chloromethane	µg/L	10							<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50		<50
Dibromomethane	µg/L	1							<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5		<5
Dichlorodifluoromethane	µg/L	10							<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50		<50
Hexachlorobutadiene	µg/L	1	**0.7**	7					<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5		<5
Iodomethane	µg/L	5							<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5		<5
Pentachloroethane	µg/L	5			80 [3]				<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5		<5
Trichloroethene	µg/L	1			330 [3]				<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5		<5
Tetrachloroethene	µg/L	1	**50**	500	70 [3]				<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5		<5
Trichlorofluoromethane	µg/L	10							<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50		<50
Vinyl chloride	µg/L	10	**0.3**	3	100 [3]				<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50		<50

[1] as As III

[2] as As V

[3] as no high reliability value was available a low or unknown reliability value was used from ANZG 2018.

[4] value taken as minimum concentration at which explosive atmosphere may be generated if complete outgassing occurs.

[5] value taken from *PFAS National Environmental Management Plan* (NEMP), (HEPA, January 2018).

[6] value taken from US EPA RSL (2018) Guideline for Tap Water.

[7] a 10x factor has been applied to the drinking water guidelines consistent with NHMRC 2008 and WA DoH (2014) for recreational contact and/or direct contact during site construction and maintenance work.

[8] blind replicate

[9] split replicate

[*] Secondary Laboratory has different EQL.

							Well ID	SMW_BH017	SMW_BH017s	SMW_BH017s	SMW_BH019	SMW_BH020	SMW_BH020s	SMW_BH021	SMW_BH021s	SMW_BH021s	SMW_BH021s	SMW_BH022s	SMW_BH024
							Sample ID	SMW_BH017	SMW_BH017s	SMW_BH200 [8]	SMW_BH019	SMW_BH020	SMW_BH020s	SMW_BH021	SMW_BH021s	SMW_BH700 [8]	SMW_BH800 [9]	SMW_BH022s	SMW_BH024
			Adopted Groundwater Screening Levels				Sample Date	04-09-18	04-09-18	04-09-18	17-09-18	18-09-18	18-09-18	18-09-18	18-09-18	18-09-18	18-09-18	18-09-18	03-09-18
			Drinking Water	Recreational /Direct Contact [7]	95% Protection of species	Long-Term Irrigation	Comm/ Ind HSL D (2-4 m)																
Analyte	**Units**	**EQL**	**NHMRC 2011**	**NHMRC 2008**	**ANZG 2018**	***ANZECC 2000***	**NEPM 2013, CRC 2011**																
General Parameters																							
Electrical Conductivity @ 25°C	µS/cm	1						3760	1730	1730	13,600	7400	13,600	17,700	21,500	21,300	21,000	33,200	13,100
pH (Lab)		0.01				*6-8.5*		*12.1*	6.45	6.42	6.95	6.93	6.59	6.63	6.36	6.38	6.5	7.2	7.45
Total Dissolved Solids @180°C	mg/L	5						1330	1100	1090	7610	4390	7950	11,500	13,800	13,900	15,000	22,800	7880
Major Ions																							
Sodium (Filtered)	mg/L	0.5						215	256	251	1940	1260	2410	2590	3760	3870	5500	7320	1950
Potassium (Filtered)	mg/L	0.5						20	3	2	33	7	9	26	6	7	9.3	240	28
Calcium (Filtered)	mg/L	0.5						276	65	63	273	108	119	375	116	116	120	358	151
Magnesium (Filtered)	mg/L	0.5						<1	13	10	229	132	191	319	395	404	450	693	353
Chloride	mg/L	1						226	418	406	4430	1800	4710	6520	8070	8040	5900	12,000	4470
Fluoride	mg/L	0.1	**1.5**	15		*1*					0.1	0.1	0.1	<0.1	<0.1	<0.1	<0.1	0.4	0.4
Sulphate (as SO4)	mg/L	1						123	179	182	82	1040	713	305	700	686	710	2330	125
Bicarbonate Alkalinity (as CaCO3)	mg/L	1						<1	118	116	625	282	254	476	164	178	180	586	949
Carbonate Alkalinity (as CaCO3)	mg/L	1						60	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1
Hydroxide Alkalinity (as CaCO3)	mg/L	1						630	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1
Total Alkalinity (as CaCO3)	mg/L	1						690	118	116	625	282	254	476	164	178	180	586	949
Total Anions	meq/L	0.01						22.7	17.9	17.6	139	78.1	153	200	245	245		399	148
Total Cations	meq/L	0.01						23.6	15.5	14.9	118	71.2	127	158	202	208		399	122
Ionic Balance (Lab)	%	0.01						1.97	7.04	8.08	8.35	4.57	9.33	11.6	9.72	8.2	21	0.09	9.46
Nutrients																							
Nitrate (as N)	ug/L	5	**50**	500				<10	<10	20	**190**	**120**	**60**	<100	**70**	<10	10	<10	**60**
Nitrite (as N)	ug/L	5	**3**	30				**40**	<10	<10	<10	<10	<10	<100	<10	<10	<5	<10	<10
Nitrogen (Total Oxidised)	ug/L	10						40	<10	20	190	120	60	<100	70	<10		<10	60
Ammonia (as N)	ug/L	10			910			1830	30	50	4090	230	290	2500	290	310	250	1400	1910
Total Kjeldahl Nitrogen (as N)	ug/L	100						2300	300	600	4200	700	600	2600	<500	<500		1500	3600
Nitrogen (Total)	ug/L	100				*5000*		2300	300	600	4400	800	700	2600	<500	<500	500	1500	3700
Reactive Phosphorus (as P)	ug/L	10						<10	<10	<10	<10	<10	<50	<100	<10	<10	<5	<10	<10
Total Phosphorus (as P)	ug/L	10				*50*		10	<10	20	<10	*290*	*60*	*230*	<50	<50	<50	<50	*680*
Metals																							
Arsenic (Filtered)	µg/L	1	**10**	100	24 [1] / 13 [2]	*100*		<1	<1	<1	<1	<1	1	**20**	1	<1	1	<10	**14**
Cadmium (Filtered)	µg/L	0.1	**2**	20	5.5	*10*		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<1	<0.1
Chromium (Filtered)	µg/L	1						22	1	<1	<1	<1	<1	<1	<1	<1	1	<10	<1
Chromium (hexavalent) (Filtered)	µg/L	10	**50**	500	4.4	*100*						<10	<10	<10	<10			<10	
Cobalt (Filtered)	µg/L	1			1	*50*		<1	6	6	3	8	46	2	*57*	*58*	*52*	<10	2
Copper (Filtered)	µg/L	1	**2000**	20000	1.3	*200*		10	<1	<1	<1	2	<1	<1	<1	<1	<1	<10	<1
Iron (Filtered)	ug/L	10				*200*		130	*260*	*260*	*4870*	*530*	*18,700*	*37,300*	*17,700*	*18,600*	*18,000*	*2000*	<50
Lead (Filtered)	µg/L	1	**10**	100	4.4 [3]	*2000*		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<10	<1
Manganese (Filtered)	µg/L	1	**500**	5000	80 [3]	*200*		<1	*200*	192	*425*	***555***	***526***	***1510***	*254*	*248*	*290*	*398*	*220*
Mercury (Filtered)	µg/L	0.05	**1**	10	0.4	*2*		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1
Nickel (Filtered)	µg/L	1	**20**	200	70	*200*		2	3	3	3	2	12	2	**20**	**21**	**20**	<10	3
Zinc (Filtered)	µg/L	1			15	*2000*		<5	11	15	11	<5	<5	22	10	10	10	<50	<5
Heavy Metals (Organo)																							
Tributyltin	ngSn/L	2			6														
Dissolved Gases																							
Methane	µg/L	10	**1600** [4]								**2270**								

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Appendix C-6 Analytical Results

			Adopted Groundwater Screening Levels					Well ID	SMW_BH017	SMW_BH017s	SMW_BH017s	SMW_BH019	SMW_BH020	SMW_BH020s	SMW_BH021	SMW_BH021s	SMW_BH021s	SMW_BH021s	SMW_BH022s	SMW_BH024
								Sample ID	SMW_BH017	SMW_BH017s	SMW_BH200 [8]	SMW_BH019	SMW_BH020	SMW_BH020s	SMW_BH021	SMW_BH021s	SMW_BH700 [8]	SMW_BH800 [9]	SMW_BH022s	SMW_BH024
								Sample Date	04-09-18	04-09-18	04-09-18	17-09-18	18-09-18	18-09-18	18-09-18	18-09-18	18-09-18	18-09-18	18-09-18	03-09-18
			Drinking Water	Recreational /Direct Contact [7]	95% Protection of species	Long-Term Irrigation	Comm/ Ind HSL D (2-4 m)													
Analyte	**Units**	**EQL**	**NHMRC 2011**	**NHMRC 2008**	**ANZG 2018**	***ANZECC 2000***	**NEPM 2013, CRC 2011**													
Per- and polyfluoroalkyl substances (PFAS)																				
Sum of PFHxS and PFOS (lab reported)	µg/L	0.01	**0.07** [5]	0.7 [5]									<0.05	<0.05	<0.05	<0.05			<0.05	<0.01
10:2 Fluorotelomer sulfonic acid	µg/L	0.05											<0.05	<0.05	<0.05	<0.05			<0.05	<0.05
4:2 Fluorotelomer sulfonic acid	µg/L	0.05											<0.05	<0.05	<0.05	<0.05			<0.05	<0.05
8:2 Fluorotelomer sulfonate	µg/L	0.05											<0.05	<0.05	<0.05	<0.05			<0.05	<0.05
Perfluorobutanoic acid (PFBA)	µg/L	0.1											<0.2	<0.2	<0.2	<0.2			<0.2	<0.1
Perfluoroheptane sulfonic acid	µg/L	0.02											<0.05	<0.05	<0.05	<0.05			<0.05	<0.02
Perfluoro-n-pentanoic acid (PFPeA)	µg/L	0.02											<0.05	<0.05	<0.05	<0.05			<0.05	<0.02
Perfluoropentane sulfonic acid	µg/L	0.02											<0.05	<0.05	<0.05	<0.05			<0.05	<0.02
N-Et-FOSA	µg/L	0.05											<0.12	<0.12	<0.12	<0.12			<0.12	<0.05
N-Et-FOSE	µg/L	0.05											<0.12	<0.12	<0.12	<0.12			<0.12	<0.05
N-Me-FOSA	µg/L	0.05											<0.12	<0.12	<0.12	<0.12			<0.12	<0.05
N-Me-FOSE	µg/L	0.05											<0.12	<0.12	<0.12	<0.12			<0.12	<0.05
PFDcS	µg/L	0.02																		<0.02
N-methyl-perfluorooctanesulfonamidoacetic acid	µg/L	0.02											<0.05	<0.05	<0.05	<0.05			<0.05	<0.02
Perfluorobutanesulfonic acid (PFBS)	µg/L	0.02											<0.05	<0.05	<0.05	<0.05			<0.05	<0.02
Perfluorodecanesulfonic acid (PFDS)	µg/L	0.02											<0.05	<0.05	<0.05	<0.05			<0.05	
Perfluorodecanoic acid (PFDA)	µg/L	0.02											<0.05	<0.05	<0.05	<0.05			<0.05	<0.02
Perfluorododecanoic acid (PFDoA)	µg/L	0.02											<0.05	<0.05	<0.05	<0.05			<0.05	<0.02
Perfluoroheptanoic acid (PFHpA)	µg/L	0.02											<0.05	<0.05	<0.05	<0.05			<0.05	<0.02
Perfluorooctanesulfonic acid (PFOS)	µg/L	0.01			0.13 [5]								<0.05	<0.05	<0.05	<0.05			<0.05	<0.01
Perfluorooctanoate (PFOA)	µg/L	0.01	**0.56** [5]	5.6 [5]	220 [5]								<0.05	<0.05	<0.05	<0.05			<0.05	<0.01
Perfluorohexanesulfonic acid (PFHxS)	µg/L	0.02											<0.05	<0.05	<0.05	<0.05			<0.05	<0.02
Perfluorononanoic acid (PFNA)	µg/L	0.02											<0.05	<0.05	<0.05	<0.05			<0.05	<0.02
Perfluorohexanoic acid (PFHxA)	µg/L	0.02											<0.05	<0.05	<0.05	<0.05			<0.05	<0.02
6:2 Fluorotelomer Sulfonate (6:2 FtS)	µg/L	0.05											<0.05	<0.05	<0.05	<0.05			<0.05	<0.05
N-ethyl-perfluorooctanesulfonamidoacetic acid	µg/L	0.02											<0.05	<0.05	<0.05	<0.05			<0.05	<0.02
Perfluorooctanesulfonamide (PFOSA)	µg/L	0.02											<0.05	<0.05	<0.05	<0.05			<0.05	<0.02
Perfluorotetradecanoic acid (PFTeDA)	µg/L	0.05											<0.12	<0.12	<0.12	<0.12			<0.12	<0.05
Perfluorotridecanoic acid (PFTrDA)	µg/L	0.02											<0.05	<0.05	<0.05	<0.05			<0.05	<0.02
Perfluoroundecanoic acid (PFUnA)	µg/L	0.02											<0.05	<0.05	<0.05	<0.05			<0.05	<0.02
Total Recoverable Hydrocarbons (TRHs)																				
TRH C10 - C14 Fraction	µg/L	50							180	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	90
TRH C15 - C28 Fraction	µg/L	100							<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	770
TRH C29 - C36 Fraction	µg/L	50							<50	<50	<50	<50	<50	<50	<50	<50	<50	<100	<50	210
TRH+C10 - C36 (Sum of total) (Lab Reported)	µg/L	50							180	<50	<50	<50	<50	<50	<50	<50	<50		<50	1070
TRH >C10 - C16 Fraction F2	µg/L	50							120	<100	<100	<100	<100	<100	<100	<100	<100	<50	<100	100
TRH >C10 - C16 Fraction Less Naphthalene (F2)	µg/L	50	**100** [6]	1000			NL		**120**	<100	<100	<100	<100	<100	<100	<100	<100	<50	<100	**100**
TRH >C16 - C34 Fraction F3	µg/L	100	**800** [4]	8000					<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	**960**
TRH >C34 - C40 Fraction F4	µg/L	100	**800** [6]	8000					<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
TRH+C10 - C40 (Sum of total) (Lab Reported)	µg/L	100							120	<100	<100	<100	<100	<100	<100	<100	<100		<100	1060
Volatile Petroleum Hydrocarbons (PHCs)																				
TRH C6 - C9 Fraction	µg/L	10							80	<20	<20	40	<20	<20	<20	<20	<20	<10	<20	30
TRH C6 - C10 Fraction F1	µg/L	10							110	<20	<20	40	20	<20	<20	<20	<20	<10	<20	30
TRH C6 - C10 Fraction Less BTEX F1	µg/L	10	**1300** [6]	13,000			6000		60	<20	<20	30	<20	<20	<20	<20	<20	<10	<20	<20
BTEX																				
Benzene	µg/L	1	**1**	10	700		5000		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Toluene	µg/L	1	**800**	8000	180 [3]		NL		45	<2	<2	9	4	<2	<2	4	4	4	<2	9
Ethylbenzene	µg/L	1	**300**	3000	5 [3]		NL		<2	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<2
Xylenes (m & p)	µg/L	2			m-xylene: 75 [3]				5	<2	<2	4	<2	<2	<2	<2	<2	<2	<2	3
Xylene (o)	µg/L	1			350 [3]				4	<2	<2	<2	<2	<2	<2	<2	<2	<1	<2	<2
Xylenes (Sum of total) (Lab Reported)	µg/L	2	**600**	6000			NL		9	<2	<2	4	<2	<2	<2	<2	<2		<2	3
Naphthalene	µg/L	1-5*			70		NL		<5	<5	<5	<5	<5	<5	<5	<5	<5	<1	<5	<5
Total BTEX	µg/L	1							54	<1	<1	13	4	<1	<1	4	4		<1	12

GOLDER Douglas Partners

Appendix C-6 Analytical Results

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							Well ID	SMW_BH017	SMW_BH017s	SMW_BH017s	SMW_BH019	SMW_BH020	SMW_BH020s	SMW_BH021	SMW_BH021s	SMW_BH021s	SMW_BH021s	SMW_BH022s	SMW_BH024	
							Sample ID	SMW_BH017	SMW_BH017s	SMW_BH200 [8]	SMW_BH019	SMW_BH020	SMW_BH020s	SMW_BH021	SMW_BH021s	SMW_BH700 [8]	SMW_BH800 [9]	SMW_BH022s	SMW_BH024	
			Adopted Groundwater Screening Levels				Sample Date	04-09-18	04-09-18	04-09-18	17-09-18	18-09-18	18-09-18	18-09-18	18-09-18	18-09-18	18-09-18	18-09-18	03-09-18	
			Drinking Water	Recreational /Direct Contact [7]	95% Protection of species	Long-Term Irrigation	Comm/ Ind HSL D (2-4 m)																	
Analyte	**Units**	**EQL**	**NHMRC 2011**	**NHMRC 2008**	**ANZG 2018**	***ANZECC 2000***	**NEPM 2013, CRC 2011**																	
Phenols																								
Phenolics (Sum of total)	µg/L	50						<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	
2,4,5-Trichlorophenol	µg/L	1			4 [3]																			
2,4,6-Trichlorophenol	µg/L	1	**20**	200	3 [3]																			
2,4-Dichlorophenol	µg/L	1	**200**	2000	120 [3]																			
2,6-Dichlorophenol	µg/L	1			34 [3]																			
2-Chlorophenol	µg/L	1	**300**	3000	340 [3]																			
4-Chloro-3-methylphenol	µg/L	1																						
Pentachlorophenol	µg/L	2	**10**	100	22																			
2,4-Dimethylphenol	µg/L	1			2 [3]																			
2-Methylphenol	µg/L	1																						
2-Nitrophenol	µg/L	1																						
3- & 4- Methylphenol	µg/L	2																						
Phenol	µg/L	1			400																			
Polychlorinated Biphenyls																								
PCB (Sum of Total-Lab Reported)	µg/L	1																						
SVOCs																								
Cyclohexane	µg/L	1																						
Volatile Organic Compounds																								
1,4-Dichlorobenzene	µg/L	1	**40**	400	60 [3]			<5	<5	<5	<5	<5	<5	<5	<5	<5	<1	<5	<5	
4-Chlorotoluene	µg/L	1						<5	<5	<5	<5	<5	<5	<5	<5	<5	<1	<5	<5	
1,2,3-Trichlorobenzene	µg/L	1			3 [3]			<5	<5	<5	<5	<5	<5	<5	<5	<5	<1	<5	<5	
1,2,4-Trichlorobenzene	µg/L	1			80			<5	<5	<5	<5	<5	<5	<5	<5	<5	<1	<5	<5	
1,2-Dichlorobenzene	µg/L	1	**1500**	15000	160 [3]			<5	<5	<5	<5	<5	<5	<5	<5	<5	<1	<5	<5	
1,3-Dichlorobenzene	µg/L	1			260 [3]			<5	<5	<5	<5	<5	<5	<5	<5	<5	<1	<5	<5	
2-Chlorotoluene	µg/L	1						<5	<5	<5	<5	<5	<5	<5	<5	<5	<1	<5	<5	
Bromobenzene	µg/L	1						<5	<5	<5	<5	<5	<5	<5	<5	<5	<1	<5	<5	
Chlorobenzene	µg/L	1	**300**	3000	55 [3]			<5	<5	<5	<5	<5	<5	<5	<5	<5	<1	<5	<5	
1,2,4-trimethylbenzene	µg/L	1						<5	<5	<5	<5	<5	<5	<5	<5	<5	<1	<5	<5	
1,3,5-Trimethylbenzene	µg/L	1						<5	<5	<5	<5	<5	<5	<5	<5	<5	<1	<5	<5	
Isopropylbenzene	µg/L	1			30 [3]			<5	<5	<5	<5	<5	<5	<5	<5	<5	<1	<5	<5	
n-Butylbenzene	µg/L	1						<5	<5	<5	<5	<5	<5	<5	<5	<5	<1	<5	<5	
n-Propylbenzene	µg/L	1						<5	<5	<5	<5	<5	<5	<5	<5	<5	<1	<5	<5	
p-Isopropyltoluene	µg/L	1						<5	<5	<5	<5	<5	<5	<5	<5	<5	<1	<5	<5	
sec-Butylbenzene	µg/L	1						<5	<5	<5	<5	<5	<5	<5	<5	<5	<1	<5	<5	
Styrene	µg/L	1	**30**	300				<5	<5	<5	<5	<5	<5	<5	<5	<5	<1	<5	<5	
tert-Butylbenzene	µg/L	1						<5	<5	<5	<5	<5	<5	<5	<5	<5	<1	<5	<5	
Methyl Ethyl Ketone	µg/L	50						<50	<50	<50	<50	<50	<50	<50	<50	<50		<50	<50	
2-Hexanone	µg/L	50						<50	<50	<50	<50	<50	<50	<50	<50	<50		<50	<50	
Methyl iso-butyl ketone	µg/L	50						<50	<50	<50	<50	<50	<50	<50	<50	<50		<50	<50	
Vinyl acetate	µg/L	50						<50	<50	<50	<50	<50	<50	<50	<50	<50		<50	<50	
1,1,1,2-Tetrachloroethane	µg/L	1						<5	<5	<5	<5	<5	<5	<5	<5	<5	<1	<5	<5	
1,1,2,2-Tetrachloroethane	µg/L	1						<5	<5	<5	<5	<5	<5	<5	<5	<5	<1	<5	<5	
1,1,1-Trichloroethane	µg/L	1			270 [3]			<5	<5	<5	<5	<5	<5	<5	<5	<5	<1	<5	<5	
1,1,2-Trichloroethane	µg/L	1			1900			<5	<5	<5	<5	<5	<5	<5	<5	<5	<1	9	<5	
1,2,3-Trichloropropane	µg/L	1						<5	<5	<5	<5	<5	<5	<5	<5	<5	<1	<5	<5	
1,2-Dibromo-3-chloropropane	µg/L	1						<5	<5	<5	<5	<5	<5	<5	<5	<5	<1	<5	<5	
1,2-Dibromoethane	µg/L	1	**1**	10				<5	<5	<5	<5	<5	<5	<5	<5	<5	<1	<5	<5	
1,1-Dichloroethane	µg/L	1						<5	<5	<5	<5	<5	<5	<5	<5	<5	<1	<5	<5	
1,2-Dichloroethane	µg/L	1	**3**	30	1900 [3]			<5	<5	<5	<5	<5	<5	<5	<5	<5	<1	<5	<5	
1,1-Dichloroethene	µg/L	1	**30**	300	700 [3]			<5	<5	<5	<5	<5	<5	<5	<5	<5	<1	<5	<5	
cis-1,2-Dichloroethene	µg/L	1						<5	<5	<5	<5	<5	<5	<5	<5	<5	<1	<5	<5	
trans-1,2-dichloroethene	µg/L	1						<5	<5	<5	<5	<5	<5	<5	<5	<5	<1	<5	<5	
1,2 - Dichloroethene (as sum of cis-1,2-Dichloroethene and trans-1,2-dichloroethene)	µg/L	-	**60**	600				<5	<5	<5	<5	<5	<5	<5	<5	<5	<1	<5	<5	
1,2-Dichloropropane	µg/L	1			900 [3]			<5	<5	<5	<5	<5	<5	<5	<5	<5	<1	<5	<5	
1,3-Dichloropropane	µg/L	1			1100 [3]			<5	<5	<5	<5	<5	<5	<5	<5	<5	<1	<5	<5	
2,2-Dichloropropane	µg/L	1						<5	<5	<5	<5	<5	<5	<5	<5	<5	<1	<5	<5	
1,1-Dichloropropene	µg/L	1						<5	<5	<5	<5	<5	<5	<5	<5	<5	<1	<5	<5	
cis-1,3-Dichloropropene	µg/L	1						<5	<5	<5	<5	<5	<5	<5	<5	<5	<1	<5	<5	
trans-1,3-dichloropropene	µg/L	1						<5	<5	<5	<5	<5	<5	<5	<5	<5	<1	<5	<5	
1,3-dichloropropene (as sum of cis-1,3-Dichloropropene and trans-1,3-dichloropropene)	µg/L	-	**100**		0.8 [3]			<5	<5	<5	<5	<5	<5	<5	<5	<5	<1	<5	<5	

GOLDER Douglas Partners

Appendix C-6 Analytical Results

| | | | Adopted Groundwater Screening Levels | | |

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Appendix C-6 Analytical Results

							Well ID	SMW_BH027	SMW_BH029	SMW_BH032	SMW_BH033	SMW_BH033	SMW_BH033	SMW_BH034	SMW_BH035	SMW_BH037	SMW_BH037s	SMW_BH038	SMW_BH038
							Sample ID	SMW_BH027	SMW_BH029	SMW_BH032	SMW_BH_400 [9]	SMW_BH033	SMW_BH033_B [8]	SMW_BH034	SMW_BH035	SMW_BH037	SMW_BH037s	SMW_BH_250 [9]	SMW_BH038
			Adopted Groundwater Screening Levels				Sample Date	04-09-18	12-09-18	11-09-18	09-12-18	12-09-18	12-09-18	04-09-18	20-09-18	12-09-18	06-09-18	17-09-18	17-09-18
			Drinking Water	Recreational /Direct Contact [7]	95% Protection of species	Long-Term Irrigation	Comm/ Ind HSL D (2-4 m)																	
Analyte	**Units**	**EQL**	**NHMRC 2011**	**NHMRC 2008**	**ANZG 2018**	***ANZECC 2000***	**NEPM 2013, CRC 2011**																	
Per- and polyfluoroalkyl substances (PFAS)																								
Sum of PFHxS and PFOS (lab reported)	µg/L	0.01	**0.07** [5]	0.7 [5]				<0.05	<0.01	<0.01		<0.05	<0.05	<0.05		**0.17**	0.02		
10:2 Fluorotelomer sulfonic acid	µg/L	0.05						<0.05	<0.05	<0.05		<0.05	<0.05	<0.05		<0.05	<0.05		
4:2 Fluorotelomer sulfonic acid	µg/L	0.05						<0.05	<0.05	<0.05		<0.05	<0.05	<0.05		<0.05	<0.05		
8:2 Fluorotelomer sulfonate	µg/L	0.05						<0.05	<0.05	<0.05		<0.05	<0.05	<0.05		<0.05	<0.05		
Perfluorobutanoic acid (PFBA)	µg/L	0.1						<0.2	<0.1	<0.1		<0.2	<0.2	<0.2		<0.1	<0.1		
Perfluoroheptane sulfonic acid	µg/L	0.02						<0.05		<0.02				<0.05					
Perfluoro-n-pentanoic acid (PFPeA)	µg/L	0.02						<0.05	<0.02	<0.02		<0.05	<0.05	<0.05		<0.02	0.02		
Perfluoropentane sulfonic acid	µg/L	0.02						<0.05		<0.02				<0.05					
N-Et-FOSA	ug/L	0.05						<0.12		<0.05				<0.12					
N-Et-FOSE	ug/L	0.05						<0.12		<0.05				<0.12					
N-Me-FOSA	ug/L	0.05						<0.12		<0.05				<0.12					
N-Me-FOSE	ug/L	0.05						<0.12		<0.05				<0.12					
PFDcS	ug/L	0.02						<0.05		<0.02				<0.05					
N-methyl-perfluorooctanesulfonamidoacetic acid	µg/L	0.02						<0.05		<0.02				<0.05					
Perfluorobutanesulfonic acid (PFBS)	µg/L	0.02						<0.05	<0.02	<0.02		<0.05	<0.05	<0.05		<0.02	<0.02		
Perfluorodecanesulfonic acid (PFDS)	µg/L	0.02																	
Perfluorodecanoic acid (PFDA)	µg/L	0.02						<0.05		<0.02				<0.05					
Perfluorododecanoic acid (PFDoA)	µg/L	0.02						<0.05		<0.02				<0.05					
Perfluoroheptanoic acid (PFHpA)	µg/L	0.02						<0.05	<0.02	<0.02		<0.05	<0.05	<0.05		<0.02	<0.02		
Perfluorooctanesulfonic acid (PFOS)	µg/L	0.01			0.13 [5]			<0.05	<0.01	<0.01		<0.05	<0.05	<0.05		0.17	<0.01		
Perfluorooctanoate (PFOA)	µg/L	0.01	**0.56** [5]	5.6 [5]	220 [5]			<0.05	<0.01	<0.01		<0.05	<0.05	<0.05		<0.01	0.02		
Perfluorohexanesulfonic acid (PFHxS)	µg/L	0.02						<0.05	<0.02	<0.02		<0.05	<0.05	<0.05		<0.02	0.02		
Perfluorononanoic acid (PFNA)	µg/L	0.02						<0.05		<0.02				<0.05					
Perfluorohexanoic acid (PFHxA)	µg/L	0.02						<0.05	<0.02	<0.02		<0.05	<0.05	<0.05		<0.02	0.02		
6:2 Fluorotelomer Sulfonate (6:2 FtS)	µg/L	0.05						<0.05	<0.05	<0.05		<0.05	<0.05	<0.05		<0.05	<0.05		
N-ethyl-perfluorooctanesulfonamidoacetic acid	µg/L	0.02						<0.05		<0.02				<0.05					
Perfluorooctanesulfonamide (PFOSA)	µg/L	0.02						<0.05		<0.02				<0.05					
Perfluorotetradecanoic acid (PFTeDA)	µg/L	0.05						<0.12		<0.05				<0.12					
Perfluorotridecanoic acid (PFTrDA)	µg/L	0.02						<0.05		<0.02				<0.05					
Perfluoroundecanoic acid (PFUnA)	µg/L	0.02						<0.05		<0.02				<0.05					
Total Recoverable Hydrocarbons (TRHs)																								
TRH C10 - C14 Fraction	µg/L	50						<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
TRH C15 - C28 Fraction	µg/L	100						<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
TRH C29 - C36 Fraction	µg/L	50						<50	<50	<50	<100	<50	<50	<50	<50	<50	<50	<100	<50
TRH+C10 - C36 (Sum of total) (Lab Reported)	µg/L	50						<50	<50	<50		<50	<50	<50	<50	<50	<50		<50
TRH >C10 - C16 Fraction F2	µg/L	50						<100	<100	<100	<50	<100	<100	<100	<100	<100	<100	<50	<100
TRH >C10 - C16 Fraction Less Naphthalene (F2)	µg/L	50	**100** [6]	1000			NL	<100	<100	<100	<50	<100	<100	<100	<100	<100	<100	<50	<100
TRH >C16 - C34 Fraction F3	µg/L	100	**800** [6]	8000				<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
TRH >C34 - C40 Fraction F4	µg/L	100	**800** [6]	8000				<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
TRH+C10 - C40 (Sum of total) (Lab Reported)	µg/L	100						<100	<100	<100		<100	<100	<100	<100	<100	<100		<100
Volatile Petroleum Hydrocarbons (PHCs)																								
TRH C6 - C9 Fraction	µg/L	10						20	<20	<20	39	40	30	20	<20	<20	<20	<10	<20
TRH C6 - C10 Fraction F1	µg/L	10						30	<20	<20	40	40	40	20	<20	<20	<20	<10	20
TRH C6 - C10 Fraction Less BTEX F1	µg/L	10	**1300** [6]	13,000			6000	20	<20	<20	31	30	30	<20	<20	<20	<20	<10	<20
BTEX																								
Benzene	µg/L	1	**1**	10	700		5000	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Toluene	µg/L	1	**800**	8000	180 [3]		NL	10	3	<2	8	7	7	11	<2	<2	<2	3	4
Ethylbenzene	µg/L	1	**300**	3000	5 [3]		NL	<2	<2	<2	<1	<2	<2	<2	<2	<2	<2	<1	<2
Xylenes (m & p)	µg/L	2			m-xylene: 75 [3]			<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Xylene (o)	µg/L	1			350 [3]			<2	<2	<2	<1	<2	<2	<2	<2	<2	<2	<1	<2
Xylenes (Sum of total) (Lab Reported)	µg/L	2	**600**	6000			NL	<2	<2	<2		<2	<2	<2	<2	<2	<2		<2
Naphthalene	ug/L	1-5*			70		NL	<5	<5	<5	<1	<5	<5	<5	<5	<5	<5	1	<5
Total BTEX	µg/L	1						10	3	<1		7	7	11	<1	<1	<1		4

GOLDER Douglas Partners

Appendix C-6 Analytical Results

							Well ID	SMW_BH027	SMW_BH029	SMW_BH032	SMW_BH033	SMW_BH033	SMW_BH033	SMW_BH034	SMW_BH035	SMW_BH037	SMW_BH037s	SMW_BH038	SMW_BH038
							Sample ID	SMW_BH027	SMW_BH029	SMW_BH032	SMW_BH_400 [9]	SMW_BH033	SMW_BH033_B [8]	SMW_BH034	SMW_BH035	SMW_BH037	SMW_BH037s	SMW_BH_250 [9]	SMW_BH038
			Adopted Groundwater Screening Levels				Sample Date	04-09-18	12-09-18	11-09-18	09-12-18	12-09-18	12-09-18	04-09-18	20-09-18	12-09-18	06-09-18	17-09-18	17-09-18
			Drinking Water	Recreational /Direct Contact [7]	95% Protection of species	Long-Term Irrigation	Comm/ Ind HSL D (2-4 m)																
Analyte	**Units**	**EQL**	**NHMRC 2011**	**NHMRC 2008**	**ANZG 2018**	***ANZECC 2000***	**NEPM 2013, CRC 2011**																
Organochlorine Pesticides																							
a-BHC	µg/L	0.5														<0.5	<0.5		<0.5
Aldrin	µg/L	0.5			0.003 [3]											<0.5	<0.5		<0.5
Dieldrin	µg/L	0.5			0.01 [3]											<0.5	<0.5		<0.5
Aldrin & Dieldrin (Sum of total) (Lab Reported)	µg/L	0.5	**0.3**	3												<0.5	<0.5		<0.5
b-BHC	µg/L	0.5														<0.5	<0.5		<0.5
cis-Chlordane	µg/L	0.5														<0.5	<0.5		<0.5
trans-Chlordane	µg/L	0.5														<0.5	<0.5		<0.5
Chlordane (Sum of total)	µg/L	0.5	**2**	20	0.001 [3]											<0.5	<0.5		<0.5
d-BHC	µg/L	0.5														<0.5	<0.5		<0.5
DDD	µg/L	0.5														<0.5	<0.5		<0.5
DDE	µg/L	0.5			0.0005 [3]											<0.5	<0.5		<0.5
DDT	µg/L	2	**9**	90	0.0004 [3]											<2	<2		<2
DDT+DDE+DDD (Sum of total) (Lab Reported)	µg/L	0.5														<0.5	<0.5		<0.5
Endosulfan I	µg/L	0.5														<0.5	<0.5		<0.5
Endosulfan II	µg/L	0.5														<0.5	<0.5		<0.5
Endosulfan (as sum of Endosulfan I and Endosulfan II)	µg/L	-	**20**	200												<0.5	<0.5		<0.5
Endosulfan sulphate	µg/L	0.5														<0.5	<0.5		<0.5
Endrin	µg/L	0.5			0.008											<0.5	<0.5		<0.5
Endrin aldehyde	µg/L	0.5														<0.5	<0.5		<0.5
Endrin ketone	µg/L	0.5														<0.5	<0.5		<0.5
g-BHC	µg/L	0.5	**10**	100	0.007 [3]											<0.5	<0.5		<0.5
Heptachlor	µg/L	0.5	**0.3**	3	0.0004 [3]											<0.5	<0.5		<0.5
Heptachlor epoxide	µg/L	0.5														<0.5	<0.5		<0.5
Hexachlorobenzene	µg/L	0.5			0.05 [3]											<0.5	<0.5		<0.5
Methoxychlor	µg/L	2	**300**	3000	0.004 [3]											<2	<2		<2
Organophosphorous Pesticides																							
Azinphos-methyl	µg/L	0.5	**30**	300	0.01 [3]											<0.5	<0.5		<0.5
Bromophos-ethyl	µg/L	0.5	**10**	100												<0.5	<0.5		<0.5
Carbophenothion	µg/L	0.5	**0.5**	5												<0.5	<0.5		<0.5
Chlorfenvinphos	µg/L	0.5	**2**	20												<0.5	<0.5		<0.5
Chlorpyriphos	µg/L	0.5	**10**	100	0.009											<0.5	<0.5		<0.5
Chlorpyriphos-methyl	µg/L	0.5														<0.5	<0.5		<0.5
Demeton-s-methyl	µg/L	0.5			4 [3]											<0.5	<0.5		<0.5
Diazinon	µg/L	0.5	**4**	40	0.01 [3]											<0.5	<0.5		<0.5
Dichlorvos	µg/L	0.5	**5**	50												<0.5	<0.5		<0.5
Dimethoate	µg/L	0.5	**7**	70	0.15 [3]											<0.5	<0.5		<0.5
Ethion	µg/L	0.5	**4**	40												<0.5	<0.5		<0.5
Fenamiphos	µg/L	0.5	**0.5**	5												<0.5	<0.5		<0.5
Fenthion	µg/L	0.5	**7**	70												<0.5	<0.5		<0.5
Malathion	µg/L	0.5	**70**	700	0.05 [3]											<0.5	<0.5		<0.5
Parathion-methyl	µg/L	2	**0.7**	7												<2	<2		<2
Monocrotophos	µg/L	2	**2**	20												<2	<2		<2
Parathion	µg/L	2	**20**	200	0.004 [3]											<2	<2		<2
Pirimphos-ethyl	µg/L	0.5	**0.5**	5												<0.5	<0.5		<0.5
Prothiofos	µg/L	0.5														<0.5	<0.5		<0.5
PAH																							
Benzo(a)pyrene (TEQs)	µg/L	5									<5							<5	
Benzo(b+j) & Benzo(k)fluoranthene	µg/L	2									<2							<2	
Acenaphthene	µg/L	1						<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Acenaphthylene	µg/L	1						<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Anthracene	µg/L	1			0.1 [3]			<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Benz(a)anthracene	µg/L	1						<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Benzo(a)pyrene	µg/L	0.5	**0.01**	0.1	0.2 [3]			<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5
Benzo(a)pyrene TEQ (lower bound)*	µg/L	0.5						<0.5	<0.5	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5
Benzo(b)&(j)fluoranthene	µg/L	1						<1	<1	<1		<1	<1	<1	<1	<1	<1		<1
Benzo(g,h,i)perylene	µg/L	1						<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Benzo(k)fluoranthene	µg/L	1						<1	<1	<1		<1	<1	<1	<1	<1	<1		<1
Chrysene	µg/L	1						<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Dibenz(a,h)anthracene	µg/L	1						<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Fluoranthene	µg/L	1			1 [3]			<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Fluorene	µg/L	1						<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Indeno(1,2,3-c,d)pyrene	µg/L	1						<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Naphthalene	µg/L	1			70		NL	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Phenanthrene	µg/L	1			0.6 [3]			<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Pyrene	µg/L	1						<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
PAH (Sum of Common 16 PAHs - Lab Reported)	µg/L	0.5						<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5
Total PAH (NEPM/WHO 16)	µg/L	1									0							0	

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							Well ID	SMW_BH027	SMW_BH029	SMW_BH032	SMW_BH033	SMW_BH033	SMW_BH033	SMW_BH034	SMW_BH035	SMW_BH037	SMW_BH037s	SMW_BH038	SMW_BH038
							Sample ID	SMW_BH027	SMW_BH029	SMW_BH032	SMW_BH_400 [9]	SMW_BH033	SMW_BH033_B [8]	SMW_BH034	SMW_BH035	SMW_BH037	SMW_BH037s	SMW_BH_250 [9]	SMW_BH038
			Adopted Groundwater Screening Levels				Sample Date	04-09-18	12-09-18	11-09-18	09-12-18	12-09-18	12-09-18	04-09-18	20-09-18	12-09-18	06-09-18	17-09-18	17-09-18
			Drinking Water	Recreational /Direct Contact [7]	95% Protection of species	Long-Term Irrigation	Comm/ Ind HSL D (2-4 m)																
Analyte	**Units**	**EQL**	**NHMRC 2011**	**NHMRC 2008**	**ANZG 2018**	***ANZECC 2000***	**NEPM 2013, CRC 2011**																
Phenols																							
Phenolics (Sum of total)	µg/L	50						<50	<50	<50		<50	<50	<50		<50	<50		
2,4,5-Trichlorophenol	µg/L	1			4 [3]														<1
2,4,6-Trichlorophenol	µg/L	1	**20**	200	3 [3]														<1
2,4-Dichlorophenol	µg/L	1	**200**	2000	120 [3]														<1
2,6-Dichlorophenol	µg/L	1			34 [3]														<1
2-Chlorophenol	µg/L	1	**300**	3000	340 [3]														<1
4-Chloro-3-methylphenol	µg/L	1																	<1
Pentachlorophenol	µg/L	2	**10**	100	22														<2
2,4-Dimethylphenol	µg/L	1			2 [3]														<1
2-Methylphenol	µg/L	1																	<1
2-Nitrophenol	µg/L	1																	<1
3- & 4- Methylphenol	µg/L	2																	<2
Phenol	µg/L	1			400														<1
Polychlorinated Biphenyls																							
PCB (Sum of Total-Lab Reported)	µg/L	1																					
SVOCs																							
Cyclohexane	µg/L	1																					
Volatile Organic Compounds																							
1,4-Dichlorobenzene	µg/L	1	**40**	400	60 [3]			<5	<5	<5		<5	<5	<5		<5	<5		<5
4-Chlorotoluene	µg/L	1						<5	<5	<5		<5	<5	<5		<5	<5		<5
1,2,3-Trichlorobenzene	µg/L	1			3 [3]			<5	<5	<5		<5	<5	<5		<5	<5		<5
1,2,4-Trichlorobenzene	µg/L	1			80			<5	<5	<5		<5	<5	<5		<5	<5		<5
1,2-Dichlorobenzene	µg/L	1	**1500**	15000	160 [3]			<5	<5	<5		<5	<5	<5		<5	<5		<5
1,3-Dichlorobenzene	µg/L	1			260 [3]			<5	<5	<5		<5	<5	<5		<5	<5		<5
2-Chlorotoluene	µg/L	1						<5	<5	<5		<5	<5	<5		<5	<5		<5
Bromobenzene	µg/L	1						<5	<5	<5		<5	<5	<5		<5	<5		<5
Chlorobenzene	µg/L	1	**300**	3000	55 [3]			<5	<5	<5		<5	<5	<5		<5	<5		<5
1,2,4-trimethylbenzene	µg/L	1						<5	<5	<5		<5	<5	<5		<5	<5		<5
1,3,5-Trimethylbenzene	µg/L	1						<5	<5	<5		<5	<5	<5		<5	<5		<5
Isopropylbenzene	µg/L	1			30 [3]			<5	<5	<5		<5	<5	<5		<5	<5		<5
n-Butylbenzene	µg/L	1						<5	<5	<5		<5	<5	<5		<5	<5		<5
n-Propylbenzene	µg/L	1						<5	<5	<5		<5	<5	<5		<5	<5		<5
p-Isopropyltoluene	µg/L	1						<5	<5	<5		<5	<5	<5		<5	<5		<5
sec-Butylbenzene	µg/L	1						<5	<5	<5		<5	<5	<5		<5	<5		<5
Styrene	µg/L	1	**30**	300				<5	<5	<5		<5	<5	<5		<5	<5		<5
tert-Butylbenzene	µg/L	1						<5	<5	<5		<5	<5	<5		<5	<5		<5
Methyl Ethyl Ketone	µg/L	50						<50	<50	<50		<50	<50	<50		<50	<50		<50
2-Hexanone	µg/L	50						<50	<50	<50		<50	<50	<50		<50	<50		<50
Methyl iso-butyl ketone	µg/L	50						<50	<50	<50		<50	<50	<50		<50	<50		<50
Vinyl acetate	µg/L	50						<50	<50	<50		<50	<50	<50		<50	<50		<50
1,1,1,2-Tetrachloroethane	µg/L	1						<5	<5	<5		<5	<5	<5		<5	<5		<5
1,1,2,2-Tetrachloroethane	µg/L	1						<5	<5	<5		<5	<5	<5		<5	<5		<5
1,1,1-Trichloroethane	µg/L	1			270 [3]			<5	<5	<5		<5	<5	<5		<5	<5		<5
1,1,2-Trichloroethane	µg/L	1			1900			<5	<5	<5		<5	<5	<5		<5	<5		<5
1,2,3-Trichloropropane	µg/L	1						<5	<5	<5		<5	<5	<5		<5	<5		<5
1,2-Dibromo-3-chloropropane	µg/L	1						<5	<5	<5		<5	<5	<5		<5	<5		<5
1,2-Dibromoethane	µg/L	1	**1**	10				<5	<5	<5		<5	<5	<5		<5	<5		<5
1,1-Dichloroethane	µg/L	1						<5	<5	<5		<5	<5	<5		<5	<5		<5
1,2-Dichloroethane	µg/L	1	**3**	30	1900 [3]			<5	<5	<5		<5	<5	<5		<5	<5		<5
1,1-Dichloroethene	µg/L	1	**30**	300	700 [3]			<5	<5	<5		<5	<5	<5		<5	<5		<5
cis-1,2-Dichloroethene	µg/L	1						<5	<5	<5		<5	<5	<5		<5	<5		<5
trans-1,2-dichloroethene	µg/L	1						<5	<5	<5		<5	<5	<5		<5	<5		<5
1,2 - Dichloroethene (as sum of cis-1,2-Dichloroethene and trans-1,2-dichloroethene)	µg/L	-	**60**	600				<5	<5	<5		<5	<5	<5		<5	<5		<5
1,2-Dichloropropane	µg/L	1			900 [3]			<5	<5	<5		<5	<5	<5		<5	<5		<5
1,3-Dichloropropane	µg/L	1			1100 [3]			<5	<5	<5		<5	<5	<5		<5	<5		<5
2,2-Dichloropropane	µg/L	1						<5	<5	<5		<5	<5	<5		<5	<5		<5
1,1-Dichloropropene	µg/L	1						<5	<5	<5		<5	<5	<5		<5	<5		<5
cis-1,3-Dichloropropene	µg/L	1						<5	<5	<5		<5	<5	<5		<5	<5		<5
trans-1,3-dichloropropene	µg/L	1						<5	<5	<5		<5	<5	<5		<5	<5		<5
1,3-dichloropropene (as sum of cis-1,3-Dichloropropene and trans-1,3-dichloropropene)	µg/L	-	**100**		0.8 [3]			<5	<5	<5		<5	<5	<5		<5	<5		<5

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			Adopted Groundwater Screening Levels															
			Drinking Water	Recreational /Direct Contact [7]	95% Protection of species	Long-Term Irrigation	Comm/ Ind HSL D (2-4 m)	Well ID	SMW_BH027	SMW_BH029	SMW_BH032	SMW_BH033	SMW_BH033	SMW_BH033	SMW_BH034	SMW_BH035	SMW_BH037	SMW_BH037s	SMW_BH038	SMW_BH038
								Sample ID	SMW_BH027	SMW_BH029	SMW_BH032	SMW_BH_400 [9]	SMW_BH033	SMW_BH033_B [8]	SMW_BH034	SMW_BH035	SMW_BH037	SMW_BH037s	SMW_BH_250 [9]	SMW_BH038
								Sample Date	04-09-18	12-09-18	11-09-18	09-12-18	12-09-18	12-09-18	04-09-18	20-09-18	12-09-18	06-09-18	17-09-18	17-09-18
Analyte	**Units**	**EQL**	**NHMRC 2011**	**NHMRC 2008**	**ANZG 2018**	***ANZECC 2000***	**NEPM 2013, CRC 2011**													
cis-1,4-Dichloro-2-butene	µg/L	5							<5	<5	<5		<5	<5	<5		<5	<5		<5
trans-1,4-Dichloro-2-butene	µg/L	5							<5	<5	<5		<5	<5	<5		<5	<5		<5
Bromochloromethane	µg/L	1																		
Bromodichloromethane	µg/L	1							<5	<5	<5		<5	<5	<5		<5	<5		<5
Bromoform	µg/L	1							<5	<5	<5		<5	<5	<5		<5	<5		<5
Bromomethane	µg/L	10	**1**	10					<50	<50	<50		<50	<50	<50		<50	<50		<50
Carbon disulfide	µg/L	5							<5	<5	<5		<5	<5	6		<5	<5		<5
Carbon tetrachloride	µg/L	1	**3**	30	240 [3]				<5	<5	<5		<5	<5	<5		<5	<5		<5
Chlorodibromomethane	µg/L	1							<5	<5	<5		<5	<5	<5		<5	<5		<5
Chloroethane	µg/L	10							<50	<50	<50		<50	<50	<50		<50	<50		<50
Chloroform	µg/L	1			370 [3]				<5	<5	<5		<5	<5	<5		<5	<5		<5
Chloromethane	µg/L	10							<50	<50	<50		<50	<50	<50		<50	<50		<50
Dibromomethane	µg/L	1							<5	<5	<5		<5	<5	<5		<5	<5		<5
Dichlorodifluoromethane	µg/L	10							<50	<50	<50		<50	<50	<50		<50	<50		<50
Hexachlorobutadiene	µg/L	1	**0.7**	7					<5	<5	<5		<5	<5	<5		<5	<5		<5
Iodomethane	µg/L	5							<5	<5	<5		<5	<5	<5		<5	<5		<5
Pentachloroethane	µg/L	5			80 [3]				<5	<5	<5		<5	<5	<5		<5	<5		<5
Trichloroethene	µg/L	1			330 [3]				<5	<5	<5		<5	<5	<5		<5	<5		<5
Tetrachloroethene	µg/L	1	**50**	500	70 [3]				<5	<5	<5		<5	<5	<5		<5	<5		<5
Trichlorofluoromethane	µg/L	10							<50	<50	<50		<50	<50	<50		<50	<50		<50
Vinyl chloride	µg/L	10	**0.3**	3	100 [3]				<50	<50	<50		<50	<50	<50		<50	<50		<50

[1] as As III

[2] as As V

[3] as no high reliability value was available a low or unknown reliability value was used from ANZG 2018.

[4] value taken as minimum concentration at which explosive atmosphere may be generated if complete outgassing occurs.

[5] value taken from *PFAS National Environmental Management Plan* (NEMP), (HEPA, January 2018).

[6] value taken from US EPA RSL (2018) Guideline for Tap Water.

[7] a 10x factor has been applied to the drinking water guidelines consistent with NHMRC 2008 and WA DoH (2014) for recreational contact and/or direct contact during site construction and maintenance work.

[8] blind replicate

[9] split replicate

* Secondary Laboratory has different EQL.

Analyte	Unit	LOR	Drinking Water Criteria	Ecological Marine Water Criteria	HSLs Criteria	Long-Term Irrigation Trigger Values	Recreational Water Criteria	Location	SMW_BH715s	SMW_BH718	SMW_BH719	SMW_BH724	SMW_BH724	SMW_BH724	SMW_BH725	SMW_BH725	SMW_ENV713	SMW_ENV716A	SMW_ENV717	SMW_ENV717s
								Field ID	SMW_BH715s	SMW_BH718	SMW_BH719	SMW_BH724	FT18	FT18	SMW_BH725	FD15	SMW_ENV713	SMW_ENV716A	SMW_ENV717	SMW_ENV717s
								Sample date	25-Mar-21	25-Mar-21	07-May-21	01-Apr-21	01-Apr-21	01-Apr-21	26-Mar-21	26-Mar-21	10-Mar-21	07-May-21	07-May-21	07-May-21
								Laboratory report	ES2110913	ES2110913	ES2117171	ES2112172	ES2112172	265946	ES2111156	ES2111156	ES2108475	ES2117171	ES2117171	ES2117171
EIL Parameters																				
Iron (Filtered)	mg/L	0.01				0.2[#1]			2.84	1.18	14.4	60.1	59.7	94	98.2	99	<0.05	<0.05	16.3	21.7
Electrical Conductivity @ 25°C	µS/cm	1							5050	11,700	6600	2490	2480	2400	2810	2870	7820	1080	1080	1150
pH (Lab)	pH_Units	0.01				6-8.5[#1]			6.61	7.62	8.02	5.63	5.74	5.7	6.19	6.06	7.54	8.39	8.18	8.07
Total Dissolved Solids @180°C	mg/L	5							3030	7570	3830	1550	1540	2800	1800	1850	4660	692	646	821
Sodium (Filtered)	mg/L	0.5				115[#1]			860	2030	1060	278	272	260	302	314	1430	45	107	37
Potassium (Filtered)	mg/L	0.5							8	33	18	14	13	12	9	11	25	21	8	25
Calcium (Filtered)	mg/L	0.5							24	236	81	37	37	36	53	60	116	184	102	184
Magnesium (Filtered)	mg/L	0.5							43	284	140	67	66	66	72	75	131	19	13	32
Chloride	mg/L	1				175[#1]			1120	3360	1950	752	756	730	914	951	1780	61	206	54
Sulphate (as SO4)	mg/L	1							-	-	-	-	-	33	-	-	-	-	-	-
Sulphate (as SO4) (Filtered)	mg/L	1							573	252	186	35	35	-	13	12	503	133	28	29
Bicarbonate Alkalinity (as CaCO3)	mg/L	1							89	465	201	16	11	32	29	28	960	446	280	517
Carbonate Alkalinity (as CaCO3)	mg/L	1							<1	<1	<1	<1	<1	<5	<1	<1	<1	16	<1	<1
Hydroxide Alkalinity (as CaCO3)	mg/L	1							<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1
Total Alkalinity (as CaCO3)	mg/L	1							89	465	201	16	11	32	29	28	960	462	280	517
Nitrate (as N)	mg/L	0.005	50[#2]	2.4[#20]			500[#2]		1.92	<0.01	0.01	<0.1	<0.1	<0.005	<0.01	1.5	2.42	0.23	0.02	0.04
Nitrite (as N)	mg/L	0.005	3[#3]				30[#3]		0.13	<0.01	0.03	<0.1	<0.1	<0.005	<0.01	<0.01	0.06	0.02	0.02	0.01
Nitrate + Nitrite (as N)	mg/L	0.01							2.05	<0.01	0.04	<0.1	<0.1	-	<0.01	1.5	2.48	0.25	0.04	0.05
Ammonia (as N)	mg/L	0.005							0.13	0.03	0.24	0.27	0.54	0.067	0.06	0.02	2.18	<0.01	<0.01	6.75
Total Kjeldahl Nitrogen (as N)	mg/L	0.1							0.8	0.3	0.4	0.3	<1	-	0.2	0.3	2.4	0.2	0.3	8.1
Nitrogen (Total)	mg/L	0.1				5[#1]			2.8	0.3	0.4	0.3	<1	0.2	0.2	1.8	4.9	0.4	0.3	8.2
Fluoride	mg/L	0.1	1.5[#3]			1[#1]	15[#3]		0.4	1.2	0.7	0.1	<0.1	<0.1	0.2	0.2	1.4	0.1	0.1	0.1
Reactive Phosphorus (as P)	mg/L	0.01							<0.01	<0.01	<0.05	<0.1	<0.1	-	<0.1	<0.1	<0.01	<0.01	<0.05	<0.01
Total Phosphorus (as P)	mg/L	0.01				0.05[#1]			0.23	0.09	0.05	<0.1	<0.1	<0.05	<0.1	<0.1	0.06	<0.01	0.07	0.52
Ortho phosphate (as P)	µg/L	5							-	-	-	-	-	<50	-	-	-	-	-	-
Total Anions	meq/L	0.01							45.3	109	62.9	22.3	22.3	-	26.6	27.6	79.9	13.7	12	12.4
Total Cations	meq/L	0.01							42.3	124	62.1	19.8	19.4	-	21.9	23.1	79.4	13.2	11	14.1
Ionic Balance (Lab)	%	0.01							3.37	6.41	0.61	5.82	6.79	-7	9.67	8.93	0.28	1.78	4.22	6.06
Perfluorinated Compounds																				
10:2 Fluorotelomer sulfonic acid	µg/L	0.05							<0.05	<0.05	<0.05	<0.05	<0.05	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
4:2 Fluorotelomer sulfonic acid	µg/L	0.05							<0.05	<0.05	<0.05	<0.05	<0.05	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
8:2 Fluorotelomer sulfonate	µg/L	0.02							<0.05	<0.05	<0.05	<0.05	<0.05	<0.02	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
N-Et-FOSA	µg/L	0.05							<0.05	<0.05	<0.05	<0.05	<0.05	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
N-Et-FOSE	µg/L	0.05							<0.05	<0.05	<0.05	<0.05	<0.05	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
N-Me-FOSA	µg/L	0.05							<0.05	<0.05	<0.05	<0.05	<0.05	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
N-Me-FOSE	µg/L	0.05							<0.05	<0.05	<0.05	<0.05	<0.05	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Perfluorobutanoic acid (PFBA)	µg/L	0.1							<0.1	<0.1	<0.1	<0.1	<0.1	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Perfluoroheptane sulfonic acid	µg/L	0.02							<0.02	<0.02	<0.02	<0.02	<0.02	-	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluoro-n-pentanoic acid (PFPeA)	µg/L	0.02							<0.02	<0.02	<0.02	<0.02	<0.02	-	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluoropentane sulfonic acid	µg/L	0.02							<0.02	<0.02	<0.02	<0.02	<0.02	-	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
PFDcS	µg/L	0.02							<0.02	<0.02	<0.02	<0.02	<0.02	-	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
N-methyl-perfluorooctanesulfonamidoacetic acid	µg/L	0.02							<0.02	<0.02	<0.02	<0.02	<0.02	-	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Sum of PFHxS and PFOS (lab reported)	µg/L	0.01	0.07[#4]				2[#4]		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Sum of US EPA PFAS (PFOS + PFOA)	µg/L	0.01							-	-	-	-	-	<0.01	-	-	-	-	-	-
Sum of WA DER PFAS (n=10)	µg/L	0.01							0.01	<0.01	<0.01	<0.01	<0.01	-	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Sum of PFASs (n=28)	µg/L	0.01							0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Perfluorobutanesulfonic acid (PFBS)	µg/L	0.02							<0.02	<0.02	<0.02	<0.02	<0.02	-	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorodecanoic acid (PFDA)	µg/L	0.02							<0.02	<0.02	<0.02	<0.02	<0.02	-	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorododecanoic acid (PFDoA)	µg/L	0.02							<0.02	<0.02	<0.02	<0.02	<0.02	-	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluoroheptanoic acid (PFHpA)	µg/L	0.02							<0.02	<0.02	<0.02	<0.02	<0.02	-	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorooctanesulfonic acid (PFOS)	µg/L	0.01		0.00023[#5]					<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Perfluorooctanoate (PFOA)	µg/L	0.01	0.56[#4]	19[#5]			10[#4]		0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Perfluorohexanesulfonic acid (PFHxS)	µg/L	0.01							<0.02	<0.02	<0.02	<0.02	<0.02	<0.01	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorononanoic acid (PFNA)	µg/L	0.02							<0.02	<0.02	<0.02	<0.02	<0.02	-	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorohexanoic acid (PFHxA)	µg/L	0.02							<0.02	<0.02	<0.02	<0.02	<0.02	-	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
6:2 Fluorotelomer Sulfonate (6:2 FtS)	µg/L	0.01							<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
N-ethyl-perfluorooctanesulfonamidoacetic acid	µg/L	0.02							<0.02	<0.02	<0.02	<0.02	<0.02	-	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorooctanesulfonamide (PFOSA)	µg/L	0.02							<0.02	<0.02	<0.02	<0.02	<0.02	-	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorotetradecanoic acid (PFTeDA)	µg/L	0.05							<0.05	<0.05	<0.05	<0.05	<0.05	-	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Perfluorotridecanoic acid (PFTrDA)	µg/L	0.02							<0.02	<0.02	<0.02	<0.02	<0.02	-	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Perfluoroundecanoic acid (PFUnA)	µg/L	0.02							<0.02	<0.02	<0.02	<0.02	<0.02	-	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02

Created: KR 07/06/21
Checked: SPD 9/6/2021

Analyte	Unit	LOR	Drinking Water Criteria	Ecological Marine Water Criteria	HSLs Criteria	Long-Term Irrigation Trigger Values	Recreational Water Criteria	Location	SMW_BH715s	SMW_BH718	SMW_BH719	SMW_BH724	SMW_BH724	SMW_BH724	SMW_BH725	SMW_BH725	SMW_ENV713	SMW_ENV716A	SMW_ENV717	SMW_ENV717s
								Field ID	SMW_BH715s	SMW_BH718	SMW_BH719	SMW_BH724	FT18	FT18	SMW_BH725	FD15	SMW_ENV713	SMW_ENV716A	SMW_ENV717	SMW_ENV717s
								Sample date	25-Mar-21	25-Mar-21	07-May-21	01-Apr-21	01-Apr-21	01-Apr-21	26-Mar-21	26-Mar-21	10-Mar-21	07-May-21	07-May-21	07-May-21
								Laboratory report	ES2110913	ES2110913	ES2117171	ES2112172	ES2112172	265946	ES2111156	ES2111156	ES2108475	ES2117171	ES2117171	ES2117171
Total Petroleum Hydrocarbons																				
TRH C10 - C14 SG Cleanup	mg/L	0.05							-	-	-	-	-	-	-	-	-	-	-	-
TRH C15 - C28 SG Cleanup	mg/L	0.1							-	-	-	-	-	-	-	-	-	-	-	-
TRH C29 - C36 SG Cleanup	mg/L	0.05							-	-	-	-	-	-	-	-	-	-	-	-
TRH C10 - C36 (Sum, Lab Reported) SG Cleanup	mg/L	0.05							-	-	-	-	-	-	-	-	-	-	-	-
TRH >C10 - C16 SG Cleanup F2	mg/L	0.1							-	-	-	-	-	-	-	-	-	-	-	-
TRH >C10 - C16 SG Cleanup Less Naphthalene F2	mg/L	0.1							-	-	-	-	-	-	-	-	-	-	-	-
TRH >C16 - C34 SG Cleanup F3	mg/L	0.1							-	-	-	-	-	-	-	-	-	-	-	-
TRH >C34 - C40 SG Cleanup F4	mg/L	0.1							-	-	-	-	-	-	-	-	-	-	-	-
TRH C10 - C40 (Sum, Lab Rptd) SG Cleanup	mg/L	0.1							-	-	-	-	-	-	-	-	-	-	-	-
TRH - HSL																				
TRH C6 - C10 Fraction F1	mg/L	0.01							<0.02	<0.02	<0.02	<0.02	<0.02	<0.01	<0.02	<0.02	<0.02	<0.02	0.05	<0.02
TRH C6 - C10 Fraction Less BTEX F1	mg/L	0.01	1.3[#6]		6[#7]		13[#6]		<0.02	<0.02	<0.02	<0.02	<0.02	<0.01	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
TRH >C10 - C16 Fraction F2	mg/L	0.05							<0.1	0.12	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TRH >C10 - C16 Fraction Less Naphthalene (F2)	mg/L	0.05	0.1[#6]		NL[#7, 8]		1[#6]		<0.1	0.12	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TRH >C16 - C34 Fraction F3	mg/L	0.1	0.8[#6]		NL[#7, 8]		8[#6]		<0.1	0.36	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.36	<0.1
TRH >C34 - C40 Fraction F4	mg/L	0.1	0.8[#6]		NL[#7, 8]		8[#6]		<0.1	0.14	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.1	<0.1
TRH+C10 - C40 (Sum of total) (Lab Reported)	mg/L	0.1							<0.1	0.62	<0.1	<0.1	<0.1	-	<0.1	<0.1	<0.1	<0.1	0.46	<0.1
TPH Group - Waste Classification																				
TRH C6 - C9 Fraction	mg/L	0.01							<0.02	<0.02	<0.02	<0.02	<0.02	<0.01	<0.02	<0.02	<0.02	<0.02	0.06	<0.02
TRH C10 - C14 Fraction	mg/L	0.05							<0.05	0.07	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
TRH C15 - C28 Fraction	mg/L	0.1							<0.1	0.34	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.34	<0.1
TRH C29 - C36 Fraction	mg/L	0.05							<0.05	0.16	<0.05	<0.05	<0.05	<0.1	<0.05	<0.05	<0.05	<0.05	0.08	<0.05
TRH+C10 - C36 (Sum of total) (Lab Reported)	mg/L	0.05							<0.05	0.57	<0.05	<0.05	<0.05	-	<0.05	<0.05	<0.05	<0.05	0.42	<0.05
BTEX																				
Benzene	µg/L	1	1[#3]	700[#9]	5000[#7]		10[#3]		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Toluene	µg/L	1	800[#3]	180[#9]	NL[#7, 8]		8000[#3]		<2	3 - 4	8 - 9	4	6	5	2	2	<2	<2	34	<2
Ethylbenzene	µg/L	1	300[#3]	80[#9]	NL[#7, 8]		3000[#3]		<2	<2	<2	<2	<2	<1	<2	<2	<2	<2	<2	<2
Xylenes (m & p)	µg/L	2		75[#10]					<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	3	<2
Xylene (o)	µg/L	1		350[#11]					<2	<2	<2	<2	<2	<1	<2	<2	<2	<2	<2	<2
Xylenes (Sum of total) (Lab Reported)	µg/L	2	600[#3]		NL[#7, 8]		6000[#3]		<2	<2	<2	<2	<2	-	<2	<2	<2	<2	3	<2
Total BTEX	µg/L	1							<1	3	9	4	6	-	2	2	<1	<1	37	<1
Heavy Metals																				
Chromium (hexavalent) (Filtered)	µg/L	5	50[#3]				500[#3]		<10	<10	<10	<10	<10	<50	<50	<50	<10	<10	<10	<10
Cobalt (Filtered)	µg/L	1		1[#9]		50[#1]			19	1	33	1	1	1	3	2	43	<1	8	<1
Manganese (Filtered)	µg/L	1	500[#3]	80[#12]		200[#1]	5000[#3]		899	894	1070	2380	2380	2900	3190	3080	272	276	566	397
Arsenic (Filtered)	µg/L	1	10[#3]	13[#13]		100[#1]	100[#3]		<1	<1	<1	<1	<1	<1	<1	<1	2	<1	4	10
Cadmium (Filtered)	µg/L	0.1	2[#3]	0.7[#14]		10[#1]	20[#3]		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.1	0.6	<0.1	<0.1
Chromium (Filtered)	µg/L	1	50[#15]	4.4[#16]		100[#1]	500[#15]		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Copper (Filtered)	µg/L	1	2000[#3]	1.3[#9]		200[#1]	20000[#3]		1	<1	<1	<1	<1	<1	<1	<1	89	8	<1	<1
Lead (Filtered)	µg/L	1	10[#3]	4.4[#9]		2000[#1]	100[#3]		<1	<1	<1	<1	<1	<1	<1	<1	1	2	<1	<1
Mercury (Filtered)	µg/L	0.05	1[#3]	0.1[#14]		2[#1]	10[#3]		<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Nickel (Filtered)	µg/L	1	20[#3]	70[#9]		200[#1]	200[#3]		22	<1	29	4	4	4	3	2	81	11	6	2
Zinc (Filtered)	µg/L	1		15[#9]		2000[#1]			67	<5	10	<5	<5	4	<5	<5	91	739	7	23
Organochlorine Pesticides																				
p,p-DDE	mg/L	0.002							<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
a-BHC	µg/L	2							<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Aldrin	µg/L	2		0.003[#12]					<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Dieldrin	µg/L	2		0.01[#11]					<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Aldrin & Dieldrin (Sum of total) (Lab Reported)	µg/L	4	0.3[#3]				3[#3]		<4	<4	<4	<4	<4	-	<4	<4	<4	<4	<4	<4
b-BHC	µg/L	2							<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
cis-Chlordane	µg/L	2	2[#3]	0.001[#12]			20[#3]		-	-	-	-	-	<2	-	-	-	-	-	-
trans-Chlordane	µg/L	2							-	-	-	-	-	<2	-	-	-	-	-	-
d-BHC	µg/L	2							<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
DDD	µg/L	2							<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
DDT	µg/L	2	9[#3]	0.0004[#12]			90[#3]		<4	<4	<4	<4	<4	<2	<4	<4	<4	<4	<4	<4
DDT+DDE+DDD (Sum of total) (Lab Reported)	µg/L	4							<4	<4	<4	<4	<4	-	<4	<4	<4	<4	<4	<4
Endosulfan I	µg/L	2	20[#3]	0.005[#14]			200[#3]		<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Endosulfan II	µg/L	2							<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Endosulfan sulphate	µg/L	2							<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Endrin	µg/L	2		0.004[#14]					<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Endrin aldehyde	µg/L	2							-	-	-	-	-	<2	-	-	-	-	-	-
Endrin ketone	µg/L	2							-	-	-	-	-	<2	-	-	-	-	-	-
g-BHC	µg/L	2	10[#3]	0.007[#12]			100[#3]		<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2

Created: KR 07/06/21
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Analyte	Unit	LOR	Drinking Water Criteria	Ecological Marine Water Criteria	HSLs Criteria	Long-Term Irrigation Trigger Values	Recreational Water Criteria	Location	SMW_BH715s	SMW_BH718	SMW_BH719	SMW_BH724	SMW_BH724	SMW_BH724	SMW_BH725	SMW_BH725	SMW_ENV713	SMW_ENV716A	SMW_ENV717	SMW_ENV717s
								Field ID	SMW_BH715s	SMW_BH718	SMW_BH719	SMW_BH724	FT18	FT18	SMW_BH725	FD15	SMW_ENV713	SMW_ENV716A	SMW_ENV717	SMW_ENV717s
								Sample date	25-Mar-21	25-Mar-21	07-May-21	01-Apr-21	01-Apr-21	01-Apr-21	26-Mar-21	26-Mar-21	10-Mar-21	07-May-21	07-May-21	07-May-21
								Laboratory report	ES2110913	ES2110913	ES2117171	ES2112172	ES2112172	265946	ES2111156	ES2111156	ES2108475	ES2117171	ES2117171	ES2117171
Heptachlor	µg/L	2	0.3[#3]	0.0004[#12]			3[#3]	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Heptachlor epoxide	µg/L	2						<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Hexachlorobenzene	µg/L	2		0.05[#14]				<4	<4	<4	<4	<4	<2	<4	<4	<4	<4	<4	<4
Methoxychlor	µg/L	2	300[#3]	0.04[#12]			3000[#3]	-	-	-	-	-	<2	-	-	-	-	-	-
Organophosphorous Pesticides																			
Phosalone	µg/L	2						-	-	-	-	-	<2	-	-	-	-	-	-
Azinphos-methyl	µg/L	2	30[#3]	0.02[#11]			300[#3]	-	-	-	-	-	<2	-	-	-	-	-	-
Bromophos-ethyl	µg/L	2	10[#3]				100[#3]	-	-	-	-	-	<2	-	-	-	-	-	-
Chlorfenvinphos	µg/L	2	2[#3]				20[#3]	<2	<2	<2	<2	<2	-	<2	<2	<2	<2	<2	<2
Chlorpyriphos	µg/L	2	10[#3]	0.009[#9]			100[#3]	<2	<2	<2	<2	<2	-	<2	<2	<2	<2	<2	<2
Chlorpyriphos-methyl	µg/L	2						<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Coumaphos	µg/L	2						-	-	-	-	-	<2	-	-	-	-	-	-
Diazinon	µg/L	2	4[#3]	0.01[#11]			40[#3]	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Dichlorvos	µg/L	2	5[#3]				50[#3]	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Dimethoate	µg/L	2	7[#3]	0.15[#11]			70[#3]	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Disulfoton	µg/L	2	4[#3]				40[#3]	-	-	-	-	-	<2	-	-	-	-	-	-
Ethion	µg/L	2	4[#3]				40[#3]	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Fenamiphos	µg/L	2	0.5[#3]				5[#3]	-	-	-	-	-	<2	-	-	-	-	-	-
Fenitrothion	µg/L	2	7[#3]	0.001[#12]			70[#3]	-	-	-	-	-	<2	-	-	-	-	-	-
Fenthion	µg/L	2	7[#3]				70[#3]	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Malathion	µg/L	2	70[#3]	0.05[#11]			700[#3]	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Methidathion	µg/L	2	6[#3]				60[#3]	-	-	-	-	-	<2	-	-	-	-	-	-
Parathion-methyl	µg/L	2	0.7[#3]				7[#3]	-	-	-	-	-	<2	-	-	-	-	-	-
Mevinphos	µg/L	2	5[#3]				50[#3]	-	-	-	-	-	<2	-	-	-	-	-	-
Parathion	µg/L	2	20[#3]	0.004[#11]			200[#3]	-	-	-	-	-	<2	-	-	-	-	-	-
Phorate	µg/L	2						-	-	-	-	-	<2	-	-	-	-	-	-
Pirimphos-ethyl	µg/L	2	0.5[#3]				5[#3]	<2	<2	<2	<2	<2	-	<2	<2	<2	<2	<2	<2
Prothiofos	µg/L	2						<2	<2	<2	<2	<2	-	<2	<2	<2	<2	<2	<2
Ronnel	µg/L	2						-	-	-	-	-	<2	-	-	-	-	-	-
PAH																			
Benzo(a)pyrene (TEQs)	µg/L	5						-	-	-	-	-	<5	-	-	-	-	-	-
Benzo(b+j) & Benzo(k)fluoranthene	µg/L	2						<4	<4	<4	-	-	<2	-	-	<4	<4	<4	<4
Acenaphthene	µg/L	1						<1	<1	<1	<1	<1	<1	-	-	<1	<1	<1	<1
Acenaphthylene	µg/L	1						<1	<1	<1	<1	<1	<1	-	-	<1	<1	<1	<1
Anthracene	µg/L	1		0.01[#14]				<1	<1	<1	<1	<1	<1	-	-	<1	<1	<1	<1
Benz(a)anthracene	µg/L	1						<1	<1	<1	<1	<1	<1	-	-	<1	<1	<1	<1
Benzo(a)pyrene	µg/L	0.5	0.01[#3]	0.1[#14]			0.1[#3]	<0.5	<0.5	<0.5	<0.5	<0.5	<1	-	-	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ (lower bound)*	µg/L	0.5						<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	<0.5	<0.5	<0.5	<0.5
Benzo(b)&(j)fluoranthene	µg/L	1						<1	<1	<1	<1	<1	-	-	-	<1	<1	<1	<1
Benzo(g,h,i)perylene	µg/L	1						<1	<1	<1	<1	<1	<1	-	-	<1	<1	<1	<1
Benzo(k)fluoranthene	µg/L	1						<1	<1	<1	<1	<1	-	-	-	<1	<1	<1	<1
Chrysene	µg/L	1						<1	<1	<1	<1	<1	<1	-	-	<1	<1	<1	<1
Dibenz(a,h)anthracene	µg/L	1						<1	<1	<1	<1	<1	<1	-	-	<1	<1	<1	<1
Fluoranthene	µg/L	1		1[#14]				<1	<1	<1	<1	<1	<1	-	-	<1	<1	<1	<1
Fluorene	µg/L	1						<1	<1	<1	<1	<1	<1	-	-	<1	<1	<1	<1
Indeno(1,2,3-c,d)pyrene	µg/L	1						<1	<1	<1	<1	<1	<1	-	-	<1	<1	<1	<1
Naphthalene	µg/L	1		70[#9]	[#7]|0[#8]			<1	<1	<1	<1	<1	<1	<5	<5	<1	<1	<1	<1
Phenanthrene	µg/L	1		0.6[#14]				<1	<1	<1	<1	<1	<1	-	-	<1	<1	<2 - 1	<1
Pyrene	µg/L	1						<1	<1	<1	<1	<1	<1	-	-	<1	<1	<1	<1
PAH (Sum of Common 16 PAHs - Lab Reported)	µg/L	0.5						<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	<0.5	<0.5	<2 - 1	<0.5
Total PAH (NEPM/WHO 16)	µg/L	1						-	-	-	-	-	0	-	-	-	-	-	-
2-Methylnaphthalene	µg/L	2						<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Phenols																			
4,6-Dinitro-2-methylphenol	µg/L	20						-	-	-	-	-	<20	-	-	-	-	-	-
2,3,4,6-Tetrachlorophenol	µg/L	2		10[#11]				-	-	-	-	-	<2	-	-	-	-	-	-
2,4,5-Trichlorophenol	µg/L	2						<2	<2	<2	<2	-	<2	<2	<2	<2	<2	<2	<2
2,4,6-Trichlorophenol	µg/L	2	20[#3]	3[#11]			200[#3]	<2	<2	<2	<2	-	<2	<2	<2	<2	<2	<2	<2
2,4-Dichlorophenol	µg/L	2	200[#3]	160[#11]			2000[#3]	<2	<2	<2	<2	-	<2	<2	<2	<2	<2	<2	<2
2,6-Dichlorophenol	µg/L	2		34[#11]				<2	<2	<2	<2	-	<2	<2	<2	<2	<2	<2	<2
2-Chlorophenol	µg/L	2	300[#3]	490[#11]			3000[#3]	<2	<2	<2	<2	-	<2	<2	<2	<2	<2	<2	<2
4-Chloro-3-methylphenol	µg/L	2						<2	<2	<2	<2	-	<10	<2	<2	<2	<2	<2	<2
2,4-Dinitrophenol	µg/L	20		45[#11]				-	-	-	-	-	<20	-	-	-	-	-	-
Pentachlorophenol	µg/L	4	10[#3]	11[#14]			100[#3]	<4	<4	<4	<4	-	<10	<4	<4	<4	<4	<4	<4
2,4-Dimethylphenol	µg/L	2		2[#11]				<2	<2	<2	<2	-	<2	<2	<2	<2	<2	<2	<2

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Analyte	Unit	LOR	Drinking Water Criteria	Ecological Marine Water Criteria	HSLs Criteria	Long-Term Irrigation Trigger Values	Recreational Water Criteria	Location	SMW_BH715s	SMW_BH718	SMW_BH719	SMW_BH724	SMW_BH724	SMW_BH724	SMW_BH725	SMW_BH725	SMW_ENV713	SMW_ENV716A	SMW_ENV717	SMW_ENV717s
								Field ID	SMW_BH715s	SMW_BH718	SMW_BH719	SMW_BH724	FT18	FT18	SMW_BH725	FD15	SMW_ENV713	SMW_ENV716A	SMW_ENV717	SMW_ENV717s
								Sample date	25-Mar-21	25-Mar-21	07-May-21	01-Apr-21	01-Apr-21	01-Apr-21	26-Mar-21	26-Mar-21	10-Mar-21	07-May-21	07-May-21	07-May-21
								Laboratory report	ES2110913	ES2110913	ES2117171	ES2112172	ES2112172	265946	ES2111156	ES2111156	ES2108475	ES2117171	ES2117171	ES2117171
2-Methylphenol	µg/L	2							<2	<2	<2	-	-	<2	<2	<2	<2	<2	<2	<2
2-Nitrophenol	µg/L	2							<2	<2	<2	-	-	<2	<2	<2	<2	<2	<2	<2
3- & 4- Methylphenol	µg/L	4							<4	<4	<4	-	-	<4	<4	<4	<4	<4	<4	<4
Dinoseb	µg/L	10							-	-	-	-	-	<10	-	-	-	-	-	-
4-Nitrophenol	µg/L	20		58[#11]					-	-	-	-	-	<20	-	-	-	-	-	-
Phenol	µg/L	2		400[#9]					<2	<2	<2	-	-	<2	<2	<2	<2	<2	<2	<2
SVOCs																				
1,2,4,5-Tetrachlorobenzene	µg/L	2		3[#14]					-	-	-	-	-	<2	-	-	-	-	-	-
Isosafrole	µg/L	5							-	-	-	-	-	<5	-	-	-	-	-	-
n-Nitrosomethylethylamine	µg/L	2							<2	<2	<2	<2	<2	-	<2	<2	<2	<2	<2	<2
Safrole	µg/L	5							-	-	-	-	-	<5	-	-	-	-	-	-
n-Nitrosodiethylamine	µg/L	2							<2	<2	<2	<2	<2	-	<2	<2	<2	<2	<2	<2
N-Nitrosodi-n-butylamine	µg/L	2							<2	<2	<2	<2	<2	<5	<2	<2	<2	<2	<2	<2
N-Nitrosodi-n-propylamine	µg/L	2							<2	<2	<2	<2	<2	<5	<2	<2	<2	<2	<2	<2
1-Naphthylamine	µg/L	2							<2	<2	<2	<2	<2	<5	<2	<2	<2	<2	<2	<2
2-Naphthylamine	µg/L	5							-	-	-	-	-	<5	-	-	-	-	-	-
Diphenylamine	µg/L	5							-	-	-	-	-	<5	-	-	-	-	-	-
n-Nitrosodiphenylamine & Diphenylamine	µg/L	4							<4	<4	<4	<4	<4	-	<4	<4	<4	<4	<4	<4
2-Nitroaniline	µg/L	4							<4	<4	<4	<4	<4	<5	<4	<4	<4	<4	<4	<4
3-Nitroaniline	µg/L	4							<4	<4	<4	<4	<4	<5	<4	<4	<4	<4	<4	<4
4-Chloroaniline	µg/L	2							<2	<2	<2	<2	<2	<5	<2	<2	<2	<2	<2	<2
2-methyl-5-nitroaniline	µg/L	2							<2	<2	<2	<2	<2	<5	<2	<2	<2	<2	<2	<2
4-Nitroaniline	µg/L	2							<2	<2	<2	<2	<2	<5	<2	<2	<2	<2	<2	<2
Aniline	µg/L	2		250[#11]					<2	<2	<2	<2	<2	<5	<2	<2	<2	<2	<2	<2
Nitrobenzene	µg/L	2		550[#11]					<2	<2	<2	<2	<2	<5	<2	<2	<2	<2	<2	<2
Pentachloronitrobenzene	µg/L	2	30[#3]				300[#3]		<2	<2	<2	<2	<2	<5	<2	<2	<2	<2	<2	<2
1,3,5-Trinitrobenzene	µg/L	2		4[#11]					<2	<2	<2	<2	<2	-	<2	<2	<2	<2	<2	<2
1,3-Dinitrobenzene	µg/L	5		13[#11]					-	-	-	-	-	<5	-	-	-	-	-	-
2,4-Dinitrotoluene	µg/L	4		65[#11]					<4	<4	<4	<4	<4	-	<4	<4	<4	<4	<4	<4
2,6-Dinitrotoluene	µg/L	4							<4	<4	<4	<4	<4	<5	<4	<4	<4	<4	<4	<4
Pentachlorobenzene	µg/L	2		1.5[#14]					<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Pronamide	µg/L	2	70[#3]				700[#3]		<2	<2	<2	<2	<2	-	<2	<2	<2	<2	<2	<2
2-Chloronaphthalene	µg/L	2							<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
3-Methylcholanthrene	µg/L	2							<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
7,12-Dimethylbenz(a)anthracene	µg/L	2							<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Carbazole	µg/L	2							<2	<2	<2	<2	<2	<5	<2	<2	<2	<2	<2	<2
Chlorobenzilate	µg/L	2							<2	<2	<2	<2	<2	-	<2	<2	<2	<2	<2	<2
Bis(2-ethylhexyl) phthalate	µg/L	10	10[#3]	1[#11]			100[#3]		<10	<10	<10	<10	<10	<50	<10	<10	<10	<10	<10	<10
Butylbenzyl phthalate	µg/L	2							<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2	<2
Diethyl phthalate	µg/L	2		1000[#11]					<2	<2	<2	3	3	<10	<2	<2	<2	9	<2	5
Dimethyl phthalate	µg/L	2		3700[#11]					<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2	<2
Di-n-butyl phthalate	µg/L	2		10[#11]					<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2	<2
Di-n-octyl phthalate	µg/L	2							<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2	<2
2-(Acetylamino) fluorene	µg/L	2							<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
2-Picoline	µg/L	2							<2	<2	<2	<2	<2	-	<2	<2	<2	<2	<2	<2
3,3-Dichlorobenzidine	µg/L	2							<2	<2	<2	<2	<2	-	<2	<2	<2	<2	<2	<2
4-(Dimethylamino) azobenzene	µg/L	2							<2	<2	<2	<2	<2	<5	<2	<2	<2	<2	<2	<2
4-Aminobiphenyl	µg/L	2							<2	<2	<2	<2	<2	-	<2	<2	<2	<2	<2	<2
4-Bromophenyl phenyl ether	µg/L	2							<2	<2	<2	<2	<2	<5	<2	<2	<2	<2	<2	<2
4-Chlorophenyl phenyl ether	µg/L	2							<2	<2	<2	<2	<2	<5	<2	<2	<2	<2	<2	<2
4-Nitroquinoline-n-oxide	µg/L	2							<2	<2	<2	<2	<2	-	<2	<2	<2	<2	<2	<2
Acetophenone	µg/L	2							<2	<2	<2	<2	<2	<5	<2	<2	<2	<2	<2	<2
Azobenzene	µg/L	2							<2	<2	<2	<2	<2	<5	<2	<2	<2	<2	<2	<2
Benzyl alcohol	µg/L	5							-	-	-	-	-	<5	-	-	-	-	-	-
Bis(2-chloroethoxy) methane	µg/L	2							<2	<2	<2	<2	<2	<5	<2	<2	<2	<2	<2	<2
Bis(2-chloroethyl) ether	µg/L	2							<2	<2	<2	<2	<2	<5	<2	<2	<2	<2	<2	<2
Bis(2-chloroisopropyl) ether	µg/L	5							-	-	-	-	-	<5	-	-	-	-	-	-
Dibenzofuran	µg/L	2							<2	<2	<2	<2	<2	<5	<2	<2	<2	<2	<2	<2
Ethylmethanesulfonate	µg/L	5							-	-	-	-	-	<5	-	-	-	-	-	-
Hexachlorocyclopentadiene	µg/L	5							<10	<10	<10	<10	<10	<5	<10	<10	<10	<10	<10	<10
Hexachloropropene	µg/L	2							<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Methapyrilene	µg/L	2							<2	<2	<2	<2	<2	<10	<2	<2	<2	<2	<2	<2
n-Nitrosomorpholine	µg/L	2							<2	<2	<2	<2	<2	<5	<2	<2	<2	<2	<2	<2
N-Nitrosopiperidine	µg/L	2							<2	<2	<2	<2	<2	<5	<2	<2	<2	<2	<2	<2

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								Well ID	SMW_ENV150_w	SMW_ENV044_w	SMW_ENV044_w	SMW_ENV144	SMW_ENV144	SMW_ENV149_w	SMW_ENV149_w	SMW_ENV148_W	SMW_BH070	SMW_BH024	SMW_BH121	SMW_BH120	SMW_BH069
								Sample ID	SMW_ENV150_w	SMW_ENV044_w	SMW_ENV044_w	SMW_ENV144	SMW_ENV144	SMW_ENV149_w	SMW_ENV149_w	SMW_ENV148_W	SMW_BH070	SMW_BH024	SMW_BH121	SMW_BH120	SMW_BH069
			Adopted Groundwater Screening Levels					Sample Date	20-Nov-19	20-Nov-19	23-Mar-20	25/11/2019	20/03/2020	20-Nov-19	20-Mar-20	21-Nov-19	04-Dec-19	8/04/2020	03-Oct-19	04-Oct-19	03-Dec-19
			Drinking Water	Recreational /Direct Contact [7]	95% Protection of species	Long-Term Irrigation	Comm/ Ind HSL D (2-4 m)														
Analyte	Units	EQL	NHMRC 2011	NHMRC 2008	ANZG 2018	*ANZECC 2000*	NEPM 2013, CRC 2011														
General Parameters																					
Electrical Conductivity @ 25°C	µS/cm	1							59,000	25,200	-	25400	26700	25,200	-	29,200	33,200	13800	48,700	16,400	15,700
pH (Lab)	pH units	0.01				*6-8.5*			7.53	7.18	-	7.83	7.15	7.07	-	7.14	6.96	7.36	7.22	6.98	7.63
Total Dissolved Solids @180°C	mg/L	5							43,600	16,400	-	15700	21300	15,400	-	16,300	25,200	8270	37,000	10,100	8830
Hydrocarbon utilising bacteria	CFU/mL	1							-	-	-	<10	-	-	-	-	-	-	-	-	-
Pseudomonas aeruginosa	CFU/100mL	1							-	-	<1	-	<1	-	<1	-	-	-	-	-	-
Major Ions																					
Sodium (Filtered)	mg/L	0.5							11,400	3940	-	3980	3990	4500	-	4740	5060	2250	9400	2770	2610
Potassium (Filtered)	mg/L	0.5							117	44	-	17	15	10	-	10	75	28	100	42	34
Calcium (Filtered)	mg/L	0.5							1320	957	-	529	468	290	-	354	1040	306	1310	233	226
Magnesium (Filtered)	mg/L	0.5							1580	709	-	644	683	722	-	803	1050	295	1310	358	344
Chloride	mg/L	1							18,900	8380	-	8260	9150	8420	-	10,900	11,900	4620	21,400	5720	5330
Fluoride	mg/L	0.1	1.5	15		*1*			0.2	0.3	-	-	0.4	0.4	-	0.2	0.3	0.3	0.2	0.3	0.4
Sulphate (as SO4)	mg/L	1							4590	<1	58	292	364	638	622	667	864	120	2160	597	438
Bicarbonate Alkalinity (as CaCO3)	mg/L	1							147	947	-	567	502	307	-	259	603	786	230	600	473
Carbonate Alkalinity (as CaCO3)	mg/L	1							<1	<1	-	<1	<1	<1	-	<1	<1	<1	<1	<1	<1
Hydroxide Alkalinity (as CaCO3)	mg/L	1							<1	<1	-	<1	<1	<1	-	<1	<1	<1	<1	<1	<1
Total Alkalinity (as CaCO3)	mg/L	1							147	947	-	567	502	307	-	259	603	786	230	600	473
Total Anions	meq/L	0.01							632	255	-	250	276	257	-	326	366	148	653	186	169
Total Cations	meq/L	0.01							695	279	-	253	254	270	-	290	360	138	585	163	154
Ionic Balance (Lab)	%	0.01							4.76	4.36	-	0.5	4.2	2.46	-	5.89	0.74	3.62	5.54	6.64	4.62
Nutrients																					
Nitrate (as N)	ug/L	10	50	500					270	<10	<10	<10	<100	20	<10	10	<10	<10	<50	10	10
Nitrite (as N)	ug/L	10	3	30					680	20	-	<10	<100	<10	-	<10	<10	40	<50	<10	<10
Nitrogen (Total Oxidised)	ug/L	10							950	20	-	<10	<100	20	-	10	<10	40	50	<10	10
Ammonia (as N)	ug/L	10			910				700	3570	-	1270	1140	720	-	350	6890	3090	3430	1640	2220
Total Kjeldahl Nitrogen (as N)	ug/L	200							300	3800	-	1300	1000	800	-	<500	7000	3500	3400	1700	3600
Nitrogen (Total)	ug/L	200				*5000*			1200	3800	-	1300	1000	800	-	<500	*7000*	3500	3400	1700	3600
Reactive Phosphorus (as P)	ug/L	10							<10	40	-	<10	<50	<10	-	<10	<10	<10	<50	<10	<10
Total Phosphorus (as P)	ug/L	10				*50*			*80*	30	-	<20	*150*	<10	-	<50	<50	*310*	*160*	20	30
Metals																					
Arsenic (Filtered)	µg/L	1	10	100	24 [1] / 13 [2]	*100*			<10	<1	-	2	4	2	-	1	4	2	<10	2	3
Cadmium (Filtered)	µg/L	0.1	2	20	5.5	*10*			<1	<0.1	-	<0.1	<0.1	<0.1	-	<0.1	<0.1	<0.1	<1	<0.1	<0.1
Chromium (Filtered)	µg/L	1							<10	<1	-	<1	<1	<1	-	<1	1	<1	<10	<1	1
Chromium (hexavalent) (Filtered)	µg/L	10	50	500	4.4	*100*			<10	<10	-	<10	-	<10	-	<10	-	-	<10	<10	-
Cobalt (Filtered)	µg/L	1		1	1	*50*			<10	<1	-	-	16	38	-	26	8	<1	<10	10	10
Copper (Filtered)	µg/L	1	2000	20000	1.3	*200*			<10	<1	-	3	<1	1	-	2	<1	<1	<10	6	<1
Iron (ferrous)	µg/L	50							-	-	8840	-	16300	-	-	-	-	-	-	-	-
Iron (Filtered)	µg/L	50				*200*			<100	*2990*	-	-	*14600*	*16600*	*21000*	880	*12000*	*2900*	*10600*	*1120*	60
Lead (Filtered)	µg/L	1	10	100	4.4 [3]	*2000*			<10	<1	-	<1	<1	<1	-	<1	<1	<1	<10	<1	<1
Manganese (Filtered)	µg/L	1	500	5000	80 [3]	*200*			76	1220	1110	*416*	*397*	*323*	*309*	511	523	*299*	3100	*441*	*406*
Mercury (Filtered)	µg/L	0.1	1	10	0.4	*2*			<0.1	<0.1	-	<0.1	<0.1	<0.1	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Nickel (Filtered)	µg/L	1	20	200	70	*200*			<10	<1	-	9	8	12	-	4	2	1	<10	67	18
Zinc (Filtered)	µg/L	1			15	*2000*			<50	16	-	26	13	16	-	10	<5	<5	<50	73	58
Heavy Metals (Organo)																					
Tributyltin	ngSn/L	2			6				-	-	-	-	-	-	-	-	-	-	-	-	-
Dissolved Gases																					
Methane	µg/L	10	1600 [4]						<10	10900	4300	12	<10	<10	<10	<10	<10	-	<10	<10	27
Total Recoverable Hydrocarbons (TRHs)																					
TRH C10 - C14 Fraction	µg/L	50							<50	<50	-	<50	<50	<50	-	<50	<50	<50	<50	<50	<50
TRH C15 - C28 Fraction	µg/L	100							<100	<100	-	<100	<100	<100	-	<100	<100	150	<100	<100	<100
TRH C29 - C36 Fraction	µg/L	50							<50	<50	-	<50	<50	<50	-	<50	<50	<50	<50	<50	<50
TRH+C10 - C36 (Sum of total) (Lab Reported)	µg/L	50							<50	<50	-	<50	<50	<50	-	<50	<50	150	<50	<50	<50
TRH >C10 - C16 Fraction F2	µg/L	100							<100	<100	-	<100	<100	<100	-	<100	<100	<100	<100	<100	<100
TRH >C10 - C16 Fraction Less Naphthalene (F2)	µg/L	50	100 [6]	1000				NL	<100	<100	-	<100	<100	<100	-	<100	<100	<100	<100	<100	<100
TRH >C16 - C34 Fraction F3	µg/L	100	800 [6]	8000					<100	<100	-	<100	<100	<100	-	<100	<100	170	<100	<100	<100
TRH >C34 - C40 Fraction F4	µg/L	100	800 [6]	8000					<100	<100	-	<100	<100	<100	-	<100	<100	<100	<100	<100	<100
TRH+C10 - C40 (Sum of total) (Lab Reported)	µg/L	100							<100	<100	-	<100	<100	<100	-	<100	<100	170	<100	<100	<100
Volatile Petroleum Hydrocarbons (PHCs)																					
TRH C6 - C9 Fraction	µg/L	20							<20	<20	-	<20	<20	<20	-	<20	<20	<20	<20	<20	<20
TRH C6 - C10 Fraction F1	µg/L	20							<20	<20	-	<20	<20	<20	-	<20	<20	<20	<20	<20	<20
TRH C6 - C10 Fraction Less BTEX F1	µg/L	20	1300 [6]	13,000				6000	<20	<20		<20	<20	<20	-	<20	<20	<20	<20	<20	<20
BTEX																					
Benzene	µg/L	1	1	10	700			5000	<1	<1	-	<1	<1	<1	-	<1	<1	<1	<1	<1	<1
Toluene	µg/L	2	800	8000	180 [3]			NL	<2	<2	-	<2	<2	<2	-	<2	<2	<2	<2	<2	<2
Ethylbenzene	µg/L	2	300	3000	80 [3]			NL	<2	<2	-	<2	<2	<2	-	<2	<2	<2	<2	<2	2
Xylenes (m & p)	µg/L	2			m-xylene: 75 [3]				<2	<2	-	<2	<2	<2	-	<2	<2	<2	<2	<2	<2
Xylene (o)	µg/L	2			350 [3,8]				<2	<2	-	<2	<2	<2	-	<2	<2	<2	<2	<2	<2
Xylenes (Sum of total) (Lab Reported)	µg/L	2	600	6000				NL	<2	<2	-	<2	<2	<2	-	<2	<2	<2	<2	<2	<2
Naphthalene	ug/L	1-5*			70			NL	<5	<5	-	-	-	<5	-	<5	<5	-	<5	<5	<5
Total BTEX	µg/L	1							<1	<1	-	<1	<1	<1	-	<1	<1	<1	<1	<1	2
Organochlorine Pesticides																					

							Well ID	SMW_ENV150_w	SMW_ENV044_w	SMW_ENV044_w	SMW_ENV144	SMW_ENV144	SMW_ENV149_w	SMW_ENV149_w	SMW_ENV148_W	SMW_BH070	SMW_BH024	SMW_BH121	SMW_BH120	SMW_BH069
							Sample ID	SMW_ENV150_w	SMW_ENV044_w	SMW_ENV044_w	SMW_ENV144	SMW_ENV144	SMW_ENV149_w	SMW_ENV149_w	SMW_ENV148_W	SMW_BH070	SMW_BH024	SMW_BH121	SMW_BH120	SMW_BH069
			Adopted Groundwater Screening Levels				Sample Date	20-Nov-19	20-Nov-19	23-Mar-20	25/11/2019	20/03/2020	20-Nov-19	20-Mar-20	21-Nov-19	04-Dec-19	8/04/2020	03-Oct-19	04-Oct-19	03-Dec-19
			Drinking Water	Recreational /Direct Contact [7]	95% Protection of species	Long-Term Irrigation	Comm/ Ind HSL D (2-4 m)													
Analyte	**Units**	**EQL**	**NHMRC 2011**	**NHMRC 2008**	**ANZG 2018**	***ANZECC 2000***	**NEPM 2013, CRC 2011**													
p,p-DDE	µg/L	2						-	-	-	<2	<2	-	-	-	-	-	-	-	-
a-BHC	µg/L	2						<2	<2	-	<2	<2	<2	-	<2	<2	-	<2	<2	<2
Aldrin	µg/L	2			0.003 [3]			<2	<2	-	<2	<2	<2	-	<2	<2	-	<2	<2	<2
Dieldrin	µg/L	2			0.01 [3,8]			<2	<2	-	<2	<2	<2	-	<2	<2	-	<2	<2	<2
Aldrin & Dieldrin (Sum of total) (Lab Reported)	µg/L	4	0.3	3				<4	<4	-	<4	<4	<4	-	<4	<4	-	<4	<4	<4
b-BHC	µg/L	2						<2	<2	-	<2	<2	<2	-	<2	<2	-	<2	<2	<2
cis-Chlordane	µg/L	0.5						-	-	-	-	-	-	-	-	-	-	-	-	-
trans-Chlordane	µg/L	0.5						-	-	-	-	-	-	-	-	-	-	-	-	-
Chlordane (Sum of total)	µg/L	0.5	2	20	0.001 [3]			-	-	-	-	-	-	-	-	-	-	-	-	-
d-BHC	µg/L	2						<2	<2	-	<2	<2	<2	-	<2	<2	-	<2	<2	<2
DDD	µg/L	2						<2	<2	-	<2	<2	<2	-	<2	<2	-	<2	<2	<2
DDE	µg/L	0.5						<2	<2	-	-	-	<2	-	<2	<2	-	<2	<2	<2
DDT	µg/L	4	9	90	0.0004 [3]			<4	<4	-	<4	<4	<4	-	<4	<4	-	<4	<4	<4
DDT+DDE+DDD (Sum of total) (Lab Reported)	µg/L	4						<4	<4	-	<4	<4	<4	-	<4	<4	-	<4	<4	<4
Endosulfan I	µg/L	2						<2	<2	-	<2	<2	<2	-	<2	<2	-	<2	<2	<2
Endosulfan II	µg/L	2						<2	<2	-	<2	<2	<2	-	<2	<2	-	<2	<2	<2
Endosulfan (as sum of Endosulfan I and Endosulfan II)	µg/L	-	20	200	0.01			-	-	-	-	-	-	-	-	-	-	-	-	-
Endosulfan sulphate	µg/L	2						<2	<2	-	<2	<2	<2	-	<2	<2	-	<2	<2	<2
Endrin	µg/L	2			0.008			<2	<2	-	<2	<2	<2	-	<2	<2	-	<2	<2	<2
Endrin aldehyde	µg/L	0.5						-	-	-	-	-	-	-	-	-	-	-	-	-
Endrin ketone	µg/L	0.5						-	-	-	-	-	-	-	-	-	-	-	-	-
g-BHC	µg/L	2	10	100	0.007 [3]			<2	<2	-	<2	<2	<2	-	<2	<2	-	<2	<2	<2
Heptachlor	µg/L	2	0.3	3	0.0004 [3]			<2	<2	-	<2	<2	<2	-	<2	<2	-	<2	<2	<2
Heptachlor epoxide	µg/L	2						<2	<2	-	<2	<2	<2	-	<2	<2	-	<2	<2	<2
Hexachlorobenzene	µg/L	4			0.1 [3]			<4	<4	-	<4	<4	<4	-	<4	<4	-	<4	<4	<4
Methoxychlor	µg/L	2	300	3000	0.004 [3]			-	-	-	-	-	-	-	-	-	-	-	-	-
Organophosphorous Pesticides																				
Azinphos-methyl	µg/L	0.5	30	300	0.02 [3,8]			-	-	-	-	-	-	-	-	-	-	-	-	-
Bromophos-ethyl	µg/L	0.5	10	100				-	-	-	-	-	-	-	-	-	-	-	-	-
Carbophenothion	µg/L	0.5	0.5	5				-	-	-	-	-	-	-	-	-	-	-	-	-
Chlorfenvinphos	µg/L	0.5	2	20				<2	<2	-	<2	<2	<2	-	<2	<2	-	<2	<2	<2
Chlorpyriphos	µg/L	0.5	10	100	0.009			<2	<2	-	<2	<2	<2	-	<2	<2	-	<2	<2	<2
Chlorpyriphos-methyl	µg/L	0.5						<2	<2	-	<2	<2	<2	-	<2	<2	-	<2	<2	<2
Demeton-s-methyl	µg/L	0.5			4 [3]			-	-	-	-	-	-	-	-	-	-	-	-	-
Diazinon	µg/L	0.5	4	40	0.01 [3,8]			<2	<2	-	<2	<2	<2	-	<2	<2	-	<2	<2	<2
Dichlorvos	µg/L	0.5	5	50				<2	<2	-	<2	<2	<2	-	<2	<2	-	<2	<2	<2
Dimethoate	µg/L	0.5	7	70	0.15 [3,8]			<2	<2	-	<2	<2	<2	-	<2	<2	-	<2	<2	<2
Ethion	µg/L	0.5	4	40				<2	<2	-	<2	<2	<2	-	<2	<2	-	<2	<2	<2
Fenitrothion	µg/L	0.5	7	70	0.001 [3]			-	-	-	-	-	-	-	-	-	-	-	-	-
Fenamiphos	µg/L	0.5	0.5	5				-	-	-	-	-	-	-	-	-	-	-	-	-
Fenthion	µg/L	0.5	7	70				<2	<2	-	<2	<2	<2	-	<2	<2	-	<2	<2	<2
Malathion	µg/L	0.5	70	700	0.03 [3,8]			<2	<2	-	<2	<2	<2	-	<2	<2	-	<2	<2	<2
Parathion-methyl	µg/L	2	0.7	7				-	-	-	-	-	-	-	-	-	-	-	-	-
Monocrotophos	µg/L	2	2	20				-	-	-	-	-	-	-	-	<2	-	<2	<2	<2
Parathion	µg/L	2	20	200	0.004 [3,8]			-	-	-	-	-	-	-	-	-	-	-	-	-
Pirimphos-ethyl	µg/L	0.5	0.5	5				<2	<2	-	<2	<2	<2	-	<2	-	-	-	-	-
Prothiofos	µg/L	0.5						<2	<2	-	<2	<2	<2	-	<2	<2	-	<2	<2	<2
Ronnel	µg/L	0.5						-	-	-	-	-	-	-	-	-	-	-	-	-
PAHs										-										
Benzo(a)pyrene (TEQs)	µg/L	5						-	-	-	-	-	-	-	-	-	-	-	-	-
Benzo(b+j) & Benzo(k)fluoranthene	µg/L	4						<4	<4	-	<4	<4	<4	-	<4	-	-	<4	<4	-
Acenaphthene	µg/L	1						<1	<1	-	<1	<1	<1	-	<1	<1	<1	<1	<1	<1
Acenaphthylene	µg/L	1						<1	<1	-	<1	<1	<1	-	<1	<1	<1	<1	<1	<1
Anthracene	µg/L	1			0.4			<1	<1	-	<1	<1	<1	-	<1	<1	<1	<1	<1	<1
Benz(a)anthracene	µg/L	1						<1	<1	-	<1	<1	<1	-	<1	<1	<1	<1	<1	<1
Benzo(a)pyrene	µg/L	0.5	0.01	0.1	0.2 [3]			<0.5	<0.5	-	<0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ (lower bound)*	µg/L	0.5						<0.5	<0.5	-	<0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(b)&(j)fluoranthene	µg/L	1						<1	<1	-	<1	<1	<1	-	<1	<1	<1	<1	<1	<1
Benzo(g,h,i)perylene	µg/L	1						<1	<1	-	<1	<1	<1	-	<1	<1	<1	<1	<1	<1
Benzo(k)fluoranthene	µg/L	1						<1	<1	-	<1	<1	<1	-	<1	<1	<1	<1	<1	<1
Chrysene	µg/L	1						<1	<1	-	<1	<1	<1	-	<1	<1	<1	<1	<1	<1
Dibenz(a,h)anthracene	µg/L	1						<1	<1	-	<1	<1	<1	-	<1	<1	<1	<1	<1	<1
Fluoranthene	µg/L	1			1.4 [3]			<1	<1	-	<1	<1	<1	-	<1	<1	<1	<1	<1	<1
Fluorene	µg/L	1						<1	<1	-	<1	<1	<1	-	<1	<1	<1	<1	<1	<1
Indeno(1,2,3-c,d)pyrene	µg/L	1						<1	<1	-	<1	<1	<1	-	<1	<1	<1	<1	<1	<1
Naphthalene	µg/L	1			70		NL	<1	<1	-	<1	<1	<1	-	<1	<1	<1	<1	<1	<1
Phenanthrene	µg/L	1			2.0 [3]			<1	<1	-	<1	<1	<1	-	<1	<1	<1	<1	<1	<1
Pyrene	µg/L	1						<1	<1	-	<1	<1	<1	-	<1	<1	<1	<1	<1	<1
PAH (Sum of Common 16 PAHs - Lab Reported)	µg/L	0.5						<0.5	<0.5	-	<0.5	<0.5	<0.5	-	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Total PAH (NEPM/WHO 16)	µg/L	1						-	-	-	-	-	-	-	-	-	-	-	-	-
2-Methylnaphthalene	µg/L	2						<2	<2	-	<2	<2	<2	-	<2	<2	-	<2	<2	<2
Phenols										-										

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							Well ID	SMW_ENV150_w	SMW_ENV044_w	SMW_ENV044_w	SMW_ENV144	SMW_ENV144	SMW_ENV149_w	SMW_ENV149_w	SMW_ENV148_W	SMW_BH070	SMW_BH024	SMW_BH121	SMW_BH120	SMW_BH069
							Sample ID	SMW_ENV150_w	SMW_ENV044_w	SMW_ENV044_w	SMW_ENV144	SMW_ENV144	SMW_ENV149_w	SMW_ENV149_w	SMW_ENV148_W	SMW_BH070	SMW_BH024	SMW_BH121	SMW_BH120	SMW_BH069
			Adopted Groundwater Screening Levels				Sample Date	20-Nov-19	20-Nov-19	23-Mar-20	25/11/2019	20/03/2020	20-Nov-19	20-Mar-20	21-Nov-19	04-Dec-19	8/04/2020	03-Oct-19	04-Oct-19	03-Dec-19
			Drinking Water	Recreational /Direct Contact [7]	95% Protection of species	Long-Term Irrigation	Comm/ Ind HSL D (2-4 m)															
Analyte	**Units**	**EQL**	**NHMRC 2011**	**NHMRC 2008**	**ANZG 2018**	***ANZECC 2000***	**NEPM 2013, CRC 2011**															
Perfluoroheptane sulfonic acid	µg/L	0.02						<0.05	<0.05	-	<0.02	<0.02	<0.05	-	<0.02	-	-	<0.05	<0.05	-
Perfluoro-n-pentanoic acid (PFPeA)	µg/L	0.02						<0.05	<0.05	-	<0.02	<0.02	<0.05	-	<0.02	<0.05	-	<0.05	<0.05	<0.02
Perfluoropentane sulfonic acid	µg/L	0.02						<0.05	<0.05	-	<0.02	<0.02	<0.05	-	<0.02	-	-	<0.05	<0.05	-
PFDcS	µg/L	0.02						<0.05	<0.05	-	<0.02	<0.02	<0.05	-	<0.02	-	-	<0.05	<0.05	-
N-methyl-perfluorooctanesulfonamidoacetic acid	µg/L	0.02						<0.05	<0.05	-	<0.02	<0.02	<0.05	-	<0.02	-	-	<0.05	<0.05	-
Sum of PFHxS and PFOS (lab reported)	µg/L	0.01	0.07 [5]	0.7 [5]				<0.05	<0.05	-	<0.01	<0.01	<0.05	-	<0.01	<0.05	-	<0.05	<0.05	<0.01
Sum of WA DER PFAS (n=10)	µg/L	0.01						<0.05	<0.05	-	0.33	<0.01	<0.05	-	<0.01	<0.05	-	<0.05	<0.05	<0.01
Sum of PFASs (n=28)	µg/L	0.01						<0.05	<0.05	-	0.33	<0.01	<0.05	-	<0.01	-	-	<0.05	<0.05	-
Perfluorobutanesulfonic acid (PFBS)	µg/L	0.02						<0.05	<0.05	-	<0.02	<0.02	<0.05	-	<0.02	<0.05	-	<0.05	<0.05	<0.02
Perfluorodecanoic acid (PFDA)	µg/L	0.02						<0.05	<0.05	-	<0.02	<0.02	<0.05	-	<0.02	-	-	<0.05	<0.05	-
Perfluorododecanoic acid (PFDoA)	µg/L	0.02						<0.05	<0.05	-	<0.02	<0.02	<0.05	-	<0.02	-	-	<0.05	<0.05	-
Perfluoroheptanoic acid (PFHpA)	µg/L	0.02						<0.05	<0.05	-	<0.02	<0.02	<0.05	-	<0.02	<0.05	-	<0.05	<0.05	<0.02
Perfluorooctanesulfonic acid (PFOS)	µg/L	0.01			0.13 [5]			<0.05	<0.05	-	<0.01	<0.01	<0.05	-	<0.01	<0.05	-	<0.05	<0.05	<0.01
Perfluorooctanoate (PFOA)	µg/L	0.01	0.56 [5]	5.6 [5]	220 [5]			<0.05	<0.05	-	<0.01	<0.01	<0.05	-	<0.01	<0.05	-	<0.05	<0.05	<0.01
Perfluorohexanesulfonic acid (PFHxS)	µg/L	0.02						<0.05	<0.05	-	<0.02	<0.02	<0.05	-	<0.02	<0.05	-	<0.05	<0.05	<0.02
Perfluorononanoic acid (PFNA)	µg/L	0.02						<0.05	<0.05	-	<0.02	<0.02	<0.05	-	<0.02	-	-	<0.05	<0.05	-
Perfluorohexanoic acid (PFHxA)	µg/L	0.02						<0.05	<0.05	-	<0.02	<0.02	<0.05	-	<0.02	<0.05	-	<0.05	<0.05	<0.02
6:2 Fluorotelomer Sulfonate (6:2 FtS)	µg/L	0.05						<0.05	<0.05	-	0.28	<0.05	<0.05	-	<0.05	<0.05	-	<0.05	<0.05	<0.05
N-ethyl-perfluorooctanesulfonamidoacetic acid	µg/L	0.02						<0.05	<0.05	-	<0.02	<0.02	<0.05	-	<0.02	-	-	<0.05	<0.05	-
Perfluorooctanesulfonamide (PFOSA)	µg/L	0.02						<0.05	<0.05	-	<0.02	<0.02	<0.05	-	<0.02	-	-	<0.05	<0.05	-
Perfluorotetradecanoic acid (PFTeDA)	µg/L	0.05						<0.12	<0.12	-	<0.05	<0.05	<0.12	-	<0.05	-	-	<0.12	<0.12	-
Perfluorotridecanoic acid (PFTrDA)	µg/L	0.02						<0.05	<0.05	-	<0.02	<0.02	<0.05	-	<0.02	-	-	<0.05	<0.05	-
Perfluoroundecanoic acid (PFUnA)	µg/L	0.02						<0.05	<0.05	-	<0.02	<0.02	<0.05	-	<0.02	-	-	<0.05	<0.05	-

Notes

[1] as As III (criteria for freshwater)

[2] as As V (criteria for freshwater)

[3] as no high reliability value was available a low or unknown reliability value was used from ANZG 2018.

[4] value taken as minimum concentration at which explosive atmosphere may be generated if complete outgassing occurs.

[5] value taken from *PFAS National Environmental Management Plan* (NEMP), (HEPA, January 2020).

[6] value taken from US EPA RSL (2020) Guideline for Tap Water.

[7] a 10x factor has been applied to the drinking water guidelines consistent with NHMRC 2008 and WA DoH (2014) for recreational contact and/or direct contact during site construction and maintenance work.

[8] Freshwater criterion adopted as criterion for marine water is available

								Well ID	SMW_BH126	SMW_BH073	SMW-BH082	SMW_ENV020_S	SMW_ENV020_S	QCA2201	QCB2201	SMW_ENV020_D	SMW_ENV020_D	SMW_ENV021_S	SMW_ENV021_S	SMW_ENV021_D
								Sample ID	SMW_BH126	SMW_BH073	SMW-BH082	SMW_ENV020_S	SMW_ENV020_S	SMW_ENV020_S	SMW_ENV020_S	SMW_ENV020_D	SMW_ENV020_D	SMW_ENV021_S	SMW_ENV021_S	SMW_ENV021_D
			Adopted Groundwater Screening Levels					Sample Date	03-Dec-19	19/06/2020	06-Dec-19	22-Jan-19	27-Apr-20	22-Jan-19	22-Jan-19	22-Jan-19	27-Apr-20	22-Jan-19	27-Apr-20	22-Jan-19
			Drinking Water	Recreational /Direct Contact [7]	95% Protection of species	Long-Term Irrigation	Comm/ Ind HSL D (2-4 m)													
Analyte	**Units**	**EQL**	**NHMRC 2011**	**NHMRC 2008**	**ANZG 2018**	***ANZECC 2000***	**NEPM 2013, CRC 2011**													
General Parameters																				
Electrical Conductivity @ 25°C	µS/cm	1						12,900	5500	8870	954	-	948	800	10000	-	14300	-	1530	
pH (Lab)	pH units	0.01				*6-8.5*		7.61	6.81	7.57	7.15	-	7.18	7	6.05	-	7.36	-	7.22	
Total Dissolved Solids @180°C	mg/L	5						6800	-	5770	679	-	660	610	5080	-	8540	-	1360	
Hydrocarbon utilising bacteria	CFU/mL	1						-	-	-	-	-	-	-	-	-	-	-	-	
Pseudomonas aeruginosa	CFU/100mL	1						-	-	-	-	-	-	-	-	-	-	-	-	
Major Ions																				
Sodium (Filtered)	mg/L	0.5						2100	975	1580	36	-	31	24	1640	-	2160	-	345	
Potassium (Filtered)	mg/L	0.5						552	13	22	9	-	9	10	63	-	88	-	14	
Calcium (Filtered)	mg/L	0.5						65	28	200	154	-	154	180	66	-	300	-	3	
Magnesium (Filtered)	mg/L	0.5						78	85	151	10	-	11	13	141	-	256	-	4	
Chloride	mg/L	1						3710	1370	1520	33	-	33	30	2990	-	4290	-	174	
Fluoride	mg/L	0.1	1.5	15		*1*		*1.3*	*1.2*	2.1	0.4	-	0.4	0.4	<0.1	-	0.7	-	0.4	
Sulphate (as SO4)	mg/L	1						<5	398	1580	30	-	30	37	539	-	423	-	38	
Bicarbonate Alkalinity (as CaCO3)	mg/L	1						1640	302	534	452	-	455	490	92	-	678	-	563	
Carbonate Alkalinity (as CaCO3)	mg/L	1						<1	<1	<1	<1	-	<1	<5	<1	-	<1	-	<1	
Hydroxide Alkalinity (as CaCO3)	mg/L	1						<1	<1	<1	<1	-	<1	<5	<1	-	<1	-	<1	
Total Alkalinity (as CaCO3)	mg/L	1						1640	302	534	452	-	455	490	92	-	678	-	563	
Total Anions	meq/L	0.01						137	53	86.4	10.6	-	10.6	-	97.4	-	143	-	16.9	
Total Cations	meq/L	0.01						115	51.1	91.7	10.3	-	10.2	-	87.8	-	132	-	15.8	
Ionic Balance (Lab)	%	0.01						8.83	1.76	2.95	1.35	-	2.3	-	5.16	-	4.04	-	3.37	
Nutrients																				
Nitrate (as N)	ug/L	10	50	500				<10	<10	<10	20	-	20	<5	20	-	30	-	30	
Nitrite (as N)	ug/L	10	3	30				<10	<10	<10	<10	-	<10	5	<10	-	<10	-	<10	
Nitrogen (Total Oxidised)	ug/L	10						<10	<10	<10	20	-	20	-	20	-	30	-	30	
Ammonia (as N)	ug/L	10			910			267000	30	300	400	-	420	260	130	-	3790	-	10	
Total Kjeldahl Nitrogen (as N)	ug/L	200						312,000	100	400	500	-	400	-	600	-	3600	-	500	
Nitrogen (Total)	ug/L	200				*5000*		*312000*	100	400	500	-	400	500	600	-	3600	-	500	
Reactive Phosphorus (as P)	ug/L	10						<10	<10	<10	<10	-	<10	<5	<10	-	<50	-	<10	
Total Phosphorus (as P)	ug/L	10				*50*		*440*	*120*	<10	*280*	-	*280*	*300*	*120*	-	*890*	-	*170*	
Metals																				
Arsenic (Filtered)	µg/L	1	10	100	24 [1] / 13 [2]	*100*		5	<1	8	41	-	43	190	54	-	12	-	55	
Cadmium (Filtered)	µg/L	0.1	2	20	5.5	*10*		<0.1	<0.1	<0.1	<0.1	-	<0.1	<0.1	<0.1	-	<0.1	-	<0.1	
Chromium (Filtered)	µg/L	1						20	<1	<1	<1	-	<1	<1	<1	-	<1	-	<1	
Chromium (hexavalent) (Filtered)	µg/L	10	50	500	4.4	*100*		-	-	-	<10	-	<10	<5	<10	-	<10	-	<10	
Cobalt (Filtered)	µg/L	1		1	1	*50*		11	-	16	<1	-	1	1	<1	-	<1	-	<1	
Copper (Filtered)	µg/L	1	2000	20000	1.3	*200*		<1	<1	<1	<1	-	<1	<1	<1	-	<1	-	<1	
Iron (ferrous)	µg/L	50						-	-	-	-	-	-	-	-	-	-	-	-	
Iron (Filtered)	µg/L	50				*200*		*300*	*1540*	*2950*	*320*	-	*300*	*9400*	*8260*	-	*12900*	-	200	
Lead (Filtered)	µg/L	1	10	100	4.4 [3]	*2000*		<1	<1	<1	<1	-	<1	<1	<1	-	<1	-	<1	
Manganese (Filtered)	µg/L	1	500	5000	80 [3]	*200*		41	5620	1800	*266*	-	*264*	*280*	176	-	*298*	-	6	
Mercury (Filtered)	µg/L	0.1	1	10	0.4	*2*		<0.1	<0.1	<0.1	<0.1	-	<0.1	0.4	<0.1	-	<0.1	-	<0.1	
Nickel (Filtered)	µg/L	1	20	200	70	*200*		26	15	17	2	-	1	2	1	-	<1	-	<1	
Zinc (Filtered)	µg/L	1			15	*2000*		<5	11	<5	109	-	95	180	8	-	<5	-	<5	
Heavy Metals (Organo)																				
Tributyltin	ngSn/L	2			6			-	-	-	-	<2	-	-	-	<2	-	<2	-	
Dissolved Gases																				
Methane	µg/L	10	1600 [4]					9460	-	-	-	-	-	-	-	-	-	-	-	
Total Recoverable Hydrocarbons (TRHs)																				
TRH C10 - C14 Fraction	µg/L	50						220	<50	<50	<50	-	<50	<50	-	-	-	-	-	
TRH C15 - C28 Fraction	µg/L	100						630	<100	<100	<100	-	<100	<100	-	-	-	-	-	
TRH C29 - C36 Fraction	µg/L	50						<50	<50	<50	<50	-	<50	<100	-	-	-	-	-	
TRH+C10 - C36 (Sum of total) (Lab Reported)	µg/L	50						850	<50	<50	<50	-	<50	-	-	-	-	-	-	
TRH >C10 - C16 Fraction F2	µg/L	100						430	<100	<100	<100	-	<100	<50	<100	-	<100	-	<100	
TRH >C10 - C16 Fraction Less Naphthalene (F2)	µg/L	50	100 [6]	1000			NL	420	<100	<100	<100	-	<100	<50	<100	-	<100	-	<100	
TRH >C16 - C34 Fraction F3	µg/L	100	800 [6]	8000				460	<100	<100	<100	-	<100	<100	<100	-	<100	-	<100	
TRH >C34 - C40 Fraction F4	µg/L	100	800 [6]	8000				<100	<100	<100	<100	-	<100	<100	<100	-	<100	-	<100	
TRH+C10 - C40 (Sum of total) (Lab Reported)	µg/L	100						890	<100	<100	<100	-	<100	<150	<100	-	<100	-	<100	
Volatile Petroleum Hydrocarbons (PHCs)																				
TRH C6 - C9 Fraction	µg/L	20						190	<20	20	<20	-	<20	<10	<20	-	<20	-	<20	
TRH C6 - C10 Fraction F1	µg/L	20						180	<20	20	<20	-	<20	<10	<20	-	<20	-	<20	
TRH C6 - C10 Fraction Less BTEX F1	µg/L	20	1300 [6]	13,000			6000	120	<20	<20	<20	-	<20	<10	<20	-	<20	-	<20	
BTEX																				
Benzene	µg/L	1	1	10	700		5000	61	<1	<1	<1	-	<1	<1	<1	-	<1	-	<1	
Toluene	µg/L	2	800	8000	180 [3]		NL	<2	<2	<2	<2	-	<2	<1	<2	-	<2	-	<2	
Ethylbenzene	µg/L	2	300	3000	80 [3]		NL	2	<2	2	<2	-	<2	<1	<2	-	<2	-	<2	
Xylenes (m & p)	µg/L	2			m-xylene: 75 [3]			<2	<2	<2	<2	-	<2	<2	<2	-	<2	-	<2	
Xylene (o)	µg/L	2			350 [3,8]			<2	<2	<2	<2	-	<2	<1	<2	-	<2	-	<2	
Xylenes (Sum of total) (Lab Reported)	µg/L	2	600	6000			NL	<2	<2	<2	<2	-	<2	<3	<2	-	<2	-	<2	
Naphthalene	ug/L	1-5*			70		NL	12	-	<5	<5	-	<5	<1	<5	-	<5	-	<5	
Total BTEX	µg/L	1						63	<1	2	<1	-	<1	<6	<1	-	<1	-	<1	
Organochlorine Pesticides																				

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							Well ID	SMW_BH126	SMW_BH073	SMW-BH082	SMW_ENV020_S	SMW_ENV020_S	QCA2201	QCB2201	SMW_ENV020_D	SMW_ENV020_D	SMW_ENV021_S	SMW_ENV021_S	SMW_ENV021_D
							Sample ID	SMW_BH126	SMW_BH073	SMW-BH082	SMW_ENV020_S	SMW_ENV020_S	SMW_ENV020_S	SMW_ENV020_S	SMW_ENV020_D	SMW_ENV020_D	SMW_ENV021_S	SMW_ENV021_S	SMW_ENV021_D
			Adopted Groundwater Screening Levels				Sample Date	03-Dec-19	19/06/2020	06-Dec-19	22-Jan-19	27-Apr-20	22-Jan-19	22-Jan-19	22-Jan-19	27-Apr-20	22-Jan-19	27-Apr-20	22-Jan-19
			Drinking Water	Recreational /Direct Contact [7]	95% Protection of species	Long-Term Irrigation	Comm/ Ind HSL D (2-4 m)												
Analyte	**Units**	**EQL**	**NHMRC 2011**	**NHMRC 2008**	**ANZG 2018**	***ANZECC 2000***	**NEPM 2013, CRC 2011**												
Phenolics (Sum of total)	µg/L	50						-	-	-	-	-	-	-	-	-	-	-	-
4,6-Dinitro-2-methylphenol	µg/L	10						-	-	-	-	-	-	<10	-	-	-	-	-
2,3,4,6-Tetrachlorophenol	µg/L	1			20 [8]			-	-	-	-	-	-	<1	-	-	-	-	-
2,4,5-Trichlorophenol	µg/L	1						<2	<2	<2	<2	-	<2	<2	<2	-	<2	-	<2
2,4,6-Trichlorophenol	µg/L	1	20	200	20 [8]			<2	<2	<2	<2	-	<2	<2	<2	-	<2	-	<2
2,4-Dichlorophenol	µg/L	1	200	2000	160 [8]			<2	<2	<2	<2	-	<2	<2	<2	-	<2	-	<2
2,6-Dichlorophenol	µg/L	1						<2	<2	<2	<2	-	<2	<1	<2	-	<2	-	<2
2-Chlorophenol	µg/L	1	300	3000	340 [3,8]			<2	<2	<2	<2	-	<2	<2	<2	-	<2	-	<2
4-Chloro-3-methylphenol	µg/L	1						<2	<2	<2	<2	-	<2	<10	<2	-	<2	-	<2
Pentachlorophenol	µg/L	2	10	100	22			<4	<4	<4	<4	-	<4	<10	<4	-	<4	-	<4
2,4-Dimethylphenol	µg/L	1			2 [3,8]			<2	<2	<2	<2	-	<2	<2	<2	-	<2	-	<2
2-Methylphenol	µg/L	1						<2	<2	<2	<2	-	<2	<2	<2	-	<2	-	<2
2-Nitrophenol	µg/L	1						<2	<2	<2	<2	-	<2	<2	<2	-	<2	-	<2
3- & 4- Methylphenol	µg/L	2						<4	<4	<4	<4	-	<4	<4	<4	-	<4	-	<4
Phenol	µg/L	1			400			<2	<2	<2	<2	-	<2	<2	<2	-	<2	-	<2
Polychlorinated Biphenyls																			
PCB (Sum of Total-Lab Reported)	µg/L	1						-	-	-	-	-	-	-	-	-	-	-	-
SVOCs																			
Cyclohexane	µg/L	1						-	-	-	-	-	-	-	-	-	-	-	-
Volatile Organic Compounds																			
1,3-Dichloropropene (Calculated)	µg/L		100	1000	0.8 [3]			-	<2	-	-	-	-	-	-	-	-	-	-
1,4-Dichlorobenzene	µg/L	2, 5	40	400	60 [3,8]			<2	<5	<2	<2	-	<2	<1	<2	-	<2	-	<2
4-Chlorotoluene	µg/L	5						<5	<5	<5	<5	-	<5	<1	<5	-	<5	-	<5
1,2,3-Trichlorobenzene	µg/L	5			10 [3,8]			<5	<2	<5	<5	-	<5	<1	<5	-	<5	-	<5
1,2,4-Trichlorobenzene	µg/L	2			80			<2	<2	<2	<2	-	<2	<1	<2	-	<2	-	<2
1,2-Dichlorobenzene	µg/L	2	1500	15000	160 [3,8]			<2	<2	<2	<2	-	<2	<1	<2	-	<2	-	<2
1,3-Dichlorobenzene	µg/L	2			260 [3,8]			<2	<5	<2	<2	-	<2	<2	<2	-	<2	-	<2
2-Chlorotoluene	µg/L	5						<5	<5	<5	<5	-	<5	<1	<5	-	<5	-	<5
Bromobenzene	µg/L	5						<5	<5	<5	<5	-	<5	<1	<5	-	<5	-	<5
Chlorobenzene	µg/L	5	300	3000	55 [3]			32	<5	<5	<5	-	<5	<1	<5	-	<5	-	<5
1,2,4-trimethylbenzene	µg/L	5						<5	<5	<5	<5	-	<5	<1	<5	-	<5	-	<5
1,3,5-Trimethylbenzene	µg/L	5						<5	<5	<5	<5	-	<5	<1	<5	-	<5	-	<5
Isopropylbenzene	µg/L	5			30 [3]			<5	<5	<5	<5	-	<5	<1	<5	-	<5	-	<5
n-Butylbenzene	µg/L	5						<5	<5	<5	<5	-	<5	<1	<5	-	<5	-	<5
n-Propylbenzene	µg/L	5						<5	<5	<5	<5	-	<5	<1	<5	-	<5	-	<5
p-Isopropyltoluene	µg/L	5						<5	<5	<5	<5	-	<5	<1	<5	-	<5	-	<5
sec-Butylbenzene	µg/L	5						<5	<5	<5	<5	-	<5	<1	<5	-	<5	-	<5
Styrene	µg/L	5	30	300				<5	<5	<5	<5	-	<5	<1	<5	-	<5	-	<5
tert-Butylbenzene	µg/L	5						<5	<50	<5	<5	-	<5	<1	<5	-	<5	-	<5
Methyl Ethyl Ketone	µg/L	50						<50	<50	<50	<50	-	<50	-	<50	-	<50	-	<50
2-Hexanone	µg/L	50						<50	<50	<50	<50	-	<50	-	<50	-	<50	-	<50
Methyl iso-butyl ketone	µg/L	50						<50	<2	<50	<50	-	<50	-	<50	-	<50	-	<50
Isophorone	µg/L	2						<2	<50	<2	<2	-	<2	<5	<2	-	<2	-	<2
Vinyl acetate	µg/L	50						<50	<5	<50	<50	-	<50	-	<50	-	<50	-	<50
1,1,1,2-Tetrachloroethane	µg/L	5						<5	<5	<5	<5	-	<5	<1	<5	-	<5	-	<5
1,1,2,2-Tetrachloroethane	µg/L	5						<5	<5	<5	<5	-	<5	<1	<5	-	<5	-	<5
1,1,1-Trichloroethane	µg/L	5			270 [3]			<5	<5	<5	<5	-	<5	<1	<5	-	<5	-	<5
1,1,2-Trichloroethane	µg/L	5			1900			<5	<5	<5	<5	-	<5	<1	<5	-	<5	-	<5
1,2,3-Trichloropropane	µg/L	5						<5	<5	<5	<5	-	<5	<1	<5	-	<5	-	<5
1,2-Dibromo-3-chloropropane	µg/L	5						<5	<5	<5	<5	-	<5	<1	<5	-	<5	-	<5
1,2-Dibromoethane	µg/L	5						<5	<5	<5	<5	-	<5	<1	<5	-	<5	-	<5
1,1-Dichloroethane	µg/L	5						<5	<5	<5	<5	-	<5	<1	<5	-	<5	-	<5
1,2-Dichloroethane	µg/L	5	3	30	1900 [3]			<5	<5	<5	<5	-	<5	<1	<5	-	<5	-	<5
1,1-Dichloroethene	µg/L	5	30	300	700 [3]			<5		<5	<5	-	<5	<1	<5	-	<5	-	<5
cis-1,2-Dichloroethene	µg/L	5						<5	<5	<5	<5	-	<5	<1	<5	-	<5	-	<5
trans-1,2-dichloroethene	µg/L	5						<5	<5	<5	<5	-	<5	<1	<5	-	<5	-	<5
1,2 - Dichloroethene (as sum of cis-1,2-Dichloroethene and trans-1,2-dichloroethene)	µg/L	-	60	600				-	-	-	-	-	-	-	-	-	-	-	-
1,2-Dichloropropane	µg/L	5			900 [3]			<5	<5	<5	<5	-	<5	<1	<5	-	<5	-	<5
1,3-Dichloropropane	µg/L	5			1100 [3]			<5	<5	<5	<5	-	<5	<1	<5	-	<5	-	<5
2,2-Dichloropropane	µg/L	5						<5	<5	<5	<5	-	<5	<1	<5	-	<5	-	<5
1,1-Dichloropropene	µg/L	5						<5	<5	<5	<5	-	<5	<1	<5	-	<5	-	<5
cis-1,3-Dichloropropene	µg/L	5						<5	<5	<5	<5	-	<5	<1	<5	-	<5	-	<5
trans-1,3-dichloropropene	µg/L	5						<5	<5	<5	<5	-	<5	<1	<5	-	<5	-	<5
1,3-dichloropropene (as sum of cis-1,3-Dichloropropene	µg/L	10	100	1000				<10		<10	<10	-	<10	-	<10	-	<10	-	<10
cis-1,4-Dichloro-2-butene	µg/L	5						<5	<5	<5	<5	-	<5	-	<5	-	<5	-	<5
trans-1,4-Dichloro-2-butene	µg/L	5						<5	<5	<5	<5	-	<5	-	<5	-	<5	-	<5
Bromochloromethane	µg/L	1						-		-	-	-	-	<1	-	-	-	-	-
Bromodichloromethane	µg/L	5						<5	<5	<5	<5	-	<5	<1	<5	-	<5	-	<5
Bromoform	µg/L	5						<5	<5	<5	<5	-	<5	<1	<5	-	<5	-	<5
Bromomethane	µg/L	50	1	10				<50	<50	<50	<50	-	<50	<10	<50	-	<50	-	<50
Carbon disulfide	µg/L	5						<5	<5	<5	<5	-	<5	-	<5	-	<5	-	<5

							Well ID	SMW_BH126	SMW_BH073	SMW-BH082	SMW_ENV020_S	SMW_ENV020_S	QCA2201	QCB2201	SMW_ENV020_D	SMW_ENV020_D	SMW_ENV021_S	SMW_ENV021_S	SMW_ENV021_D
							Sample ID	SMW_BH126	SMW_BH073	SMW-BH082	SMW_ENV020_S	SMW_ENV020_S	SMW_ENV020_S	SMW_ENV020_S	SMW_ENV020_D	SMW_ENV020_D	SMW_ENV021_S	SMW_ENV021_S	SMW_ENV021_D
			Adopted Groundwater Screening Levels				Sample Date	03-Dec-19	19/06/2020	06-Dec-19	22-Jan-19	27-Apr-20	22-Jan-19	22-Jan-19	22-Jan-19	27-Apr-20	22-Jan-19	27-Apr-20	22-Jan-19
			Drinking Water	Recreational /Direct Contact [7]	95% Protection of species	Long-Term Irrigation	Comm/ Ind HSL D (2-4 m)												
Analyte	**Units**	**EQL**	**NHMRC 2011**	**NHMRC 2008**	**ANZG 2018**	***ANZECC 2000***	**NEPM 2013, CRC 2011**												
Carbon tetrachloride	µg/L	5	3	30	240 [3]			<5	<5	<5	<5	-	<5	<1	<5	-	<5	-	<5
Chlorodibromomethane	µg/L	5						<5	<5	<5	<5	-	<5	<1	<5	-	<5	-	<5
Chloroethane	µg/L	50						<50	<50	<50	<50	-	<50	<10	<50	-	<50	-	<50
Chloroform	µg/L	5			770 [3]			<5	<5	<5	<5	-	<5	<1	<5	-	<5	-	<5
Chloromethane	µg/L	50						<50	<50	<50	<50	-	<50	<10	<50	-	<50	-	<50
Dibromomethane	µg/L	5						<5	<5	<5	<5	-	<5	<1	<5	-	<5	-	<5
Dichlorodifluoromethane	µg/L	50						<50	<50	<50	<50	-	<50	<10	<50	-	<50	-	<50
Hexachlorobutadiene	µg/L	2	0.7	7				<2	<2	<2	<2	-	<2	<1	<2	-	<2	-	<2
Hexachloroethane	µg/L	2						<2	<2	<2	<2	-	<2	<2	<2	-	<2	-	<2
Iodomethane	µg/L	5						<5	<5	<5	<5	-	<5	-	<5	-	<5	-	<5
Pentachloroethane	µg/L	5			80 [3]			<5	<5	<5	<5	-	<5	<2	<5	-	<5	-	<5
Trichloroethene	µg/L	5			330 [3]			<5	<5	<5	<5	-	<5	<1	<5	-	<5	-	<5
Tetrachloroethene	µg/L	5	50	500	70 [3]			<5	<5	<5	<5	-	<5	<1	<5	-	<5	-	<5
Trichlorofluoromethane	µg/L	50						<50	<50	<50	<50	-	<50	<10	<50	-	<50	-	<50
Vinyl chloride	µg/L	50	0.3	3	100 [3]			<50	<50	<50	<50	-	<50	<10	<50	-	<50	-	<50
SVOCs																			
n-Nitrosomethylethylamine	µg/L	2						<2	<2	<2	<2	-	-	-	<2	-	<2	-	<2
n-Nitrosodiethylamine	µg/L	2						<2	<2	<2	<2	-	-	-	<2	-	<2	-	<2
N-Nitrosodi-n-butylamine	µg/L	2						<2	<2	<2	<2	-	-	<5	<2	-	<2	-	<2
N-Nitrosodi-n-propylamine	µg/L	2						<2	<2	<2	<2	-	-	<5	<2	-	<2	-	<2
1-Naphthylamine	µg/L	2						<2	<2	<2	<2	-	-	<5	<2	-	<2	-	<2
n-Nitrosodiphenylamine & Diphenylamine	µg/L	4						5	<4	<4	<4	-	-	<5	<4	-	<4	-	<4
2-Nitroaniline	µg/L	4						<4	<4	<4	<4	-	-	<5	<4	-	<4	-	<4
3-Nitroaniline	µg/L	4						<4	<4	<4	<4	-	-	<5	<4	-	<4	-	<4
4-Chloroaniline	µg/L	2						<2	<2	<2	<2	-	-	<5	<2	-	<2	-	<2
2-methyl-5-nitroaniline	µg/L	2						<2	<2	<2	<2	-	-	-	<2	-	<2	-	<2
4-Nitroaniline	µg/L	2						<2	<2	<2	<2	-	-	-	<2	-	<2	-	<2
Aniline	µg/L	2			250 [8]			<2	<2	<2	<2	-	-	<5	<2	-	<2	-	<2
Nitrobenzene	µg/L	2						<2	<2	<2	<2	-	-	<5	<2	-	<2	-	<2
Pentachloronitrobenzene	µg/L	2						<2	<2	<2	<2	-	-	<5	<2	-	<2	-	<2
1,3,5-Trinitrobenzene	µg/L	2			4 [3,8]			<2	<2	<2	<2	-	-	-	<2	-	<2	-	<2
2,4-Dinitrotoluene	µg/L	4			65 [8]			<4	<4	<4	<4	-	-	-	<4	-	<4	-	<4
2,6-Dinitrotoluene	µg/L	4						<4	<4	<4	<4	-	-	<5	<4	-	<4	-	<4
Pentachlorobenzene	µg/L	2			2			<2	<2	<2	<2	-	-	<2	<2	-	<2	-	<2
Pronamide	µg/L	2						<2	<2	<2	<2	-	-	-	<2	-	<2	-	<2
2-Chloronaphthalene	µg/L	2						<2	<2	<2	<2	-	-	<2	<2	-	<2	-	<2
3-Methylcholanthrene	µg/L	2						<2	<2	<2	<2	-	-	<2	<2	-	<2	-	<2
7,12-Dimethylbenz(a)anthracene	µg/L	2						<2	<2	<2	<2	-	-	<2	<2	-	<2	-	<2
Carbazole	µg/L	2						<2	<2	<2	<2	-	-	<5	<2	-	<2	-	<2
Chlorobenzilate	µg/L	2						<2	<2	<2	<2	-	-	-	<2	-	<2	-	<2
Bis(2-ethylhexyl) phthalate	µg/L	10	10	100				<10	<10	<10	<10	-	-	<10	<10	-	<10	-	<10
Butylbenzyl phthalate	µg/L	2						<2	<2	<2	<2	-	-	<10	<2	-	<2	-	<2
Diethyl phthalate	µg/L	2			1000 [8]			<2	<2	18	<2	-	-	<10	<2	-	<2	-	<2
Dimethyl phthalate	µg/L	2						<2	<2	<2	<2	-	-	<10	<2	-	<2	-	<2
Di-n-butyl phthalate	µg/L	2			26 [8]			<2	<2	<2	<2	-	-	<10	<2	-	<2	-	<2
Di-n-octyl phthalate	µg/L	2						<2	<2	<2	<2	-	-	<10	<2	-	<2	-	<2
2-(Acetylamino) fluorene	µg/L	2						<2	<2	<2	<2	-	-	<2	<2	-	<2	-	<2
2-Picoline	µg/L	2						<2	<2	<2	<2	-	-	-	<2	-	<2	-	<2
3,3-Dichlorobenzidine	µg/L	2						<2	<2	<2	<2	-	-	-	<2	-	<2	-	<2
4-(Dimethylamino) azobenzene	µg/L	2						<2	<2	<2	<2	-	-	<5	<2	-	<2	-	<2
4-Aminobiphenyl	µg/L	2						<2	<2	<2	<2	-	-	-	<2	-	<2	-	<2
4-Bromophenyl phenyl ether	µg/L	2						<2	<2	<2	<2	-	-	<5	<2	-	<2	-	<2
4-Chlorophenyl phenyl ether	µg/L	2						<2	<2	<2	<2	-	-	<5	<2	-	<2	-	<2
4-Nitroquinoline-n-oxide	µg/L	2						<2	<2	<2	<2	-	-	-	<2	-	<2	-	<2
Acetophenone	µg/L	2						<2	<2	<2	<2	-	-	<5	<2	-	<2	-	<2
Azobenzene	µg/L	2						<2	<2	<2	<2	-	-	<5	<2	-	<2	-	<2
Bis(2-chloroethoxy) methane	µg/L	2						<2	<2	<2	<2	-	-	<5	<2	-	<2	-	<2
Bis(2-chloroethyl) ether	µg/L	2						<2	<2	<2	<2	-	-	<5	<2	-	<2	-	<2
Dibenzofuran	µg/L	2						<2	<2	<2	<2	-	-	<5	<2	-	<2	-	<2
Hexachlorocyclopentadiene	µg/L	10						<10	<10	<10	<10	-	-	<5	<10	-	<10	-	<10
Hexachloropropene	µg/L	2						<2	<2	<2	<2	-	-	<2	<2	-	<2	-	<2
Methapyrilene	µg/L	2						<2	<2	<2	<2	-	-	<10	<2	-	<2	-	<2
n-Nitrosomorpholine	µg/L	2						<2	<2	<2	<2	-	-	<5	<2	-	<2	-	<2
N-Nitrosopiperidine	µg/L	2						<2	<2	<2	<2	-	-	<5	<2	-	<2	-	<2
n-Nitrosopyrrolidine	µg/L	4						<4	<4	<4	<4	-	-	-	<4	-	<4	-	<4
Phenacetin	µg/L	2						<2	<2	<2	<2	-	-	<5	<2	-	<2	-	<2
Per- and polyfluoroalkyl substances (PFAS)																			
10:2 Fluorotelomer sulfonic acid	µg/L	0.05						<0.05	<0.05	<0.05	<0.05	-	<0.05	<0.05	<0.05	-	<0.05	-	<0.05
4:2 Fluorotelomer sulfonic acid	µg/L	0.05						<0.05	<0.05	<0.05	<0.05	-	<0.05	<0.05	<0.05	-	<0.05	-	<0.05
8:2 Fluorotelomer sulfonate	µg/L	0.05						<0.05	<0.05	<0.05	<0.05	-	<0.05	<0.05	<0.05	-	<0.05	-	<0.05
N-Et-FOSA	µg/L	0.05						-	<0.05	<0.05	<0.05	-	<0.05	<0.05	<0.05	-	<0.05	-	<0.05
N-Et-FOSE	µg/L	0.05						-	<0.05	<0.05	<0.05	-	<0.05	<0.05	<0.05	-	<0.05	-	<0.05
N-Me-FOSA	µg/L	0.05						-	<0.05	<0.05	<0.05	-	<0.05	<0.05	<0.05	-	<0.05	-	<0.05
N-Me-FOSE	µg/L	0.05						-	<0.05	<0.05	<0.05	-	<0.05	<0.05	<0.05	-	<0.05	-	<0.05
Perfluorobutanoic acid (PFBA)	µg/L	0.1						<0.1	<0.1	<0.1	<0.1	-	<0.1	<0.1	<0.1	-	<0.1	-	<0.1

							Well ID	SMW_BH126	SMW_BH073	SMW-BH082	SMW_ENV020_S	SMW_ENV020_S	QCA2201	QCB2201	SMW_ENV020_D	SMW_ENV020_D	SMW_ENV021_S	SMW_ENV021_S	SMW_ENV021_D
							Sample ID	SMW_BH126	SMW_BH073	SMW-BH082	SMW_ENV020_S	SMW_ENV020_S	SMW_ENV020_S	SMW_ENV020_S	SMW_ENV020_D	SMW_ENV020_D	SMW_ENV021_S	SMW_ENV021_S	SMW_ENV021_D
			Adopted Groundwater Screening Levels				Sample Date	03-Dec-19	19/06/2020	06-Dec-19	22-Jan-19	27-Apr-20	22-Jan-19	22-Jan-19	22-Jan-19	27-Apr-20	22-Jan-19	27-Apr-20	22-Jan-19
			Drinking Water	Recreational /Direct Contact [7]	95% Protection of species	Long-Term Irrigation	Comm/ Ind HSL D (2-4 m)												
Analyte	**Units**	**EQL**	**NHMRC 2011**	**NHMRC 2008**	**ANZG 2018**	***ANZECC 2000***	**NEPM 2013, CRC 2011**												
Perfluoroheptane sulfonic acid	µg/L	0.02						-	<0.02	<0.02	<0.02	-	<0.02	<0.02	<0.02	-	<0.02	-	<0.02
Perfluoro-n-pentanoic acid (PFPeA)	µg/L	0.02						<0.02	<0.02	<0.02	<0.02	-	<0.02	<0.02	<0.02	-	<0.02	-	<0.02
Perfluoropentane sulfonic acid	µg/L	0.02						-	<0.02	<0.02	<0.02	-	<0.02	<0.02	<0.02	-	0.05	-	<0.02
PFDcS	µg/L	0.02						-	<0.02	<0.02	<0.02	-	<0.02	<0.02	<0.02	-	<0.02	-	<0.02
N-methyl-perfluorooctanesulfonamidoacetic acid	µg/L	0.02						-	<0.02	<0.02	<0.02	-	<0.02	<0.02	<0.02	-	<0.02	-	<0.02
Sum of PFHxS and PFOS (lab reported)	µg/L	0.01	0.07 [5]	0.7 [5]				0.34	<0.01	<0.01	<0.01	-	<0.01	<0.01	<0.01	-	0.41	-	0.03
Sum of WA DER PFAS (n=10)	µg/L	0.01						2.04	<0.01	<0.01	<0.01	-	<0.01	<0.01	<0.01	-	0.53	-	0.03
Sum of PFASs (n=28)	µg/L	0.01						-	<0.01	<0.01	<0.01	-	<0.01	<0.01	<0.01	-	0.58	-	0.03
Perfluorobutanesulfonic acid (PFBS)	µg/L	0.02						0.7	<0.02	<0.02	<0.02	-	<0.02	<0.02	<0.02	-	0.06	-	<0.02
Perfluorodecanoic acid (PFDA)	µg/L	0.02						-	<0.02	<0.02	<0.02	-	<0.02	<0.02	<0.02	-	<0.02	-	<0.02
Perfluorododecanoic acid (PFDoA)	µg/L	0.02						-	<0.02	<0.02	<0.02	-	<0.02	<0.02	<0.02	-	<0.02	-	<0.02
Perfluoroheptanoic acid (PFHpA)	µg/L	0.02						0.1	<0.02	<0.02	<0.02	-	<0.02	<0.02	<0.02	-	<0.02	-	<0.02
Perfluorooctanesulfonic acid (PFOS)	µg/L	0.01			0.13 [5]			0.14	<0.01	<0.01	<0.01	-	<0.01	<0.01	<0.01	-	0.1	-	0.01
Perfluorooctanoate (PFOA)	µg/L	0.01	0.56 [5]	5.6 [5]	220 [5]			0.34	<0.01	<0.01	<0.01	-	<0.01	<0.01	<0.01	-	0.02	-	<0.01
Perfluorohexanesulfonic acid (PFHxS)	µg/L	0.02						0.2	<0.02	<0.02	<0.02	-	<0.02	<0.02	<0.02	-	0.31	-	0.02
Perfluorononanoic acid (PFNA)	µg/L	0.02						-	<0.02	<0.02	<0.02	-	<0.02	<0.02	<0.02	-	<0.02	-	<0.02
Perfluorohexanoic acid (PFHxA)	µg/L	0.02						0.56	<0.02	<0.02	<0.02	-	<0.02	<0.02	<0.02	-	0.04	-	<0.02
6:2 Fluorotelomer Sulfonate (6:2 FtS)	µg/L	0.05						<0.05	<0.05	<0.05	<0.05	-	<0.05	<0.05	<0.05	-	<0.05	-	<0.05
N-ethyl-perfluorooctanesulfonamidoacetic acid	µg/L	0.02						-	<0.02	<0.02	<0.02	-	<0.02	<0.02	<0.02	-	<0.02	-	<0.02
Perfluorooctanesulfonamide (PFOSA)	µg/L	0.02						-	<0.02	<0.02	<0.02	-	<0.02	<0.02	<0.02	-	<0.02	-	<0.02
Perfluorotetradecanoic acid (PFTeDA)	µg/L	0.05						-	<0.05	<0.05	<0.05	-	<0.05	<0.05	<0.05	-	<0.05	-	<0.05
Perfluorotridecanoic acid (PFTrDA)	µg/L	0.02						-	<0.02	<0.02	<0.02	-	<0.02	<0.02	<0.02	-	<0.02	-	<0.02
Perfluoroundecanoic acid (PFUnA)	µg/L	0.02						-	<0.02	<0.02	<0.02	-	<0.02	<0.02	<0.02	-	<0.02	-	<0.02

Notes

[1] as As III (criteria for freshwater)

[2] as As V (criteria for freshwater)

[3] as no high reliability value was available a low or unknown reliability value was used from ANZG 2018.

[4] value taken as minimum concentration at which explosive atmosphere may be generated if complete outgassing occurs.

[5] value taken from *PFAS National Environmental Management Plan* (NEMP), (HEPA, January 2020).

[6] value taken from US EPA RSL (2020) Guideline for Tap Water.

[7] a 10x factor has been applied to the drinking water guidelines consistent with NHMRC 2008 and WA DoH (2014) for recreational contact and/or direct contact during site construction and maintenance work.

[8] Freshwater criterion adopted as criterion for marine water is available

	Field			Major Ions								Alkalinity		Inorganics						Metals									
Borehole	pH	EC at 25 (us/cm)	TDS (mg/L)	Iron (filtered) (mg/L)	Sodium (Filtered) (mg/L)	Potassium (filtered) (mg/L)	Calcium (Filtered) (mg/L)	Magnesium (Filtered) (mg/L)	Chloride (mg/L)	Fluoride (mg/L)	Sulfate (as SO4) (filtered) (mg/L)	Bicarbonate Alkalinity (as CaCO3) mg/L	Total Alkalinity (as CaCO3) mg/L	Nitrate (As N) mg/L	Nitrite (as N) mg/L	Ammonia (asN) mg/L	Total Kjeldahl Nitrogen (as N) mg/L	Nitrogen (Total) mg/L	Total Phosphorus (as P) mg/L	Arsenic (Filtered) (µg/L)	Cadmium (Filtered) (µg/L)	Chromium (Filtered) (µg/L)	Copper (filtered) (µg/L)	Cobalt (Filtered) (µg/L)	Lead (Filtered) (µg/L)	Maganese (Filtered) (µg/L)	Nickel (Filtered) (µg/L)	Zinc (Filtered) (µg/L)	Iron (Filtered) (µg/L)
NEPM 2013 Table 1A(4) Comm/Ind HSL D GW for Vapour Intrusion, Sand (µg/L)																													
Structural Impacts (Mild Upper Limits) (mg/L)									5999#1		999#2																		
ANZG (2018) Freshwater 95% LOSP Toxicant DGVs																0.91				13	0.2		1.4		3.4	1900	11	8	
ANZG (2018) Marine Water 95% LOSP Toxicant DGVs																0.9						27	1.3	1	3.4		70	8	
NEMP 2020 PFAS Ecological Freshwater Water 99% Protection (µg/L)																													
SMW_BH015	7.05	17100	11300	2.83	3000	41	415	269	5140	0.2	1090	737	737	0.61		3.59	3.9	4.5		6				40		607	52		
SMW_ENV712	7.65	11900	8420		2330	37	470	257	3900	0.4	505	802	802			0.92	1.4	1.4	0.07	11						273	1		2270
SMW_ENV712s	5.37	13400	8730		2470	48	111	263	3770	0.3	538	272	272	0.02		0.39	10.1	10.1	8.12	2	0.2		20	175		1090	327	263	190
SMW_ENV713	7.54	7820	4660		1430	25	116	131	1780	1.4	503	960	960	2.42	0.06	2.18	2.4	4.9	0.06	2	0.1		89	43	1	272	81	91	
SMW_ENV714	7.56	8520	5210		1610	29	71	123	2210	1.4	386	1140	1140	0.78		0.29	0.4	1.2	0.03							112	1		
SMW_BH019	6.95	13600	7610	4.87	1940	33	273	229	4430	0.1	82	625	625	0.19		4.09	4.2	4.4						3		425	3	11	
SMW_BH120	6.98	16400	10100	1.12	2770	42	233	358	5720	0.3	597	600	600	0.01		1.64	1.7	1.7	0.02	2			6	10		441	67	73	
SMW_BH032	7.70	19000	10700	0.19	3200	42	467	312	6050	0.2	785	204	204	0.11		1.8	2	2.1	0.04	2						93	2	7	
SMW_BH126	7.61	12900	6800	0.3	2100	552	65	78	3710	1.3		1640	1640			267	312	312	0.44	5		20		11		41	26		

#1 AS 2159-2009 Exposure Classfication for Concrete Piles in Groundwater (Soil Condition A). <6000 mg/L equates to 'mild' classification.
#2 AS 2159-2009 Exposure Classfication for Concrete Piles in Groundwater (Soil Condition A). <1000 mg/L sulphate equates to 'mild' classification.

	Methane	VOCs	PAHs		TRH						BTEXN						PFAS					Phenolics
Borehole	Dissolved Methane (µg/L)	Chlorobenzene (µg/L)	Naphthalene (µg/L)	Sum of PAHs (µg/L)	TRH C6-C10 Fraction (µg/L)	C6-C10 Fraction minus BTEX (F1) (µg/L)	>C10-C16 Fraction minus Naphthalene (F2) (µg/L)	TRH >C16-C34 Fraction (µg/L)	TRH >C34-C40 (µg/L)	C10-C40 (Sum of Total) (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	Total BTEX (µg/L)	Naphthalene (µg/L)	Perfluorohexanoic acid (PFHxA) (µg/L)	Perfluoroheptanoic acid (PFHpA) (µg/L)	Perfluorooctanoic acid (PFOA) (µg/L)	Sum of PFAS (µg/L)	Sum of PFHxS and PFOS (µg/L)	Phenol (µg/L)
NEPM 2013 Table 1A(4) Comm/Ind HSL D GW for Vapour Intrusion, Sand (µg/L)						7000					5000	NL										
Structural Impacts (Mild Upper Limits) (mg/L)																						
ANZG (2018) Freshwater 95% LOSP Toxicant DGVs											950	180	80			16						
ANZG (2018) Marine Water 95% LOSP Toxicant DGVs											950	180	80			70						
NEMP 2020 PFAS Ecological Freshwater Water 99% Protection (µg/L)																			19			
SMW_BH015																						
SMW_ENV712																						4
SMW_ENV712s																						
SMW_ENV713																						
SMW_ENV714																						
SMW_BH019	2270				40	30						9		4	13							
SMW_BH120																						
SMW_BH032																						
SMW_BH126	9460	32	5.4	5.4	180	120	420	460		890	61		2		63	12	0.56	0.1	0.34	2.04	0.34	

#1 AS 2159-2009 Exposure Classfication for Concrete Piles in Groundwater (Soil Condition A). <6000 mg/L equates to 'mild' classification.
#2 AS 2159-2009 Exposure Classfication for Concrete Piles in Groundwater (Soil Condition A). <1000 mg/L sulphate equates to 'mild' classification.

	Units	NEPM 2013 Table 1A(4) Comm/Ind HSL D GW for Vapour Intrusion, Sand	Structural Impacts (Mild Upper Limits)	ANZG (2018) Freshwater 95% LOSP Toxicant DGVs	ANZG (2018) Marine Water 95% LOSP Toxicant DGVs	NEMP 2020 PFAS Ecological Freshwater Water 99% Protection	AF_BH36 Sample date: 14/02/2022 Analysis date: 23/02/2022	AF_BH36s Sample date: 14/02/2022 Analysis date: (pending)	AF_BH37 Sample date: 14/02/2022 Analysis date: 23/02/2022	AF_BH37s Sample date: 14/02/2022 Analysis date: 23/02/2022
VHC's in water										
Dichlorodifluoromethane	µg/L						<10		<10	<10
Chloromethane	µg/L						<10		<10	<10
Vinyl Chloride	µg/L						<10		<10	<10
Bromomethane	µg/L						<10		<10	<10
Chloroethane	µg/L						<10		<10	<10
Trichlorofluoromethane	µg/L						<10		<10	<10
1,1-Dichloroethene	µg/L						<1		<1	<1
Trans-1,2-dichloroethene	µg/L						<1		<1	<1
1,1-dichloroethane	µg/L						<1		<1	<1
Cis-1,2-dichloroethene	µg/L						<1		<1	<1
Bromochloromethane	µg/L						<1		<1	<1
Chloroform	µg/L			770	770		3		61	<1
2,2-dichloropropane	µg/L						<1		<1	<1
1,2-dichloroethane	µg/L			1900	1900		<1		<1	<1
1,1,1-trichloroethane	µg/L			270	270		<1		<1	<1
1,1-dichloropropene	µg/L						<1		<1	<1
Carbon tetrachloride	µg/L			240	240		<1		<1	<1
Dibromomethane	µg/L						<1		<1	<1
1,2-dichloropropane	µg/L			900	900		<1		<1	<1
Trichloroethene	µg/L						<1		<1	<1
Bromodichloromethane	µg/L						<1		<1	<1
trans-1,3-dichloropropene	µg/L						<1		<1	<1
cis-1,3-dichloropropene	µg/L						<1		<1	<1
1,1,2-trichloroethane	µg/L			6500	1900		<1		<1	<1
1,3-dichloropropane	µg/L						<1		<1	<1
Dibromochloromethane	µg/L						<1		<1	<1
1,2-dibromoethane	µg/L						<1		<1	<1
Tetrachloroethene	µg/L						<1		<1	<1
1,1,1,2-tetrachloroethane	µg/L						<1		<1	<1
Chlorobenzene	µg/L						<1		<1	<1
Bromoform	µg/L						<1		<1	<1
1,1,2,2-tetrachloroethane	µg/L			400	400		<1		<1	<1
1,2,3-trichloropropane	µg/L						<1		<1	<1
Bromobenzene	µg/L						<1		<1	<1
2-chlorotoluene	µg/L						<2		<1	<1
4-chlorotoluene	µg/L						<3		<1	<1
1,4-dichlorobenzene	µg/L			60			<5		<1	<1
1,2-dichlorobenzene	µg/L			160			<6		<1	<1
1,2-dibromo-3-chloropropane	µg/L						<7		<1	<1
1,2,4-trichlorobenzene	µg/L			170	80		<8		<1	<1
Hexachlorobutadiene	µg/L						<9		<1	<1
1,2,3-trichlorobenzene	µg/L			10			<10		<1	<1

	Units	NEPM 2013 Table 1A(4) Comm/Ind HSL D GW for Vapour Intrusion, Sand	Structural Impacts (Mild Upper Limits)	ANZG (2018) Freshwater 95% LOSP Toxicant DGVs	ANZG (2018) Marine Water 95% LOSP Toxicant DGVs	NEMP 2020 PFAS Ecological Freshwater Water 99% Protection	AF_BH36 Sample date: 14/02/2022 Analysis date: 23/02/2022	AF_BH36s Sample date: 14/02/2022 Analysis date: (pending)	AF_BH37 Sample date: 14/02/2022 Analysis date: 23/02/2022	AF_BH37s Sample date: 14/02/2022 Analysis date: 23/02/2022
vTRH(C6 - C10)/BTEXN in water										
TRH C6 - C9	µg/L						<10		51	<10
TRH C6 - C10	µg/L						<10		51	<10
TRH C6 - C10 less BTEXN (F1)	µg/L	7000					<10		50	<10
Benzene	µg/L	5000		950	700		<1		<1	<1
Toluene	µg/L			180	180		4		1	<1
Ethylbenzene	µg/L			80	80		<1		<1	<1
m+p-xylene	µg/L			75	75		<2		<2	<2
o-xylene	µg/L			350			<1		<1	<1
Naphthalene	µg/L			16	70		<1		<1	<1
svTRH(C10-40) in water										
TRH C10 - C14	µg/L						100		110	88
TRH C15 - C28	µg/L						200		320	260
TRH C29 - C36	µg/L						<100		<100	<100
Total +ve TRH (C10-C36)	µg/L						300		430	340
TRH >C10 - C16	µg/L						90		110	130
TRH >C10 - C16 less Naphthalene (F2)	µg/L						90		110	130
TRH >C16 - C34	µg/L						180		290	210
TRH >C34 - C40	µg/L						<100		<100	<100
Total +ve TRH (>C10-C40)	µg/L						280		400	330
PAHs in water										
Naphthalene	µg/L			16	70		<0.2		0.4	0.7
Acenaphthylene	µg/L						<0.1		<0.1	<0.1
Acenaphthene	µg/L						<0.1		<0.1	0.6
Fluorene	µg/L						<0.1		<0.1	0.2
Phenanthrene	µg/L			2	2		<0.1		<0.1	0.3
Anthracene	µg/L			0.4	0.4		<0.1		<0.1	<0.1
Fluoranthene	µg/L			1.4	1.4		<0.1		<0.1	<0.1
Pyrene	µg/L						<0.1		<0.1	<0.1
Benzo(a)anthracene	µg/L						<0.1		<0.1	<0.1
Chrysene	µg/L						<0.1		<0.1	<0.1
Benzo(b,j+k)fluoranthene	µg/L						<0.2		<0.2	<0.2
Benzo(a)pyrene	µg/L			0.2	0.2		<0.1		<0.1	<0.1
Indeno(1,2,3-c,d)pyrene	µg/L						<0.1		<0.1	<0.1
Dibenzo(a,h)anthracene	µg/L						<0.1		<0.1	<0.1
Benzo(g,h,i)perylene	µg/L						<0.1		<0.1	<0.1
Benzo(a)pyrene TEQ	µg/L						<0.5		<0.5	<0.5
Total +ve PAH's	µg/L						<0.1		0.38	1.7
Organochlorine Pesticides in water										
alpha-BHC	µg/L						<0.2		<0.2	<0.2
HCB	µg/L						<0.2		<0.2	<0.2
beta-BHC	µg/L						<0.2		<0.2	<0.2
gamma-BHC	µg/L						<0.2		<0.2	<0.2

	Units	NEPM 2013 Table 1A(4) Comm/Ind HSL D GW for Vapour Intrusion, Sand	Structural Impacts (Mild Upper Limits)	ANZG (2018) Freshwater 95% LOSP Toxicant DGVs	ANZG (2018) Marine Water 95% LOSP Toxicant DGVs	NEMP 2020 PFAS Ecological Freshwater Water 99% Protection	AF_BH36 Sample date: 14/02/2022 Analysis date: 23/02/2022	AF_BH36s Sample date: 14/02/2022 Analysis date: (pending)	AF_BH37 Sample date: 14/02/2022 Analysis date: 23/02/2022	AF_BH37s Sample date: 14/02/2022 Analysis date: 23/02/2022
Heptachlor	µg/L			0.9			<0.2		<0.2	<0.2
delta-BHC	µg/L						<0.2		<0.2	<0.2
Aldrin	µg/L						<0.2		<0.2	<0.2
Heptachlor Epoxide	µg/L						<0.2		<0.2	<0.2
gamma-Chlordane	µg/L			0.8			<0.2		<0.2	<0.2
alpha-Chlordane	µg/L			0.8			<0.2		<0.2	<0.2
Endosulfan I	µg/L			0.2	0.01		<0.2		<0.2	<0.2
pp-DDE	µg/L						<0.2		<0.2	<0.2
Dieldrin	µg/L						<0.2		<0.2	<0.2
Endrin	µg/L			0.02	0.008		<0.2		<0.2	<0.2
Endosulfan II	µg/L			0.2	0.01		<0.2		<0.2	<0.2
pp-DDD	µg/L						<0.2		<0.2	<0.2
Endrin Aldehyde	µg/L						<0.2		<0.2	<0.2
pp-DDT	µg/L			0.01			<0.2		<0.2	<0.2
Endosulfan Sulphate	µg/L						<0.2		<0.2	<0.2
Methoxychlor	µg/L						<0.2		<0.2	<0.2
Organophosphate Pesticides in water										
Dichlorvos	µg/L						<0.2		<0.2	<0.2
Dimethoate	µg/L			0.15			<0.2		<0.2	<0.2
Diazinon	µg/L			0.01			<0.2		<0.2	<0.2
Chlorpyriphos-methyl	µg/L						<0.2		<0.2	<0.2
Ronnel	µg/L						<0.2		<0.2	<0.2
Fenitrothion	µg/L			0.2			<0.2		<0.2	<0.2
Malathion	µg/L						<0.2		<0.2	<0.2
Chlorpyriphos	µg/L			0.01	0.009		<0.2		<0.2	<0.2
Parathion	µg/L			0.004			<0.2		<0.2	<0.2
Bromophos ethyl	µg/L						<0.2		<0.2	<0.2
Ethion	µg/L						<0.2		<0.2	<0.2
Azinphos-methyl (Guthion)	µg/L			0.02			<0.2		<0.2	<0.2
PCBs in water										
Aroclor 1016	µg/L						<2		<2	<2
Aroclor 1221	µg/L						<2		<2	<2
Aroclor 1232	µg/L						<2		<2	<2
Aroclor 1242	µg/L			0.6			<2		<2	<2
Aroclor 1248	µg/L						<2		<2	<2
Aroclor 1254	µg/L			0.03			<2		<2	<2
Aroclor 1260	µg/L						<2		<2	<2
Speciated Phenols in water										
Phenol	µg/L			320	400		5		<1	<1
2-Chlorophenol	µg/L			490			<1		<1	<1
4-Chloro-3-Methylphenol	µg/L						<5		<5	<5
2-Methylphenol (0-Cresol)	µg/L						<1		<1	<1
3/4-Methylphenol (m/p-Cresol)	µg/L						<2		<2	<2

		Units	NEPM 2013 Table 1A(4) Comm/Ind HSL D GW for Vapour Intrusion, Sand	Structural Impacts (Mild Upper Limits)	ANZG (2018) Freshwater 95% LOSP Toxicant DGVs	ANZG (2018) Marine Water 95% LOSP Toxicant DGVs	NEMP 2020 PFAS Ecological Freshwater Water 99% Protection	AF_BH36 Sample date: 14/02/2022 Analysis date: 23/02/2022	AF_BH36s Sample date: 14/02/2022 Analysis date: (pending)	AF_BH37 Sample date: 14/02/2022 Analysis date: 23/02/2022	AF_BH37s Sample date: 14/02/2022 Analysis date: 23/02/2022
	2-Nitrophenol	µg/L						<1		<1	<1
	2,4-Dimethylphenol	µg/L						<1		<1	<1
	2,4-Dichlorophenol	µg/L			160			<1		<1	<1
	2,6-Dichlorophenol	µg/L						<1		<1	<1
	2,4,5-Trichlorophenol	µg/L			36			<1		<1	<1
	2,4,6-Trichlorophenol	µg/L			20			<1		<1	<1
	2,4-Dinitrophenol	µg/L			45			<20		<20	<20
	4-Nitrophenol	µg/L						<20		<20	<20
	2346-Tetrachlorophenol	µg/L						<1		<1	<1
	2-methyl-4,6-Dinitrophenol	µg/L						<10		<10	<10
	Pentachlorophenol	µg/L			10	22		<5		<5	<5
HM in	water - dissolved										
	Arsenic-Dissolved	µg/L			13			2		<1	4
	Cadmium-Dissolved	µg/L			0.2	5.5		<0.1		<0.1	<0.1
	Chromium-Dissolved	µg/L				27		<1		<1	<1
	Copper-Dissolved	µg/L			1.4	1.3		<1		<1	<1
	Lead-Dissolved	µg/L			3.4	4.4		<1		<1	<1
	Mercury-Dissolved	µg/L			0.6	0.4		<0.05		<0.05	<0.05
	Nickel-Dissolved	µg/L			11	70		1		5	8
	Zinc-Dissolved	µg/L			8	8		2		2	37
	Aluminium-Dissolved	µg/L			55			<10		20	<10
	Boron-Dissolved	µg/L			940			50		40	60
	Barium-Dissolved	µg/L						270		52	580
	Beryllium-Dissolved	µg/L						<0.5		<0.5	<0.5
	Cobalt-Dissolved	µg/L				1		<1		<1	6
	Iron-Dissolved	µg/L						120		190	35000
	Manganese-Dissolved	µg/L			1900			49		110	1100
	Molybdenum-Dissolved	µg/L						32		2	2
	Antimony-Dissolved	µg/L						<1		<1	<1
	Selenium-Dissolved	µg/L			11			<1		<1	2
	Strontium-Dissolved	µg/L						1400		96	380
	Uranium-Dissolved	µg/L						1.1		<0.5	1
Miscellaneous	Inorganics										
	Total Suspended Solids	mg/L						180		29	220
	Total Dissolved Solids (grav)	mg/L						5900		410	1900
	Ammonia as N in water	mg/L			910	900		1.9		0.41	2.1
	Nitrate as N in water	mg/L		110000				<0.005		<0.005	<0.005
	Nitrite as N in water	mg/L						<0.005		<0.005	<0.005
	Fluoride, F	mg/L						0.3		1.3	0.3
	Phosphate as P in water	mg/L						<0.005		<0.005	<0.005
	Total Organic Carbon	mg/L						12		17	110
	BOD	mg/L						6		9	85
	COD	mg O2 /L						110		150	390

	Units	NEPM 2013 Table 1A(4) Comm/Ind HSL D GW for Vapour Intrusion, Sand	Structural Impacts (Mild Upper Limits)	ANZG (2018) Freshwater 95% LOSP Toxicant DGVs	ANZG (2018) Marine Water 95% LOSP Toxicant DGVs	NEMP 2020 PFAS Ecological Freshwater Water 99% Protection	AF_BH36 Sample date: 14/02/2022 Analysis date: 23/02/2022	AF_BH36s Sample date: 14/02/2022 Analysis date: (pending)	AF_BH37 Sample date: 14/02/2022 Analysis date: 23/02/2022	AF_BH37s Sample date: 14/02/2022 Analysis date: 23/02/2022
Metals in water - Total										
Phosphorus - Total	mg/L						<0.05		<0.05	<0.05
Ion Balance										
Calcium - Dissolved	mg/L						82		22	88
Potassium - Dissolved	mg/L						33		6.9	6.6
Sodium - Dissolved	mg/L						1300		69	380
Magnesium - Dissolved	mg/L						120		6.8	38
Hardness	mgCaCO 3 /L						710		84	380
Hydroxide Alkalinity (OH-) as CaCO3	mg/L						<5		<5	<5
Bicarbonate Alkalinity as CaCO3	mg/L						230		110	380
Carbonate Alkalinity as CaCO3	mg/L						<5		<5	<5
Total Alkalinity as CaCO3	mg/L						230		110	380
Sulphate, SO4	mg/L		999000#2				190		12	75
Chloride, Cl	mg/L		5999000#1				2400		88	460
Ionic Balance	%						-3		-2	4
PFAS in water Short										
Perfluorohexanesulfonic Acid - PFHxS	µg/L						<0.01		<0.01	0.07
Perfluorooctanesulfonic acid PFOS	µg/L					0.00023	<0.01		<0.01	0.04
Perfluorooctanoic acid PFOA	µg/L					19	<0.01		<0.01	0.06
6:2 FTS	µg/L						<0.01		<0.01	<0.01
8:2 FTS	µg/L						<0.02		<0.02	<0.02
Total Positive PFHxS & PFOS	µg/L						<0.01		<0.01	0.11
Total Positive PFOA & PFOS	µg/L						<0.01		<0.01	0.1
Total Positive PFAS	µg/L						<0.01		<0.01	0.17
Dissolved Gases in Water										
Methane	µg/L						92		48	3200

#1 AS 2159-2009 Exposure Classfication for

#2 AS 2159-2009 Exposure Classfication for

APPENDIX H WASTE CLASSIFICATION REPORT

8 June 2022

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RE: Waste Classification at Sydney Olympic Park Construction Site, Sydney Metro West; Central Tunnelling Package – Station Box

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1. Introduction and Background

ADE Consulting Group Pty Ltd (ADE) was commissioned by Acciona Ferrovial Joint Venture (AFJV) to undertake a waste classification based on environmental data collected at the Sydney Metro West, Sydney Olympic Park worksite, located on the corner of Corner of Olympic Boulevard and Figtree Drive, Sydney Olympic Park, New South Wales (NSW) (the 'site'). A preliminary waste classification was undertaken by ADE (2022)[1] using environmental data collected on site, as presented in ERM (2022b)[2]. The conclusion of the preliminary waste classification (ADE, 2022) was that insufficient samples had been collected to classify fill material (including shallow fill material) and additional sampling was recommended to address this data gap.

Additional shallow soil sampling was subsequently undertaken in April 2022 to address the data gap. Within the site, there are two areas within the subject area, namely the Station Box and the Site Establishment Area, as presented in **Figure 1** (**Appendix A**) and defined below. This report aims to update the initial waste classification presented in ADE (2022) for the **Station Box only**, with an emphasis on clarifying the waste classification of in-situ shallow soils materials less than 2 metres below ground level.

1.1 Station Box Footprint

The Station Box footprint is located adjacent to Olympic Boulevard and extends south from Herb Elliot Avenue to Figtree Drive. The Station Box is defined by an area size of approximately 7,880 m^2, with a proposed excavation depth of approximately 28 metres below ground level (mbgl). The Station Box footprint is presented in **Figure 1** (**Appendix A**). This Station Box only will be the subject of this assessment.

1.2 Site Establishment Area

The Site Establishment Area surrounds the Station Box footprint, extending west to the Sanyo Building and east to the Phillips Building. The Site Establishment Area is defined by an area size of approximately 14,479 m^2 (with a total site area of 22,359 m^2 including the Station Box) with a proposed maximum excavation depth of 0.7 mbgl[3]. The Site Establishment Area is presented in **Figure 1** (**Appendix A**), however will not be discussed further in this assessment.

[1] ADE 2022 *RE: Preliminary Waste Classification at Sydney Olympic Park Construction Site, Sydney Metro West; Central Tunnelling Package*. 9 April 2022
[2] ERM 2022b Detailed Site Investigation. Sydney Olympic Park Construction Site, Sydney Metro West; Central Tunnelling Package. 16 February 2022
[3] Average excavation depth is estimated to be 0.4 mbgl with a maximum depth of 0.7 mbgl.

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1.3 Previous Assessments

In preparing this preliminary waste classification, ADE has been incorporated the following environmental reports:

- ADE 2022 *RE: Preliminary Waste Classification at Sydney Olympic Park Construction Site, Sydney Metro West; Central Tunnelling Package*. 9 April 2022
- ERM 2022a *Sampling and Analysis Quality Plan – Sydney Olympic Park Construction Site, Sydney Metro West; Central tunnelling Package*, date: 24 January, project No: 0628507
- ERM 2022b *Detailed Site Investigation – Sydney Olympic Park Construction Site, Sydney Metro West; Central tunnelling Package*, date: 16 February 2022, project No: 0628507_02_R01

2. Desktop Review

The outcomes of the desktop review presented in ADE (2022) follow:

2.1 Acid sulfate soils

The site was identified as having 'no risk' regarding acid sulfate soils (ASS)[4]. Additionally, no observations / odours indicative of potential ASS (PASS) were noted in ERM (2022b) nor were they observed during sampling undertaken by ADE in April 2022.

2.2 EPA online records

NSW EPA contaminated sites records were reviewed in relation to contaminated sites at or near the site. Summary information is presented in **Appendix G.** The NSW EPA review as presented in **Appendix G** acknowledges that the site was not listed as 'contaminated' under the Contaminated Land Management Act (CLM Act) 1997. There were three sites listed as 'sites notified to the NSW EPA' identified within a 500 m radius of the site with ongoing maintenance required to manage residual contamination, these include:

- Aquatic Centre carpark landfill located 150 m south-west of the site
- Former golf driving range landfill located 150 m south-east of the site
- Bicentennial Park landfill located 300 m east of the site

The Aquatic Centre landfill and former golf driving range landfill appear to be located cross- or up-hydraulic gradient to the site, and the Bicentennial Park landfill appears to be located down hydraulic gradient of the site. The groundwater measurements presented in ERM (2022b) suggest several parameters (e.g. ammonia and total phosphorus) exceed ecological screening levels and one contaminant (nitrate) exceeds human health (recreational) screening criteria. On this basis, groundwater conditions do not appear to exhibit concentrations reflective of landfill contamination (to groundwater) that may affect the waste classification. However groundwater assessment over a longer timeframe would be required to clarify potential groundwater contamination conditions. In relation to hazardous ground gases, both landfills are understood to be currently managed and therefore are likely low risk in terms of potential landfill gas migration onto the site, consistent with the findings in ERM (2022b).

One formerly licensed activity by the NSW EPA was identified on site, Silanna Semiconductor Pty Ltd. The activity is listed as 'hazardous, industrial or Group A Waste Generation or Storage'. ERM (2022a) noted that polychlorinated biphenyls (PCB) and chlorinated hydrocarbons were considered to be relevant contaminants of potential concern for this industry.

Two records of historical James Hardie Asbestos Waste sites were identified to be located immediately adjacent to the northern boundary of the site.

2.3 Potential contaminating activities

- Uncontrolled filling across the site
- Potential firefighting activities adjacent to the site
- Former landfills located up gradient of the site
- Potential historical contamination during the use of a portion of the site by Silanna Semiconductor Pty Ltd
- Historical commercial and industrial land use within and surrounding the site

[4] Refer espade.environment.nsw.gov.au. Accessed 24 March 2022

- Application of herbicides/pesticides to control local weeds and pests
- Illegal dumping.

2.4 Contaminants analysed

Based on ADE's desktop assessment, including the assessment of historical site and surrounding activities and a review of the ERM's sampling and analysis quality plan (SAQP) (ERM, 2022a), the following suite of analytes were included in this investigation:

- Heavy metals – arsenic, cadmium, chromium, copper, lead, mercury, nickel and zinc,
- Total recoverable hydrocarbons (TRHs),
- Polycyclic aromatic hydrocarbons (PAHs),
- Polychlorinated biphenyls (PCBs),
- Benzene, toluene, ethyl-benzene and total xylenes (BTEX),
- Organochlorine pesticides (OCPs),
- Organophosphorus pesticides (OPPs),
- Polyfluoroalkyl Substances (PFAS) including perfluorooctane sulfonate (PFOS) + perfluorohexane sulfonate (PFHxS),
- Volatile organic compounds (VOCs),
- Asbestos (as per Australian Standard 4964-2004: Method for the qualitative identification of asbestos in bulk samples).

The subsequent soil analytical results tables (**Table B1**) is presented in **Appendix B**.

3. Sample Method

3.1 Sampling rationale

Following a review of analytical data presented in ERM (2022b), ADE recommended additional sampling locations within the station box to comply with Victoria EPA (2009)[5] sample design guidelines. The new sampling locations (TP1 – TP9) are presented in **Figure 1** (**Appendix A**) and those same sampling locations shown alongside previous sampling locations presented in ERM (2022b) are presented in **Figure 2** (**Appendix A**). For further discussion of the sampling rationale, refer to in ADE (2022).

3.2 Soil sampling method

The soil sampling method undertaken for test pits TP1 – TP9 is presented below in **Table 1.**

Table 1. Summary of sampling method

Item	Details
Service Location	All service locations were undertaken by AFJV prior to ADE conducting site works.
Test Pitting Methodology	Test pits were completed by an excavator to a maximum depth of 1 m bgl (terminating in natural soil material). Test pits were completed by mechanical excavation/scraping in 0.1 m increments. This was repeated until termination in natural soil. All test pits were reinstated with soil cuttings in the order in which it was excavated from the test pit.
Soil Logging	Soil logging of recovered shallow soil material was completed in general accordance with the USCS. Test pit logs details are presented in **Appendix D**.
Sampling methodology	Soil samples were collected directly by gloved hand from the excavator bucket. Soil samples were collected at a rate of up to one sample every 0.1-0.5m. Soil samples were collected at varying depths throughout the soil profile, with at least one sample taken in the fill material (typically 0-0.5 mbgl depth range) and one from natural soil (typically >0.3m bgl). Select samples were placed into a snap lock bag and screened using a calibrated 10.6 eV lamp PID for VOC measurements. Soil samples were transferred into laboratory prepared 150 (millilitre) ml amber jars, PFAS specific jars and snap lock bags, which were filled to minimise headspace. Sample jars were placed in a cooler containing crushed ice. A clean pair of gloves were used for each sample collection event. No decontamination of equipment was required as samples were collected directly from a gloved hand, which gloves changed between each sample.
QA/QC Program	Intra-laboratory duplicates were collected at a frequency of one per 20 primary samples collected Inter-laboratory duplicates were collected at a frequency of one per 20 primary samples collected Trip Blanks were collected at a frequency one per day. Trip Spikes were collected at a frequency of one per day.
Disposal of Soil Cuttings	All soil cuttings were reinstated within the excavation.
Soil Sample Analysis	Analyses conducted by a NATA accredited laboratory as per established internationally recognised procedures including those published by US Environment Protection Agency, American Public Health Association, Australian Standards and National Environmental Protection Measure.

[5] EPA Victoria 2009 Industrial Waste Resource Guidelines. Available at: https://www.epa.vic.gov.au/about-epa/publications/iwrg702

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3.3 Soil sampling method

For the in-situ assessment of the subject soil materials, ADE made reference to the sampling density outlined in the NSW EPA *Contaminated Sites Sampling Design Guidelines* (NSW EPA, 1995) and Victorian EPA (2009)[6] sample design guidelines. **Table 2** below compares the recommended number of sampling locations for the contamination assessment against soil samples taken (in accordance with NSW EPA, 1995) and **Table 3** presents the comparison of soil samples taken against the recommended number of samples suggested in the Victorian EPA (2010) guidelines for waste classification. The comparison suggests sufficient samples have been collected to adequately inform waste classification requirements.

Table 2. Minimum Sampling Density for Assessment of the In-situ Soil Materials

Size of Subject Area (m^2)	Number of Recommended Sampling Points as per NSW EPA (1995)	Number of Sampling Points Undertaken	Minimum Sampling Density and Arrangement Achieved?
Station Box	Station Box	Station Box	Station Box
500	5	26	Sampling compliance achieved
1,000	6		
2,000	7		
2,500	8		
3,000	9		
4,000	11		
5,000	13		
6,000	15		
7,000	17		
8,000	19		
9,000	20		
10,000	21		
15,000	25		

Notes to Table 2
1. Site Establishment Area

Table 3. Volumetric sampling density for assessment of the fill materials

Material Type	Approximate Volume (m^3)	No. Primary Samples collected	Vic EPA (2009) IWRG - Table 3 Minimum number of samples	Minimum Sampling Density Achieved
	Station Box [1]	Station Box	Station Box	Station Box
Fill	12,519 m^3 (Note 1)	52	At a rate of 1 sample for 250 m^3, a total of 51 samples would be required	Sampling compliance achieved

Notes to Table 2
1. Refer to Appendix G for estimation of volume.

[6] EPA Victoria 2009 Industrial Waste Resource Guidelines. Available at: https://www.epa.vic.gov.au/about-epa/publications/iwrg702

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4. Discussion of field observations and results

4.1 Soil composition and depth

From ERM (2022b), fill materials encountered across the site generally comprised gravelly sand / road base gravels / crushed shale and clay / course and fine silty and sandy clays and clayey sands. The depth of fill was observed to be varied between 0.1 and 1.7 m bgl across the site. Brown/red/orange and grey silty clays and clayey sands were encountered below the fill material with underlying shales observed at depth.

ADE conducted further site investigations of shallow fill material and photos of the soil profiles exposed during test pitting are presented in **Appendix C** and detailed descriptions are included in borelogs (refer **Appendix D**). The findings of soil composition were consistent with those presented in ERM (2022b). A Summary of the extent (depth) of fill material in each of the four station box grids is presented below in **Table 4** and also presented in **Appendix G**.

Table 4. Summary of shallow fill material within the four grids of the station box

Location	Contaminant concentrations	Average Depth of Fill
Station Box - Grid 1	Maximum depth of fill estimated to be 1.7 mbgl	Approximately 1.2 mbgl
Station Box - Grid 2	Maximum depth of fill estimated to be 1.8 mbgl	Approximately 1.2 mbgl
Station Box - Grid 3	Maximum depth of fill estimated to be 0.7 mbgl	Approximately 0.6 mbgl
Station Box - Grid 4	Maximum depth of fill estimated to be 1.5 mbgl	Approximately 1.0 mbgl

Note:
Fill depths and averages are presented in **Appendix G**.

4.2 Fill Layer Results

4.2.1 Fill Layer – Nickel

All soil samples collected from the fill layer and re-worked clay layer across the Station Box footprint returned concentrations below the NSW EPA (2014)[7] contaminant threshold (CT1) criteria of 40 mg/kg, with the exception of nickel (Ni) in the samples BH110_0.2: (Ni 57 mg/kg), BH118_0.1: (Ni 109 mg/kg), BH119_0.2: (Ni 99 mg/kg), and TP5_0-0.1 (98.7 mg/kg). ADE conducted a 95% Upper Confidence Limit analysis on the nickel dataset for the fill layer across the station box footprint (refer **Appendix G**), which was calculated to be 150.1 mg/kg, which is above CT1 for nickel of 40 mg/kg.

To confirm these samples complied with general solid waste (SCC1 & TCLP1)[6] criteria, the samples exceeding general solid waste (CT1) criteria were subject to a toxicity characteristic leaching procedure (TCLP) Ni analysis. All TCLP Ni results were reported to be below the adopted TCLP1 Ni criteria (the maximum concentration 0.2 mg/L, compared with the TCLP1 criteria of 2 mg/L). Therefore, the nickel content of the fill and re-worked clay layer extending to a maximum depth of 1.8 m bgl complies with the requirements for General Solid Waste.

[7] NSW EPA 2014 *Waste Classification Guidelines*. Available at: https://www.epa.nsw.gov.au/your-environment/waste/classifying-waste/waste-classification-guidelines

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4.2.2 Fill Layer - PFAS

Sample BH125_0.5 contained trace detections of PFAS, specifically PFOS + PFHxS[8], of 0.0014 mg/kg. ADE has estimated[9] that if all this PFAS were to leach it would generate a maximum TCLP value of 0.07 µg/L. The NSW EPA (2016)[10] TCLP1 guideline for PFAS (PFOS + PFHxS) is 50 µg/L, indicating the material would be compliant with GSW criteria (below SCC1 & TCLP1 criteria). It is also understood that the NSW EPA considers sample results that report concentrations of PFAS below the laboratory limit of reporting of 5 µg/kg for PFOA, and PFOS + PFHxS to be acceptable in demonstrating that PFAS is not present at concentration warranting further consideration in relation to waste classification.

4.2.3 Fill Layer – Waste Classification

Based on the measurements presented in ERM (2022b) and additional test pits completed by ADE, it is considered that the fill and reworked soil materials (as presented in **Table 4**) across the station box footprint to be consistent with **General Solid Waste.**

4.3 Natural Layer Results

Most soil samples collected from the natural layer in the Station Box footprint returned analytical results consistent with no contamination from manufactured chemicals, process residues, or wastes from industrial, commercial, mining or agricultural activities, and background ranges of heavy metals consistent with Berkman, (1989)[11], indicating that these soils would be virgin excavated natural material (VENM).

The exceptions were detections of TRH, xylene, PAH and nickel within various samples, as outlined below in **Table 5** and also presented in **Figure 2 (Appendix A).**

Table 5. Summary of concentrations of contaminants in natural material

Station Box Grid	Location	Contaminant concentrations
Grid 2	**BH118**	BH118_5.0: TRH (C6-C9) – 19 mg/kg BH118_10.0: TRH (C6-C9) – 31 mg/kg BH118_10.0: PAH (total) – 0.8 mg/kg BH118_10.0: Xylene – 0.5 mg/kg BH118_15.0: TRH (C6-C9) – 15 mg/kg BH118_20.0: TRH (C6-C9) – 10 mg/kg BH118_25.0: TRH (C6-C9) – 20 mg/kg
Grid 4	**BH121**	BH121_5.0: TRH (C6-C9) – 11 mg/kg
Grid 4	**BH125**	BH125_5.0- TRH (C6-C9) – 21 mg/kg BH125_5.0- PAH (total) – 0.8 mg/kg

[8] No PFOA was identified above the limit of reporting (0.2 µg/kg)
[9] Estimated on basis at 100g of soil sample is diluted with 2L of solution to conservatively obtain TCLP concentration i.e. 100g sample of 0.05 mg/kg diluted into 2L = 0.0025 mg/L = 2.5 µg/L.
[10] NSW EPA 2016 *Addendum to the Waste Classification Guidelines (2014. Part 1: classifying waste.* Available at: https://www.epa.nsw.gov.au/your-environment/waste/classifying-waste/waste-classification-guidelines
[11] Background ranges, taken from the Field Geologist's Manual, compiled by D A Berkman, Third Edition 1989. Publisher – The Australasian Institute of Mining & Metallurgy (Berkman, 1989)

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Station Box Grid	Location	Contaminant concentrations
		BH125_10.0- PAH (total) – 1 mg/kg BH125_10.0- TRH (C6-C9) – 24 mg/kg BH125_15.0- PAH (total) – 0.8 mg/kg BH125_20.0- TRH (C6-C9) – 19 mg/kg BH125_20.0- PAH (total) – 0.8 mg/kg BH125_25.0 PAH (total) – 0.6 mg/kg
Grid 4	**BH126**	BH126_2.0: PAH (total) – 0.7 mg/kg BH126_2.0: Nickel – 42 mg/kg [A]
Grid 4	**BH127**	BH127_4.0 - PAH (total) – 0.6 mg/kg

Note:

[A]: The presence of Nickel, whilst lower than Berkman (1999), exceeded NSW EPA (2016) CT1 criteria of 40 mg/kg. TCLP results of the sample (refer **Table B2** in **Appendix B**) showed compliance with SCC1 and TCLP1 values, thus indicative of General Solid Waste.

Soil samples collected from the natural layer within Grids 2 and 4 which reported concentrations of PAH, TRH and xylene exceeding the laboratory detection limit (indicating potential contamination), do not meet the definition of VENM. Additionally, nickel was identified at one location at 2 mbgl at concentrations below SCC1 & TCLP1 criteria and therefore consistent with the classification of General Solid Waste. ADE notes that reported concentrations of PAH, TRH and Xylene within the natural layer across the Station Box footprint were below CT1 criteria. It is noted that soil samples in Grids 2 and 4 were collected to a maximum depth >25 mbgl.

In Grid 2, it is has been presumed that material between the shallow fill layer (typically <1.8 mbgl, as presented in **Table 4**) and the strata where contaminants were identified to be above background concentrations (between 5 and 25 mbgl) may contain contaminants from soil layers above and has consequently been classified as General Solid Waste. Material below 25 mbgl in Grid 2 is understood to be VENM. In Grid 4, the shallow fill layer (typically <1.5 mbgl, as presented in **Table 4**) is adjacent to the strata where contaminants were identified to be above background concentrations (between 2 and 25 mbgl) and as such, has been classified as General Solid Waste. Material below 25mbgl in Grid 4 is understood to be VENM.

Due to the inherent variability (heterogenous nature) of soil and uncertainty in historical analytical results (particularly from natural soils in Grids 2 and 4 of the Station Box), ADE considers that further investigation is warranted. This may alter the waste classifications presented within this report. The uncertainties related to the in-situ waste classification of the deeper natural material can be summarised with the following questions:

- Has the contamination resulted from previous land use(s) at or within the vicinity of the site (noting historical industrial activities and resulting contamination within the vicinity of the site)?
- Is the hydrocarbon contamination likely to be naturally occurring or anthropogenic?
- Is it possible that cross contamination of samples occurred during the previous sampling efforts?
- Could contamination have migrated in groundwater from nearby fuel storage sites to the station box site?

4.4 Asbestos Results

No asbestos was detected within any of the samples submitted for laboratory analysis. As such, the soil materials within the Station Box are not considered 'Special Waste'.

4.5 Summary

Based on the assessment conducted with the presently available data, the following waste classification approach

is proposed:

- The Station Box has been divided into four grids, as presented in **Figure 2** (**Appendix A**):
    - Grid 1: fill material (typically <1.7mbgl) is considered to be **GSW (non-putrescible)** with natural material below this fill layer considered to be **VENM**
    - Grid 2: fill material (typically <1.8mbgl) is considered to be **GSW (non-putrescible)** with material below this layer also considered to be **GSW (non-putrescible)** due to the presence of select contaminants down to depth of 25 mbgl
    - Grid 3: fill material (typically <0.7 mbgl) is considered to be **GSW (non-putrescible)** with natural material below this layer considered to be **VENM**
    - Grid 4: fill material (typically <1.7 mbgl) is considered to be **GSW (non-putrescible)** with material below this layer also considered to be **GSW (non-putrescible)** due to the presence of select contaminants down to depth of 25 mbgl
- The vertical profiles for the Station Box grids is presented as the SOP Grid Cross Section (refer **Figure 3**, **Appendix A**)

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5. Conclusions

Based on the data and evidence collected during the investigation, it is the opinion of ADE that:

5.1 Station Box Area

- Based on the findings of the current test pit assessment and previous investigation (ERM, 2022b), the fill and reworked clay layer across the Station Box Area are considered **GSW (non-putrescible**). Exceedances of contaminants above GSW (CT1) criteria were limited to soils within shallow samples at BH110, BH118, BH119 and TP5 which showed elevated concentrations of nickel. However subsequent TCLP analysis showed that concentrations remained with GSW criteria. All other materials extending across the fill layer within the Station Box Area reported chemical concentrations below GSW (CT1) criteria.

- Based on the findings of the of the current test pit assessment and previous investigation (ERM, 2022b), the natural layer across the Station Box Area is considered Virgin Excavated Natural Material (VENM), within Grids 1 and 3. In Grids 2 and 4, contaminants above background concentrations or exceeding GSW criteria were identified in soils at locations BH118, BH121, BH125 and BH126 and BH127 to a depth of 25 mbgl and are also considered **GSW (non-putrescible)**. Material below 25 mbgl in Grids 2 and 4 is considered **VENM**.

This report has been prepared in accordance with the NSW EPA (2014) waste classification guidelines for the purpose of off-site disposal. For compliance with regulatory guidelines, ADE considers the current dataset for the subject areas to be adequate based on the recommended sampling densities in the VIC EPA (2010) and NSW EPA (1995) guidelines.

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6. Limitations

This report has been prepared for the exclusive use of the client and is limited to the scope of the work agreed in the terms and conditions of contract (including assumptions, limitations and qualifications, circumstances, and constraints). ADE has relied upon the accuracy of information and data provided to it by the client and others.

ADE has used a degree of care and skill ordinarily exercised in similar investigations by reputable members of the environmental industry in Australia. No other warranty, expressed or implied, is made or intended. No one section or part of a section, of this report should be taken as giving an overall idea of this report. Each section must be read in conjunction with the whole of this report, including its appendixes and attachments. The report is an integral document and must be read in its entirety.

To the fullest extent permitted by law, ADE does not accept or assume responsibility to any third party (other than the client) for the investigative work, the report or the opinions given. The scope of work conducted, and report herein may not meet the specific needs (of which ADE is not aware) of third parties. ADE cannot be held liable for third party reliance on this document. Any third party who relies upon this report does so at its own risk.

The subsurface environment can present substantial uncertainty due to it complex heterogeneity. The conclusions presented in this report are based on limited investigation of conditions at specific sampling locations chosen to be as representative as possible under the given circumstances. However, it is possible that this investigation may not have encountered all areas of contamination at the site due to the limited sampling and testing program undertaken.

The material subject to classification pertains only to the site and subject area outlined within the report and must be consistent with the waste description reported. If there are any unexpected finds that are not consistent with this classification, ADE must be notified immediately.

ADE does not verify the accuracy or completeness of, or adopt as its own, the information or data supplied by others and excludes all liability with respect to such information and data. To the extent that conditions differ from assumptions set out in the report, and to the extent that information provided to ADE is inaccurate or incomplete or has changed since it was provided to ADE, the opinions expressed in this report may not be valid and should be reviewed.

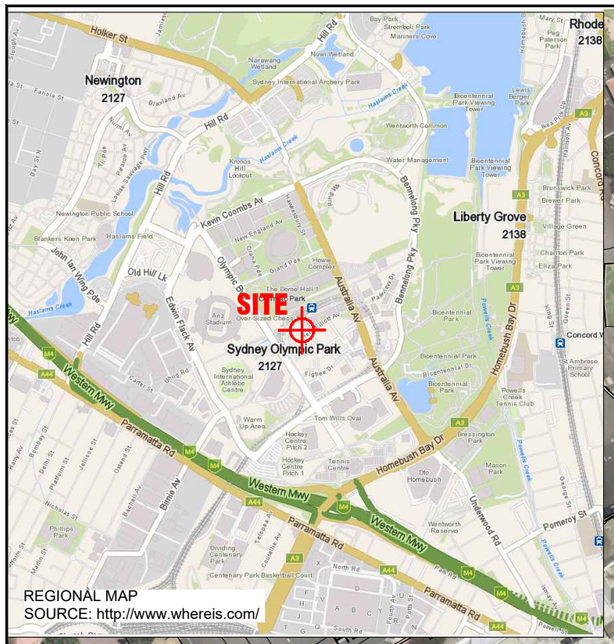
ADE's professional opinions are based upon its professional judgement, experience, training, and results from analytical data. In some cases, further testing and analysis may be required, thus producing different results and/or opinions. ADE has limited its investigation to the scope agreed upon with its client.

This Limitation and Disclaimer must accompany every copy of this report. Should you have any queries, please do not hesitate to contact us on 1300 796 922.

7. References

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Appendix A – Figures



LEGEND

- SITE BOUNDARY
- SUBJECT AREA
- TP — PROPOSED TEST PIT LOCATION

NOTE:
ALL LOCATIONS ARE APPROXIMATE
DIMENSIONS IN METRES.

AERIAL IMAGE SOURCE: MAPS.AU.NEARMAP.COM, 21 DEC 2022.

revision	no.	description	drawn	approved	date
	A	FIRST ISSUE	MC	SB	29/03/22
	B	SECOND ISSUE	MC	SB	26/04/22
	C	RELOCATE TP LOCATION	MC	SB	04/05/22

0 12 24 36 48 60
SCALE 1:1200 @A3 METRES

drawn	MC
approved	SB
date	04/05/2022
scale	AS SHOWN
original size	A3

client: AFJV

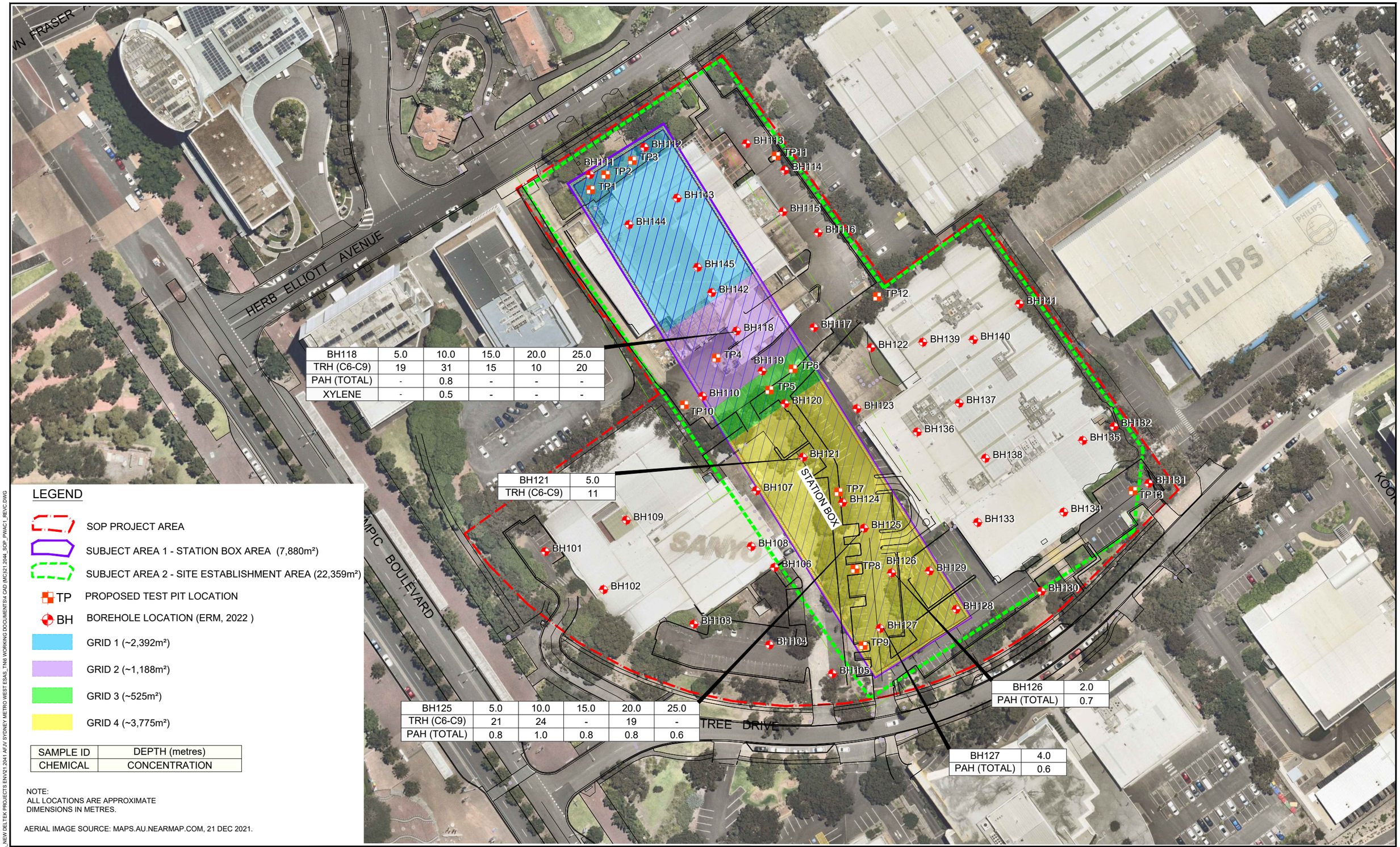
project: PRELIMINARY WASTE ANALYSIS AND CLASSIFICATION REPORT
SYDNEY OLYMPIC PARK, NSW

title: PROPOSED SAMPLE LOCATION AND SITE LOCATION PLAN

project no: 21.2044_PWAC1 | figure no: FIGURE 1 | rev: C

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PLOT DATE: 20/05/2022 11:49:04 AM DWG FILE: W:_NEW DELTEK PROJECTS ENV\21.2041 AFJV SYDNEY METRO WEST ESAS_TN6 WORKING DOCUMENTS\4 CAD (MC)\21.2044_SOP_PWAC1_REVC.DWG



BH118	5.0	10.0	15.0	20.0	25.0
TRH (C6-C9)	19	31	15	10	20
PAH (TOTAL)	-	0.8	-	-	-
XYLENE	-	0.5	-	-	-

BH121	5.0
TRH (C6-C9)	11

BH125	5.0	10.0	15.0	20.0	25.0
TRH (C6-C9)	21	24	-	19	-
PAH (TOTAL)	0.8	1.0	0.8	0.8	0.6

BH126	2.0
PAH (TOTAL)	0.7

BH127	4.0
PAH (TOTAL)	0.6

LEGEND

- SOP PROJECT AREA
- SUBJECT AREA 1 - STATION BOX AREA (7,880m²)
- SUBJECT AREA 2 - SITE ESTABLISHMENT AREA (22,359m²)
- TP PROPOSED TEST PIT LOCATION
- BH BOREHOLE LOCATION (ERM, 2022)
- GRID 1 (~2,392m²)
- GRID 2 (~1,188m²)
- GRID 3 (~525m²)
- GRID 4 (~3,775m²)

SAMPLE ID	DEPTH (metres)
CHEMICAL	CONCENTRATION

NOTE:
ALL LOCATIONS ARE APPROXIMATE
DIMENSIONS IN METRES.

AERIAL IMAGE SOURCE: MAPS.AU.NEARMAP.COM, 21 DEC 2021.

revision	no.	description	drawn	approved	date
	A	FIRST ISSUE	MC	SB	29/03/22
	B	SECOND ISSUE	MC	SB	26/04/22
	C	PROPOSED TP LOCATION	MC	SB	04/05/22

0 12 24 36 48 60
SCALE 1:1200 @A3 METRES

drawn	MC
approved	SB
date	04/05/2022
scale	AS SHOWN
original size	A3

client: AFJV

project: PRELIMINARY WASTE ANALYSIS AND CLASSIFICATION REPORT
SYDNEY OLYMPIC PARK, NSW

title: SOIL ANALYTICAL RESULTS

project no: 21.2044_PWAC1 | figure no: FIGURE 2 | rev: C

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PLOT DATE: 20/06/2022 11:48:33 AM DWG FILE: W:_NEW DELTEK PROJECTS ENV\21.2041 AFJV SYDNEY METRO WEST ESAS_TM6 WORKING DOCUMENTS\4 CAD (MC)\21.2044_SOP_PWAC1_REVC.DWG
21.2044_PWAC1_REVC.DWG

WASTE ANALYSIS AND CLASSIFICATION REPORT
SYDNEY OLYMPIC PARK
FIGURE 3 - GRID CROSS SECTION

Average Depth/Grid	Grid 1 (2,392 m^2)	Grid 2 (1,188 m^2)	Grid 3 (525 m^2)	Grid 4 (3,775 m^2)
0.5m	GSW 4066 m^3 (depth 1.7m)	GSW 29,707 m^3	GSW 367 m^3 (depth 0.7m)	GSW 94,379 m^3
1.0m				
1.5m				
2.0m				
2.5m				
3.0m				
3.5m				
4.0m				
4.5m				
5.0m				
5.5m				
6.0m				
6.5m				
7.0m				
7.5m				
8.0m				
8.5m				
9.0m				
9.5m				
10.0m				
10.5m				
11.0m				
11.5m				
12.0m				
12.5m				
13.0m				
13.5m				
14.0m				
14.5m	VENM 62,902 m^3		VENM 14,329 m^3	
15.0m				
15.5m				
16.0m				
16.5m				
17.0m				
17.5m				
18m				
18.5m				
19m				
19.5m				
20m				
20.5m				
21m				
21.5m				
22m				
22.5m				
23m				
23.5m				
24m				
24.5m				
25m				
25.5m		VENM 3,565 m^3		VENM 11,325 m^3
26m				
26.5m				
27m				
27.5m				
28.0m				

Estimated Volumes (m^3)	
128,519	GSW
92,121	VENM

STATION BOX EXCAVATION EXTENDS TO ~28.0 M BGL

Appendix B – Result Table

Commercial in Confidence

Table B1

Result Table A		Asbestos		BTEX							TRH							
		Asbestos (Trace)	Asbestos fibres	Benzene	Toluene	Ethylbenzene	Xylene (m & p)	Xylene (o)	Xylene Total	Total BTEX	C6-C10 Fraction (F1)	C6-C10 (F1 minus BTEX)	>C10-C16 Fraction (F2)	>C10-C16 Fraction (F2 minus Naphthalene)	>C16-C34 Fraction (F3)	>C34-C40 Fraction (F4)	>C10-C40 Fraction (Sum)
		Fibres	g/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL		5		0.1	0.1	0.1	0.2	0.1	0.3	0.2	10	10	50	50	100	100	50
Berkman (1989) Background Ranges (VENM)				0	0	0			0				0		0	0	
NSW 2014 General Solid Waste CT1 (No Leaching)				10	288	600			1,000								
NSW 2014 General Solid Waste SCC1 (with leached)				18	518	1,080			1,800								
NSW 2014 Restricted Solid Waste CT2 (No Leaching)				40	1,152	2,400			4,000								
NSW 2014 Restricted Solid Waste SCC2 (with leached)				72	2,073	4,320			7,200								
NSW 2014 Restricted Solid Waste TCLP2 (leached)																	
Field ID	Date																
Grid 1																	
Fill																	
SOP_BH111_1.0_220118	18/01/2022	0	0	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<10	<10	<50	<50	<100	<100	<50
SOP_BH112_1.0_220118	18/01/2022	0	0	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<10	<10	<50	<50	<100	<100	<50
SOP_BH142_0.4_220119	19/01/2022	0	0	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<10	<10	<50	<50	<100	<100	<50
SOP_BH143_0.3_220119	19/01/2022	0	0	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<10	<10	<50	<50	<100	<100	<50
SOP_BH143_1.0_220119	19/01/2022			<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<10	<10	<50	<50	<100	<100	<50
SOP_BH144_0.3_220119	19/01/2022	0	0	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<10	<10	<50	<50	<100	<100	<50
SOP_BH144_0.6_220119	19/01/2022			<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<10	<10	<50	<50	<100	<100	<50
SOP_BH145_0.3_220119	19/01/2022	0	0	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<10	<10	<50	<50	<100	<100	<50
SOP_BH145_1.0_220119	19/01/2022			<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<10	<10	<50	<50	<100	<100	<50
WAC1_TP1_0.4-0.5	29/04/2022	Nil	Nil	<0.50	<0.50	<0.50	<1.0	<0.50	<1.0	<1.0	<35	<35	<50		<100	<100	<50
WAC1_TP1_0.9-1.0	29/04/2022	Nil	Nil	<0.50	<0.50	<0.50	<1.0	<0.50	<1.0	<1.0	<35	<35	<50		<100	<100	<50
WAC1_TP1_1.4-1.5	29/04/2022	Nil	Nil	<0.50	<0.50	<0.50	<1.0	<0.50	<1.0	<1.0	<35	<35	<50		<100	<100	<50
WAC1_TP2_0.0-0.1	29/04/2022	Nil	Nil	<0.50	<0.50	<0.50	<1.0	<0.50	<1.0	<1.0	<35	<35	<50		<100	<100	<50
WAC1_TP2_0.4-0.5	29/04/2022	Nil	Nil	<0.50	<0.50	<0.50	<1.0	<0.50	<1.0	<1.0	<35	<35	<50		<100	<100	<50
WAC1_TP2_0.9-1.0	29/04/2022	Nil	Nil	<0.50	<0.50	<0.50	<1.0	<0.50	<1.0	<1.0	<35	<35	<50		<100	<100	<50
WAC1_TP2_1.4-1.5	29/04/2022	Nil	Nil	<0.50	<0.50	<0.50	<1.0	<0.50	<1.0	<1.0	<35	<35	<50		<100	<100	<50
WAC1_TP3_0.0-0.1	29/04/2022	Nil	Nil	<0.50	<0.50	<0.50	<1.0	<0.50	<1.0	<1.0	<35	<35	<50		<100	<100	<50
WAC1_TP3_0.4-0.5	29/04/2022	Nil	Nil	<0.50	<0.50	<0.50	<1.0	<0.50	<1.0	<1.0	<35	<35	<50		<100	<100	<50
WAC1_TP3_0.9-1.0	29/04/2022	Nil	Nil	<0.50	<0.50	<0.50	<1.0	<0.50	<1.0	<1.0	<35	<35	<50		<100	<100	<50
WAC1_TP3_1.4-1.5	29/04/2022	Nil	Nil	<0.50	<0.50	<0.50	<1.0	<0.50	<1.0	<1.0	<35	<35	<50		<100	<100	<50
Natural material																	
SOP_BH111_3.0_220118	18/01/2022			<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<10	<10	<50	<50	<100	<100	<50
SOP_BH112_5.0_220118	18/01/2022			<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<10	<10	<50	<50	<100	<100	<50
SOP_BH142_4.0_220119	19/01/2022			<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<10	<10	<50	<50	<100	<100	<50
SOP_BH145_5.0_220119	19/01/2022			<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<10	<10	<50	<50	<100	<100	<50
WAC1_TP1_1.7-1.8	29/04/2022	Nil	Nil	<0.50	<0.50	<0.50	<1.0	<0.50	<1.0	<1.0	<35	<35	<50		<100	<100	<50
WAC1_TP2_1.7-1.8	29/04/2022	Nil	Nil	<0.50	<0.50	<0.50	<1.0	<0.50	<1.0	<1.0	<35	<35	<50		<100	<100	<50
WAC1_TP3_1.7-1.8	29/04/2022	Nil	Nil	<0.50	<0.50	<0.50	<1.0	<0.50	<1.0	<1.0	<35	<35	<50		<100	<100	<50
Grid 2																	
Fill material																	
SOP_BH110_0.2_220117	17/01/2022	0	0	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<10	<10	<50	<50	100	120	220
SOP_BH110_0.2_220117	17/01/2022																
SOP_BH110_1.3_220118	18/01/2022			<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<10	<10	<50	<50	<100	<100	<50
SOP_BH118_0.1_220119	19/01/2022	0	0	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<10	<10	<50	<50	160	180	340
SOP_BH118_1.0_220119	19/01/2022			<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<10	<10	<50	<50	<100	<100	<50
SOP_BH119_0.2_220117	17/01/2022	0	0	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<10	<10	<50	<50	<100	<100	<50
SOP_BH119_0.2_220117	17/01/2022																
SOP_BH119_1.0_220117	17/01/2022			<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<10	<10	<50	<50	<100	<100	<50
WAC1_TP4_0.0-0.1	29/04/2022	Nil	Nil														
WAC1_TP4_0.3	29/04/2022	Nil	Nil	<0.50	<0.50	<0.50	<1.0	<0.50	<1.0	<1.0	<35	<35	<50		<100	<100	<50
Natural material																	
SOP_BH118_5.0_220119	19/01/2022			<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	24	24	<50	<50	120	<100	120
SOP_BH118_10.0_220119	19/01/2022			<0.2	<0.5	<0.5	0.5	<0.5	0.5	0.5	39	38	50	50	120	<100	170
SOP_BH118_15.0_220119	19/01/2022			<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	20	20	50	50	<100	<100	50
SOP_BH118_20.0_220119	19/01/2022			<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	14	14	<50	<50	<100	<100	<50
SOP_BH118_25.0_220119	19/01/2022			<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	29	29	80	80	130	<100	210
SOP_BH119_3.0_220117	17/01/2022			<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<10	<10	<50	<50	<100	<100	<50
WAC1_TP4_0.4	29/04/2022	Nil	Nil	<0.50	<0.50	<0.50	<1.0	<0.50	<1.0	<1.0	<35	<35	<50		<100	<100	<50
WAC1_TP4_0.5	29/04/2022	Nil	Nil	<0.50	<0.50	<0.50	<1.0	<0.50	<1.0	<1.0	<35	<35	<50		<100	<100	<50
WAC1_TP4_ BRa	29/04/2022			<0.50	<0.50	<0.50	<1.0	<0.50	<1.0	<1.0	<35	<35	<50		<100	<100	<50
Grid 3																	
Fill material																	
SOP_BH120_0.5_220120	20/01/2022	0	0	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<10	<10	<50	<50	<100	<100	<50
SOP_BH120_3.0_220120	20/01/2022			<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<10	<10	<50	<50	<100	<100	<50
WAC1_TP5_0.0-0.1	29/04/2022	Nil	Nil	<0.50	<0.50	<0.50	<1.0	<0.50	<1.0	<1.0	<35	<35	<50		<100	<100	<50
WAC1_TP5_0.3-0.4	29/04/2022	Nil	Nil	<0.50	<0.50	<0.50	<1.0	<0.50	<1.0	<1.0	<35	<35	<50		<100	<100	<50
WAC1_TP6_0.0-0.1	29/04/2022	Nil	Nil	<0.50	<0.50	<0.50	<1.0	<0.50	<1.0	<1.0	<35	<35	<50		<100	<100	<50
WAC1_TP6_0.3-0.4	29/04/2022	Nil	Nil	<0.50	<0.50	<0.50	<1.0	<0.50	<1.0	<1.0	<35	<35	<50		<100	<100	<50
Natural material																	
WAC1_TP5_0.5-0.6	29/04/2022	Nil	Nil	<0.50	<0.50	<0.50	<1.0	<0.50	<1.0	<1.0	<35	<35	<50		<100	<100	<50
WAC1_TP6_0.5-0.6	29/04/2022	Nil	Nil	<0.50	<0.50	<0.50	<1.0	<0.50	<1.0	<1.0	<35	<35	<50		<100	<100	<50
WAC1_TP6_ BRb	29/04/2022			<0.50	<0.50	<0.50	<1.0	<0.50	<1.0	<1.0	<35	<35	<50		<100	<100	<50
Grid 4																	
Fill material																	
SOP_BH124_0.5_220120	21/01/2022	0	0	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<10	<10	<50	<50	<100	<100	<50
SOP_BH125_0.5_220121	21/01/2022	0	0	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<10	<10	<50	<50	<100	<100	<50
SOP_BH126_0.5_220121	21/01/2022	0	0	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<10	<10	<50	<50	<100	<100	<50
SOP_BH127_1.2_220121	21/01/2022	0	0	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<10	<10	<50	<50	<100	<100	<50
SOP_BH128_0.9_220124	24/01/2022	0	0	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<10	<10	<50	<50	<100	<100	<50
SOP_BH129_0.5_220124	24/01/2022	0	0	<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<10	<10	<50	<50	<100	<100	<50
SOP_BH129_1.0_220124	24/01/2022			<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<10	<10	<50	<50	<100	<100	<50
WAC1_TP7_0.0-0.1	29/04/2022	Nil	Nil	<0.50	<0.50	<0.50	<1.0	<0.50	<1.0	<1.0	<35	<35	<50		<100	<100	<50
WAC1_TP7_0.3_	29/04/2022	Nil	Nil	<0.50	<0.50	<0.50	<1.0	<0.50	<1.0	<1.0	<35	<35	<50		<100	<100	<50
WAC1_TP8_0.1	29/04/2022	Nil	Nil	<0.50	<0.50	<0.50	<1.0	<0.50	<1.0	<1.0	<35	<35	<50		<100	<100	<50
WAC1_TP8_0.2	29/04/2022	Nil	Nil	<0.50	<0.50	<0.50	<1.0	<0.50	<1.0	<1.0	<35	<35	<50		<100	<100	<50
WAC1_TP8_0.3	29/04/2022	Nil	Nil	<0.50	<0.50	<0.50	<1.0	<0.50	<1.0	<1.0	<35	<35	<50		<100	<100	<50
WAC1_TP8_0.4	29/04/2022	Nil	Nil	<0.50	<0.50	<0.50	<1.0	<0.50	<1.0	<1.0	<35	<35	<50		<100	<100	<50
WAC1_TP8_0.5	29/04/2022	Nil	Nil	<0.50	<0.50	<0.50	<1.0	<0.50	<1.0	<1.0	<35	<35	<50		<100	<100	<50
WAC1_TP8_0.6	29/04/2022	Nil	Nil	<0.50	<0.50	<0.50	<1.0	<0.50	<1.0	<1.0	<35	<35	<50		<100	<100	<50
WAC1_TP8_0.7	29/04/2022	Nil	Nil	<0.50	<0.50	<0.50	<1.0	<0.50	<1.0	<1.0	<35	<35	<50		<100	<100	<50
WAC1_TP9_0.0-0.1	29/04/2022	Nil	Nil	<0.50	<0.50	<0.50	<1.0	<0.50	<1.0	<1.0	<35	<35	<50		<100	<100	<50
WAC1_TP9_0.2-0.3	29/04/2022	Nil	Nil	<0.50	<0.50	<0.50	<1.0	<0.50	<1.0	<1.0	<35	<35	<50		<100	<100	<50
WAC1_TP9_0.3-0.4	29/04/2022	Nil	Nil	<0.50	<0.50	<0.50	<1.0	<0.50	<1.0	<1.0	<35	<35	<50		<100	<100	<50
WAC1_TP9_0.4-0.5	29/04/2022	Nil	Nil	<0.50	<0.50	<0.50	<1.0	<0.50	<1.0	<1.0	<35	<35	<50		<100	<100	<50
WAC1_TP9_0.8-0.9	29/04/2022	Nil	Nil	<0.50	<0.50	<0.50	<1.0	<0.50	<1.0	<1.0	<35	<35	<50		<100	<100	<50
Natural material																	
SOP_BH124_3.0_220120	21/01/2022			<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<10	<10	<50	<50	<100	<100	<50
SOP_BH125_5.0_220121	21/01/2022			<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	26	26	<50	<50	<100	<100	<50
SOP_BH125_10.0_220121	21/01/2022			<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	33	33	70	70	140	<100	210
SOP_BH125_15.0_220121	21/01/2022			<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<10	<10	80	80	170	<100	250
SOP_BH125_20.0_220121	21/01/2022			<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	26	26	60	60	110	<100	170
SOP_BH125_25.0_220121	21/01/2022			<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<10	<10	70	70	150	<100	220
SOP_BH126_2.0_220121	21/01/2022			<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<10	<10	<50	<50	<100	<100	<50
SOP_BH126_2.0_220121	21/01/2022																
SOP_BH127_4.0_220121	21/01/2022			<0.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.2	<10	<10	<50	<50	<100	<100	<50
WAC1_TP9_1.0-1.1	29/04/2022	Nil	Nil	<0.50	<0.50	<0.50	<1.0	<0.50	<1.0	<1.0	<35	<35	<50		<100	<100	<50
* A Non Detect Multiplier of 0.5 has been applied.																	
Environmental Standards																	
NSW EPA, November 2014, NSW 2014 General Solid Waste CT1 (No Leaching)																	
NSW EPA, November 2014, NSW 2014 General Solid Waste SCC1 (with leached)																	
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste CT2 (No Leaching)																	
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste SCC2 (with leached)																	
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste TCLP2 (leached)																	

Table B1

Result Table A		Chlorinated Hydrocarbons																			
		Chlorinated hydrocarbons EPAVic	Other chlorinated hydrocarbons EPAVic	Total Chlorinated Hydrocarbons	1,1,1,2-tetrachloroethane	1,1,1-trichloroethane	1,1,2,2-tetrachloroethane	1,1,2-trichloroethane	1,1-dichloroethane	1,1-dichloroethene	1,1-dichloropropene	1,2,3-trichloropropane	1,2-dibromo-3-chloropropane	1,2-dichloroethane	1,2-dichloropropane	1,3-dichloropropane	2,2-dichloropropane	Benzyl chloride	Bromochloromethane	Bromodichloromethane	Bromoform
		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL		0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Berkman (1989) Background Ranges (VENM)																					
NSW 2014 General Solid Waste CT1 (No Leaching)					200	600	26	24		14				10							
NSW 2014 General Solid Waste SCC1 (with leached)					360	1,080	46.8	43.2		25				18							
NSW 2014 Restricted Solid Waste CT2 (No Leaching)					800	2,400	104	96		56				40							
NSW 2014 Restricted Solid Waste SCC2 (with leached)					1,440	4,320	187.2	172.8		100				72							
NSW 2014 Restricted Solid Waste TCLP2 (leached)																					
Field ID	Date																				
Grid 1																					
Fill																					
SOP_BH111_1.0_220118	18/01/2022				<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5			<0.5	<0.5
SOP_BH112_1.0_220118	18/01/2022				<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5			<0.5	<0.5
SOP_BH142_0.4_220119	19/01/2022				<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5			<0.5	<0.5
SOP_BH143_0.3_220119	19/01/2022																					
SOP_BH143_1.0_220119	19/01/2022				<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5			<0.5	<0.5
SOP_BH144_0.3_220119	19/01/2022																					
SOP_BH144_0.6_220119	19/01/2022				<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5			<0.5	<0.5
SOP_BH145_0.3_220119	19/01/2022																					
SOP_BH145_1.0_220119	19/01/2022				<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5			<0.5	<0.5
WAC1_TP1_0.4-0.5	29/04/2022		<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		<0.50				<0.50					<0.50		
WAC1_TP1_0.9-1.0	29/04/2022		<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		<0.50				<0.50					<0.50		
WAC1_TP1_1.4-1.5	29/04/2022		<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		<0.50				<0.50					<0.50		
WAC1_TP2_0.0-0.1	29/04/2022		<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		<0.50				<0.50					<0.50		
WAC1_TP2_0.4-0.5	29/04/2022		<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		<0.50				<0.50					<0.50		
WAC1_TP2_0.9-1.0	29/04/2022		<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		<0.50				<0.50					<0.50		
WAC1_TP2_1.4-1.5	29/04/2022		<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		<0.50				<0.50					<0.50		
WAC1_TP3_0.0-0.1	29/04/2022		<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		<0.50				<0.50					<0.50		
WAC1_TP3_0.4-0.5	29/04/2022		<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		<0.50				<0.50					<0.50		
WAC1_TP3_0.9-1.0	29/04/2022		<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		<0.50				<0.50					<0.50		
WAC1_TP3_1.4-1.5	29/04/2022		<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		<0.50				<0.50					<0.50		
Natural material																					
SOP_BH111_3.0_220118	18/01/2022																					
SOP_BH112_5.0_220118	18/01/2022																					
SOP_BH142_4.0_220119	19/01/2022																					
SOP_BH145_5.0_220119	19/01/2022																					
WAC1_TP1_1.7-1.8	29/04/2022		<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		<0.50				<0.50					<0.50		
WAC1_TP2_1.7-1.8	29/04/2022		<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		<0.50				<0.50					<0.50		
WAC1_TP3_1.7-1.8	29/04/2022		<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		<0.50				<0.50					<0.50		
Grid 2																					
Fill material																					
SOP_BH110_0.2_220117	17/01/2022				<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5			<0.5	<0.5
SOP_BH110_0.2_220117	17/01/2022																					
SOP_BH110_1.3_220118	18/01/2022																					
SOP_BH118_0.1_220119	19/01/2022				<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5			<0.5	<0.5
SOP_BH118_1.0_220119	19/01/2022																					
SOP_BH119_0.2_220117	17/01/2022																					
SOP_BH119_0.2_220117	17/01/2022																					
SOP_BH119_1.0_220117	17/01/2022				<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5			<0.5	<0.5
WAC1_TP4_0.0-0.1	29/04/2022																					
WAC1_TP4_0.3	29/04/2022		<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		<0.50				<0.50					<0.50		
Natural material																					
SOP_BH118_5.0_220119	19/01/2022				<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5			<0.5	<0.5
SOP_BH118_10.0_220119	19/01/2022																					
SOP_BH118_15.0_220119	19/01/2022				<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5			<0.5	<0.5
SOP_BH118_20.0_220119	19/01/2022																					
SOP_BH118_25.0_220119	19/01/2022				<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5			<0.5	<0.5
SOP_BH119_3.0_220117	17/01/2022																					
WAC1_TP4_0.4	29/04/2022		<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		<0.50				<0.50					<0.50		
WAC1_TP4_0.5	29/04/2022		<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		<0.50				<0.50					<0.50		
WAC1_TP4_ BRa	29/04/2022		<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		<0.50				<0.50					<0.50		
Grid 3																					
Fill material																					
SOP_BH120_0.5_220120	20/01/2022																					
SOP_BH120_3.0_220120	20/01/2022				<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5			<0.5	<0.5
WAC1_TP5_0.0-0.1	29/04/2022		<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		<0.50				<0.50					<0.50		
WAC1_TP5_0.3-0.4	29/04/2022		<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		<0.50				<0.50					<0.50		
WAC1_TP6_0.0-0.1	29/04/2022		<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		<0.50				<0.50					<0.50		
WAC1_TP6_0.3-0.4	29/04/2022		<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		<0.50				<0.50					<0.50		
Natural material																					
WAC1_TP5_0.5-0.6	29/04/2022		<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		<0.50				<0.50					<0.50		
WAC1_TP6_0.5-0.6	29/04/2022		<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		<0.50				<0.50					<0.50		
WAC1_TP6_ BRb	29/04/2022		<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		<0.50				<0.50					<0.50		
Grid 4																					
Fill material																					
SOP_BH124_0.5_220120	21/01/2022				<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5			<0.5	<0.5
SOP_BH125_0.5_220121	21/01/2022																					
SOP_BH126_0.5_220121	21/01/2022				<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5			<0.5	<0.5
SOP_BH127_1.2_220121	21/01/2022				<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5			<0.5	<0.5
SOP_BH128_0.9_220124	24/01/2022				<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5			<0.5	<0.5
SOP_BH129_0.5_220124	24/01/2022																					
SOP_BH129_1.0_220124	24/01/2022				<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5			<0.5	<0.5
WAC1_TP7_0.0-0.1	29/04/2022		<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		<0.50				<0.50					<0.50		
WAC1_TP7_0.3_	29/04/2022		<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		<0.50				<0.50					<0.50		
WAC1_TP8_0.1	29/04/2022		<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		<0.50				<0.50					<0.50		
WAC1_TP8_0.2	29/04/2022		<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		<0.50				<0.50					<0.50		
WAC1_TP8_0.3	29/04/2022		<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		<0.50				<0.50					<0.50		
WAC1_TP8_0.4	29/04/2022		<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		<0.50				<0.50					<0.50		
WAC1_TP8_0.5	29/04/2022		<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		<0.50				<0.50					<0.50		
WAC1_TP8_0.6	29/04/2022		<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		<0.50				<0.50					<0.50		
WAC1_TP8_0.7	29/04/2022		<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		<0.50				<0.50					<0.50		
WAC1_TP9_0.0-0.1	29/04/2022		<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		<0.50				<0.50					<0.50		
WAC1_TP9_0.2-0.3	29/04/2022		<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		<0.50				<0.50					<0.50		
WAC1_TP9_0.3-0.4	29/04/2022		<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		<0.50				<0.50					<0.50		
WAC1_TP9_0.4-0.5	29/04/2022		<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		<0.50				<0.50					<0.50		
WAC1_TP9_0.8-0.9	29/04/2022		<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		<0.50				<0.50					<0.50		
Natural material																					
SOP_BH124_3.0_220120	21/01/2022																					
SOP_BH125_5.0_220121	21/01/2022				<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5			<0.5	<0.5
SOP_BH125_10.0_220121	21/01/2022																					
SOP_BH125_15.0_220121	21/01/2022				<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5			<0.5	<0.5
SOP_BH125_20.0_220121	21/01/2022																					
SOP_BH125_25.0_220121	21/01/2022				<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5			<0.5	<0.5
SOP_BH126_2.0_220121	21/01/2022																					
SOP_BH126_2.0_220121	21/01/2022																					
SOP_BH127_4.0_220121	21/01/2022																					
WAC1_TP9_1.0-1.1	29/04/2022		<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		<0.50				<0.50					<0.50		
* A Non Detect Multiplier of 0.5 has been applied.																					
Environmental Standards																					
NSW EPA, November 2014, NSW 2014 General Solid Waste CT1 (No Leaching)																					
NSW EPA, November 2014, NSW 2014 General Solid Waste SCC1 (with leached)																					
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste CT2 (No Leaching)																					
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste SCC2 (with leached)																					
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste TCLP2 (leached)																					

Table B1

Result Table A		Carbon tetrachloride	Chlorodibromomethane	Chloroethane	Chloroform	Chloromethane	cis-1,2-dichloroethene	cis-1,3-dichloropropene	Dibromomethane	Dichloromethane	Hexachlorobutadiene	Hexachlorocyclopentadiene	Hexachloroethane	Trichloroethene	Tetrachloroethene	trans-1,2-dichloroethene	trans-1,3-dichloropropene	Vinyl chloride	Halogenated Hydroc: 1,2-dibromoethane	Bromomethane	Dichlorodifluoromethane
		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL		0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Berkman (1989) Background Ranges (VENM)																					
NSW 2014 General Solid Waste CT1 (No Leaching)		10			120					172				10	14			4			
NSW 2014 General Solid Waste SCC1 (with leached)		18			126					310				18	25.2			7.2			
NSW 2014 Restricted Solid Waste CT2 (No Leaching)		40			480					688				40	56			16			
NSW 2014 Restricted Solid Waste SCC2 (with leached)		72			864					1,240				72	100.8			28.8			
NSW 2014 Restricted Solid Waste TCLP2 (leached)																					
Field ID	Date																				
Grid 1																					
Fill																					
SOP_BH111_1.0_220118	18/01/2022	<0.5	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5		<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<5	<5
SOP_BH112_1.0_220118	18/01/2022	<0.5	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5		<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<5	<5
SOP_BH142_0.4_220119	19/01/2022	<0.5	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5		<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<5	<5
SOP_BH143_0.3_220119	19/01/2022																				
SOP_BH143_1.0_220119	19/01/2022	<0.5	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5		<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<5	<5
SOP_BH144_0.3_220119	19/01/2022																				
SOP_BH144_0.6_220119	19/01/2022	<0.5	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5		<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<5	<5
SOP_BH145_0.3_220119	19/01/2022																				
SOP_BH145_1.0_220119	19/01/2022	<0.5	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5		<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<5	<5
WAC1_TP1_0.4-0.5	29/04/2022	<0.50			<0.50		<0.50			<0.50	<0.50			<0.50	<0.50	<0.50		<0.50			
WAC1_TP1_0.9-1.0	29/04/2022	<0.50			<0.50		<0.50			<0.50	<0.50			<0.50	<0.50	<0.50		<0.50			
WAC1_TP1_1.4-1.5	29/04/2022	<0.50			<0.50		<0.50			<0.50	<0.50			<0.50	<0.50	<0.50		<0.50			
WAC1_TP2_0.0-0.1	29/04/2022	<0.50			<0.50		<0.50			<0.50	<0.50			<0.50	<0.50	<0.50		<0.50			
WAC1_TP2_0.4-0.5	29/04/2022	<0.50			<0.50		<0.50			<0.50	<0.50			<0.50	<0.50	<0.50		<0.50			
WAC1_TP2_0.9-1.0	29/04/2022	<0.50			<0.50		<0.50			<0.50	<0.50			<0.50	<0.50	<0.50		<0.50			
WAC1_TP2_1.4-1.5	29/04/2022	<0.50			<0.50		<0.50			<0.50	<0.50			<0.50	<0.50	<0.50		<0.50			
WAC1_TP3_0.0-0.1	29/04/2022	<0.50			<0.50		<0.50			<0.50	<0.50			<0.50	<0.50	<0.50		<0.50			
WAC1_TP3_0.4-0.5	29/04/2022	<0.50			<0.50		<0.50			<0.50	<0.50			<0.50	<0.50	<0.50		<0.50			
WAC1_TP3_0.9-1.0	29/04/2022	<0.50			<0.50		<0.50			<0.50	<0.50			<0.50	<0.50	<0.50		<0.50			
WAC1_TP3_1.4-1.5	29/04/2022	<0.50			<0.50		<0.50			<0.50	<0.50			<0.50	<0.50	<0.50		<0.50			
Natural material																					
SOP_BH111_3.0_220118	18/01/2022																				
SOP_BH112_5.0_220118	18/01/2022																				
SOP_BH142_4.0_220119	19/01/2022																				
SOP_BH145_5.0_220119	19/01/2022																				
WAC1_TP1_1.7-1.8	29/04/2022	<0.50			<0.50		<0.50			<0.50	<0.50			<0.50	<0.50	<0.50		<0.50			
WAC1_TP2_1.7-1.8	29/04/2022	<0.50			<0.50		<0.50			<0.50	<0.50			<0.50	<0.50	<0.50		<0.50			
WAC1_TP3_1.7-1.8	29/04/2022	<0.50			<0.50		<0.50			<0.50	<0.50			<0.50	<0.50	<0.50		<0.50			
Grid 2																					
Fill material																					
SOP_BH110_0.2_220117	17/01/2022	<0.5	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5		<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<5	<5
SOP_BH110_0.2_220117	17/01/2022																				
SOP_BH110_1.3_220118	18/01/2022																				
SOP_BH118_0.1_220119	19/01/2022	<0.5	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5		<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<5	<5
SOP_BH118_1.0_220119	19/01/2022																				
SOP_BH119_0.2_220117	17/01/2022																				
SOP_BH119_0.2_220117	17/01/2022																				
SOP_BH119_1.0_220117	17/01/2022	<0.5	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5		<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<5	<5
WAC1_TP4_0.0-0.1	29/04/2022																				
WAC1_TP4_0.3	29/04/2022	<0.50			<0.50		<0.50			<0.50	<0.50			<0.50	<0.50	<0.50		<0.50			
Natural material																					
SOP_BH118_5.0_220119	19/01/2022	<0.5	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5		<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<5	<5
SOP_BH118_10.0_220119	19/01/2022																				
SOP_BH118_15.0_220119	19/01/2022	<0.5	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5		<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<5	<5
SOP_BH118_20.0_220119	19/01/2022																				
SOP_BH118_25.0_220119	19/01/2022	<0.5	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5		<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<5	<5
SOP_BH119_3.0_220117	17/01/2022																				
WAC1_TP4_0.4	29/04/2022	<0.50			<0.50		<0.50			<0.50	<0.50			<0.50	<0.50	<0.50		<0.50			
WAC1_TP4_0.5	29/04/2022	<0.50			<0.50		<0.50			<0.50	<0.50			<0.50	<0.50	<0.50		<0.50			
WAC1_TP4_ BRa	29/04/2022	<0.50			<0.50		<0.50			<0.50	<0.50			<0.50	<0.50	<0.50		<0.50			
Grid 3																					
Fill material																					
SOP_BH120_0.5_220120	20/01/2022																				
SOP_BH120_3.0_220120	20/01/2022	<0.5	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5		<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<5	<5
WAC1_TP5_0.0-0.1	29/04/2022	<0.50			<0.50		<0.50			<0.50	<0.50			<0.50	<0.50	<0.50		<0.50			
WAC1_TP5_0.3-0.4	29/04/2022	<0.50			<0.50		<0.50			<0.50	<0.50			<0.50	<0.50	<0.50		<0.50			
WAC1_TP6_0.0-0.1	29/04/2022	<0.50			<0.50		<0.50			<0.50	<0.50			<0.50	<0.50	<0.50		<0.50			
WAC1_TP6_0.3-0.4	29/04/2022	<0.50			<0.50		<0.50			<0.50	<0.50			<0.50	<0.50	<0.50		<0.50			
Natural material																					
WAC1_TP5_0.5-0.6	29/04/2022	<0.50			<0.50		<0.50			<0.50	<0.50			<0.50	<0.50	<0.50		<0.50			
WAC1_TP6_0.5-0.6	29/04/2022	<0.50			<0.50		<0.50			<0.50	<0.50			<0.50	<0.50	<0.50		<0.50			
WAC1_TP6_ BRb	29/04/2022	<0.50			<0.50		<0.50			<0.50	<0.50			<0.50	<0.50	<0.50		<0.50			
Grid 4																					
Fill material																					
SOP_BH124_0.5_220120	21/01/2022	<0.5	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5		<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<5	<5
SOP_BH125_0.5_220121	21/01/2022																				
SOP_BH126_0.5_220121	21/01/2022	<0.5	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5		<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<5	<5
SOP_BH127_1.2_220121	21/01/2022	<0.5	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5		<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<5	<5
SOP_BH128_0.9_220124	24/01/2022	<0.5	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5		<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<5	<5
SOP_BH129_0.5_220124	24/01/2022																				
SOP_BH129_1.0_220124	24/01/2022	<0.5	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5		<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<5	<5
WAC1_TP7_0.0-0.1	29/04/2022	<0.50			<0.50		<0.50			<0.50	<0.50			<0.50	<0.50	<0.50		<0.50			
WAC1_TP7_0.3_	29/04/2022	<0.50			<0.50		<0.50			<0.50	<0.50			<0.50	<0.50	<0.50		<0.50			
WAC1_TP8_0.1	29/04/2022	<0.50			<0.50		<0.50			<0.50	<0.50			<0.50	<0.50	<0.50		<0.50			
WAC1_TP8_0.2	29/04/2022	<0.50			<0.50		<0.50			<0.50	<0.50			<0.50	<0.50	<0.50		<0.50			
WAC1_TP8_0.3	29/04/2022	<0.50			<0.50		<0.50			<0.50	<0.50			<0.50	<0.50	<0.50		<0.50			
WAC1_TP8_0.4	29/04/2022	<0.50			<0.50		<0.50			<0.50	<0.50			<0.50	<0.50	<0.50		<0.50			
WAC1_TP8_0.5	29/04/2022	<0.50			<0.50		<0.50			<0.50	<0.50			<0.50	<0.50	<0.50		<0.50			
WAC1_TP8_0.6	29/04/2022	<0.50			<0.50		<0.50			<0.50	<0.50			<0.50	<0.50	<0.50		<0.50			
WAC1_TP8_0.7	29/04/2022	<0.50			<0.50		<0.50			<0.50	<0.50			<0.50	<0.50	<0.50		<0.50			
WAC1_TP9_0.0-0.1	29/04/2022	<0.50			<0.50		<0.50			<0.50	<0.50			<0.50	<0.50	<0.50		<0.50			
WAC1_TP9_0.2-0.3	29/04/2022	<0.50			<0.50		<0.50			<0.50	<0.50			<0.50	<0.50	<0.50		<0.50			
WAC1_TP9_0.3-0.4	29/04/2022	<0.50			<0.50		<0.50			<0.50	<0.50			<0.50	<0.50	<0.50		<0.50			
WAC1_TP9_0.4-0.5	29/04/2022	<0.50			<0.50		<0.50			<0.50	<0.50			<0.50	<0.50	<0.50		<0.50			
WAC1_TP9_0.8-0.9	29/04/2022	<0.50			<0.50		<0.50			<0.50	<0.50			<0.50	<0.50	<0.50		<0.50			
Natural material																					
SOP_BH124_3.0_220120	21/01/2022																				
SOP_BH125_5.0_220121	21/01/2022	<0.5	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5		<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<5	<5
SOP_BH125_10.0_220121	21/01/2022																				
SOP_BH125_15.0_220121	21/01/2022	<0.5	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5		<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<5	<5
SOP_BH125_20.0_220121	21/01/2022																				
SOP_BH125_25.0_220121	21/01/2022	<0.5	<0.5	<5	<0.5	<5	<0.5	<0.5	<0.5		<0.5	<2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<0.5	<5	<5
SOP_BH126_2.0_220121	21/01/2022																				
SOP_BH126_2.0_220121	21/01/2022																				
SOP_BH127_4.0_220121	21/01/2022																				
WAC1_TP9_1.0-1.1	29/04/2022	<0.50			<0.50		<0.50			<0.50	<0.50			<0.50	<0.50	<0.50		<0.50			
* A Non Detect Multiplier of 0.5 has been applied.																					
Environmental Standards																					
NSW EPA, November 2014, NSW 2014 General Solid Waste CT1 (No Leaching)																					
NSW EPA, November 2014, NSW 2014 General Solid Waste SCC1 (with leached)																					
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste CT2 (No Leaching)																					
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste SCC2 (with leached)																					
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste TCLP2 (leached)																					

Result Table A		arbons			
		Iodomethane	Trichlorofluoromethane	Perfluorobutanoic acid (PFBA)	Perfluorohexanoic acid (PFHxA)
		mg/kg	mg/kg	mg/kg	mg/kg
EQL		0.5	0.5	0.001	0.0002
Berkman (1989) Background Ranges (VENM)					
NSW 2014 General Solid Waste CT1 (No Leaching)					
NSW 2014 General Solid Waste SCC1 (with leached)					
NSW 2014 Restricted Solid Waste CT2 (No Leaching)					
NSW 2014 Restricted Solid Waste SCC2 (with leached)					
NSW 2014 Restricted Solid Waste TCLP2 (leached)					
Field ID	Date				
Grid 1					
Fill					
SOP_BH111_1.0_220118	18/01/2022	<0.5	<5	<0.001	<0.0002
SOP_BH112_1.0_220118	18/01/2022	<0.5	<5	<0.001	<0.0002
SOP_BH142_0.4_220119	19/01/2022	<0.5	<5	<0.001	<0.0002
SOP_BH143_0.3_220119	19/01/2022			<0.001	<0.0002
SOP_BH143_1.0_220119	19/01/2022	<0.5	<5	<0.001	<0.0002
SOP_BH144_0.3_220119	19/01/2022			<0.001	<0.0002
SOP_BH144_0.6_220119	19/01/2022	<0.5	<5	<0.001	<0.0002
SOP_BH145_0.3_220119	19/01/2022			<0.001	<0.0002
SOP_BH145_1.0_220119	19/01/2022	<0.5	<5		
WAC1_TP1_0.4-0.5	29/04/2022			<0.005	<0.005
WAC1_TP1_0.9-1.0	29/04/2022			<0.005	<0.005
WAC1_TP1_1.4-1.5	29/04/2022			<0.005	<0.005
WAC1_TP2_0.0-0.1	29/04/2022			<0.005	<0.005
WAC1_TP2_0.4-0.5	29/04/2022				
WAC1_TP2_0.9-1.0	29/04/2022			<0.005	<0.005
WAC1_TP2_1.4-1.5	29/04/2022				
WAC1_TP3_0.0-0.1	29/04/2022			<0.005	<0.005
WAC1_TP3_0.4-0.5	29/04/2022				
WAC1_TP3_0.9-1.0	29/04/2022			<0.005	<0.005
WAC1_TP3_1.4-1.5	29/04/2022				
Natural material					
SOP_BH111_3.0_220118	18/01/2022			<0.001	<0.0002
SOP_BH112_5.0_220118	18/01/2022			<0.001	<0.0002
SOP_BH142_4.0_220119	19/01/2022			<0.001	<0.0002
SOP_BH145_5.0_220119	19/01/2022			<0.001	<0.0002
WAC1_TP1_1.7-1.8	29/04/2022			<0.005	<0.005
WAC1_TP2_1.7-1.8	29/04/2022			<0.005	<0.005
WAC1_TP3_1.7-1.8	29/04/2022				
Grid 2					
Fill material					
SOP_BH110_0.2_220117	17/01/2022	<0.5	<5	<0.001	<0.0002
SOP_BH110_0.2_220117	17/01/2022				
SOP_BH110_1.3_220118	18/01/2022				
SOP_BH118_0.1_220119	19/01/2022	<0.5	<5		
SOP_BH118_1.0_220119	19/01/2022			<0.001	<0.0002
SOP_BH119_0.2_220117	17/01/2022			<0.001	<0.0002
SOP_BH119_0.2_220117	17/01/2022				
SOP_BH119_1.0_220117	17/01/2022	<0.5	<5	<0.001	<0.0002
WAC1_TP4_0.0-0.1	29/04/2022			<0.005	<0.005
WAC1_TP4_0.3	29/04/2022				
Natural material					
SOP_BH118_5.0_220119	19/01/2022	<0.5	<5		
SOP_BH118_10.0_220119	19/01/2022			<0.001	<0.0002
SOP_BH118_15.0_220119	19/01/2022	<0.5	<5		
SOP_BH118_20.0_220119	19/01/2022				
SOP_BH118_25.0_220119	19/01/2022	<0.5	<5	<0.001	<0.0002
SOP_BH119_3.0_220117	17/01/2022			<0.001	<0.0002
WAC1_TP4_0.4	29/04/2022				
WAC1_TP4_0.5	29/04/2022				
WAC1_TP4_ BRa	29/04/2022				
Grid 3					
Fill material					
SOP_BH120_0.5_220120	20/01/2022			<0.001	<0.0002
SOP_BH120_3.0_220120	20/01/2022	<0.5	<5	<0.001	<0.0002
WAC1_TP5_0.0-0.1	29/04/2022			<0.005	<0.005
WAC1_TP5_0.3-0.4	29/04/2022				
WAC1_TP6_0.0-0.1	29/04/2022			<0.005	<0.005
WAC1_TP6_0.3-0.4	29/04/2022				
Natural material					
WAC1_TP5_0.5-0.6	29/04/2022			<0.005	<0.005
WAC1_TP6_0.5-0.6	29/04/2022			<0.005	<0.005
WAC1_TP6_ BRb	29/04/2022				
Grid 4					
Fill material					
SOP_BH124_0.5_220120	21/01/2022	<0.5	<5	<0.001	<0.0002
SOP_BH125_0.5_220121	21/01/2022			<0.001	<0.0002
SOP_BH126_0.5_220121	21/01/2022	<0.5	<5	<0.001	<0.0002
SOP_BH127_1.2_220121	21/01/2022	<0.5	<5	<0.001	<0.0002
SOP_BH128_0.9_220124	24/01/2022	<0.5	<5	<0.001	<0.0002
SOP_BH129_0.5_220124	24/01/2022			<0.001	<0.0002
SOP_BH129_1.0_220124	24/01/2022	<0.5	<5	<0.001	<0.0002
WAC1_TP7_0.0-0.1	29/04/2022			<0.005	<0.005
WAC1_TP7_0.3_	29/04/2022				
WAC1_TP8_0.1	29/04/2022			<0.005	<0.005
WAC1_TP8_0.2	29/04/2022				
WAC1_TP8_0.3	29/04/2022				
WAC1_TP8_0.4	29/04/2022				
WAC1_TP8_0.5	29/04/2022				
WAC1_TP8_0.6	29/04/2022				
WAC1_TP8_0.7	29/04/2022			<0.005	<0.005
WAC1_TP9_0.0-0.1	29/04/2022			<0.005	<0.005
WAC1_TP9_0.2-0.3	29/04/2022				
WAC1_TP9_0.3-0.4	29/04/2022				
WAC1_TP9_0.4-0.5	29/04/2022				
WAC1_TP9_0.8-0.9	29/04/2022			<0.005	<0.005
Natural material					
SOP_BH124_3.0_220120	21/01/2022			<0.001	<0.0002
SOP_BH125_5.0_220121	21/01/2022	<0.5	<5		
SOP_BH125_10.0_220121	21/01/2022				
SOP_BH125_15.0_220121	21/01/2022	<0.5	<5	<0.001	<0.0002
SOP_BH125_20.0_220121	21/01/2022				
SOP_BH125_25.0_220121	21/01/2022	<0.5	<5		
SOP_BH126_2.0_220121	21/01/2022			<0.001	<0.0002
SOP_BH126_2.0_220121	21/01/2022				
SOP_BH127_4.0_220121	21/01/2022			<0.001	<0.0002
WAC1_TP9_1.0-1.1	29/04/2022				
* A Non Detect Multiplier of 0.5 has been applied.					
Environmental Standards					
NSW EPA, November 2014, NSW 2014 General Solid Waste CT1 (No Leaching)					
NSW EPA, November 2014, NSW 2014 General Solid Waste SCC1 (with leached)					
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste CT2 (No Leaching)					
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste SCC2 (with leached)					
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste TCLP2 (leached)					

Table B1

Result Table A		Perfluoroalkane Carboxylic Acids									(n:2) Fluorotelomer Sulfonic Acids				Perfluoroalkane Sulfonic Acids						
		Perfluoropentanoic acid (PFPeA)	Perfluoroheptanoic acid (PFHpA)	Perfluorooctanoic acid (PFOA)	Perfluorodecanoic acid (PFDA)	Perfluorododecanoic acid (PFDoDA)	Perfluorononanoic acid (PFNA)	Perfluorotetradecanoic acid (PFTeDA)	Perfluorotridecanoic acid (PFTrDA)	Perfluoroundecanoic acid (PFUnDA)	4:2 Fluorotelomer sulfonic acid (4:2 FTS)	6:2 Fluorotelomer sulfonic acid (6:2 FTS)	8:2 Fluorotelomer sulfonic acid (8:2 FTS)	10:2 Fluorotelomer sulfonic acid (10:2 FTS)	Perfluoropropanesulfonic acid (PFPrS)	Perfluorobutane sulfonic acid (PFBS)	Perfluoropentane sulfonic acid (PFPeS)	Perfluorohexane sulfonic acid (PFHxS)	Perfluoroheptane sulfonic acid (PFHpS)	Perfluorooctane sulfonic acid (PFOS)	Perfluorodecane sulfonic acid (PFDS)
		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL		0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0005	0.0002	0.0002	0.0005	0.0005	0.0005	0.0005	0.005	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002
Berkman (1989) Background Ranges (VENM)																					
NSW 2014 General Solid Waste CT1 (No Leaching)																					
NSW 2014 General Solid Waste SCC1 (with leached)				18																	
NSW 2014 Restricted Solid Waste CT2 (No Leaching)																					
NSW 2014 Restricted Solid Waste SCC2 (with leached)				72																	
NSW 2014 Restricted Solid Waste TCLP2 (leached)																					
Field ID	Date																				
Grid 1																					
Fill																					
SOP_BH111_1.0_220118	18/01/2022	<0.0002	<0.0002	<0.0002							<0.0005	<0.0005	<0.0005	<0.0005		<0.0002		<0.0002		<0.0002	
SOP_BH112_1.0_220118	18/01/2022	<0.0002	<0.0002	<0.0002							<0.0005	<0.0005	<0.0005	<0.0005		<0.0002		<0.0002		<0.0002	
SOP_BH142_0.4_220119	19/01/2022	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
SOP_BH143_0.3_220119	19/01/2022	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
SOP_BH143_1.0_220119	19/01/2022	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
SOP_BH144_0.3_220119	19/01/2022	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
SOP_BH144_0.6_220119	19/01/2022	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
SOP_BH145_0.3_220119	19/01/2022	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
SOP_BH145_1.0_220119	19/01/2022																				
WAC1_TP1_0.4-0.5	29/04/2022	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005						<0.005	<0.005	<0.005	<0.005	<0.005	
WAC1_TP1_0.9-1.0	29/04/2022	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005						<0.005	<0.005	<0.005	<0.005	<0.005	
WAC1_TP1_1.4-1.5	29/04/2022	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005						<0.005	<0.005	<0.005	<0.005	<0.005	
WAC1_TP2_0.0-0.1	29/04/2022	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005						<0.005	<0.005	<0.005	<0.005	<0.005	
WAC1_TP2_0.4-0.5	29/04/2022																				
WAC1_TP2_0.9-1.0	29/04/2022	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005						<0.005	<0.005	<0.005	<0.005	<0.005	
WAC1_TP2_1.4-1.5	29/04/2022																				
WAC1_TP3_0.0-0.1	29/04/2022	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005						<0.005	<0.005	<0.005	<0.005	<0.005	
WAC1_TP3_0.4-0.5	29/04/2022																				
WAC1_TP3_0.9-1.0	29/04/2022	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005						<0.005	<0.005	<0.005	<0.005	<0.005	
WAC1_TP3_1.4-1.5	29/04/2022																				
Natural material																					
SOP_BH111_3.0_220118	18/01/2022	<0.0002	<0.0002	<0.0002							<0.0005	<0.0005	<0.0005	<0.0005		<0.0002		<0.0002		<0.0002	
SOP_BH112_5.0_220118	18/01/2022	<0.0002	<0.0002	<0.0002							<0.0005	<0.0005	<0.0005	<0.0005		<0.0002		<0.0002		<0.0002	
SOP_BH142_4.0_220119	19/01/2022	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
SOP_BH145_5.0_220119	19/01/2022	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
WAC1_TP1_1.7-1.8	29/04/2022	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005						<0.005	<0.005	<0.005	<0.005	<0.005	
WAC1_TP2_1.7-1.8	29/04/2022	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005						<0.005	<0.005	<0.005	<0.005	<0.005	
WAC1_TP3_1.7-1.8	29/04/2022																				
Grid 2																					
Fill material																					
SOP_BH110_0.2_220117	17/01/2022	<0.0002	<0.0002	<0.0002							<0.0005	<0.0005	<0.0005	<0.0005		**0.0005**		<0.0002		<0.0002	
SOP_BH110_0.2_220117	17/01/2022																				
SOP_BH110_1.3_220118	18/01/2022																				
SOP_BH118_0.1_220119	19/01/2022																				
SOP_BH118_1.0_220119	19/01/2022	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
SOP_BH119_0.2_220117	17/01/2022	<0.0002	<0.0002	<0.0002							<0.0005	<0.0005	<0.0005	<0.0005		<0.0002		<0.0002		<0.0002	
SOP_BH119_0.2_220117	17/01/2022																				
SOP_BH119_1.0_220117	17/01/2022	<0.0002	<0.0002	<0.0002							<0.0005	<0.0005	<0.0005	<0.0005		<0.0002		<0.0002		<0.0002	
WAC1_TP4_0.0-0.1	29/04/2022	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005						<0.005	<0.005	<0.005	<0.005	<0.005	
WAC1_TP4_0.3	29/04/2022																				
Natural material																					
SOP_BH118_5.0_220119	19/01/2022																				
SOP_BH118_10.0_220119	19/01/2022	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
SOP_BH118_15.0_220119	19/01/2022																				
SOP_BH118_20.0_220119	19/01/2022																				
SOP_BH118_25.0_220119	19/01/2022	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
SOP_BH119_3.0_220117	17/01/2022	<0.0002	<0.0002	<0.0002							<0.0005	<0.0005	<0.0005	<0.0005		<0.0002		<0.0002		<0.0002	
WAC1_TP4_0.4	29/04/2022																				
WAC1_TP4_0.5	29/04/2022																				
WAC1_TP4_ BRa	29/04/2022																				
Grid 3																					
Fill material																					
SOP_BH120_0.5_220120	20/01/2022	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
SOP_BH120_3.0_220120	20/01/2022	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
WAC1_TP5_0.0-0.1	29/04/2022	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005						<0.005	<0.005	<0.005	<0.005	<0.005	
WAC1_TP5_0.3-0.4	29/04/2022																				
WAC1_TP6_0.0-0.1	29/04/2022	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005						<0.005	<0.005	<0.005	<0.005	<0.005	
WAC1_TP6_0.3-0.4	29/04/2022																				
Natural material																					
WAC1_TP5_0.5-0.6	29/04/2022	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005						<0.005	<0.005	<0.005	<0.005	<0.005	
WAC1_TP6_0.5-0.6	29/04/2022	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005						<0.005	<0.005	<0.005	<0.005	<0.005	
WAC1_TP6_ BRb	29/04/2022																				
Grid 4																					
Fill material																					
SOP_BH124_0.5_220120	21/01/2022	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
SOP_BH125_0.5_220121	21/01/2022	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005		<0.0002	<0.0002	**0.0012**	<0.0002	**0.0002**	<0.0002
SOP_BH126_0.5_220121	21/01/2022	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
SOP_BH127_1.2_220121	21/01/2022	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
SOP_BH128_0.9_220124	24/01/2022	<0.0002	<0.0002	<0.0002							<0.0005	<0.0005	<0.0005	<0.0005		<0.0002		<0.0002		<0.0002	
SOP_BH129_0.5_220124	24/01/2022	<0.0002	<0.0002	<0.0002							<0.0005	<0.0005	<0.0005	<0.0005		<0.0002		<0.0002		<0.0002	
SOP_BH129_1.0_220124	24/01/2022	<0.0002	<0.0002	<0.0002							<0.0005	<0.0005	<0.0005	<0.0005		<0.0002		<0.0002		<0.0002	
WAC1_TP7_0.0-0.1	29/04/2022	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005						<0.005	<0.005	<0.005	<0.005	<0.005	
WAC1_TP7_0.3_	29/04/2022																				
WAC1_TP8_0.1	29/04/2022	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005						<0.005	<0.005	<0.005	<0.005	<0.005	
WAC1_TP8_0.2	29/04/2022																				
WAC1_TP8_0.3	29/04/2022																				
WAC1_TP8_0.4	29/04/2022																				
WAC1_TP8_0.5	29/04/2022																				
WAC1_TP8_0.6	29/04/2022																				
WAC1_TP8_0.7	29/04/2022	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005						<0.005	<0.005	<0.005	<0.005	<0.005	
WAC1_TP9_0.0-0.1	29/04/2022	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005						<0.005	<0.005	<0.005	<0.005	<0.005	
WAC1_TP9_0.2-0.3	29/04/2022																				
WAC1_TP9_0.3-0.4	29/04/2022																				
WAC1_TP9_0.4-0.5	29/04/2022																				
WAC1_TP9_0.8-0.9	29/04/2022	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005						<0.005	<0.005	<0.005	<0.005	<0.005	
Natural material																					
SOP_BH124_3.0_220120	21/01/2022	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
SOP_BH125_5.0_220121	21/01/2022																				
SOP_BH125_10.0_220121	21/01/2022																				
SOP_BH125_15.0_220121	21/01/2022	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
SOP_BH125_20.0_220121	21/01/2022																				
SOP_BH125_25.0_220121	21/01/2022																				
SOP_BH126_2.0_220121	21/01/2022	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
SOP_BH126_2.0_220121	21/01/2022																				
SOP_BH127_4.0_220121	21/01/2022	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0005	<0.0002	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
WAC1_TP9_1.0-1.1	29/04/2022																				
* A Non Detect Multiplier of 0.5 has been applied.																					
Environmental Standards																					
NSW EPA, November 2014, NSW 2014 General Solid Waste CT1 (No Leaching)																					
NSW EPA, November 2014, NSW 2014 General Solid Waste SCC1 (with leached)																					
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste CT2 (No Leaching)																					
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste SCC2 (with leached)																					
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste TCLP2 (leached)																					

Table B1

Result Table A		Perfluoroalkyl Sulfonamides							PFAS					
		Perfluorooctane sulfonamide (FOSA)	N-Methyl perfluorooctane sulfonamide (MeFOSA)	N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	N-methyl perfluorooctane sulfonamidoethanol (MeFOSE)	N-Ethyl perfluorooctane sulfonamide (EtFOSA)	N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	Perfluorononanesulfonic acid (PFNS)	Sum of PFHxS and PFOS	Sum of PFAS	Sum of PFAS (WA DER List)	Sum of enHealth PFAS (PFHxS + PFOS + PFOA)	Sum of PFAS (PFOS + PFOA)
		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	µg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL		0.0002	0.0005	0.0002	0.0005	0.0005	0.0002	0.0005	5	0.0002	0.0002	0.0002	0.005	0.005
Berkman (1989) Background Ranges (VENM)														
NSW 2014 General Solid Waste CT1 (No Leaching)														
NSW 2014 General Solid Waste SCC1 (with leached)										1.8				
NSW 2014 Restricted Solid Waste CT2 (No Leaching)														
NSW 2014 Restricted Solid Waste SCC2 (with leached)										7.2				
NSW 2014 Restricted Solid Waste TCLP2 (leached)														
Field ID	Date													
Grid 1														
Fill														
SOP_BH111_1.0_220118	18/01/2022									<0.0002		<0.0002		
SOP_BH112_1.0_220118	18/01/2022									<0.0002		<0.0002		
SOP_BH142_0.4_220119	19/01/2022	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005		<0.0002	<0.0002	<0.0002		
SOP_BH143_0.3_220119	19/01/2022	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005		<0.0002	<0.0002	<0.0002		
SOP_BH143_1.0_220119	19/01/2022	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005		<0.0002	<0.0002	<0.0002		
SOP_BH144_0.3_220119	19/01/2022	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005		<0.0002	<0.0002	<0.0002		
SOP_BH144_0.6_220119	19/01/2022	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005		<0.0002	<0.0002	<0.0002		
SOP_BH145_0.3_220119	19/01/2022	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005		<0.0002	<0.0002	<0.0002		
SOP_BH145_1.0_220119	19/01/2022													
WAC1_TP1_0.4-0.5	29/04/2022													
WAC1_TP1_0.9-1.0	29/04/2022													
WAC1_TP1_1.4-1.5	29/04/2022													
WAC1_TP2_0.0-0.1	29/04/2022													
WAC1_TP2_0.4-0.5	29/04/2022													
WAC1_TP2_0.9-1.0	29/04/2022													
WAC1_TP2_1.4-1.5	29/04/2022													
WAC1_TP3_0.0-0.1	29/04/2022													
WAC1_TP3_0.4-0.5	29/04/2022													
WAC1_TP3_0.9-1.0	29/04/2022													
WAC1_TP3_1.4-1.5	29/04/2022													
Natural material														
SOP_BH111_3.0_220118	18/01/2022									<0.0002		<0.0002		
SOP_BH112_5.0_220118	18/01/2022									<0.0002		<0.0002		
SOP_BH142_4.0_220119	19/01/2022	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005		<0.0002	<0.0002	<0.0002		
SOP_BH145_5.0_220119	19/01/2022	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005		<0.0002	<0.0002	<0.0002		
WAC1_TP1_1.7-1.8	29/04/2022													
WAC1_TP2_1.7-1.8	29/04/2022													
WAC1_TP3_1.7-1.8	29/04/2022													
Grid 2														
Fill material														
SOP_BH110_0.2_220117	17/01/2022									<0.0002		**0.0005**		
SOP_BH110_0.2_220117	17/01/2022													
SOP_BH110_1.3_220118	18/01/2022													
SOP_BH118_0.1_220119	19/01/2022													
SOP_BH118_1.0_220119	19/01/2022	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005		<0.0002	<0.0002	<0.0002		
SOP_BH119_0.2_220117	17/01/2022									<0.0002		<0.0002		
SOP_BH119_0.2_220117	17/01/2022													
SOP_BH119_1.0_220117	17/01/2022									<0.0002		<0.0002		
WAC1_TP4_0.0-0.1	29/04/2022													
WAC1_TP4_0.3	29/04/2022													
Natural material														
SOP_BH118_5.0_220119	19/01/2022													
SOP_BH118_10.0_220119	19/01/2022	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005		<0.0002	<0.0002	<0.0002		
SOP_BH118_15.0_220119	19/01/2022													
SOP_BH118_20.0_220119	19/01/2022													
SOP_BH118_25.0_220119	19/01/2022	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005		<0.0002	<0.0002	<0.0002		
SOP_BH119_3.0_220117	17/01/2022									<0.0002		<0.0002		
WAC1_TP4_0.4	29/04/2022													
WAC1_TP4_0.5	29/04/2022													
WAC1_TP4_ BRa	29/04/2022													
Grid 3														
Fill material														
SOP_BH120_0.5_220120	20/01/2022	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005		<0.0002	<0.0002	<0.0002		
SOP_BH120_3.0_220120	20/01/2022	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005		<0.0002	<0.0002	<0.0002		
WAC1_TP5_0.0-0.1	29/04/2022													
WAC1_TP5_0.3-0.4	29/04/2022													
WAC1_TP6_0.0-0.1	29/04/2022													
WAC1_TP6_0.3-0.4	29/04/2022													
Natural material														
WAC1_TP5_0.5-0.6	29/04/2022													
WAC1_TP6_0.5-0.6	29/04/2022													
WAC1_TP6_ BRb	29/04/2022													
Grid 4														
Fill material														
SOP_BH124_0.5_220120	21/01/2022	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005		<0.0002	<0.0002	<0.0002		
SOP_BH125_0.5_220121	21/01/2022	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005		**0.0014**	**0.0014**	**0.0014**		
SOP_BH126_0.5_220121	21/01/2022	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005		<0.0002	<0.0002	<0.0002		
SOP_BH127_1.2_220121	21/01/2022	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005		<0.0002	<0.0002	<0.0002		
SOP_BH128_0.9_220124	24/01/2022									<0.0002		<0.0002		
SOP_BH129_0.5_220124	24/01/2022									<0.0002		<0.0002		
SOP_BH129_1.0_220124	24/01/2022									<0.0002		<0.0002		
WAC1_TP7_0.0-0.1	29/04/2022													
WAC1_TP7_0.3_	29/04/2022													
WAC1_TP8_0.1	29/04/2022													
WAC1_TP8_0.2	29/04/2022													
WAC1_TP8_0.3	29/04/2022													
WAC1_TP8_0.4	29/04/2022													
WAC1_TP8_0.5	29/04/2022													
WAC1_TP8_0.6	29/04/2022													
WAC1_TP8_0.7	29/04/2022													
WAC1_TP9_0.0-0.1	29/04/2022													
WAC1_TP9_0.2-0.3	29/04/2022													
WAC1_TP9_0.3-0.4	29/04/2022													
WAC1_TP9_0.4-0.5	29/04/2022													
WAC1_TP9_0.8-0.9	29/04/2022													
Natural material														
SOP_BH124_3.0_220120	21/01/2022	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005		<0.0002	<0.0002	<0.0002		
SOP_BH125_5.0_220121	21/01/2022													
SOP_BH125_10.0_220121	21/01/2022													
SOP_BH125_15.0_220121	21/01/2022	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005		<0.0002	<0.0002	<0.0002		
SOP_BH125_20.0_220121	21/01/2022													
SOP_BH125_25.0_220121	21/01/2022													
SOP_BH126_2.0_220121	21/01/2022	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005		<0.0002	<0.0002	<0.0002		
SOP_BH126_2.0_220121	21/01/2022													
SOP_BH127_4.0_220121	21/01/2022	<0.0002	<0.0005	<0.0002	<0.0005	<0.0005	<0.0002	<0.0005		<0.0002	<0.0002	<0.0002		
WAC1_TP9_1.0-1.1	29/04/2022													
* A Non Detect Multiplier of 0.5 has been applied.														
Environmental Standards														
NSW EPA, November 2014, NSW 2014 General Solid Waste CT1 (No Leaching)														
NSW EPA, November 2014, NSW 2014 General Solid Waste SCC1 (with leached)														
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste CT2 (No Leaching)														
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste SCC2 (with leached)														
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste TCLP2 (leached)														

Table B1

Result Table A		Metals								Nitroaromatics		
		Arsenic	Cadmium	Chromium (III+VI)	Copper	Lead	Mercury	Nickel	Zinc	2-Picoline	4-aminobiphenyl	Pentachloronitrobenzene
		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL		2	0.3	2	5	5	0.1	2	5	0.5	0.5	0.5
Berkman (1989) Background Ranges (VENM)		50	1		100	200	0.03	500	300			
NSW 2014 General Solid Waste CT1 (No Leaching)		100	20			100	4	40				
NSW 2014 General Solid Waste SCC1 (with leached)		500	100			1,500	50	1,050				
NSW 2014 Restricted Solid Waste CT2 (No Leaching)		400	80			400	16	160				
NSW 2014 Restricted Solid Waste SCC2 (with leached)		2,000	400			6,000	200	4,200				
NSW 2014 Restricted Solid Waste TCLP2 (leached)												
Field ID	Date											
Grid 1												
Fill												
SOP_BH111_1.0_220118	18/01/2022	9	<1	18	18	30	<0.1	2	6	<0.5	<0.5	<0.5
SOP_BH112_1.0_220118	18/01/2022	12	<1	15	19	18	<0.1	3	10	<0.5	<0.5	<0.5
SOP_BH142_0.4_220119	19/01/2022	<5	<1	3	11	8	<0.1	<2	<5	<0.5	<0.5	<0.5
SOP_BH143_0.3_220119	19/01/2022	6	<1	13	6	15	<0.1	<2	5			
SOP_BH143_1.0_220119	19/01/2022	8	<1	18	16	17	<0.1	3	9	<0.5	<0.5	<0.5
SOP_BH144_0.3_220119	19/01/2022	<5	<1	4	<5	6	<0.1	<2	<5			
SOP_BH144_0.6_220119	19/01/2022	6	<1	4	8	9	<0.1	<2	<5	<0.5	<0.5	<0.5
SOP_BH145_0.3_220119	19/01/2022	6	<1	10	9	12	<0.1	<2	<5			
SOP_BH145_1.0_220119	19/01/2022	10	<1	15	14	15	<0.1	<2	<5	<0.5	<0.5	<0.5
WAC1_TP1_0.4-0.5	29/04/2022	12.7	<0.30	18.5	14.2	37.7	<0.20	<10.0	48.9			
WAC1_TP1_0.9-1.0	29/04/2022	24.2	<0.30	12.4	7.7	<10.0	<0.20	<10.0	<5.0			
WAC1_TP1_1.4-1.5	29/04/2022	26.3	<0.30	12.9	20.5	<10.0	<0.20	<10.0	<5.0			
WAC1_TP2_0.0-0.1	29/04/2022	10.8	<0.30	9.6	8.6	<10.0	<0.20	<10.0	<5.0			
WAC1_TP2_0.4-0.5	29/04/2022	11.8	<0.30	9.4	13.2	<10.0	<0.20	<10.0	8.3			
WAC1_TP2_0.9-1.0	29/04/2022	24.9	<0.30	20.5	5.0	12.5	<0.20	<10.0	<5.0			
WAC1_TP2_1.4-1.5	29/04/2022	21.4	<0.30	10.7	11.0	<10.0	<0.20	<10.0	<5.0			
WAC1_TP3_0.0-0.1	29/04/2022	<5.0	<0.30	7.2	<5.0	<10.0	<0.20	<10.0	<5.0			
WAC1_TP3_0.4-0.5	29/04/2022	<5.0	<0.30	10.7	9.9	<10.0	<0.20	<10.0	11.1			
WAC1_TP3_0.9-1.0	29/04/2022	14.6	<0.30	14.3	19.9	<10.0	<0.20	<10.0	<5.0			
WAC1_TP3_1.4-1.5	29/04/2022	25.7	<0.30	11.4	8.6	<10.0	<0.20	<10.0	<5.0			
Natural material												
SOP_BH111_3.0_220118	18/01/2022	7	<1	8	22	20	<0.1	4	21			
SOP_BH112_5.0_220118	18/01/2022	15	<1	8	59	12	<0.1	25	149			
SOP_BH142_4.0_220119	19/01/2022	<5	<1	4	40	11	<0.1	12	120			
SOP_BH145_5.0_220119	19/01/2022	9	<1	8	46	16	<0.1	46	280			
WAC1_TP1_1.7-1.8	29/04/2022	23.3	<0.30	7.0	13.0	<10.0	<0.20	<10.0	<5.0			
WAC1_TP2_1.7-1.8	29/04/2022	19.6	<0.30	8.1	17.4	<10.0	<0.20	<10.0	<5.0			
WAC1_TP3_1.7-1.8	29/04/2022	6.3	<0.30	6.3	9.1	<10.0	<0.20	<10.0	<5.0			
Grid 2												
Fill material												
SOP_BH110_0.2_220117	17/01/2022	<5	<1	6	39	<5	<0.1	57	25	<0.5	<0.5	<0.5
SOP_BH110_0.2_220117	17/01/2022											
SOP_BH110_1.3_220118	18/01/2022	6	<1	4	24	10	<0.1	4	14			
SOP_BH118_0.1_220119	19/01/2022	<5	<1	13	57	<5	<0.1	109	42	<0.5	<0.5	<0.5
SOP_BH118_1.0_220119	19/01/2022	<5	<1	<2	13	<5	<0.1	<2	<5			
SOP_BH119_0.2_220117	17/01/2022	<5	<1	8	52	<5	<0.1	99	34			
SOP_BH119_0.2_220117	17/01/2022											
SOP_BH119_1.0_220117	17/01/2022	<5	<1	2	11	8	<0.1	<2	7	<0.5	<0.5	<0.5
WAC1_TP4_0.0-0.1	29/04/2022											
WAC1_TP4_0.3	29/04/2022	<5.0	<0.30	<5.0	<5.0	<10.0	<0.20	<10.0	<5.0			
Natural material												
SOP_BH118_5.0_220119	19/01/2022	8	<1	7	37	15	<0.1	24	178	<0.5	<0.5	<0.5
SOP_BH118_10.0_220119	19/01/2022	8	<1	10	40	18	<0.1	24	92			
SOP_BH118_15.0_220119	19/01/2022	5	<1	13	40	19	<0.1	22	84	<0.5	<0.5	<0.5
SOP_BH118_20.0_220119	19/01/2022	6	<1	15	41	20	<0.1	22	87			
SOP_BH118_25.0_220119	19/01/2022	<5	<1	10	49	26	<0.1	24	88	<0.5	<0.5	<0.5
SOP_BH119_3.0_220117	17/01/2022	7	<1	7	58	14	<0.1	32	154			
WAC1_TP4_0.4	29/04/2022	13.4	<0.30	<5.0	14.8	<10.0	<0.20	<10.0	<5.0			
WAC1_TP4_0.5	29/04/2022	16.8	<0.30	6.1	29.5	<10.0	<0.20	<10.0	<5.0			
WAC1_TP4_ BRa	29/04/2022	7.0	<0.30	6.4	9.3	<10.0	<0.20	<10.0	11.9			
Grid 3												
Fill material												
SOP_BH120_0.5_220120	20/01/2022	<5	<1	6	43	9	<0.1	5	9			
SOP_BH120_3.0_220120	20/01/2022	5	<1	5	39	18	<0.1	32	117	<0.5	<0.5	<0.5
WAC1_TP5_0.0-0.1	29/04/2022	6.1	<0.30	<5.0	41.8	<10.0	<0.20	98.7	35.7			
WAC1_TP5_0.3-0.4	29/04/2022	<5.0	<0.30	<5.0	<5.0	<10.0	<0.20	<10.0	<5.0			
WAC1_TP6_0.0-0.1	29/04/2022	<5.0	<0.30	7.6	20.8	<10.0	<0.20	13.7	40.4			
WAC1_TP6_0.3-0.4	29/04/2022	5.5	<0.30	6.8	5.7	<10.0	<0.20	<10.0	<5.0			
Natural material												
WAC1_TP5_0.5-0.6	29/04/2022	7.8	<0.30	<5.0	8.7	75.3	<0.20	<10.0	<5.0			
WAC1_TP6_0.5-0.6	29/04/2022	<5.0	<0.30	<5.0	5.6	<10.0	<0.20	<10.0	<5.0			
WAC1_TP6_ BRb	29/04/2022	<5.0	<0.30	<5.0	5.8	<10.0	<0.20	<10.0	<5.0			
Grid 4												
Fill material												
SOP_BH124_0.5_220120	21/01/2022	<5	<1	4	8	14	<0.1	<2	<5	<0.5	<0.5	<0.5
SOP_BH125_0.5_220121	21/01/2022	<5	<1	4	17	7	<0.1	<2	<5			
SOP_BH126_0.5_220121	21/01/2022	5	<1	14	20	28	<0.1	14	8	<0.5	<0.5	<0.5
SOP_BH127_1.2_220121	21/01/2022	21	<1	5	17	8	<0.1	<2	8	<0.5	<0.5	<0.5
SOP_BH128_0.9_220124	24/01/2022	<5	<1	4	16	16	<0.1	2	17	<0.5	<0.5	<0.5
SOP_BH129_0.5_220124	24/01/2022	12	<1	29	16	31	<0.1	7	31			
SOP_BH129_1.0_220124	24/01/2022	9	<1	7	27	17	<0.1	3	20	<0.5	<0.5	<0.5
WAC1_TP7_0.0-0.1	29/04/2022	21.5	<0.30	8.9	14.6	<10.0	<0.20	<10.0	<5.0			
WAC1_TP7_0.3_	29/04/2022	12.0	<0.30	<5.0	6.6	<10.0	<0.20	<10.0	<5.0			
WAC1_TP8_0.1	29/04/2022	6.8	<0.30	8.6	11.9	<10.0	<0.20	<10.0	19.9			
WAC1_TP8_0.2	29/04/2022	16.0	<0.30	16.5	16.8	10.4	<0.20	<10.0	9.9			
WAC1_TP8_0.3	29/04/2022	<5.0	<0.30	6.5	<5.0	<10.0	<0.20	<10.0	<5.0			
WAC1_TP8_0.4	29/04/2022	<5.0	<0.30	<5.0	<5.0	<10.0	<0.20	<10.0	<5.0			
WAC1_TP8_0.5	29/04/2022	15.0	<0.30	7.9	7.3	14.6	<0.20	<10.0	<5.0			
WAC1_TP8_0.6	29/04/2022	10.5	<0.30	9.4	10.4	<10.0	<0.20	<10.0	<5.0			
WAC1_TP8_0.7	29/04/2022	5.6	<0.30	<5.0	7.5	57.5	<0.20	<10.0	<5.0			
WAC1_TP9_0.0-0.1	29/04/2022	<5.0	<0.30	5.5	14.6	<10.0	<0.20	<10.0	43.8			
WAC1_TP9_0.2-0.3	29/04/2022	16.3	<0.30	9.4	11.0	12.1	<0.20	<10.0	6.7			
WAC1_TP9_0.3-0.4	29/04/2022	18.8	<0.30	12.4	13.4	11.5	<0.20	<10.0	19.9			
WAC1_TP9_0.4-0.5	29/04/2022	15.0	<0.30	19.0	12.1	10.0	<0.20	<10.0	12.2			
WAC1_TP9_0.8-0.9	29/04/2022	18.1	<0.30	6.5	11.5	<10.0	<0.20	<10.0	<5.0			
Natural material												
SOP_BH124_3.0_220120	21/01/2022	6	<1	4	47	16	<0.1	26	261			
SOP_BH125_5.0_220121	21/01/2022	6	<1	7	40	16	<0.1	23	83	<0.5	<0.5	<0.5
SOP_BH125_10.0_220121	21/01/2022	9	<1	14	37	18	<0.1	21	81			
SOP_BH125_15.0_220121	21/01/2022	5	<1	15	40	18	<0.1	21	80	<0.5	<0.5	<0.5
SOP_BH125_20.0_220121	21/01/2022	6	<1	14	35	17	<0.1	20	78			
SOP_BH125_25.0_220121	21/01/2022	<5	<1	10	47	22	<0.1	22	84	<0.5	<0.5	<0.5
SOP_BH126_2.0_220121	21/01/2022	<5	<1	7	44	13	<0.1	42	130			
SOP_BH126_2.0_220121	21/01/2022											
SOP_BH127_4.0_220121	21/01/2022	9	<1	8	38	14	<0.1	22	77			
WAC1_TP9_1.0-1.1	29/04/2022	5.9	<0.30	<5.0	7.5	<10.0	<0.20	<10.0	<5.0			
* A Non Detect Multiplier of 0.5 has been applied.												
Environmental Standards												
NSW EPA, November 2014, NSW 2014 General Solid Waste CT1 (No Leaching)												
NSW EPA, November 2014, NSW 2014 General Solid Waste SCC1 (with leached)												
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste CT2 (No Leaching)												
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste SCC2 (with leached)												
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste TCLP2 (leached)												

Table B1

Result Table A		Organochlorine Pesticides																			
		Organochlorine pesticides EPAVic	Other organochlorine pesticides EPAVic	4,4-DDE	a-BHC	Aldrin	Aldrin + Dieldrin	b-BHC	Chlordane	Chlordane (cis)	Chlordane (trans)	d-BHC	DDD	DDT	DDT+DDE+DDD	Dieldrin	Endosulfan	Endosulfan I	Endosulfan II	Endosulfan sulphate	Endrin
		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL		0.1	0.1	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
Berkman (1989) Background Ranges (VENM)							0								0		0				
NSW 2014 General Solid Waste CT1 (No Leaching)																	60				
NSW 2014 General Solid Waste SCC1 (with leached)																	108				
NSW 2014 Restricted Solid Waste CT2 (No Leaching)																	240				
NSW 2014 Restricted Solid Waste SCC2 (with leached)																	432				
NSW 2014 Restricted Solid Waste TCLP2 (leached)																					
Field ID	Date																				
Grid 1																					
Fill																					
SOP_BH111_1.0_220118	18/01/2022			<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
SOP_BH112_1.0_220118	18/01/2022			<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
SOP_BH142_0.4_220119	19/01/2022			<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
SOP_BH143_0.3_220119	19/01/2022			<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
SOP_BH143_1.0_220119	19/01/2022			<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
SOP_BH144_0.3_220119	19/01/2022			<0.05	<0.05	**0.56**	**0.72**	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	**0.16**	<0.05	<0.05	<0.05	<0.05	<0.05
SOP_BH144_0.6_220119	19/01/2022			<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
SOP_BH145_0.3_220119	19/01/2022			<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
SOP_BH145_1.0_220119	19/01/2022			<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
WAC1_TP1_0.4-0.5	29/04/2022			<0.10	<0.10	<0.10		<0.10		<0.10	<0.10	<0.10	<0.10	<0.10		<0.10		<0.20	<0.20	<0.10	<0.20
WAC1_TP1_0.9-1.0	29/04/2022			<0.10	<0.10	<0.10		<0.10		<0.10	<0.10	<0.10	<0.10	<0.10		<0.10		<0.20	<0.20	<0.10	<0.20
WAC1_TP1_1.4-1.5	29/04/2022			<0.10	<0.10	<0.10		<0.10		<0.10	<0.10	<0.10	<0.10	<0.10		<0.10		<0.20	<0.20	<0.10	<0.20
WAC1_TP2_0.0-0.1	29/04/2022			<0.10	<0.10	<0.10		<0.10		<0.10	<0.10	<0.10	<0.10	<0.10		<0.10		<0.20	<0.20	<0.10	<0.20
WAC1_TP2_0.4-0.5	29/04/2022			<0.10	<0.10	<0.10		<0.10		<0.10	<0.10	<0.10	<0.10	<0.10		<0.10		<0.20	<0.20	<0.10	<0.20
WAC1_TP2_0.9-1.0	29/04/2022			<0.10	<0.10	<0.10		<0.10		<0.10	<0.10	<0.10	<0.10	<0.10		<0.10		<0.20	<0.20	<0.10	<0.20
WAC1_TP2_1.4-1.5	29/04/2022			<0.10	<0.10	<0.10		<0.10		<0.10	<0.10	<0.10	<0.10	<0.10		<0.10		<0.20	<0.20	<0.10	<0.20
WAC1_TP3_0.0-0.1	29/04/2022			<0.10	<0.10	<0.10		<0.10		<0.10	<0.10	<0.10	<0.10	<0.10		<0.10		<0.20	<0.20	<0.10	<0.20
WAC1_TP3_0.4-0.5	29/04/2022			<0.10	<0.10	<0.10		<0.10		<0.10	<0.10	<0.10	<0.10	<0.10		<0.10		<0.20	<0.20	<0.10	<0.20
WAC1_TP3_0.9-1.0	29/04/2022			<0.10	<0.10	<0.10		<0.10		<0.10	<0.10	<0.10	<0.10	<0.10		<0.10		<0.20	<0.20	<0.10	<0.20
WAC1_TP3_1.4-1.5	29/04/2022			<0.10	<0.10	<0.10		<0.10		<0.10	<0.10	<0.10	<0.10	<0.10		<0.10		<0.20	<0.20	<0.10	<0.20
Natural material																					
SOP_BH111_3.0_220118	18/01/2022			<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
SOP_BH112_5.0_220118	18/01/2022			<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
SOP_BH142_4.0_220119	19/01/2022			<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
SOP_BH145_5.0_220119	19/01/2022			<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
WAC1_TP1_1.7-1.8	29/04/2022			<0.10	<0.10	<0.10		<0.10		<0.10	<0.10	<0.10	<0.10	<0.10		<0.10		<0.20	<0.20	<0.10	<0.20
WAC1_TP2_1.7-1.8	29/04/2022			<0.10	<0.10	<0.10		<0.10		<0.10	<0.10	<0.10	<0.10	<0.10		<0.10		<0.20	<0.20	<0.10	<0.20
WAC1_TP3_1.7-1.8	29/04/2022			<0.10	<0.10	<0.10		<0.10		<0.10	<0.10	<0.10	<0.10	<0.10		<0.10		<0.20	<0.20	<0.10	<0.20
Grid 2																					
Fill material																					
SOP_BH110_0.2_220117	17/01/2022			<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
SOP_BH110_0.2_220117	17/01/2022																				
SOP_BH110_1.3_220118	18/01/2022			<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
SOP_BH118_0.1_220119	19/01/2022			<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
SOP_BH118_1.0_220119	19/01/2022			<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
SOP_BH119_0.2_220117	17/01/2022			<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
SOP_BH119_0.2_220117	17/01/2022																				
SOP_BH119_1.0_220117	17/01/2022			<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
WAC1_TP4_0.0-0.1	29/04/2022																				
WAC1_TP4_0.3	29/04/2022			<0.10	<0.10	<0.10		<0.10		<0.10	<0.10	<0.10	<0.10	<0.10		<0.10		<0.20	<0.20	<0.10	<0.20
Natural material																					
SOP_BH118_5.0_220119	19/01/2022			<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
SOP_BH118_10.0_220119	19/01/2022			<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
SOP_BH118_15.0_220119	19/01/2022			<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
SOP_BH118_20.0_220119	19/01/2022			<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
SOP_BH118_25.0_220119	19/01/2022			<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
SOP_BH119_3.0_220117	17/01/2022			<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
WAC1_TP4_0.4	29/04/2022			<0.10	<0.10	<0.10		<0.10		<0.10	<0.10	<0.10	<0.10	<0.10		<0.10		<0.20	<0.20	<0.10	<0.20
WAC1_TP4_0.5	29/04/2022			<0.10	<0.10	<0.10		<0.10		<0.10	<0.10	<0.10	<0.10	<0.10		<0.10		<0.20	<0.20	<0.10	<0.20
WAC1_TP4_ BRa	29/04/2022			<0.10	<0.10	<0.10		<0.10		<0.10	<0.10	<0.10	<0.10	<0.10		<0.10		<0.20	<0.20	<0.10	<0.20
Grid 3																					
Fill material																					
SOP_BH120_0.5_220120	20/01/2022			<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
SOP_BH120_3.0_220120	20/01/2022			<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
WAC1_TP5_0.0-0.1	29/04/2022			<0.10	<0.10	<0.10		<0.10		<0.10	<0.10	<0.10	<0.10	<0.10		<0.10		<0.20	<0.20	<0.10	<0.20
WAC1_TP5_0.3-0.4	29/04/2022			<0.10	<0.10	<0.10		<0.10		<0.10	<0.10	<0.10	<0.10	<0.10		<0.10		<0.20	<0.20	<0.10	<0.20
WAC1_TP6_0.0-0.1	29/04/2022			<0.10	<0.10	<0.10		<0.10		<0.10	<0.10	<0.10	<0.10	<0.10		**0.26**		<0.20	<0.20	<0.10	<0.20
WAC1_TP6_0.3-0.4	29/04/2022			<0.10	<0.10	<0.10		<0.10		<0.10	<0.10	<0.10	<0.10	<0.10		<0.10		<0.20	<0.20	<0.10	<0.20
Natural material																					
WAC1_TP5_0.5-0.6	29/04/2022			<0.10	<0.10	<0.10		<0.10		<0.10	<0.10	<0.10	<0.10	<0.10		<0.10		<0.20	<0.20	<0.10	<0.20
WAC1_TP6_0.5-0.6	29/04/2022			<0.10	<0.10	<0.10		<0.10		<0.10	<0.10	<0.10	<0.10	<0.10		<0.10		<0.20	<0.20	<0.10	<0.20
WAC1_TP6_ BRb	29/04/2022			<0.10	<0.10	<0.10		<0.10		<0.10	<0.10	<0.10	<0.10	<0.10		<0.10		<0.20	<0.20	<0.10	<0.20
Grid 4																					
Fill material																					
SOP_BH124_0.5_220120	21/01/2022			<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
SOP_BH125_0.5_220121	21/01/2022			<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
SOP_BH126_0.5_220121	21/01/2022			<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
SOP_BH127_1.2_220121	21/01/2022			<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
SOP_BH128_0.9_220124	24/01/2022			<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
SOP_BH129_0.5_220124	24/01/2022			<0.05	<0.05	<0.05	<0.05	<0.05	**0.13**	**0.07**	**0.06**	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
SOP_BH129_1.0_220124	24/01/2022			<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
WAC1_TP7_0.0-0.1	29/04/2022			<0.10	<0.10	<0.10		<0.10		<0.10	<0.10	<0.10	<0.10	<0.10		<0.10		<0.20	<0.20	<0.10	<0.20
WAC1_TP7_0.3_	29/04/2022			<0.10	<0.10	<0.10		<0.10		<0.10	<0.10	<0.10	<0.10	<0.10		<0.10		<0.20	<0.20	<0.10	<0.20
WAC1_TP8_0.1	29/04/2022			<0.10	<0.10	<0.10		<0.10		<0.10	<0.10	<0.10	<0.10	<0.10		<0.10		<0.20	<0.20	<0.10	<0.20
WAC1_TP8_0.2	29/04/2022			<0.10	<0.10	<0.10		<0.10		<0.10	<0.10	<0.10	<0.10	<0.10		<0.10		<0.20	<0.20	<0.10	<0.20
WAC1_TP8_0.3	29/04/2022			<0.10	<0.10	<0.10		<0.10		<0.10	<0.10	<0.10	<0.10	<0.10		<0.10		<0.20	<0.20	<0.10	<0.20
WAC1_TP8_0.4	29/04/2022			<0.10	<0.10	<0.10		<0.10		<0.10	<0.10	<0.10	<0.10	<0.10		<0.10		<0.20	<0.20	<0.10	<0.20
WAC1_TP8_0.5	29/04/2022			<0.10	<0.10	<0.10		<0.10		<0.10	<0.10	<0.10	<0.10	<0.10		<0.10		<0.20	<0.20	<0.10	<0.20
WAC1_TP8_0.6	29/04/2022			<0.10	<0.10	<0.10		<0.10		<0.10	<0.10	<0.10	<0.10	<0.10		<0.10		<0.20	<0.20	<0.10	<0.20
WAC1_TP8_0.7	29/04/2022			<0.10	<0.10	<0.10		<0.10		<0.10	<0.10	<0.10	<0.10	<0.10		<0.10		<0.20	<0.20	<0.10	<0.20
WAC1_TP9_0.0-0.1	29/04/2022			<0.10	<0.10	<0.10		<0.10		<0.10	<0.10	<0.10	<0.10	<0.10		<0.10		<0.20	<0.20	<0.10	<0.20
WAC1_TP9_0.2-0.3	29/04/2022			<0.10	<0.10	<0.10		<0.10		<0.10	<0.10	<0.10	<0.10	<0.10		<0.10		<0.20	<0.20	<0.10	<0.20
WAC1_TP9_0.3-0.4	29/04/2022			<0.10	<0.10	<0.10		<0.10		<0.10	<0.10	<0.10	<0.10	<0.10		<0.10		<0.20	<0.20	<0.10	<0.20
WAC1_TP9_0.4-0.5	29/04/2022			<0.10	<0.10	<0.10		<0.10		<0.10	<0.10	<0.10	<0.10	<0.10		<0.10		<0.20	<0.20	<0.10	<0.20
WAC1_TP9_0.8-0.9	29/04/2022			<0.10	<0.10	<0.10		<0.10		<0.10	<0.10	<0.10	<0.10	<0.10		<0.10		<0.20	<0.20	<0.10	<0.20
Natural material																					
SOP_BH124_3.0_220120	21/01/2022			<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
SOP_BH125_5.0_220121	21/01/2022			<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
SOP_BH125_10.0_220121	21/01/2022			<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
SOP_BH125_15.0_220121	21/01/2022			<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
SOP_BH125_20.0_220121	21/01/2022			<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
SOP_BH125_25.0_220121	21/01/2022			<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
SOP_BH126_2.0_220121	21/01/2022			<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
SOP_BH126_2.0_220121	21/01/2022																				
SOP_BH127_4.0_220121	21/01/2022			<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
WAC1_TP9_1.0-1.1	29/04/2022			<0.10	<0.10	<0.10		<0.10		<0.10	<0.10	<0.10	<0.10	<0.10		<0.10		<0.20	<0.20	<0.10	<0.20
* A Non Detect Multiplier of 0.5 has been applied.																					
Environmental Standards																					
NSW EPA, November 2014, NSW 2014 General Solid Waste CT1 (No Leaching)																					
NSW EPA, November 2014, NSW 2014 General Solid Waste SCC1 (with leached)																					
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste CT2 (No Leaching)																					
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste SCC2 (with leached)																					
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste TCLP2 (leached)																					

Result Table A		Endrin aldehyde	Endrin ketone	g-BHC (Lindane)	Heptachlor	Heptachlor epoxide	Methoxychlor	Toxaphene	Tokuthion	Azinophos methyl	Bolstar (Sulprofos)	Bromophos-ethyl	Carbophenothion	Chlorfenvinphos	Chlorpyrifos	Chlorpyrifos-methyl	Coumaphos	Demeton-O	Demeton-S	Diazinon	Dichlorvos
		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL		0.05	0.05	0.05	0.05	0.05	0.05	0.5	0.2	0.05	0.2	0.05	0.05	0.05	0.05	0.05	2	0.2	0.2	0.05	0.05
Berkman (1989) Background Ranges (VENM)																					
NSW 2014 General Solid Waste CT1 (No Leaching)															4						
NSW 2014 General Solid Waste SCC1 (with leached)															7.5						
NSW 2014 Restricted Solid Waste CT2 (No Leaching)															16						
NSW 2014 Restricted Solid Waste SCC2 (with leached)															30						
NSW 2014 Restricted Solid Waste TCLP2 (leached)																					
Field ID	Date																				
Grid 1																					
Fill																					
SOP_BH111_1.0_220118	18/01/2022	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2			<0.05		<0.05	<0.05	<0.05	<0.05	<0.05				<0.05	<0.05
SOP_BH112_1.0_220118	18/01/2022	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2			<0.05		<0.05	<0.05	<0.05	<0.05	<0.05				<0.05	<0.05
SOP_BH142_0.4_220119	19/01/2022	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2			<0.05		<0.05	<0.05	<0.05	<0.05	<0.05				<0.05	<0.05
SOP_BH143_0.3_220119	19/01/2022	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2			<0.05		<0.05	<0.05	<0.05	<0.05	<0.05				<0.05	<0.05
SOP_BH143_1.0_220119	19/01/2022	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2			<0.05		<0.05	<0.05	<0.05	<0.05	<0.05				<0.05	<0.05
SOP_BH144_0.3_220119	19/01/2022	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2			<0.05		<0.05	<0.05	<0.05	<0.05	<0.05				<0.05	<0.05
SOP_BH144_0.6_220119	19/01/2022	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2			<0.05		<0.05	<0.05	<0.05	<0.05	<0.05				<0.05	<0.05
SOP_BH145_0.3_220119	19/01/2022	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2			<0.05		<0.05	<0.05	<0.05	<0.05	<0.05				<0.05	<0.05
SOP_BH145_1.0_220119	19/01/2022	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2			<0.05		<0.05	<0.05	<0.05	<0.05	<0.05				<0.05	<0.05
WAC1_TP1_0.4-0.5	29/04/2022	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10								<0.10	<0.10				<0.10	
WAC1_TP1_0.9-1.0	29/04/2022	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10								<0.10	<0.10				<0.10	
WAC1_TP1_1.4-1.5	29/04/2022	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10								<0.10	<0.10				<0.10	
WAC1_TP2_0.0-0.1	29/04/2022	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10								<0.10	<0.10				<0.10	
WAC1_TP2_0.4-0.5	29/04/2022	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10								<0.10	<0.10				<0.10	
WAC1_TP2_0.9-1.0	29/04/2022	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10								<0.10	<0.10				<0.10	
WAC1_TP2_1.4-1.5	29/04/2022	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10								<0.10	<0.10				<0.10	
WAC1_TP3_0.0-0.1	29/04/2022	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10								<0.10	<0.10				<0.10	
WAC1_TP3_0.4-0.5	29/04/2022	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10								<0.10	<0.10				<0.10	
WAC1_TP3_0.9-1.0	29/04/2022	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10								<0.10	<0.10				<0.10	
WAC1_TP3_1.4-1.5	29/04/2022	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10								<0.10	<0.10				<0.10	
Natural material																					
SOP_BH111_3.0_220118	18/01/2022	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2			<0.05		<0.05	<0.05	<0.05	<0.05	<0.05				<0.05	<0.05
SOP_BH112_5.0_220118	18/01/2022	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2			<0.05		<0.05	<0.05	<0.05	<0.05	<0.05				<0.05	<0.05
SOP_BH142_4.0_220119	19/01/2022	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2			<0.05		<0.05	<0.05	<0.05	<0.05	<0.05				<0.05	<0.05
SOP_BH145_5.0_220119	19/01/2022	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2			<0.05		<0.05	<0.05	<0.05	<0.05	<0.05				<0.05	<0.05
WAC1_TP1_1.7-1.8	29/04/2022	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10								<0.10	<0.10				<0.10	
WAC1_TP2_1.7-1.8	29/04/2022	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10								<0.10	<0.10				<0.10	
WAC1_TP3_1.7-1.8	29/04/2022	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10								<0.10	<0.10				<0.10	
Grid 2																					
Fill material																					
SOP_BH110_0.2_220117	17/01/2022	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2			<0.05		<0.05	<0.05	<0.05	<0.05	<0.05				<0.05	<0.05
SOP_BH110_0.2_220117	17/01/2022																				
SOP_BH110_1.3_220118	18/01/2022	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2			<0.05		<0.05	<0.05	<0.05	<0.05	<0.05				<0.05	<0.05
SOP_BH118_0.1_220119	19/01/2022	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2			<0.05		<0.05	<0.05	<0.05	<0.05	<0.05				<0.05	<0.05
SOP_BH118_1.0_220119	19/01/2022	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2			<0.05		<0.05	<0.05	<0.05	<0.05	<0.05				<0.05	<0.05
SOP_BH119_0.2_220117	17/01/2022	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2			<0.05		<0.05	<0.05	<0.05	<0.05	<0.05				<0.05	<0.05
SOP_BH119_0.2_220117	17/01/2022																				
SOP_BH119_1.0_220117	17/01/2022	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2			<0.05		<0.05	<0.05	<0.05	<0.05	<0.05				<0.05	<0.05
WAC1_TP4_0.0-0.1	29/04/2022																				
WAC1_TP4_0.3	29/04/2022	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10								<0.10	<0.10				<0.10	
Natural material																					
SOP_BH118_5.0_220119	19/01/2022	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2			<0.05		<0.05	<0.05	<0.05	<0.05	<0.05				<0.05	<0.05
SOP_BH118_10.0_220119	19/01/2022	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2			<0.05		<0.05	<0.05	<0.05	<0.05	<0.05				<0.05	<0.05
SOP_BH118_15.0_220119	19/01/2022	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2			<0.05		<0.05	<0.05	<0.05	<0.05	<0.05				<0.05	<0.05
SOP_BH118_20.0_220119	19/01/2022	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2			<0.05		<0.05	<0.05	<0.05	<0.05	<0.05				<0.05	<0.05
SOP_BH118_25.0_220119	19/01/2022	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2			<0.05		<0.05	<0.05	<0.05	<0.05	<0.05				<0.05	<0.05
SOP_BH119_3.0_220117	17/01/2022	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2			<0.05		<0.05	<0.05	<0.05	<0.05	<0.05				<0.05	<0.05
WAC1_TP4_0.4	29/04/2022	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10								<0.10	<0.10				<0.10	
WAC1_TP4_0.5	29/04/2022	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10								<0.10	<0.10				<0.10	
WAC1_TP4_ BRa	29/04/2022	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10								<0.10	<0.10				<0.10	
Grid 3																					
Fill material																					
SOP_BH120_0.5_220120	20/01/2022	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2			<0.05		<0.05	<0.05	<0.05	<0.05	<0.05				<0.05	<0.05
SOP_BH120_3.0_220120	20/01/2022	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2			<0.05		<0.05	<0.05	<0.05	<0.05	<0.05				<0.05	<0.05
WAC1_TP5_0.0-0.1	29/04/2022	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10								<0.10	<0.10				<0.10	
WAC1_TP5_0.3-0.4	29/04/2022	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10								<0.10	<0.10				<0.10	
WAC1_TP6_0.0-0.1	29/04/2022	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10								<0.10	<0.10				<0.10	
WAC1_TP6_0.3-0.4	29/04/2022	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10								<0.10	<0.10				<0.10	
Natural material																					
WAC1_TP5_0.5-0.6	29/04/2022	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10								<0.10	<0.10				<0.10	
WAC1_TP6_0.5-0.6	29/04/2022	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10								<0.10	<0.10				<0.10	
WAC1_TP6_ BRb	29/04/2022	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10								<0.10	<0.10				<0.10	
Grid 4																					
Fill material																					
SOP_BH124_0.5_220120	21/01/2022	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2			<0.05		<0.05	<0.05	<0.05	<0.05	<0.05				<0.05	<0.05
SOP_BH125_0.5_220121	21/01/2022	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2			<0.05		<0.05	<0.05	<0.05	<0.05	<0.05				<0.05	<0.05
SOP_BH126_0.5_220121	21/01/2022	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2			<0.05		<0.05	<0.05	<0.05	<0.05	<0.05				<0.05	<0.05
SOP_BH127_1.2_220121	21/01/2022	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2			<0.05		<0.05	<0.05	<0.05	<0.05	<0.05				<0.05	<0.05
SOP_BH128_0.9_220124	24/01/2022	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2			<0.05		<0.05	<0.05	<0.05	<0.05	<0.05				<0.05	<0.05
SOP_BH129_0.5_220124	24/01/2022	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2			<0.05		<0.05	<0.05	<0.05	<0.05	<0.05				<0.05	<0.05
SOP_BH129_1.0_220124	24/01/2022	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2			<0.05		<0.05	<0.05	<0.05	<0.05	<0.05				<0.05	<0.05
WAC1_TP7_0.0-0.1	29/04/2022	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10								<0.10	<0.10				<0.10	
WAC1_TP7_0.3_	29/04/2022	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10								<0.10	<0.10				<0.10	
WAC1_TP8_0.1	29/04/2022	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10								<0.10	<0.10				<0.10	
WAC1_TP8_0.2	29/04/2022	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10								<0.10	<0.10				<0.10	
WAC1_TP8_0.3	29/04/2022	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10								<0.10	<0.10				<0.10	
WAC1_TP8_0.4	29/04/2022	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10								<0.10	<0.10				<0.10	
WAC1_TP8_0.5	29/04/2022	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10								<0.10	<0.10				<0.10	
WAC1_TP8_0.6	29/04/2022	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10								<0.10	<0.10				<0.10	
WAC1_TP8_0.7	29/04/2022	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10								<0.10	<0.10				<0.10	
WAC1_TP9_0.0-0.1	29/04/2022	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10								<0.10	<0.10				<0.10	
WAC1_TP9_0.2-0.3	29/04/2022	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10								<0.10	<0.10				<0.10	
WAC1_TP9_0.3-0.4	29/04/2022	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10								<0.10	<0.10				<0.10	
WAC1_TP9_0.4-0.5	29/04/2022	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10								<0.10	<0.10				<0.10	
WAC1_TP9_0.8-0.9	29/04/2022	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10								<0.10	<0.10				<0.10	
Natural material																					
SOP_BH124_3.0_220120	21/01/2022	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2			<0.05		<0.05	<0.05	<0.05	<0.05	<0.05				<0.05	<0.05
SOP_BH125_5.0_220121	21/01/2022	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2			<0.05		<0.05	<0.05	<0.05	<0.05	<0.05				<0.05	<0.05
SOP_BH125_10.0_220121	21/01/2022	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2			<0.05		<0.05	<0.05	<0.05	<0.05	<0.05				<0.05	<0.05
SOP_BH125_15.0_220121	21/01/2022	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2			<0.05		<0.05	<0.05	<0.05	<0.05	<0.05				<0.05	<0.05
SOP_BH125_20.0_220121	21/01/2022	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2			<0.05		<0.05	<0.05	<0.05	<0.05	<0.05				<0.05	<0.05
SOP_BH125_25.0_220121	21/01/2022	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2			<0.05		<0.05	<0.05	<0.05	<0.05	<0.05				<0.05	<0.05
SOP_BH126_2.0_220121	21/01/2022	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2			<0.05		<0.05	<0.05	<0.05	<0.05	<0.05				<0.05	<0.05
SOP_BH126_2.0_220121	21/01/2022																				
SOP_BH127_4.0_220121	21/01/2022	<0.05	<0.05	<0.05	<0.05	<0.05	<0.2			<0.05		<0.05	<0.05	<0.05	<0.05	<0.05				<0.05	<0.05
WAC1_TP9_1.0-1.1	29/04/2022	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10								<0.10	<0.10				<0.10	
* A Non Detect Multiplier of 0.5 has been applied.																					
Environmental Standards																					
NSW EPA, November 2014, NSW 2014 General Solid Waste CT1 (No Leaching)																					
NSW EPA, November 2014, NSW 2014 General Solid Waste SCC1 (with leached)																					
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste CT2 (No Leaching)																					
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste SCC2 (with leached)																					
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste TCLP2 (leached)																					

Table B1

Result Table A		Organophosphorous Pesticides																			
		Dimethoate	Disulfoton	Ethion	Ethoprop	Fenitrothion	Fensulfothion	Fenthion	EPN	Malathion	Merphos	Methyl parathion	Mevinphos (Phosdrin)	Monocrotophos	Naled (Dibrom)	Omethoate	Phorate	Prothiofos	Pyrazophos	Ronnel	Terbufos
		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL		0.05	0.2	0.05	0.1	0.2	0.2	0.05	0.2	0.05	0.2	0.1	0.2	0.2	0.2	2	0.2	0.05	0.2	0.1	0.2
Berkman (1989) Background Ranges (VENM)																					
NSW 2014 General Solid Waste CT1 (No Leaching)																					
NSW 2014 General Solid Waste SCC1 (with leached)																					
NSW 2014 Restricted Solid Waste CT2 (No Leaching)																					
NSW 2014 Restricted Solid Waste SCC2 (with leached)																					
NSW 2014 Restricted Solid Waste TCLP2 (leached)																					
Field ID	Date																				
Grid 1																					
Fill																					
SOP_BH111_1.0_220118	18/01/2022	<0.05		<0.05				<0.05		<0.05		<0.2		<0.2				<0.05			
SOP_BH112_1.0_220118	18/01/2022	<0.05		<0.05				<0.05		<0.05		<0.2		<0.2				<0.05			
SOP_BH142_0.4_220119	19/01/2022	<0.05		<0.05				<0.05		<0.05		<0.2		<0.2				<0.05			
SOP_BH143_0.3_220119	19/01/2022	<0.05		<0.05				<0.05		<0.05		<0.2		<0.2				<0.05			
SOP_BH143_1.0_220119	19/01/2022	<0.05		<0.05				<0.05		<0.05		<0.2		<0.2				<0.05			
SOP_BH144_0.3_220119	19/01/2022	<0.05		<0.05				<0.05		<0.05		<0.2		<0.2				<0.05			
SOP_BH144_0.6_220119	19/01/2022	<0.05		<0.05				<0.05		<0.05		<0.2		<0.2				<0.05			
SOP_BH145_0.3_220119	19/01/2022	<0.05		<0.05				<0.05		<0.05		<0.2		<0.2				<0.05			
SOP_BH145_1.0_220119	19/01/2022	<0.05		<0.05				<0.05		<0.05		<0.2		<0.2				<0.05			
WAC1_TP1_0.4-0.5	29/04/2022				<0.10							<0.10								<0.10	
WAC1_TP1_0.9-1.0	29/04/2022				<0.10							<0.10								<0.10	
WAC1_TP1_1.4-1.5	29/04/2022				<0.10							<0.10								<0.10	
WAC1_TP2_0.0-0.1	29/04/2022				<0.10							<0.10								<0.10	
WAC1_TP2_0.4-0.5	29/04/2022				<0.10							<0.10								<0.10	
WAC1_TP2_0.9-1.0	29/04/2022				<0.10							<0.10								<0.10	
WAC1_TP2_1.4-1.5	29/04/2022				<0.10							<0.10								<0.10	
WAC1_TP3_0.0-0.1	29/04/2022				<0.10							<0.10								<0.10	
WAC1_TP3_0.4-0.5	29/04/2022				<0.10							<0.10								<0.10	
WAC1_TP3_0.9-1.0	29/04/2022				<0.10							<0.10								<0.10	
WAC1_TP3_1.4-1.5	29/04/2022				<0.10							<0.10								<0.10	
Natural material																					
SOP_BH111_3.0_220118	18/01/2022	<0.05		<0.05				<0.05		<0.05		<0.2		<0.2				<0.05			
SOP_BH112_5.0_220118	18/01/2022	<0.05		<0.05				<0.05		<0.05		<0.2		<0.2				<0.05			
SOP_BH142_4.0_220119	19/01/2022	<0.05		<0.05				<0.05		<0.05		<0.2		<0.2				<0.05			
SOP_BH145_5.0_220119	19/01/2022	<0.05		<0.05				<0.05		<0.05		<0.2		<0.2				<0.05			
WAC1_TP1_1.7-1.8	29/04/2022				<0.10							<0.10								<0.10	
WAC1_TP2_1.7-1.8	29/04/2022				<0.10							<0.10								<0.10	
WAC1_TP3_1.7-1.8	29/04/2022				<0.10							<0.10								<0.10	
Grid 2																					
Fill material																					
SOP_BH110_0.2_220117	17/01/2022	<0.05		<0.05				<0.05		<0.05		<0.2		<0.2				<0.05			
SOP_BH110_0.2_220117	17/01/2022																				
SOP_BH110_1.3_220118	18/01/2022	<0.05		<0.05				<0.05		<0.05		<0.2		<0.2				<0.05			
SOP_BH118_0.1_220119	19/01/2022	<0.05		<0.05				<0.05		<0.05		<0.2		<0.2				<0.05			
SOP_BH118_1.0_220119	19/01/2022	<0.05		<0.05				<0.05		<0.05		<0.2		<0.2				<0.05			
SOP_BH119_0.2_220117	17/01/2022	<0.05		<0.05				<0.05		<0.05		<0.2		<0.2				<0.05			
SOP_BH119_0.2_220117	17/01/2022																				
SOP_BH119_1.0_220117	17/01/2022	<0.05		<0.05				<0.05		<0.05		<0.2		<0.2				<0.05			
WAC1_TP4_0.0-0.1	29/04/2022																				
WAC1_TP4_0.3	29/04/2022				<0.10							<0.10								<0.10	
Natural material																					
SOP_BH118_5.0_220119	19/01/2022	<0.05		<0.05				<0.05		<0.05		<0.2		<0.2				<0.05			
SOP_BH118_10.0_220119	19/01/2022	<0.05		<0.05				<0.05		<0.05		<0.2		<0.2				<0.05			
SOP_BH118_15.0_220119	19/01/2022	<0.05		<0.05				<0.05		<0.05		<0.2		<0.2				<0.05			
SOP_BH118_20.0_220119	19/01/2022	<0.05		<0.05				<0.05		<0.05		<0.2		<0.2				<0.05			
SOP_BH118_25.0_220119	19/01/2022	<0.05		<0.05				<0.05		<0.05		<0.2		<0.2				<0.05			
SOP_BH119_3.0_220117	17/01/2022	<0.05		<0.05				<0.05		<0.05		<0.2		<0.2				<0.05			
WAC1_TP4_0.4	29/04/2022				<0.10							<0.10								<0.10	
WAC1_TP4_0.5	29/04/2022				<0.10							<0.10								<0.10	
WAC1_TP4_ BRa	29/04/2022				<0.10							<0.10								<0.10	
Grid 3																					
Fill material																					
SOP_BH120_0.5_220120	20/01/2022	<0.05		<0.05				<0.05		<0.05		<0.2		<0.2				<0.05			
SOP_BH120_3.0_220120	20/01/2022	<0.05		<0.05				<0.05		<0.05		<0.2		<0.2				<0.05			
WAC1_TP5_0.0-0.1	29/04/2022				<0.10							<0.10								<0.10	
WAC1_TP5_0.3-0.4	29/04/2022				<0.10							<0.10								<0.10	
WAC1_TP6_0.0-0.1	29/04/2022				<0.10							<0.10								<0.10	
WAC1_TP6_0.3-0.4	29/04/2022				<0.10							<0.10								<0.10	
Natural material																					
WAC1_TP5_0.5-0.6	29/04/2022				<0.10							<0.10								<0.10	
WAC1_TP6_0.5-0.6	29/04/2022				<0.10							<0.10								<0.10	
WAC1_TP6_ BRb	29/04/2022				<0.10							<0.10								<0.10	
Grid 4																					
Fill material																					
SOP_BH124_0.5_220120	21/01/2022	<0.05		<0.05				<0.05		<0.05		<0.2		<0.2				<0.05			
SOP_BH125_0.5_220121	21/01/2022	<0.05		<0.05				<0.05		<0.05		<0.2		<0.2				<0.05			
SOP_BH126_0.5_220121	21/01/2022	<0.05		<0.05				<0.05		<0.05		<0.2		<0.2				<0.05			
SOP_BH127_1.2_220121	21/01/2022	<0.05		<0.05				<0.05		<0.05		<0.2		<0.2				<0.05			
SOP_BH128_0.9_220124	24/01/2022	<0.05		<0.05				<0.05		<0.05		<0.2		<0.2				<0.05			
SOP_BH129_0.5_220124	24/01/2022	<0.05		<0.05				<0.05		<0.05		<0.2		<0.2				<0.05			
SOP_BH129_1.0_220124	24/01/2022	<0.05		<0.05				<0.05		<0.05		<0.2		<0.2				<0.05			
WAC1_TP7_0.0-0.1	29/04/2022				<0.10							<0.10								<0.10	
WAC1_TP7_0.3_	29/04/2022				<0.10							<0.10								<0.10	
WAC1_TP8_0.1	29/04/2022				<0.10							<0.10								<0.10	
WAC1_TP8_0.2	29/04/2022				<0.10							<0.10								<0.10	
WAC1_TP8_0.3	29/04/2022				<0.10							<0.10								<0.10	
WAC1_TP8_0.4	29/04/2022				<0.10							<0.10								<0.10	
WAC1_TP8_0.5	29/04/2022				<0.10							<0.10								<0.10	
WAC1_TP8_0.6	29/04/2022				<0.10							<0.10								<0.10	
WAC1_TP8_0.7	29/04/2022				<0.10							<0.10								<0.10	
WAC1_TP9_0.0-0.1	29/04/2022				<0.10							<0.10								<0.10	
WAC1_TP9_0.2-0.3	29/04/2022				<0.10							<0.10								<0.10	
WAC1_TP9_0.3-0.4	29/04/2022				<0.10							<0.10								<0.10	
WAC1_TP9_0.4-0.5	29/04/2022				<0.10							<0.10								<0.10	
WAC1_TP9_0.8-0.9	29/04/2022				<0.10							<0.10								<0.10	
Natural material																					
SOP_BH124_3.0_220120	21/01/2022	<0.05		<0.05				<0.05		<0.05		<0.2		<0.2				<0.05			
SOP_BH125_5.0_220121	21/01/2022	<0.05		<0.05				<0.05		<0.05		<0.2		<0.2				<0.05			
SOP_BH125_10.0_220121	21/01/2022	<0.05		<0.05				<0.05		<0.05		<0.2		<0.2				<0.05			
SOP_BH125_15.0_220121	21/01/2022	<0.05		<0.05				<0.05		<0.05		<0.2		<0.2				<0.05			
SOP_BH125_20.0_220121	21/01/2022	<0.05		<0.05				<0.05		<0.05		<0.2		<0.2				<0.05			
SOP_BH125_25.0_220121	21/01/2022	<0.05		<0.05				<0.05		<0.05		<0.2		<0.2				<0.05			
SOP_BH126_2.0_220121	21/01/2022	<0.05		<0.05				<0.05		<0.05		<0.2		<0.2				<0.05			
SOP_BH126_2.0_220121	21/01/2022																				
SOP_BH127_4.0_220121	21/01/2022	<0.05		<0.05				<0.05		<0.05		<0.2		<0.2				<0.05			
WAC1_TP9_1.0-1.1	29/04/2022				<0.10							<0.10								<0.10	
* A Non Detect Multiplier of 0.5 has been applied.																					
Environmental Standards																					
NSW EPA, November 2014, NSW 2014 General Solid Waste CT1 (No Leaching)																					
NSW EPA, November 2014, NSW 2014 General Solid Waste SCC1 (with leached)																					
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste CT2 (No Leaching)																					
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste SCC2 (with leached)																					
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste TCLP2 (leached)																					

Table B1

Result Table A				PAH														
		Trichloronate	Tetrachlorvinphos	Benzo(b+j+k)fluoranthene	1-Chloronaphthalene	2-chlonaphthalene	2-methylnaphthalene	3-methylcholanthrene	7,12-dimethylbenz(a)anthracene	Acenaphthene	Acenaphthylene	Anthracene	Benz(a)anthracene	Benzo(a) pyrene		Benzo(b)fluoranthene	Benzo(b+j)fluoranthene	Benzo(g,h,i)perylene
		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	µg/L	mg/kg	mg/kg	mg/kg
EQL		0.2	0.2	1	0.5	0.5	0.5	0.5	0.5	0.3	0.3	0.3	0.3	0.3	0.5	0.3	0.5	0.3
Berkman (1989) Background Ranges (VENM)														0				
NSW 2014 General Solid Waste CT1 (No Leaching)														0.8				
NSW 2014 General Solid Waste SCC1 (with leached)														10				
NSW 2014 Restricted Solid Waste CT2 (No Leaching)														3.2				
NSW 2014 Restricted Solid Waste SCC2 (with leached)														23				
NSW 2014 Restricted Solid Waste TCLP2 (leached)															160			
Field ID	Date																	
Grid 1																		
Fill																		
SOP_BH111_1.0_220118	18/01/2022			<1		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5			<0.5	<0.5
SOP_BH112_1.0_220118	18/01/2022			<1		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5			<0.5	<0.5
SOP_BH142_0.4_220119	19/01/2022					<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5			<0.5	<0.5
SOP_BH143_0.3_220119	19/01/2022									<0.5	<0.5	<0.5	<0.5	<0.5			<0.5	<0.5
SOP_BH143_1.0_220119	19/01/2022					<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5			<0.5	<0.5
SOP_BH144_0.3_220119	19/01/2022									<0.5	<0.5	<0.5	<0.5	<0.5			<0.5	<0.5
SOP_BH144_0.6_220119	19/01/2022					<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5			<0.5	<0.5
SOP_BH145_0.3_220119	19/01/2022									<0.5	<0.5	<0.5	<0.5	<0.5			<0.5	<0.5
SOP_BH145_1.0_220119	19/01/2022					<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5			<0.5	<0.5
WAC1_TP1_0.4-0.5	29/04/2022									<0.30	<0.30	<0.30	<0.30	<0.30		<0.30		<0.30
WAC1_TP1_0.9-1.0	29/04/2022									<0.30	<0.30	<0.30	<0.30	<0.30		<0.30		<0.30
WAC1_TP1_1.4-1.5	29/04/2022									<0.30	<0.30	<0.30	<0.30	<0.30		<0.30		<0.30
WAC1_TP2_0.0-0.1	29/04/2022									<0.30	<0.30	<0.30	<0.30	<0.30		<0.30		<0.30
WAC1_TP2_0.4-0.5	29/04/2022									<0.30	<0.30	<0.30	<0.30	<0.30		<0.30		<0.30
WAC1_TP2_0.9-1.0	29/04/2022									<0.30	<0.30	<0.30	<0.30	<0.30		<0.30		<0.30
WAC1_TP2_1.4-1.5	29/04/2022									<0.30	<0.30	<0.30	<0.30	<0.30		<0.30		<0.30
WAC1_TP3_0.0-0.1	29/04/2022									<0.30	<0.30	<0.30	<0.30	<0.30		<0.30		<0.30
WAC1_TP3_0.4-0.5	29/04/2022									<0.30	<0.30	<0.30	<0.30	<0.30		<0.30		<0.30
WAC1_TP3_0.9-1.0	29/04/2022									<0.30	<0.30	<0.30	<0.30	<0.30		<0.30		<0.30
WAC1_TP3_1.4-1.5	29/04/2022									<0.30	<0.30	<0.30	<0.30	<0.30		<0.30		<0.30
Natural material																		
SOP_BH111_3.0_220118	18/01/2022									<0.5	<0.5	<0.5	<0.5	<0.5			<0.5	<0.5
SOP_BH112_5.0_220118	18/01/2022									<0.5	<0.5	<0.5	<0.5	<0.5			<0.5	<0.5
SOP_BH142_4.0_220119	19/01/2022									<0.5	<0.5	<0.5	<0.5	<0.5			<0.5	<0.5
SOP_BH145_5.0_220119	19/01/2022									<0.5	<0.5	<0.5	<0.5	<0.5			<0.5	<0.5
WAC1_TP1_1.7-1.8	29/04/2022									<0.30	<0.30	<0.30	<0.30	<0.30		<0.30		<0.30
WAC1_TP2_1.7-1.8	29/04/2022									<0.30	<0.30	<0.30	<0.30	<0.30		<0.30		<0.30
WAC1_TP3_1.7-1.8	29/04/2022									<0.30	<0.30	<0.30	<0.30	<0.30		<0.30		<0.30
Grid 2																		
Fill material																		
SOP_BH110_0.2_220117	17/01/2022			<1		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5			<0.5	<0.5
SOP_BH110_0.2_220117	17/01/2022																	
SOP_BH110_1.3_220118	18/01/2022									<0.5	<0.5	<0.5	<0.5	<0.5			<0.5	<0.5
SOP_BH118_0.1_220119	19/01/2022					<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5			<0.5	<0.5
SOP_BH118_1.0_220119	19/01/2022									<0.5	<0.5	<0.5	<0.5	<0.5			<0.5	<0.5
SOP_BH119_0.2_220117	17/01/2022									<0.5	<0.5	<0.5	<0.5	<0.5			<0.5	<0.5
SOP_BH119_0.2_220117	17/01/2022																	
SOP_BH119_1.0_220117	17/01/2022			<1		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5			<0.5	<0.5
WAC1_TP4_0.0-0.1	29/04/2022																	
WAC1_TP4_0.3	29/04/2022									<0.30	<0.30	<0.30	<0.30	<0.30		<0.30		<0.30
Natural material																		
SOP_BH118_5.0_220119	19/01/2022					<0.5	**1.4**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5			<0.5	<0.5
SOP_BH118_10.0_220119	19/01/2022									<0.5	<0.5	<0.5	<0.5	<0.5			<0.5	<0.5
SOP_BH118_15.0_220119	19/01/2022					<0.5	**0.6**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5			<0.5	<0.5
SOP_BH118_20.0_220119	19/01/2022									<0.5	<0.5	<0.5	<0.5	<0.5			<0.5	<0.5
SOP_BH118_25.0_220119	19/01/2022					<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5			<0.5	<0.5
SOP_BH119_3.0_220117	17/01/2022									<0.5	<0.5	<0.5	<0.5	<0.5			<0.5	<0.5
WAC1_TP4_0.4	29/04/2022									<0.30	<0.30	<0.30	<0.30	<0.30		<0.30		<0.30
WAC1_TP4_0.5	29/04/2022									<0.30	<0.30	<0.30	<0.30	<0.30		<0.30		<0.30
WAC1_TP4_ BRa	29/04/2022									<0.30	<0.30	<0.30	<0.30	<0.30		<0.30		<0.30
Grid 3																		
Fill material																		
SOP_BH120_0.5_220120	20/01/2022									<0.5	<0.5	<0.5	<0.5	<0.5			<0.5	<0.5
SOP_BH120_3.0_220120	20/01/2022					<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5			<0.5	<0.5
WAC1_TP5_0.0-0.1	29/04/2022									<0.30	<0.30	<0.30	<0.30	<0.30		<0.30		<0.30
WAC1_TP5_0.3-0.4	29/04/2022									<0.30	<0.30	<0.30	<0.30	<0.30		<0.30		<0.30
WAC1_TP6_0.0-0.1	29/04/2022									<0.30	<0.30	<0.30	<0.30	<0.30		<0.30		<0.30
WAC1_TP6_0.3-0.4	29/04/2022									<0.30	<0.30	<0.30	<0.30	<0.30		<0.30		<0.30
Natural material																		
WAC1_TP5_0.5-0.6	29/04/2022									<0.30	<0.30	<0.30	<0.30	<0.30		<0.30		<0.30
WAC1_TP6_0.5-0.6	29/04/2022									<0.30	<0.30	<0.30	<0.30	<0.30		<0.30		<0.30
WAC1_TP6_ BRb	29/04/2022									<0.30	<0.30	<0.30	<0.30	<0.30		<0.30		<0.30
Grid 4																		
Fill material																		
SOP_BH124_0.5_220120	21/01/2022					<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5			<0.5	<0.5
SOP_BH125_0.5_220121	21/01/2022									<0.5	<0.5	<0.5	<0.5	<0.5			<0.5	<0.5
SOP_BH126_0.5_220121	21/01/2022					<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5			<0.5	<0.5
SOP_BH127_1.2_220121	21/01/2022					<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5			<0.5	<0.5
SOP_BH128_0.9_220124	24/01/2022			<1		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5			<0.5	<0.5
SOP_BH129_0.5_220124	24/01/2022									<0.5	<0.5	<0.5	<0.5	<0.5			<0.5	<0.5
SOP_BH129_1.0_220124	24/01/2022			<1		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5			<0.5	<0.5
WAC1_TP7_0.0-0.1	29/04/2022									<0.30	<0.30	<0.30	<0.30	<0.30		<0.30		<0.30
WAC1_TP7_0.3_	29/04/2022									<0.30	<0.30	<0.30	<0.30	<0.30		<0.30		<0.30
WAC1_TP8_0.1	29/04/2022									<0.30	<0.30	<0.30	<0.30	<0.30		<0.30		<0.30
WAC1_TP8_0.2	29/04/2022									<0.30	<0.30	<0.30	<0.30	<0.30		<0.30		<0.30
WAC1_TP8_0.3	29/04/2022									<0.30	<0.30	<0.30	<0.30	<0.30		<0.30		<0.30
WAC1_TP8_0.4	29/04/2022									<0.30	<0.30	<0.30	<0.30	<0.30		<0.30		<0.30
WAC1_TP8_0.5	29/04/2022									<0.30	<0.30	<0.30	<0.30	<0.30		<0.30		<0.30
WAC1_TP8_0.6	29/04/2022									<0.30	<0.30	<0.30	<0.30	<0.30		<0.30		<0.30
WAC1_TP8_0.7	29/04/2022									<0.30	<0.30	<0.30	<0.30	<0.30		<0.30		<0.30
WAC1_TP9_0.0-0.1	29/04/2022									<0.30	<0.30	<0.30	<0.30	<0.30		<0.30		<0.30
WAC1_TP9_0.2-0.3	29/04/2022									<0.30	<0.30	<0.30	<0.30	<0.30		<0.30		<0.30
WAC1_TP9_0.3-0.4	29/04/2022									<0.30	<0.30	<0.30	<0.30	<0.30		<0.30		<0.30
WAC1_TP9_0.4-0.5	29/04/2022									<0.30	<0.30	<0.30	<0.30	<0.30		<0.30		<0.30
WAC1_TP9_0.8-0.9	29/04/2022									<0.30	<0.30	<0.30	<0.30	<0.30		<0.30		<0.30
Natural material																		
SOP_BH124_3.0_220120	21/01/2022									<0.5	<0.5	<0.5	<0.5	<0.5			<0.5	<0.5
SOP_BH125_5.0_220121	21/01/2022					<0.5	**2**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5			<0.5	<0.5
SOP_BH125_10.0_220121	21/01/2022									<0.5	<0.5	<0.5	<0.5	<0.5			<0.5	<0.5
SOP_BH125_15.0_220121	21/01/2022					<0.5	**1.7**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5			<0.5	<0.5
SOP_BH125_20.0_220121	21/01/2022									<0.5	<0.5	<0.5	<0.5	<0.5			<0.5	<0.5
SOP_BH125_25.0_220121	21/01/2022					<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5			<0.5	<0.5
SOP_BH126_2.0_220121	21/01/2022									<0.5	<0.5	<0.5	<0.5	<0.5			<0.5	<0.5
SOP_BH126_2.0_220121	21/01/2022																	
SOP_BH127_4.0_220121	21/01/2022									<0.5	<0.5	<0.5	<0.5	<0.5			<0.5	<0.5
WAC1_TP9_1.0-1.1	29/04/2022									<0.30	<0.30	<0.30	<0.30	<0.30		<0.30		<0.30
* A Non Detect Multiplier of 0.5 has been applied.																		
Environmental Standards																		
NSW EPA, November 2014, NSW 2014 General Solid Waste CT1 (No Leaching)																		
NSW EPA, November 2014, NSW 2014 General Solid Waste SCC1 (with leached)																		
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste CT2 (No Leaching)																		
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste SCC2 (with leached)																		
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste TCLP2 (leached)																		

Table B1

Result Table A		Benzo(k)fluoranthene	Chrysene	Dibenz(a,h)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-cd)pyrene	Naphthalene	Phenanthrene	Pyrene	PAHs (sum of total)	PAHs (sum of positives)	PCBs								
													Arochlor 1016	Arochlor 1221	Arochlor 1232	Arochlor 1242	Arochlor 1248	Arochlor 1254	Arochlor 1260	PCBs (sum of total)	Bis(2-ethylhexyl) phthalate
		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL		0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.5	0.3	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	5
Berkman (1989) Background Ranges (VENM)											0									0	
NSW 2014 General Solid Waste CT1 (No Leaching)											200									50	
NSW 2014 General Solid Waste SCC1 (with leached)											200									50	
NSW 2014 Restricted Solid Waste CT2 (No Leaching)											800									50	
NSW 2014 Restricted Solid Waste SCC2 (with leached)											800									50	
NSW 2014 Restricted Solid Waste TCLP2 (leached)																					
Field ID	Date																				
Grid 1																					
Fill																					
SOP_BH111_1.0_220118	18/01/2022	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5									<0.1	<5
SOP_BH112_1.0_220118	18/01/2022	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5									<0.1	<5
SOP_BH142_0.4_220119	19/01/2022	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5									<0.1	<5
SOP_BH143_0.3_220119	19/01/2022	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5									<0.1	
SOP_BH143_1.0_220119	19/01/2022	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5									<0.1	<5
SOP_BH144_0.3_220119	19/01/2022	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5									<0.1	
SOP_BH144_0.6_220119	19/01/2022	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5									<0.1	<5
SOP_BH145_0.3_220119	19/01/2022	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5									<0.1	
SOP_BH145_1.0_220119	19/01/2022	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5									<0.1	<5
WAC1_TP1_0.4-0.5	29/04/2022	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30		<0.30	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		
WAC1_TP1_0.9-1.0	29/04/2022	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30		<0.30	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		
WAC1_TP1_1.4-1.5	29/04/2022	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30		<0.30	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		
WAC1_TP2_0.0-0.1	29/04/2022	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30		<0.30	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		
WAC1_TP2_0.4-0.5	29/04/2022	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30		<0.30	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		
WAC1_TP2_0.9-1.0	29/04/2022	<0.30	<0.30	<0.30	**0.35**	<0.30	<0.30	<0.30	<0.30	**0.40**		**0.75**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		
WAC1_TP2_1.4-1.5	29/04/2022	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30		<0.30	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		
WAC1_TP3_0.0-0.1	29/04/2022	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30		<0.30	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		
WAC1_TP3_0.4-0.5	29/04/2022	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30		<0.30	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		
WAC1_TP3_0.9-1.0	29/04/2022	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30		<0.30	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		
WAC1_TP3_1.4-1.5	29/04/2022	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30		<0.30	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		
Natural material																					
SOP_BH111_3.0_220118	18/01/2022	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5									<0.1	
SOP_BH112_5.0_220118	18/01/2022	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5									<0.1	
SOP_BH142_4.0_220119	19/01/2022	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5									<0.1	
SOP_BH145_5.0_220119	19/01/2022	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5									<0.1	
WAC1_TP1_1.7-1.8	29/04/2022	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30		<0.30	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		
WAC1_TP2_1.7-1.8	29/04/2022	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30		<0.30	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		
WAC1_TP3_1.7-1.8	29/04/2022	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30		<0.30	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		
Grid 2																					
Fill material																					
SOP_BH110_0.2_220117	17/01/2022	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5									<0.1	<5
SOP_BH110_0.2_220117	17/01/2022																				
SOP_BH110_1.3_220118	18/01/2022	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5									<0.1	
SOP_BH118_0.1_220119	19/01/2022	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5									<0.1	<5
SOP_BH118_1.0_220119	19/01/2022	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5									<0.1	
SOP_BH119_0.2_220117	17/01/2022	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5									<0.1	
SOP_BH119_0.2_220117	17/01/2022																				
SOP_BH119_1.0_220117	17/01/2022	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5									<0.1	<5
WAC1_TP4_0.0-0.1	29/04/2022																				
WAC1_TP4_0.3	29/04/2022	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30		<0.30	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		
Natural material																					
SOP_BH118_5.0_220119	19/01/2022	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5									<0.1	<5
SOP_BH118_10.0_220119	19/01/2022	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**0.8**	<0.5	**0.8**									<0.1	
SOP_BH118_15.0_220119	19/01/2022	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5									<0.1	<5
SOP_BH118_20.0_220119	19/01/2022	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5									<0.1	
SOP_BH118_25.0_220119	19/01/2022	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5									<0.1	<5
SOP_BH119_3.0_220117	17/01/2022	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5									<0.1	
WAC1_TP4_0.4	29/04/2022	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30		<0.30	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		
WAC1_TP4_0.5	29/04/2022	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30		<0.30	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		
WAC1_TP4_ BRa	29/04/2022	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30		<0.30	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		
Grid 3																					
Fill material																					
SOP_BH120_0.5_220120	20/01/2022	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5									<0.1	
SOP_BH120_3.0_220120	20/01/2022	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5									<0.1	<5
WAC1_TP5_0.0-0.1	29/04/2022	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30		<0.30	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		
WAC1_TP5_0.3-0.4	29/04/2022	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30		<0.30	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		
WAC1_TP6_0.0-0.1	29/04/2022	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30		<0.30	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		
WAC1_TP6_0.3-0.4	29/04/2022	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30		<0.30	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		
Natural material																					
WAC1_TP5_0.5-0.6	29/04/2022	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30		<0.30	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		
WAC1_TP6_0.5-0.6	29/04/2022	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30		<0.30	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		
WAC1_TP6_ BRb	29/04/2022	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30		<0.30	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		
Grid 4																					
Fill material																					
SOP_BH124_0.5_220120	21/01/2022	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5									<0.1	<5
SOP_BH125_0.5_220121	21/01/2022	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5									<0.1	
SOP_BH126_0.5_220121	21/01/2022	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5									<0.1	<5
SOP_BH127_1.2_220121	21/01/2022	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5									<0.1	<5
SOP_BH128_0.9_220124	24/01/2022	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5									<0.1	<5
SOP_BH129_0.5_220124	24/01/2022	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5									<0.1	
SOP_BH129_1.0_220124	24/01/2022	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5									<0.1	<5
WAC1_TP7_0.0-0.1	29/04/2022	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30		<0.30	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		
WAC1_TP7_0.3_	29/04/2022	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30		<0.30	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		
WAC1_TP8_0.1	29/04/2022	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30		<0.30	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		
WAC1_TP8_0.2	29/04/2022	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30		<0.30	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		
WAC1_TP8_0.3	29/04/2022	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30		<0.30	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		
WAC1_TP8_0.4	29/04/2022	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30		<0.30	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		
WAC1_TP8_0.5	29/04/2022	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30		<0.30	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		
WAC1_TP8_0.6	29/04/2022	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30		<0.30	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		
WAC1_TP8_0.7	29/04/2022	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30		<0.30	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		
WAC1_TP9_0.0-0.1	29/04/2022	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30		<0.30	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		
WAC1_TP9_0.2-0.3	29/04/2022	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30		<0.30	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		
WAC1_TP9_0.3-0.4	29/04/2022	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30		<0.30	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		
WAC1_TP9_0.4-0.5	29/04/2022	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30		<0.30	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		
WAC1_TP9_0.8-0.9	29/04/2022	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30		<0.30	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		
Natural material																					
SOP_BH124_3.0_220120	21/01/2022	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5									<0.1	
SOP_BH125_5.0_220121	21/01/2022	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**0.8**	<0.5	**0.8**									<0.1	<5
SOP_BH125_10.0_220121	21/01/2022	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**1**	<0.5	**1**									<0.1	
SOP_BH125_15.0_220121	21/01/2022	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**0.8**	<0.5	**0.8**									<0.1	<5
SOP_BH125_20.0_220121	21/01/2022	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**0.8**	<0.5	**0.8**									<0.1	
SOP_BH125_25.0_220121	21/01/2022	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**0.6**	<0.5	**0.6**									<0.1	<5
SOP_BH126_2.0_220121	21/01/2022	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**0.7**	<0.5	**0.7**									<0.1	
SOP_BH126_2.0_220121	21/01/2022																				
SOP_BH127_4.0_220121	21/01/2022	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**0.6**	<0.5	**0.6**									<0.1	
WAC1_TP9_1.0-1.1	29/04/2022	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30		<0.30	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		
* A Non Detect Multiplier of 0.5 has been applied.																					
Environmental Standards																					
NSW EPA, November 2014, NSW 2014 General Solid Waste CT1 (No Leaching)																					
NSW EPA, November 2014, NSW 2014 General Solid Waste SCC1 (with leached)																					
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste CT2 (No Leaching)																					
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste SCC2 (with leached)																					
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste TCLP2 (leached)																					

Table B1

Result Table A		Phthalates					TPH					VOCs			
		Butyl benzyl phthalate	Diethylphthalate	Dimethyl phthalate	Di-n-butyl phthalate	Di-n-octyl phthalate	C6-C9 Fraction	C10-C14 Fraction	C15-C28 Fraction	C29-C36 Fraction	C10-C36 Fraction (Sum)	cis-1,4-Dichloro-2-butene	trans-1,4-Dichloro-2-butene	Dibenz(a,j)acridine	Pentachloroethane
		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
EQL		0.5	0.5	0.5	0.5	0.5	10	20	50	50	50	0.5	0.5	0.5	0.5
Berkman (1989) Background Ranges (VENM)							0								
NSW 2014 General Solid Waste CT1 (No Leaching)							650				10,000				
NSW 2014 General Solid Waste SCC1 (with leached)							650				10,000				
NSW 2014 Restricted Solid Waste CT2 (No Leaching)							2,600				40,000				
NSW 2014 Restricted Solid Waste SCC2 (with leached)							2,600				40,000				
NSW 2014 Restricted Solid Waste TCLP2 (leached)															
Field ID	Date														
Grid 1															
Fill															
SOP_BH111_1.0_220118	18/01/2022	<0.5	<0.5	<0.5	<0.5	<0.5	<10	<50	<100	<100	<50	<0.5	<0.5		<0.5
SOP_BH112_1.0_220118	18/01/2022	<0.5	<0.5	<0.5	<0.5	<0.5	<10	<50	<100	<100	<50	<0.5	<0.5		<0.5
SOP_BH142_0.4_220119	19/01/2022	<0.5	<0.5	<0.5	<0.5	<0.5	<10	<50	<100	<100	<50	<0.5	<0.5		<0.5
SOP_BH143_0.3_220119	19/01/2022						<10	<50	<100	<100	<50				
SOP_BH143_1.0_220119	19/01/2022	<0.5	<0.5	<0.5	<0.5	<0.5	<10	<50	<100	<100	<50	<0.5	<0.5		<0.5
SOP_BH144_0.3_220119	19/01/2022						<10	<50	<100	<100	<50				
SOP_BH144_0.6_220119	19/01/2022	<0.5	<0.5	<0.5	<0.5	<0.5	<10	<50	<100	<100	<50	<0.5	<0.5		<0.5
SOP_BH145_0.3_220119	19/01/2022						<10	<50	<100	<100	<50				
SOP_BH145_1.0_220119	19/01/2022	<0.5	<0.5	<0.5	<0.5	<0.5	<10	<50	<100	<100	<50	<0.5	<0.5		<0.5
WAC1_TP1_0.4-0.5	29/04/2022						<35	<50	<100	<100	<50				
WAC1_TP1_0.9-1.0	29/04/2022						<35	<50	<100	<100	<50				
WAC1_TP1_1.4-1.5	29/04/2022						<35	<50	<100	<100	<50				
WAC1_TP2_0.0-0.1	29/04/2022						<35	<50	<100	<100	<50				
WAC1_TP2_0.4-0.5	29/04/2022						<35	<50	<100	<100	<50				
WAC1_TP2_0.9-1.0	29/04/2022						<35	<50	<100	<100	<50				
WAC1_TP2_1.4-1.5	29/04/2022						<35	<50	<100	<100	<50				
WAC1_TP3_0.0-0.1	29/04/2022						<35	<50	<100	<100	<50				
WAC1_TP3_0.4-0.5	29/04/2022						<35	<50	<100	<100	<50				
WAC1_TP3_0.9-1.0	29/04/2022						<35	<50	<100	<100	<50				
WAC1_TP3_1.4-1.5	29/04/2022						<35	<50	<100	<100	<50				
Natural material															
SOP_BH111_3.0_220118	18/01/2022						<10	<50	<100	<100	<50				
SOP_BH112_5.0_220118	18/01/2022						<10	<50	<100	<100	<50				
SOP_BH142_4.0_220119	19/01/2022						<10	<50	<100	<100	<50				
SOP_BH145_5.0_220119	19/01/2022						<10	<50	<100	<100	<50				
WAC1_TP1_1.7-1.8	29/04/2022						<35	<50	<100	<100	<50				
WAC1_TP2_1.7-1.8	29/04/2022						<35	<50	<100	<100	<50				
WAC1_TP3_1.7-1.8	29/04/2022						<35	<50	<100	<100	<50				
Grid 2															
Fill material															
SOP_BH110_0.2_220117	17/01/2022	<0.5	<0.5	<0.5	<0.5	<0.5	<10	<50	<100	120	120	<0.5	<0.5		<0.5
SOP_BH110_0.2_220117	17/01/2022														
SOP_BH110_1.3_220118	18/01/2022						<10	<50	<100	<100	<50				
SOP_BH118_0.1_220119	19/01/2022	<0.5	<0.5	<0.5	<0.5	<0.5	<10	<50	<100	160	160	<0.5	<0.5		<0.5
SOP_BH118_1.0_220119	19/01/2022						<10	<50	<100	<100	<50				
SOP_BH119_0.2_220117	17/01/2022						<10	<50	<100	<100	<50				
SOP_BH119_0.2_220117	17/01/2022														
SOP_BH119_1.0_220117	17/01/2022	<0.5	<0.5	<0.5	<0.5	<0.5	<10	<50	<100	<100	<50	<0.5	<0.5		<0.5
WAC1_TP4_0.0-0.1	29/04/2022														
WAC1_TP4_0.3	29/04/2022						<35	<50	<100	<100	<50				
Natural material															
SOP_BH118_5.0_220119	19/01/2022	<0.5	<0.5	<0.5	<0.5	<0.5	19	<50	<100	<100	<50	<0.5	<0.5		<0.5
SOP_BH118_10.0_220119	19/01/2022						31	<50	110	<100	110				
SOP_BH118_15.0_220119	19/01/2022	<0.5	<0.5	<0.5	<0.5	<0.5	15	<50	<100	<100	<50	<0.5	<0.5		<0.5
SOP_BH118_20.0_220119	19/01/2022						10	<50	<100	<100	<50				
SOP_BH118_25.0_220119	19/01/2022	<0.5	<0.5	<0.5	<0.5	<0.5	20	60	140	<100	200	<0.5	<0.5		<0.5
SOP_BH119_3.0_220117	17/01/2022						<10	<50	<100	<100	<50				
WAC1_TP4_0.4	29/04/2022						<35	<50	<100	<100	<50				
WAC1_TP4_0.5	29/04/2022						<35	<50	<100	<100	<50				
WAC1_TP4_ BRa	29/04/2022						<35	<50	<100	<100	<50				
Grid 3															
Fill material															
SOP_BH120_0.5_220120	20/01/2022						<10	<50	<100	<100	<50				
SOP_BH120_3.0_220120	20/01/2022	<0.5	<0.5	<0.5	<0.5	<0.5	<10	<50	<100	<100	<50	<0.5	<0.5		<0.5
WAC1_TP5_0.0-0.1	29/04/2022						<35	<50	<100	<100	<50				
WAC1_TP5_0.3-0.4	29/04/2022						<35	<50	<100	<100	<50				
WAC1_TP6_0.0-0.1	29/04/2022						<35	<50	<100	<100	<50				
WAC1_TP6_0.3-0.4	29/04/2022						<35	<50	<100	<100	<50				
Natural material															
WAC1_TP5_0.5-0.6	29/04/2022						<35	<50	<100	<100	<50				
WAC1_TP6_0.5-0.6	29/04/2022						<35	<50	<100	<100	<50				
WAC1_TP6_ BRb	29/04/2022						<35	<50	<100	<100	<50				
Grid 4															
Fill material															
SOP_BH124_0.5_220120	21/01/2022	<0.5	<0.5	<0.5	<0.5	<0.5	<10	<50	<100	<100	<50	<0.5	<0.5		<0.5
SOP_BH125_0.5_220121	21/01/2022						<10	<50	<100	<100	<50				
SOP_BH126_0.5_220121	21/01/2022	<0.5	<0.5	<0.5	<0.5	<0.5	<10	<50	<100	<100	<50	<0.5	<0.5		<0.5
SOP_BH127_1.2_220121	21/01/2022	<0.5	<0.5	<0.5	<0.5	<0.5	<10	<50	<100	<100	<50	<0.5	<0.5		<0.5
SOP_BH128_0.9_220124	24/01/2022	<0.5	<0.5	<0.5	<0.5	<0.5	<10	<50	<100	<100	<50	<0.5	<0.5		<0.5
SOP_BH129_0.5_220124	24/01/2022						<10	<50	<100	<100	<50				
SOP_BH129_1.0_220124	24/01/2022	<0.5	<0.5	<0.5	<0.5	<0.5	<10	<50	<100	<100	<50	<0.5	<0.5		<0.5
WAC1_TP7_0.0-0.1	29/04/2022						<35	<50	<100	<100	<50				
WAC1_TP7_0.3_	29/04/2022						<35	<50	<100	<100	<50				
WAC1_TP8_0.1	29/04/2022						<35	<50	<100	<100	<50				
WAC1_TP8_0.2	29/04/2022						<35	<50	<100	<100	<50				
WAC1_TP8_0.3	29/04/2022						<35	<50	<100	<100	<50				
WAC1_TP8_0.4	29/04/2022						<35	<50	<100	<100	<50				
WAC1_TP8_0.5	29/04/2022						<35	<50	<100	<100	<50				
WAC1_TP8_0.6	29/04/2022						<35	<50	<100	<100	<50				
WAC1_TP8_0.7	29/04/2022						<35	<50	<100	<100	<50				
WAC1_TP9_0.0-0.1	29/04/2022						<35	<50	<100	<100	<50				
WAC1_TP9_0.2-0.3	29/04/2022						<35	<50	<100	<100	<50				
WAC1_TP9_0.3-0.4	29/04/2022						<35	<50	<100	<100	<50				
WAC1_TP9_0.4-0.5	29/04/2022						<35	<50	<100	<100	<50				
WAC1_TP9_0.8-0.9	29/04/2022						<35	<50	<100	<100	<50				
Natural material															
SOP_BH124_3.0_220120	21/01/2022						<10	<50	<100	<100	<50				
SOP_BH125_5.0_220121	21/01/2022	<0.5	<0.5	<0.5	<0.5	<0.5	21	<50	<100	<100	<50	<0.5	<0.5		<0.5
SOP_BH125_10.0_220121	21/01/2022						24	<50	140	<100	140				
SOP_BH125_15.0_220121	21/01/2022	<0.5	<0.5	<0.5	<0.5	<0.5	<10	60	170	<100	230	<0.5	<0.5		<0.5
SOP_BH125_20.0_220121	21/01/2022						19	<50	120	<100	120				
SOP_BH125_25.0_220121	21/01/2022	<0.5	<0.5	<0.5	<0.5	<0.5	<10	50	150	<100	200	<0.5	<0.5		<0.5
SOP_BH126_2.0_220121	21/01/2022						<10	<50	<100	<100	<50				
SOP_BH126_2.0_220121	21/01/2022														
SOP_BH127_4.0_220121	21/01/2022						<10	<50	<100	<100	<50				
WAC1_TP9_1.0-1.1	29/04/2022						<35	<50	<100	<100	<50				
* A Non Detect Multiplier of 0.5 has been applied.															
Environmental Standards															
NSW EPA, November 2014, NSW 2014 General Solid Waste CT1 (No Leaching)															
NSW EPA, November 2014, NSW 2014 General Solid Waste SCC1 (with leached)															
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste CT2 (No Leaching)															
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste SCC2 (with leached)															
NSW EPA, November 2014, NSW 2014 Restricted Solid Waste TCLP2 (leached)															

Table B2

Result Table B	Inorganics		Metals											
	Sulfate as SO4 - Turbidimetric (filtered)	Sodium (filtered)	Arsenic (filtered)	Cadmium (filtered)	Calcium (filtered)	Chromium (III+VI) (filtered)	Copper (filtered)	Iron (filtered)	Lead (filtered)	Magnesium (filtered)	Mercury (filtered)	Nickel (filtered)	Potassium (filtered)	Zinc (filtered)
	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
EQL	1	1	0.001	0.0001	1	0.001	0.001	0.05	0.001	1	0.0001	0.001	1	0.005
NSW 2014 General Solid Waste TCLP1 (leached)									5			2		
NSW 2014 Restricted Solid Waste TCLP2 (leached)									20			8		
Field ID	**Date**													
SOP_BH110_0.2_220117	**17/01/2022**											<0.1		
SOP_BH118_0.1_220117	**19/01/2022**											**0.2**		
SOP_BH119_0.2_220117	**17/01/2022**											<0.1		
SOP_BH126_2.0_220117	**21/01/2022**											<0.1		
WAC1_TP5_0.0-0.1	**23/04/2022**											<0.2		

Environmental Standards

NSW EPA, November 2014, NSW 2014 General Solid Waste TCLP1 (leached)

NSW EPA, November 2014, NSW 2014 Restricted Solid Waste TCLP2 (leached)

Appendix C – Site Photographs

Commercial in Confidence



Photo 1: Vertical soil profile at TP2. Natural clays (light grey) can be seen at the base of the test pit.



Photo 2: Vertical soil profile at TP3, showing fill and natural layers.



Photo 3: TP4 (located in the centre of the site)



Photo 4: TP6 (located in the centre of the site)



Photo 5: Vertical soil profile at TP7. Natural clays (light grey) can be seen at the base of the test pit.



Photo 6: Vertical soil profile at TP9.

Appendix D – Borelogs

Commercial in Confidence

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TEST PIT NUMBER TP1

CLIENT AFJV **PROJECT NAME** Waste Analysis and Classification

PROJECT NUMBER 21.2041 **PROJECT LOCATION** 7 Fig tree drive, Olympic park NSW

DATE STARTED 21/4/22 **COMPLETED** 21/4/22 **R.L. SURFACE** _____ **DATUM** _____

EXCAVATION CONTRACTOR Delta **SLOPE** --- **BEARING** NA

EQUIPMENT 35 tonn excavator **COORDINATES** _____

TEST PIT DIAMETER _____ **LOGGED BY** ML,SO,MH,SB **CHECKED BY** SB

NOTES _____

Method	Water	RL (m)	Depth (m)	Graphic Log	Classification Symbol	Material Description	Moisture Content	Consistency	PID (ppm)	Samples Tests Remarks	Additional Observations
E						**FILL:** Sandy clay, low plasticity, poorly graded,brown with gravels.	M	S	0.1	WAC1_TP1 0.0-0.1	NA
	NA		0.5			**FILL:** Gravely clay, Low plasticity, poorly graded,red with Small bits of sandstone and shale.			0.1	WAC1_TP1_0.4-0.5	
			1.0			**FILL:(Reworked)**Gravelly clay,Medium Plasticity,medium grained, red.			0.1	WAC1_TP1_0.9-1.0	
			1.5		CL	**Clay:** Clay, High plasticity,well graded,plae orange.			0.1	WAC1_TP1_1.4-1.5	
									0	WAC1_TP1_1.7-1.8	
						TP1 terminated at 1.8m					
			2.0								
			2.5								

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TEST PIT NUMBER TP2

CLIENT AFJV **PROJECT NAME** Waste Analysis and Classification

PROJECT NUMBER 21.2041 **PROJECT LOCATION** 7 Fig tree drive, Olympic park NSW

DATE STARTED 21/4/22 **COMPLETED** 21/4/22 **R.L. SURFACE** ___ **DATUM** ___

EXCAVATION CONTRACTOR Delta **SLOPE** --- **BEARING** NA

EQUIPMENT 35 tonn excavator **COORDINATES** ___

TEST PIT DIAMETER ___ **LOGGED BY** ML,SO,MH,SB **CHECKED BY** SB

NOTES ___

Method	Water	RL (m)	Depth (m)	Graphic Log	Classification Symbol	Material Description	Moisture Content	Consistency	PID (ppm)	Samples Tests Remarks	Additional Observations
E						**FILL:** Sandy clay, low plasticity, poorly graded,brown with gravels.	M	S	0.1	WAC1_TP2_0.0-0.1	NA
	NA		0.5			**FILL:** Gravely clay, Low plasticity, poorly graded,red with Small bits of sandstone and shale.			0.1	WAC1_TP2_0.4-0.5	
			1.0						0.1	WAC1_TP2_0.9-1.0	
			1.5			**FILL:(Reworked)**Gravelly clay,Medium Plasticity,medium grained, red.			0.1	WAC1_TP2_1.4-1.5	
					CL	**Clay:** Clay, High plasticity,fine grained,plae orange.		D	0	WAC1_TP2_1.7-1.8	
			2.0			TP2 terminated at 1.8m					
			2.5								

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TEST PIT NUMBER TP3

CLIENT AFJV **PROJECT NAME** Waste Analysis and Classification

PROJECT NUMBER 21.2041 **PROJECT LOCATION** 7 Fig tree drive, Olympic park NSW

DATE STARTED 21/4/22 **COMPLETED** 21/4/22 **R.L. SURFACE** _____ **DATUM** _____

EXCAVATION CONTRACTOR Delta **SLOPE** --- **BEARING** NA

EQUIPMENT 35 tonn excavator **COORDINATES** _____

TEST PIT DIAMETER _____ **LOGGED BY** ML,SO,MH,SB **CHECKED BY** SB

NOTES _____

Method	Water	RL (m)	Depth (m)	Graphic Log	Classification Symbol	Material Description	Moisture Content	Consistency	PID (ppm)	Samples Tests Remarks	Additional Observations
E						**FILL:** Sandy clay, low plasticity, poorly graded,brown with gravels.	M	S	0.1	WAC1_TP3_0.0-0.1	NA
	NA		0.5			**FILL:** Gravely clay, Low plasticity, poorly graded,red with Small bits of sandstone and shale.			0.1	WAC1_TP3_0.4-0.5	
			1.0						0.1	WAC1_TP3_0.9-1.0	
			1.5			**FILL:(Reworked)**Gravelly clay,Medium Plasticity,medium grained, red.			0.1	WAC1_TP3_1.4-1.5	
					CL	**Clay:** Clay, High plasticity,fine grained,pale orange.		D	0	WAC1_TP3_1.7-1.8	
			2.0			TP3 terminated at 1.8m					
			2.5								

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TEST PIT NUMBER TP4

CLIENT AFJV **PROJECT NAME** Waste Analysis and Classification

PROJECT NUMBER 21.2041 **PROJECT LOCATION** 7 Fig tree drive, Olympic park NSW

DATE STARTED 21/4/22 **COMPLETED** 21/4/22 **R.L. SURFACE** ___ **DATUM** ___

EXCAVATION CONTRACTOR Delta **SLOPE** --- **BEARING** NA

EQUIPMENT 35 tonn excavator **COORDINATES** ___

TEST PIT DIAMETER ___ **LOGGED BY** ML,SO,MH,SB **CHECKED BY** SB

NOTES ___

Method	Water	RL (m)	Depth (m)	Graphic Log	Classification Symbol	Material Description	Moisture Content	Consistency	PID (ppm)	Samples Tests Remarks	Additional Observations
E	NA					**FILL:** Sandy gravel, low plasticity, poorly graded, dark brown with sandstone gravels and road base .	M	S	0.1	WAC1_TP4_0.0-0.1	Bitumen
						FILL:(Reworked) Sandy gravel, low plasticity, poorly graded, pale brown with sandstone gravels.					
					CL	**Clay:** Silty Clay, low plasticity,fine grained,light brown to plae orange with sand bits, very dry			0.1	WAC1_TP4_0.3	
			0.5						0.1	WAC1_TP4_0.4	
						TP4 terminated at 0.5m			0	WAC1_TP4_0.5	
			1.0								
			1.5								
			2.0								
			2.5								

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TEST PIT NUMBER TP5

CLIENT AFJV **PROJECT NAME** Waste Analysis and Classification

PROJECT NUMBER 21.2041 **PROJECT LOCATION** 7 Fig tree drive, Olympic park NSW

DATE STARTED 21/4/22 **COMPLETED** 21/4/22 **R.L. SURFACE** ___ **DATUM** ___

EXCAVATION CONTRACTOR Delta **SLOPE** --- **BEARING** NA

EQUIPMENT 35 tonn excavator **COORDINATES** ___

TEST PIT DIAMETER ___ **LOGGED BY** ML,SO,MH,SB **CHECKED BY** SB

NOTES ___

Method	Water	RL (m)	Depth (m)	Graphic Log	Classification Symbol	Material Description	Moisture Content	Consistency	PID (ppm)	Samples Tests Remarks	Additional Observations
E	NA					**FILL:** Sandy gravel, low plasticity, poorly graded, dark brown, grey, angular gravels and road base .	M	S	0.1	WAC1_TP5_0.0-0.3	Bitumen
						FILL(Reworked): Sandy gravel, low plasticity, poorly graded, pale yellow with sandstone cobbles.			0.1	WAC1_TP5_0.3-0.4	
			0.5		CL	**Clay:** Silty clay, low plasticity,fine grained, orange mottled and yellow.			0	WAC1_TP5_0.5-0.6	
						TP5 terminated at 0.55m					
			1.0								
			1.5								
			2.0								
			2.5								

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Telephone: 1300976922

TEST PIT NUMBER TP6

CLIENT AFJV **PROJECT NAME** Waste Analysis and Classification

PROJECT NUMBER 21.2041 **PROJECT LOCATION** 7 Fig tree drive, Olympic park NSW

DATE STARTED 21/4/22 **COMPLETED** 21/4/22 **R.L. SURFACE** --- **DATUM** ---

EXCAVATION CONTRACTOR Delta **SLOPE** --- **BEARING** NA

EQUIPMENT 35 tonn excavator **COORDINATES** ---

TEST PIT DIAMETER --- **LOGGED BY** ML,SO,MH,SB **CHECKED BY** SB

NOTES ---

Method	Water	RL (m)	Depth (m)	Graphic Log	Classification Symbol	Material Description	Moisture Content	Consistency	PID (ppm)	Samples Tests Remarks	Additional Observations
E	NA					**FILL:** Sandy gravel, low plasticity, poorly graded, dark brown, grey, organic topsoil .	M	S	0.1	WAC1_TP6_0.0-0.1	Bitumen
						FILL:(Reworked) Sandy gravel, low plasticity, poorly graded, pale sandstone gravels.					
					CL	**Clay:** Clay, low plasticity,fine grained, pale with weatherd shale gravel.					
						TP6 terminated at 0.3m			0	WAC1_TP6_0.3-0.4	
			0.5						0	WAC1_TP6_0.5-0.6	
			1.0								
			1.5								
			2.0								
			2.5								

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TEST PIT NUMBER TP7

CLIENT AFJV **PROJECT NAME** Waste Analysis and Classification

PROJECT NUMBER 21.2041 **PROJECT LOCATION** 7 Fig tree drive, Olympic park NSW

DATE STARTED 21/4/22 **COMPLETED** 21/4/22 **R.L. SURFACE** **DATUM**

EXCAVATION CONTRACTOR Delta **SLOPE** --- **BEARING** NA

EQUIPMENT 35 tonn excavator **COORDINATES**

TEST PIT DIAMETER **LOGGED BY** ML,SO,MH,SB **CHECKED BY** SB

NOTES

Method	Water	RL (m)	Depth (m)	Graphic Log	Classification Symbol	Material Description	Moisture Content	Consistency	PID (ppm)	Samples Tests Remarks	Additional Observations
E	NA					**FILL:** Sandy gravel, low plasticity, poorly graded, dark brown, grey, road base.	M	S	0.1	WAC1_TP7_0.0-0.1	Bitumen
						FILL(Reworked): Gravely clay, low plasticity, poorly graded, red with angular shale..					
					CL	**Clay:** Shaley Clay, low plasticity,fine grained, white with mottled orange.			0	WAC1_TP7_0.3	
			0.5			TP7 terminated at 0.4m					
			1.0								
			1.5								
			2.0								
			2.5								

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TEST PIT NUMBER TP8

CLIENT AFJV **PROJECT NAME** Waste Analysis and Classification

PROJECT NUMBER 21.2041 **PROJECT LOCATION** 7 Fig tree drive, Olympic park NSW

DATE STARTED 21/4/22 **COMPLETED** 21/4/22 **R.L. SURFACE** _____ **DATUM** _____

EXCAVATION CONTRACTOR Delta **SLOPE** --- **BEARING** NA

EQUIPMENT 35 tonn excavator **COORDINATES** _____

TEST PIT DIAMETER _____ **LOGGED BY** ML,SO,MH,SB **CHECKED BY** SB

NOTES _____

Method	Water	RL (m)	Depth (m)	Graphic Log	Classification Symbol	Material Description	Moisture Content	Consistency	PID (ppm)	Samples Tests Remarks	Additional Observations
E	NA		0.5			**FILL:** Sandy gravel, low plasticity, poorly graded, dark brown, grey, road base.	M	S			Bitumen
						FILL: Sandy gravel, low plasticity, poorly graded, pale.			0.1	WAC1_TP8_0.1	
									0.1	WAC1_TP8_0.2	
						FILL(Reworked): Clay, low plasticity, poorly graded, red mottled with shale gravel.			0.1	WAC1_TP8_0.3	
									0.1	WAC1_TP8_0.4	
					CL	**Clay:** Clay, low plasticity, medium grained, pale with mottled weatherd shale.			0.1	WAC1_TP8_0.5	
									0	WAC1_TP8_06	
			1.0			TP8 terminated at 0.7m			0	WAC1_TP8_0.7	
			1.5								
			2.0								
			2.5								

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SILVERWATER NSW 2128
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TEST PIT NUMBER TP9

CLIENT AFJV **PROJECT NAME** Waste Analysis and Classification

PROJECT NUMBER 21.2041 **PROJECT LOCATION** 7 Fig tree drive, Olympic park NSW

DATE STARTED 21/4/22 **COMPLETED** 21/4/22 **R.L. SURFACE** ___ **DATUM** ___

EXCAVATION CONTRACTOR Delta **SLOPE** --- **BEARING** NA

EQUIPMENT 35 tonn excavator **COORDINATES** ___

TEST PIT DIAMETER ___ **LOGGED BY** ML,SO,MH,SB **CHECKED BY** SB

NOTES ___

Method	Water	RL (m)	Depth (m)	Graphic Log	Classification Symbol	Material Description	Moisture Content	Consistency	PID (ppm)	Samples Tests Remarks	Additional Observations
E						**FILL:** Sandy Clay, low plasticity, poorly graded, dark brown, sandy gravel, organic topsoil .	M	S	0.1	WAC1_TP9_0.0-0.1	Bitumen, Plant bed
									0.1	WAC1_TP9_0.2-0.3	
									0.1	WAC1_TP9_0.4-0.5	
			0.5			**FILL(Reworked):** Sandy clay, low plasticity, medium grained, light brown.					
	NA				CL	**Clay:** Clay, low plasticity, medium grained, dark red.			0.1	WAC1_TP9_0.8-0.9	
			1.0		CL	**Clay:** Clay, low plasticity, medium grained, pale mottled with weatherd shale, gravels.			0.1	WAC1_TP9_01.0-1.1	
						TP9 terminated at 1.3m			0	WAC1_TP9_0.3-0.4	
			1.5								
			2.0								
			2.5								

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Telephone: 1300976922

TEST PIT NUMBER TP10

CLIENT AFJV **PROJECT NAME** Waste Analysis and Classification

PROJECT NUMBER 21.2041 **PROJECT LOCATION** 7 Fig tree drive, Olympic park NSW

DATE STARTED 21/4/22 **COMPLETED** 21/4/22 **R.L. SURFACE** **DATUM**

EXCAVATION CONTRACTOR Delta **SLOPE** --- **BEARING** NA

EQUIPMENT 35 tonn excavator **COORDINATES**

TEST PIT DIAMETER **LOGGED BY** ML,SO,MH,SB **CHECKED BY** SB

NOTES

Method	Water	RL (m)	Depth (m)	Graphic Log	Classification Symbol	Material Description	Moisture Content	Consistency	PID (ppm)	Samples Tests Remarks	Additional Observations
HA	NA					**FILL:** Sand, low plasticity, coarse grained, dark brown, sandy gravel, organic topsoil . **FILL(Reworked):** Sandy clay, low plasticity, porly graded, brown with orange streaks, silty.	M	S	0.1	WAC1_TP10_0.0-0	Building material
						TP10 terminated at 0.2m			0.1	WAC1_TP10_0.2	

0.5
1.0
1.5
2.0
2.5

ADE_BOREHOLE / TESTPIT 21.2041_TP_2.GPJ GINT STD AUSTRALIA.GDT 12/5/22

ADE CONSULTING GROUP
UNIT 6 / 7 MILLENNIUM COURT
SILVERWATER NSW 2128
Telephone: 1300976922

TEST PIT NUMBER TP11

CLIENT AFJV **PROJECT NAME** Waste Analysis and Classification

PROJECT NUMBER 21.2041 **PROJECT LOCATION** 7 Fig tree drive, Olympic park NSW

DATE STARTED 21/4/22 **COMPLETED** 21/4/22 **R.L. SURFACE** ___ **DATUM** ___

EXCAVATION CONTRACTOR Delta **SLOPE** --- **BEARING** NA

EQUIPMENT 35 tonn excavator **COORDINATES** ___

TEST PIT DIAMETER ___ **LOGGED BY** ML,SO,MH,SB **CHECKED BY** SB

NOTES ___

Method	Water	RL (m)	Depth (m)	Graphic Log	Classification Symbol	Material Description	Moisture Content	Consistency	PID (ppm)	Samples Tests Remarks	Additional Observations
HA	NA					**FILL:** Sand, low plasticity, coarse grained, dark brown, sandy gravel, organic topsoil .	M	S			NA
						FILL(Reworked): Silty clay, low plasticity, porly graded, brown.			0.1	WAC1_TP11_0.1	
									0.1	WAC1_TP11_0.2-0.3	
			0.5			TP11 terminated at 0.3m					
			1.0								
			1.5								
			2.0								
			2.5								

ADE_BOREHOLE / TESTPIT 21.2041_TP_2.GPJ GINT STD AUSTRALIA.GDT 12/5/22

ADE CONSULTING GROUP
UNIT 6 / 7 MILLENNIUM COURT
SILVERWATER NSW 2128
Telephone: 1300976922

TEST PIT NUMBER TP12

CLIENT AFJV **PROJECT NAME** Waste Analysis and Classification

PROJECT NUMBER 21.2041 **PROJECT LOCATION** 7 Fig tree drive, Olympic park NSW

DATE STARTED 21/4/22 **COMPLETED** 21/4/22 **R.L. SURFACE** **DATUM**

EXCAVATION CONTRACTOR Delta **SLOPE** --- **BEARING** NA

EQUIPMENT 35 tonn excavator **COORDINATES**

TEST PIT DIAMETER **LOGGED BY** ML,SO,MH,SB **CHECKED BY** SB

NOTES

Method	Water	RL (m)	Depth (m)	Graphic Log	Classification Symbol	Material Description	Moisture Content	Consistency	PID (ppm)	Samples Tests Remarks	Additional Observations
HA	NA					**FILL:** Sand, low plasticity, coarse grained, dark brown, sandy gravel, organic topsoil .	M	S			Glass fragment <5mm
						FILL(Reworked): Silty clay, low plasticity, poorly graded, brown-orange, shale.			0.1	WAC1_TP12_0.1-0.2	
						TP12 terminated at 0.3m			0.1	WAC1_TP12_0.3-0.4	

0.5
1.0
1.5
2.0
2.5

ADE_BOREHOLE / TESTPIT 21.2041_TP_2.GPJ GINT STD AUSTRALIA.GDT 12/5/22

ADE CONSULTING GROUP
UNIT 6 / 7 MILLENNIUM COURT
SILVERWATER NSW 2128
Telephone: 1300976922

TEST PIT NUMBER TP13

CLIENT AFJV **PROJECT NAME** Waste Analysis and Classification

PROJECT NUMBER 21.2041 **PROJECT LOCATION** 7 Fig tree drive, Olympic park NSW

DATE STARTED 21/4/22 **COMPLETED** 21/4/22 **R.L. SURFACE** **DATUM**

EXCAVATION CONTRACTOR Delta **SLOPE** --- **BEARING** NA

EQUIPMENT 35 tonn excavator **COORDINATES**

TEST PIT DIAMETER **LOGGED BY** ML,SO,MH,SB **CHECKED BY** SB

NOTES

Method	Water	RL (m)	Depth (m)	Graphic Log	Classification Symbol	Material Description	Moisture Content	Consistency	PID (ppm)	Samples Tests Remarks	Additional Observations
HA	NA					**FILL:** Sand, low plasticity, coarse grained, dark brown, sandy gravel, organic topsoil .	M	S			Bitumen fragments
						FILL(Reworked): Silty clay, low plasticity, poorly graded, brown-orange, shale.			0.1	WAC1_TP13_0.1-0.2	
						TP13 terminated at 0.3m			0.1	WAC1_TP13_0.3-0.4	

0.5

1.0

1.5

2.0

2.5

ADE_BOREHOLE / TESTPIT 21.2041_TP_2.GPJ GINT STD AUSTRALIA.GDT 12/5/22

BORE LOG ID SOP_BH107

Client: AFJV
Project No: 0628507
Project Name: SMW_SOP
Site Address: corner of Olympic Boulevard and Figtree Drive, Sydney Olympic Park, NSW 2127
Drilling Date: 20/01/2022 - 20/01/2022

Drilling Method: Augering Solid Fligh
Hole Diam./Width (mm): 100
Surface Completion:
Final Water Level (m bgl):

Elevation (Ground):
Elevation (Case):
Easting (MGA): 321400
Northing (MGA): 625281

Comments:

Log By: AR
Checked By:

Material Description	Symbol	Well Diagram	Depth (m)	% Recovery	Analysed	PID	Samples	Additional Observations
CONCRETE: Concrete slab			0.2					
ROADBASE: Grey gravelly sand, poorly sorted, sub-angular roadbase			0.4					
CLAY (RE-WORKED): Brown crushed shale with clay			0.6					
			0.8					
SHALE: Brown shale, darker brown with depth			1		Y		SOP_BH107_1.0_220120	
			1.2					
			1.4					
			1.6					
			1.8					
			2		Y		SOP_BH107_2.0_220120	
			2.2					
			2.4					
			2.6					
			2.8					
			3					
Termination Depth at:3 m			3.2					
			3.4					
			3.6					
			3.8					
			4					
			4.2					
			4.4					
			4.6					
			4.8					

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produced by ESlog.ESdat.net on 14 Feb 2022

BORE LOG ID SOP_BH110

Client: AFJV
Project No: 0628507
Project Name: SMW_SOP
Site Address: corner of Olympic Boulevard and Figtree Drive, Sydney Olympic Park, NSW 2127
Drilling Date: 17/01/2022 - 18/01/2022

Drilling Method: Hand Augering
Hole Diam./Width (mm): 100
Surface Completion:
Final Water Level (m bgl):

Elevation (Ground):
Elevation (Case):
Easting (MGA): 321373
Northing (MGA): 6252901

Comments:

Log By: AR
Checked By:

Material Description	Symbol	Well Diagram	Depth (m)	% Recovery	Analysed	PID	Samples	Additional Observations
FILL: Light grey/brown clayey sand, poor-moderately sorted, fine, sub-angular with gravel			0.2		Y	2.1	SOP_BH110_0.2_220117	
			0.4					
FILL: Brown crushed shale fill			0.6					
			0.8					
			1					
SHALE: Light brown shale			1.2		Y		SOP_BH110_1.3_220118	
Termination Depth at:1.3 m			1.4					
			1.6					
			1.8					
			2					
			2.2					
			2.4					
			2.6					
			2.8					
			3					
			3.2					
			3.4					
			3.6					
			3.8					
			4					
			4.2					
			4.4					
			4.6					
			4.8					

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BORE LOG ID SOP_BH111

Client: AFJV
Project No: 0628507
Project Name: SMW_SOP
Site Address: corner of Olympic Boulevard and Figtree Drive, Sydney Olympic Park, NSW 2127
Drilling Date: 18/01/2022 - 18/01/2022

Drilling Method: Augering Solid Fligh
Hole Diam./Width (mm): 100
Surface Completion:
Final Water Level (m bgl):

Elevation (Ground):
Elevation (Case):
Easting (MGA): 321344
Northing (MGA): 6252978

Comments:

Log By: AR
Checked By:

Material Description	Symbol	Well Diagram	Depth (m)	% Recovery	Analysed	PID	Samples	Additional Observations
FILL: Brown/ red brown silty clay with gravels, soft-medium firmness, low-medium plasticity			0.2 0.4 0.6 0.8 1		Y	0.2	SOP_BH111_1.0_220118	
			1.2 1.4 1.6					
SHALE: Brown shale, becoming grey/brown with depth			1.8 2 2.2 2.4 2.6 2.8 3		Y		SOP_BH111_3.0_220118	
			3.2 3.4 3.6 3.8 4 4.2 4.4 4.6 4.8 5					
Termination Depth at:5 m			5.2					

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BORE LOG ID SOP_BH112

Client: AFJV
Project No: 0628507
Project Name: SMW_SOP
Site Address: corner of Olympic Boulevard and Figtree Drive, Sydney Olympic Park, NSW 2127
Drilling Date: 18/01/2022 - 18/01/2022

Drilling Method: Augering Solid Fligh
Hole Diam./Width (mm): 100
Surface Completion:
Final Water Level (m bgl):

Elevation (Ground):
Elevation (Case):
Easting (MGA): 321353
Northing (MGA): 6252990

Comments:

Log By: AR
Checked By:

Material Description	Symbol	Well Diagram	Depth (m)	% Recovery	Analysed	PID	Samples	Additional Observations
FILL: Brown/dark brown silty clay with gravels, soft, medium plasticity			0.2 0.4 0.6 0.8 1		Y	0.3	SOP_BH112_1.0_220118	
SHALE: Brown Shale (Natural)			1.2 1.4 1.6 1.8 2 2.2 2.4 2.6 2.8 3 3.2 3.4 3.6 3.8 4 4.2 4.4 4.6 4.8 5		Y		SOP_BH112_5.0_220118	
Termination Depth at:5 m			5.2					

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BORE LOG ID SOP_BH118

Client: AFJV
Project No: 0628507
Project Name: SMW_SOP
Site Address: corner of Olympic Boulevard and Figtree Drive, Sydney Olympic Park, NSW 2127
Drilling Date: 19/01/2022 - 19/01/2022

Drilling Method: Hydraulic Hammer
Hole Diam./Width (mm): 100
Surface Completion:
Final Water Level (m bgl):

Elevation (Ground):
Elevation (Case):
Easting (MGA): 321381
Northing (MGA): 6252914

Comments:

Log By: AR
Checked By:

Material Description	Symbol	Well Diagram	Depth (m)	% Recovery	Analysed	PID	Samples	Additional Observations
FILL: Grey silty sand roadbase with gravels and rock, poor-moderately sorted, sub-angular			0		Y	0.2	SOP_BH118_0.1_220119	
			1		Y		SOP_BH118_1.0_220119	
FILL: Grey/brown silty sandy clay with rock, soft-medium firmness, low plasticity			2					
SHALE: Grey/brown crushed/weathered shale (Natural)			3					Slightly softer @11-12m, harder @21-22m, water @14.8m, wet @15m, saturated @20m
SHALE: Grey/brown shale			4					
			5		Y		SOP_BH118_5.0_220119	
			6					
			7					
			8					
			9					
			10		Y		SOP_BH118_10.0_220119	
			11					
			12					
			13					
			14					
			15		Y		SOP_BH118_15.0_220119	
			16					
			17					
			18					
			19					
			20		Y	0.1	SOP_BH118_20.0_220119	
			21					
			22					
			23					
			24					
			25		Y		SOP_BH118_25.0_220119	
Termination Depth at:25 m			26					

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BORE LOG ID SOP_BH119

Client: AFJV
Project No: 0628507
Project Name: SMW_SOP
Site Address: corner of Olympic Boulevard and Figtree Drive, Sydney Olympic Park, NSW 2127
Drilling Date: 17/01/2022 - 17/01/2022

Drilling Method: Augering Solid Fligh
Hole Diam./Width (mm): 100
Surface Completion:
Final Water Level (m bgl):

Elevation (Ground):
Elevation (Case):
Easting (MGA): 321395
Northing (MGA): 6252911

Comments:

Log By: AR
Checked By:

Material Description	Symbol	Well Diagram	Depth (m)	% Recovery	Analysed	PID	Samples	Additional Observations
FILL: Grey/brown silty sand with gravels, fine, moderately sorted, sub-rounded			0.2		Y	4.9	SOP_BH119_0.2_220117	
			0.4					
CLAY (RE-WORKED): Grey/brown mottled shaley clay, increased clay with depth			0.6					
			0.8					
			1		Y		SOP_BH119_1.0_220117	
			1.2					
			1.4					
			1.6					
SHALE: Orange/brown shale, becoming grey/brown @3.5m			1.8					Harder @ 4.5m
			2					
			2.2					
			2.4					
			2.6					
			2.8					
			3		Y		SOP_BH119_3.0_220117	
			3.2					
			3.4					
			3.6					
			3.8					
			4					
			4.2					
			4.4					
			4.6					
			4.8					
			5					
Termination Depth at:5 m			5.2					

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BORE LOG ID SOP_BH120

Client: AFJV
Project No: 0628507
Project Name: SMW_SOP
Site Address: corner of Olympic Boulevard and Figtree Drive, Sydney Olympic Park, NSW 2127
Drilling Date: 20/01/2022 - 20/01/2022

Drilling Method: Augering Solid Fligh
Hole Diam./Width (mm): 100
Surface Completion:
Final Water Level (m bgl):

Elevation (Ground):
Elevation (Case):
Easting (MGA): 321409
Northing (MGA): 6252900

Comments:

Log By: AR
Checked By:

Material Description	Symbol	Well Diagram	Depth (m)	% Recovery	Analysed	PID	Samples	Additional Observations
ROADBASE: Grey gravelly sand, poorly sorted, sub-angular roadbase			0.2					
CLAY (RE-WORKED): Grey/brown crushed shale and clay			0.4		Y	0.1	SOP_BH120_0.5_220120	Perched water present
SHALE: Brown weathered shale			0.6					
			0.8					
			1					
			1.2					
SHALE: Brown shale			1.4					
			1.6					
			1.8					
			2					
			2.2					
			2.4					
			2.6					
			2.8					
			3		Y		SOP_BH120_3.0_220120	
			3.2					
			3.4					
			3.6					
			3.8					
			4					
			4.2					
			4.4					
			4.6					
			4.8					
Termination Depth at:5 m			5					
			5.2					

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BORE LOG ID SOP_BH121

Client: AFJV
Project No: 0628507
Project Name: SMW_SOP
Site Address: corner of Olympic Boulevard and Figtree Drive, Sydney Olympic Park, NSW 2127
Drilling Date: 20/01/2022 - 20/01/2022

Drilling Method: Augering Solid Fligh
Hole Diam./Width (mm): 100
Surface Completion:
Final Water Level (m bgl):

Elevation (Ground):
Elevation (Case):
Easting (MGA): 321411
Northing (MGA): 6252875

Comments:

Log By: AR
Checked By:

Material Description	Symbol	Well Diagram	Depth (m)	% Recovery	Analysed	PID	Samples	Additional Observations
CONCRETE: Concrete slab			0.2					
ROADBASE: Grey gravelly sand, poorly sorted, sub-angular roadbase			0.4					
SHALE: Brown weathered shale			0.6					
			0.8					
SHALE: Brown shale			1		Y	0.1	SOP_BH121_1.0_220120	
			1.2					
			1.4					
			1.6					
			1.8					
			2					
			2.2					
			2.4					
			2.6					
			2.8					
			3					
			3.2					
			3.4					
			3.6					
			3.8					
			4					
			4.2					
			4.4					
			4.6					
			4.8					
			5		Y	0.4	SOP_BH121_5.0_220120	
Termination Depth at:5 m			5.2					

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ERM

BORE LOG ID SOP_BH124

Client: AFJV
Project No: 0628507
Project Name: SMW_SOP
Site Address: corner of Olympic Boulevard and Figtree Drive, Sydney Olympic Park, NSW 2127
Drilling Date: 21/01/2022 - 21/01/2022

Drilling Method: Augering Solid Fligh
Hole Diam./Width (mm): 100
Surface Completion:
Final Water Level (m bgl):

Elevation (Ground):
Elevation (Case):
Easting (MGA): 321420
Northing (MGA): 6252861

Comments:

Log By: AR
Checked By:

Material Description	Symbol	Well Diagram	Depth (m)	% Recovery	Analysed	PID	Samples	Additional Observations
SAND: Brown coarse sand			0.2					
FILL: Brown/light brown silty clay with rock and gravels, medium firmness, medium plasticity			0.4		Y	0.2	SOP_BH124_0.5_220120	
			0.6					
			0.8					
SHALE: Light brown weathered shale			1					
			1.2					
SHALE: Brown shale, darker brown with depth			1.4					
			1.6					
			1.8					
			2					
			2.2					
			2.4					
			2.6					
			2.8					
			3		Y	0.2	SOP_BH124_3.0_220120	
			3.2					
			3.4					
			3.6					
			3.8					
			4					
			4.2					
			4.4					
			4.6					
			4.8					
			5					
Termination Depth at:5 m			5.2					

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BORE LOG ID SOP_BH125

Client: AFJV
Project No: 0628507
Project Name: SMW_SOP
Site Address: corner of Olympic Boulevard and Figtree Drive, Sydney Olympic Park, NSW 2127
Drilling Date: 21/01/2022 - 21/01/2022

Drilling Method: Augering Solid Fligh
Hole Diam./Width (mm): 100
Surface Completion:
Final Water Level (m bgl):

Elevation (Ground):
Elevation (Case):
Easting (MGA): 321427
Northing (MGA): 6252855

Comments:

Log By: AR
Checked By:

Material Description	Symbol	Well Diagram	Depth (m)	% Recovery	Analysed	PID	Samples	Additional Observations
ROADBASE: Brown coarse sand roadbase					Y	0.2	SOP_BH125_0.5_220121	
FILL: Brown clayey sand with rock, angular, poorly sorted			1					
CLAY (RE-WORKED): Brown crushed shale with clay			2					
SHALE: Brown shale, grey/brown @5.0m, increase in hardness @ 6m, Grey @ 10m			3					
			4					
			5		Y		SOP_BH125_5.0_220121	
			6					
			7					
			8					
			9					
			10		Y	3.2	SOP_BH125_10.0_220121	
			11					
			12					
			13					
			14					
			15		Y	16.9	SOP_BH125_15.0_220121	
			16					
			17					
			18					
			19					
			20		Y	13.9	SOP_BH125_20.0_220121	
			21					
			22					
			23					
			24					
			25		Y	2.9	SOP_BH125_25.0_220121	
Termination Depth at:25 m			26					

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BORE LOG ID SOP_BH126

Client: AFJV
Project No: 0628507
Project Name: SMW_SOP
Site Address: corner of Olympic Boulevard and Figtree Drive, Sydney Olympic Park, NSW 2127
Drilling Date: 21/01/2022 - 21/01/2022

Drilling Method: Augering Solid Fligh
Hole Diam./Width (mm): 100
Surface Completion:
Final Water Level (m bgl):

Elevation (Ground):
Elevation (Case):
Easting (MGA): 321439
Northing (MGA): 6252843

Comments:

Log By: AR
Checked By:

Material Description	Symbol	Well Diagram	Depth (m)	% Recovery	Analysed	PID	Samples	Additional Observations
FILL: Grey coarse sand with gravels, sub-angular, poorly sorted			0.2					
FILL: Red/brown/grey mottled silty clay with rick, medium-hard, low plasticity			0.4		Y	0.2	SOP_BH126_0.5_220121	
			0.6					
			0.8					
			1					
CLAY (RE-WORKED): Grey/brown crushed shale and clay			1.2					
SHALE: Brown shale becoming grey with depth			1.4					
			1.6					
			1.8					
			2		Y		SOP_BH126_2.0_220121	
			2.2					
			2.4					
			2.6					
			2.8					
			3					
			3.2					
			3.4					
			3.6					
			3.8					
			4					
			4.2					
			4.4					
			4.6					
			4.8					
			5					
Termination Depth at:5 m			5.2					

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BORE LOG ID SOP_BH127

Client: AFJV
Project No: 0628507
Project Name: SMW_SOP
Site Address: corner of Olympic Boulevard and Figtree Drive, Sydney Olympic Park, NSW 2127
Drilling Date: 21/01/2022 - 21/01/2022

Drilling Method: Augering Solid Fligh
Hole Diam./Width (mm): 100
Surface Completion:
Final Water Level (m bgl):

Elevation (Ground):
Elevation (Case):
Easting (MGA): 321431
Northing (MGA): 6252811

Comments:

Log By: AR
Checked By:

Material Description	Symbol	Well Diagram	Depth (m)	% Recovery	Analysed	PID	Samples	Additional Observations
ROADBASE: Grey gravelly sand, poorly sorted, sub-angular roadbase			0.2					
FILL: Brown/red silty clay with rock, medium-hard, low plasticity			0.4 0.6 0.8 1					
CLAY (RE-WORKED): Grey/brown crushed shale and clay			1.2		Y	0.2	SOP_BH127_1.2_220121	
SHALE: Brown shale, minor colour change to darker brown @ 2-3m, grey/brown @ 4m, grey @ 5m			1.4 1.6 1.8 2 2.2 2.4 2.6 2.8 3 3.2 3.4 3.6 3.8 4 4.2 4.4 4.6 4.8 5		Y		SOP_BH127_4.0_220121	
Termination Depth at:5 m			5.2					

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BORE LOG ID SOP_BH128

Client: AFJV
Project No: 0628507
Project Name: SMW_SOP
Site Address: corner of Olympic Boulevard and Figtree Drive, Sydney Olympic Park, NSW 2127
Drilling Date: 24/01/2022 - 24/01/2022

Drilling Method: Augering Solid Fligh
Hole Diam./Width (mm): 100
Surface Completion:
Final Water Level (m bgl):

Elevation (Ground):
Elevation (Case):
Easting (MGA): 321468
Northing (MGA): 6252839

Comments:

Log By: AR
Checked By:

Material Description	Symbol	Well Diagram	Depth (m)	% Recovery	Analysed	PID	Samples	Additional Observations
ROADBASE: Grey gravelly sand, poorly sorted, sub-angular roadbase			0.2					
FILL: Brown coarse, clayey sand with rock, sandstone			0.4					
			0.6					
			0.8					
CLAY (RE-WORKED): Grey/brown crushed shale and clay			1			0.1	SOP_BH128_0.9_220124	
SHALE: Grey/brown shale, greyer with depth			1.2					
			1.4					
			1.6					
			1.8					
			2					
			2.2					
			2.4					
			2.6					
			2.8					
			3					
			3.2					
			3.4					
			3.6					
			3.8					
			4					
			4.2					
			4.4					
			4.6					
			4.8					
			5			0.9	SOP_BH128_5.0_220124	
Termination Depth at:5 m			5.2					

DRAFT

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BORE LOG ID SOP_BH129

Client: AFJV
Project No: 0628507
Project Name: SMW_SOP
Site Address: corner of Olympic Boulevard and Figtree Drive, Sydney Olympic Park, NSW 2127
Drilling Date: 24/01/2022 - 24/01/2022

Drilling Method: Augering Solid Fligh
Hole Diam./Width (mm): 100
Surface Completion:
Final Water Level (m bgl):

Elevation (Ground):
Elevation (Case):
Easting (MGA): 321409
Northing (MGA): 6252826

Comments:

Log By: AR
Checked By:

Material Description	Symbol	Well Diagram	Depth (m)	% Recovery	Analysed	PID	Samples	Additional Observations
ROADBASE: Grey gravelly sand, poorly sorted, sub-angular roadbase			0.2					
FILL: Brown/grey silty clay with gravels and rock, soft, low plasticity			0.4			0.1	SOP_BH129_0.5_220124	
			0.6					
			0.8					
CLAY (RE-WORKED): Grey/brown crushed shale and clay			1			0.2	SOP_BH129_1.0_220124	
SHALE: Grey/brown shale, darker with depth, Grey @ 4.1m			1.2					
			1.4					
			1.6					
			1.8					
			2					
			2.2					
			2.4					
			2.6					
			2.8					
			3					
			3.2					
			3.4					
			3.6					
			3.8					
			4					
			4.2					
			4.4					
			4.6					
			4.8					
			5					
Termination Depth at:5 m			5.2					

DRAFT

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BORE LOG ID SOP_BH142

Client: AFJV
Project No: 0628507
Project Name: SMW_SOP
Site Address: corner of Olympic Boulevard and Figtree Drive, Sydney Olympic Park, NSW 2127
Drilling Date: 19/01/2022 - 19/01/2022

Drilling Method: Augering Solid Fligh
Hole Diam./Width (mm): 100
Surface Completion:
Final Water Level (m bgl):

Elevation (Ground):
Elevation (Case):
Easting (MGA):
Northing (MGA):

Comments:

Log By: AR
Checked By:

Material Description	Symbol	Well Diagram	Depth (m)	% Recovery	Analysed	PID	Samples	Additional Observations
CONCRETE: Concrete slab			0.2					
FILL: Brown/grey silty sandy clay with gravels and shale fragments, soft, low plasticity			0.4		Y	0.3	SOP_BH142_0.4_220119	
			0.6					
			0.8					
			1					
			1.2					
SHALE: Brown shale becoming grey with depth			1.4					
			1.6					
			1.8					
			2					
			2.2					
			2.4					
			2.6					
			2.8					
			3					
			3.2					
			3.4					
			3.6					
			3.8					
			4		Y	0.3	SOP_BH142_4.0_220119	
			4.2					
			4.4					
			4.6					
			4.8					
			5					
Termination Depth at:5 m			5.2					

DRAFT

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produced by ESlog.ESdat.net on 14 Feb 2022

BORE LOG ID SOP_BH143

Client: AFJV
Project No: 0628507
Project Name: SMW_SOP
Site Address: corner of Olympic Boulevard and Figtree Drive, Sydney Olympic Park, NSW 2127
Drilling Date: 19/01/2022 - 19/01/2022

Drilling Method: Hand Augering
Hole Diam./Width (mm): 100
Surface Completion:
Final Water Level (m bgl):

Elevation (Ground):
Elevation (Case):
Easting (MGA):
Northing (MGA):

Comments:

Log By: AR
Checked By:

Material Description	Symbol	Well Diagram	Depth (m)	% Recovery	Analysed	PID	Samples	Additional Observations
SAND: Bedding sand below ceramic tiles								
CONCRETE: Concrete slab			0.2		Y	0.3	SOP_BH143_0.3_220119	
FILL: Brown clayey sand with rock, sub-angular to sub-rounded, poorly sorted			0.4					
SILTY CLAY: Brown silty clay with shale, medium plasticity, medium hardness, darker @0.8			0.6					
			0.8					
			1		Y		SOP_BH143_1.0_220119	
			1.2					
Termination Depth at:1.3 m			1.4					
			1.6					
			1.8					
			2					
			2.2					
			2.4					
			2.6					
			2.8					
			3					
			3.2					
			3.4					
			3.6					
			3.8					
			4					
			4.2					
			4.4					
			4.6					
			4.8					

DRAFT

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BORE LOG ID SOP_BH144

Client: AFJV
Project No: 0628507
Project Name: SMW_SOP
Site Address: corner of Olympic Boulevard and Figtree Drive, Sydney Olympic Park, NSW 2127
Drilling Date: 19/01/2022 - 19/01/2022

Drilling Method: Hand Augering
Hole Diam./Width (mm): 75
Surface Completion:
Final Water Level (m bgl):

Elevation (Ground):
Elevation (Case):
Easting (MGA):
Northing (MGA):

Comments:

Log By: AR
Checked By:

Material Description	Symbol	Well Diagram	Depth (m)	% Recovery	Analysed	PID	Samples	Additional Observations
CONCRETE: Concrete slab			0.2					
FILL: Brown clayey sand with rock, poorly sorted, sub-angular to sub-rounded			0.4		Y	0.1	SOP_BH144_0.3_220119	
SILTY CLAY: Brown silty clay with shale, medium plasticity, medium-hard			0.6		Y		SOP_BH144_0.6_220119	
Termination Depth at:0.6 m			0.8					
			1					
			1.2					
			1.4					
			1.6					
			1.8					
			2					
			2.2					
			2.4					
			2.6					
			2.8					
			3					
			3.2					
			3.4					
			3.6					
			3.8					
			4					
			4.2					
			4.4					
			4.6					
			4.8					

DRAFT

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BORE LOG ID SOP_BH145

Client: AFJV
Project No: 0628507
Project Name: SMW_SOP
Site Address: corner of Olympic Boulevard and Figtree Drive, Sydney Olympic Park, NSW 2127
Drilling Date: 19/01/2022 - 19/01/2022

Drilling Method: Augering Solid Fligh
Hole Diam./Width (mm): 100
Surface Completion:
Final Water Level (m bgl):

Elevation (Ground):
Elevation (Case):
Easting (MGA):
Northing (MGA):

Comments:

Log By: AR
Checked By:

Material Description	Symbol	Well Diagram	Depth (m)	% Recovery	Analysed	PID	Samples	Additional Observations
CONCRETE: Concrete slab			0		Y	0.3	SOP_BH145_0.3_220119	
FILL: Brown clayey sand with rock, poorly sorted, sub-angular to sub-rounded			0.5					
SILTY CLAY: Brown silty clay with shale, medium plasticity, medium-hard			1		Y	0.2	SOP_BH145_1.0_220119	
			1.5					
SHALE: Brown weathered shale								
SHALE: Brown Shale			2					
			2.5					
			3					
			3.5					
			4					
			4.5					
			5		Y	6.3	SOP_BH145_5.0_220119	
			5.5					
			6					
			6.5					
			7					
Termination Depth at:7 m			7.5					
			8					
			8.5					
			9					
			9.5					

DRAFT

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Appendix E – Laboratory Analytical Certificates

Appendix E - Laboratory Analytical Certificates (ADE)

ADE CONSULTING GROUP
SOLUTIONS THROUGH INNOVATION

ESA-F-02
Chain of Custody (Internal)

PFAS tray-7~~5~~7
Jars tray-39~~4~~4

Date Printed: 29/04/2022

Document Revision Date: 30.06.2020

ESA-F-02 COC - Chain Of Custody (Internal: Sydney Laboratory Services)

ADE CONSULTING GROUP SOLUTIONS THROUGH INNOVATION

PROJECT:	AF JV_SOP_WAC1
PROJECT NUMBER - INVOICE NUMBER	21.2044
SAMPLES DELIVERED BY:	ADE Consulting Group 6/7 Millennium Ct, Silverwater NSW 2128
SAMPLERS:	Megan Lynch, monique Hutchins, Sinead O'Rourke
TURNAROUND:	24h: 48h: XX 72h: 4 WORKING DAYS:
SAMPLING DATE:	21/04/2022
AFTER TEST STORAGE:	ROOM TEMP: ☐ FRIDGE: X FREEZER: ☐ >>4 WEEKS: ☐ OTHER: ☐
REPORT FORMAT:	HARD COPY: ☐ E-MAIL: X
CONSULTANTS SIGNATURE:	CONSULTANT E-MAIL: monique.hutchins@ade.group megan.lynch@ade.group
PROJECT MANAGERS SIGNATURE: 2022012...	PROJECT MANAGERS E-MAIL: stephen.bowly@ade.group Megan

LABORATORY REFERENCE NO. (Lab use ONLY):	21.2044.WAC1																				
RECEIVED BY: Tree	SIGNATURE: TT																				
SAMPLES: 15	CHILLED: ☒	PRESERVED: ☒	PRESERVATION METHOD: X	CUSTODY SEAL INTACT: ☒																	
MINIMAL HEADSPACE: ☑	WITHIN HOLDING TIME: ☑																				
DATE: 29.4.22	TIME: 7:00	TEMPERATURE UPON RECEIPT: ☒																			
LIMS LOT NO. 2201915	LIMS/EXCEL SIGNATURE:	COMMENTS:																			

LIMS Sample ID (Lab Use)	Sample ID (ADE)	MATRIX	SAMPLE DATE	CONTAINER DATA: TYPE & PRESERVATIVE	CONTAINER DATA: NO.	pH/pH fox	BTEXN	8 Metal Suite	PAH	PCB	OCC/OPP	TCLP	VOC	PFAS	TRH	TOC	CEC	Ph/EC	Asbestos 65g				
824	WAC1_TP1 0.0-0.1	SOIL	21/04/2022	Jar / Bag / PFAS	1		X	X	X	X	X		X	X	X								
825	WAC1_TP1_0.4-0.5	SOIL	21/04/2022	Jar / Bag / PFAS	2		X	X	X	X	X		X	X	X				X				
826	WAC1_TP1_0.9-1.0	SOIL	21/04/2022	Jar	3		X	X	X	X	X			X	X								
827	WAC1_TP1_1.4-1.5	SOIL	21/04/2022	Jar	4		X	X	X	X	X			X	X								
828	WAC1_TP1_1.7-1.8	SOIL	21/04/2022	Jar / Bag / PFAS	5		X	X	X	X	X			X	X				X				
829	WAC1_TP2_0.0-0.1	SOIL	21/04/2022	Jar / Bag / PFAS	6		X	X	X	X	X		X	X	X				X				
830	WAC1_TP2_0.4-0.5	SOIL	21/04/2022	Jar	7		X	X	X	X	X		X		X								
831	WAC1_TP2_0.9-1.0	SOIL	21/04/2022	Jar / Bag / PFAS	8		X	X	X	X	X			X	X				X				
832	WAC1_TP2_1.4-1.5	SOIL	21/04/2022	Jar	9		X	X	X	X	X				X								
833	WAC1_TP2_1.7-1.8	SOIL	21/04/2022	Jar / Bag	10		X	X	X	X	X			X	X				X				
834	WAC1_TP3_0.0-0.1	SOIL	21/04/2022	Jar / Bag / PFAS	11		X	X	X	X	X		X	X	X				X				
835	WAC1_TP3_0.4-0.5	SOIL	21/04/2022	Jar / Bag	12		X	X	X	X	X		X		X				X				
836	WAC1_TP3_0.9-1.0	SOIL	21/04/2022	Jar / Bag / PFAS	13		X	X	X	X	X			X	X				X				
837	WAC1_TP3_1.4-1.5	SOIL	21/04/2022	Jar	14		X	X	X	X	X				X								
838	WAC1_TP3_1.7-1.8	SOIL	21/04/2022	Jar / Bag	15		X	X	X	X	X				X				X				

ANALYSES REQUIRED

NOTES

POTENTIAL HAZARDOUS CONTAMINANTS:

☐ ASBESTOS ☐ HYDROCARBONS
☐ LEAD/ARSENIC ☐ NO KNOWN CONTAMINATION
☐ OTHER:_____

LAB PLEASE *EMAIL COC RECEIPT: ☐

Sample Comments

Comments:

Container Type and Preservative: P = Unpreserved Plastic; PN = Nitric Preserved Plastic; ORC = Nitric Preserved ORC; PNA = Sodium Hydroxide Preserved Plastic; PC = HCl preserved Plastic; VC = Vial HCl Preserved; SP = Sulfuric Preserved Plastic; VB = Vial Sodium Bisulphate Preserved; VS = Vial Sulfuric Preserved; V = Unpreserved Vial; G = Amber Glass Unpreserved; SG = Sulfuric Preserved Amber Glass; F = Formaldehyde Preserved Glass; HS = HCl preserved Speciation bottle; Z = Zinc Acetate Preserved Bottle; E = EDTA Preserved Bottle; ST = Sterile Bottle; J = Unpreserved Glass Jar; ASS = Plastic Bag for Acid Sulfate Soils; B = Unpreserved Bag.

Due: 03.05.22

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Sydney Laboratory Services

A division of A. D. Envirotech Australia Pty Ltd
A.C.N. 093 452 950
Unit 4/10-11 Millennium Court,
Silverwater 2128
Ph: (02) 9648-6669

Accreditation No.14664
Accredited for compliance
with ISO/IEC 17025 - Testing.

SAMPLE RECEIPT NOTIFICATION (SRN)

Contact: Stephen Bowly / Thesan Naidoo / Monique Hitchens / Megan Lynch
Project name: 21.2044.WAC1
Number of samples: 15
COC number: 21.2044.WAC1
Turn around time: 48hrs
Date: 29/04/2022
Time received: 7:00am
SLS Reference: 2201915
Estimated Report Delivery Date: 03/05/2022

Sample information

☑	All samples have been received and logged into LIMS.
☑	No mistakes in the COC
☑	Evidence of chilling for samples
N/A	Samples were preserved
N/A	Custody seal intact
☑	Samples were delivered within holding time
☑	Samples to be tested for volatiles had zero headspace
☑	All samples were received in good condition (no broken jars, labelled correctly…).
☐	Samples have been subcontracted

Comments

This report contains:
Sample receipt non-conformities
Summary of samples and requested analysis
Requested report deliverables

Asbestos Samples are reported as per the State EPA guidelines

Contact details

If you have any questions with respect to these samples please contact:
sls@ade.group



Trianah Tumbridge

Sydney Laboratory Services
A division of A. D. Envirotech Australia Pty Ltd
Unit 4/10-11 Millennium Court
Silverwater 2128
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Sydney Laboratory Services

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Unit 4/10-11 Millennium Court,
Silverwater 2128
Ph: (02) 9648-6669

Accreditation No.14664
Accredited for compliance with ISO/IEC 17025 - Testing.

SAMPLE RECEIPT NOTIFICATION (SRN)

Laboratory Sample ID	Client Sample ID	6 Metal Suite	8 Metal Suite	BTEX	PAH	OCP/OPP	PCB	vTRH (C6 - C10)	TRH (C10 - C40)	pH/EC	VOC	PFAS	Bulk	Dust	Dust Swab	Soil 65 grams	SOII 500 g NEPM	AAM
2022012824	WAC1_TP1 0.0-0.1		X	X	X	X	X		X		X	X						
2022012825	WAC1_TP1_0.4-0.5		X	X	X	X	X		X		X	X				X		
2022012826	WAC1_TP1_0.9-1.0		X	X	X	X	X		X			X						
2022012827	WAC1_TP1_1.4-1.5		X	X	X	X	X		X			X						
2022012828	WAC1_TP1_1.7-1.8		X	X	X	X	X		X			X				X		
2022012829	WAC1_TP2_0.0-0.1		X	X	X	X	X		X		X	X				X		
2022012830	WAC1_TP2_0.4-0.5		X	X	X	X	X		X		X							
2022012831	WAC1_TP2_0.9-1.0		X	X	X	X	X		X			X				X		
2022012832	WAC1_TP2_1.4-1.5		X	X	X	X	X		X									
2022012833	WAC1_TP2_1.7-1.8		X	X	X	X	X		X			X				X		
2022012834	WAC1_TP3_0.0-0.1		X	X	X	X	X		X		X	X				X		
2022012835	WAC1_TP3_0.4-0.5		X	X	X	X	X		X		X					X		
2022012836	WAC1_TP3_0.9-1.0		X	X	X	X	X		X			X				X		
2022012837	WAC1_TP3_1.4-1.5		X	X	X	X	X		X									
2022012838	WAC1_TP3_1.7-1.8		X	X	X	X	X		X							X		

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Accreditation No.14664
Accredited for compliance with ISO/IEC 17025 - Testing.

This certificate of analysis contains General Comments and Analytical Results. Quality Control Report and Laboratory Quality Acceptance Criteria have been issued separately.

This report supersedes any previous report(s) with this reference. This document shall not be reproduced, except in full.

This report has been electronically signed by authorised signatories below.

Authorised By

Kaiyu Li

General Comments

Samples are analysed on as received basis. Sampling is not covered by NATA accreditation.

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

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

Samples were analysed within holding time described by laboratory internal procedures if not stated otherwise. If samples delivered do not meet required analytical criteria, results will be marked with ^.

However surrogate standards are added to samples, results are not corrected for standards recoveries.

Analysis of VOC in water samples are performed on unfiltered waters (as received) spiked with surrogates and injection standards only.

SLS is responsible for all the information in the report, except that provided by the customer.

All sampling information included in the report has been provided by customer.

Information provided by the customer can affect the validity of the results.

Sydney Laboratory Services
A division of A. D. Envirotech Australia Pty Ltd
Unit 4/10-11 Millennium Court
Silverwater 2128
Ph: (02) 9648-6669

Certificate of Analysis

Contact:	Stephen Bowly	**Date Reported:**	3/05/2022
Customer:	ADE Consulting Group	**No. of Samples:**	15
Address:	Unit 6 7 Millennium Court Silverwater NSW	**Date Received:**	29/04/2022
		Date of Analysis:	29/04/2022
Cust Ref:	21.2044		

Glossary:

*NATA accreditation does not cover the performance of this service
ND-not detected,
NT-not tested
INS-Insufficient material to perform the test
LCS-Laboratory Control Sample
RPD-Relative Percent Difference
N/A-Not Applicable
< less than
> greater than
PQL- Practical Quantitation Limit
^Analytical result might be compromised due to sample condition or holding time requirements
Reaction rate 1 = Slight
Reaction rate 2 = Moderate
Reaction rate 3 = High
Reaction rate 4 = Vigorous

Sydney Laboratory Services
A division of A. D. Envirotech Australia Pty Ltd
Unit 4/10-11 Millennium Court
Silverwater 2128
Ph: (02) 9648-6669

Certificate of Analysis

	Sample ID:	2022012824	2022012825	2022012826	2022012827	2022012828	2022012829	2022012830	2022012831	2022012832	2022012833	2022012834
	Sample Name	WAC1_TP1 0.0-0.1	WAC1_TP1_0.4-0.5	WAC1_TP1_0.9-1.0	WAC1_TP1_1.4-1.5	WAC1_TP1_1.7-1.8	WAC1_TP2_0.0-0.1	WAC1_TP2_0.4-0.5	WAC1_TP2_0.9-1.0	WAC1_TP2_1.4-1.5	WAC1_TP2_1.7-1.8	WAC1_TP3_0.0-0.1
Parameter	Units	PQL										
ESA-MP-01,ICP-01												
Arsenic	mg/kg	5	<5.0	12.7	24.2	26.3	23.3	10.8	11.8	24.9	21.4	19.6	<5.0
Cadmium	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Chromium	mg/kg	5	6.4	18.5	12.4	12.9	7.0	9.6	9.4	20.5	10.7	8.1	7.2
Copper	mg/kg	5	11.8	14.2	7.7	20.5	13.0	8.6	13.2	5.0	11.0	17.4	<5.0
Lead	mg/kg	10	<10.0	37.7	<10.0	<10.0	<10.0	<10.0	<10.0	12.5	<10.0	<10.0	<10.0
Mercury	mg/kg	0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Nickel	mg/kg	10	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
Zinc	mg/kg	5	25.6	48.9	<5.0	<5.0	<5.0	<5.0	8.3	<5.0	<5.0	<5.0	<5.0
ESA-P-12													
% Moisture Content	%		13.4	15.6	18.5	22.5	18.3	15.5	15.2	16.1	21.8	16.0	12.1
ESA-P-ORG(12 - 15)													
Acenaphthene	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Acenaphthylene	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Anthracene	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Benzo[a]anthracene	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Benzo[a]pyrene	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Benzo[b]fluoranthene	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Benzo[g,h,i]perylene	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Benzo[k]fluoranthene	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Chrysene	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Dibenzo[a,h]anthracene	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Fluoranthene	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	0.35	<0.30	<0.30	<0.30
Fluorene	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Indeno(1,2,3-cd)pyrene	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Naphthalene	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Phenanthrene	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Pyrene	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	0.40	<0.30	<0.30	<0.30

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Sum of Positive PAHs	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	0.75	<0.30	<0.30	<0.30
Benzo(a)pyrene TEQ (Zero)	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Benzo(a)pyrene TEQ (Half PQL)	mg/kg	0.3	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36
Benzo(a)pyrene TEQ (PQL)	mg/kg	0.3	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73
p-Terphenyl-d14 (Surr.)	%		91	99	92	83	82	85	89	77	73	70	75
aldrin	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
a-BHC	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
b-BHC	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
d-BHC	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
g-BHC (lindane)	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
cis-chlordane	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
trans-chlordane	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
4,4'-DDD	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
4,4'-DDE	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
4,4'-DDT	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
dieldrin	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
endosulfan I	mg/kg	0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
endosulfan II	mg/kg	0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
endosulfan sulfate	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
endrin	mg/kg	0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
endrin aldehyde	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
endrin ketone	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
heptachlor	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
heptachlor epoxide	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
hexachlorobenzene	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
methoxychlor	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
TCMX (Surr.)	%		99	114	111	98	101	107	108	95	105	76	92
chlorpyrifos	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
chlorpyrifos methyl	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
diazinon	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
fenchlorphos	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
methyl parathion	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
prophos	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10

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tributylphosphorotrithioite	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Aroclor 1016	mg/kg	0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Aroclor 1221	mg/kg	0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Aroclor 1232	mg/kg	0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Aroclor 1242	mg/kg	0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Aroclor 1248	mg/kg	0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Aroclor 1254	mg/kg	0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Aroclor 1260	mg/kg	0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
2-fluorobiphenyl (Surr.)	%		92	103	99	90	88	92	95	83	80	71	81
ESA-P-ORG16													
PFBA	ug/kg	5	<5	<5	<5	<5	<5	<5	-	<5	-	<5	<5
PFPeA	ug/kg	5	<5	<5	<5	<5	<5	<5	-	<5	-	<5	<5
PFBS	ug/kg	5	<5	<5	<5	<5	<5	<5	-	<5	-	<5	<5
PFHxA	ug/kg	5	<5	<5	<5	<5	<5	<5	-	<5	-	<5	<5
PFPeS	ug/kg	5	<5	<5	<5	<5	<5	<5	-	<5	-	<5	<5
PFHpA	ug/kg	5	<5	<5	<5	<5	<5	<5	-	<5	-	<5	<5
PFOA	ug/kg	5	<5	<5	<5	<5	<5	<5	-	<5	-	<5	<5
PFHpS	ug/kg	5	<5	<5	<5	<5	<5	<5	-	<5	-	<5	<5
PFOS	ug/kg	5	<5	<5	<5	<5	<5	<5	-	<5	-	<5	<5
PFDA	ug/kg	5	<5	<5	<5	<5	<5	<5	-	<5	-	<5	<5
PFUdA	ug/kg	5	<5	<5	<5	<5	<5	<5	-	<5	-	<5	<5
PFDoA	ug/kg	5	<5	<5	<5	<5	<5	<5	-	<5	-	<5	<5
PFTrDA	ug/kg	5	<5	<5	<5	<5	<5	<5	-	<5	-	<5	<5
PFTeDA	ug/kg	5	<5	<5	<5	<5	<5	<5	-	<5	-	<5	<5
PFNA	ug/kg	5	<5	<5	<5	<5	<5	<5	-	<5	-	<5	<5
PFHxS	ug/kg	5	<5	<5	<5	<5	<5	<5	-	<5	-	<5	<5
MPFBA (Surr.)	%		106	104	113	75	78	83	-	88	-	130	101
M3PFBS (Surr.)	%		98	104	109	75	82	86	-	97	-	121	98
MPFOS (Surr.)	%		76	96	108	75	76	111	-	119	-	119	98
MPFHxA (Surr.)	%		98	101	104	79	94	78	-	100	-	122	91
MPFOA (Surr.)	%		72	70	86	71	78	84	-	91	-	70	91
MPFUdA (Surr.)	%		95	87	122	98	92	90	-	86	-	78	94

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ESA-P-ORG(3,8)													
>C10-C16	mg/kg	50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
>C16-C34	mg/kg	100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
>C34-C40	mg/kg	100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
>C10-C40 (Sum of total)	mg/kg	50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
>C10-C14	mg/kg	50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
>C15-C28	mg/kg	100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
>C29-C36	mg/kg	100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
>C10-C36 (Sum of total)	mg/kg	50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
ESA-P-ORG07 & ORG08													
Benzene	mg/kg	0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Toluene	mg/kg	0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Ethylbenzene	mg/kg	0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
m.p Xylene	mg/kg	1	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
o Xylene	mg/kg	0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Sum of BTEX	mg/kg	1	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Total Xylenes	mg/kg	1	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Styrene	mg/kg	0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Sum of MAHs	mg/kg	1	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
vNaphthalene	mg/kg	0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
C6-C9 Conc.	mg/kg	35	<35	<35	<35	<35	<35	<35	<35	<35	<35	<35	<35
C6-C10 Conc.	mg/kg	35	<35	<35	<35	<35	<35	<35	<35	<35	<35	<35	<35
C6-C10 minus BTEX (F1)	mg/kg	35	<35	<35	<35	<35	<35	<35	<35	<35	<35	<35	<35
Vinyl Chloride	mg/kg	0.5	<0.50	<0.50	-	-	-	<0.50	<0.50	-	-	-	<0.50
trans-1,2-Dichloroethene	mg/kg	0.5	<0.50	<0.50	-	-	-	<0.50	<0.50	-	-	-	<0.50
Methylene chloride	mg/kg	0.5	<0.50	<0.50	-	-	-	<0.50	<0.50	-	-	-	<0.50
cis-1,2-Dichloroethene	mg/kg	0.5	<0.50	<0.50	-	-	-	<0.50	<0.50	-	-	-	<0.50
Bromochloromethane	mg/kg	0.5	<0.50	<0.50	-	-	-	<0.50	<0.50	-	-	-	<0.50
Chloroform	mg/kg	0.5	<0.50	<0.50	-	-	-	<0.50	<0.50	-	-	-	<0.50
1,1,1-Trichloroethane	mg/kg	0.5	<0.50	<0.50	-	-	-	<0.50	<0.50	-	-	-	<0.50
1,2-Dichloroethane	mg/kg	0.5	<0.50	<0.50	-	-	-	<0.50	<0.50	-	-	-	<0.50
Carbon tetrachloride	mg/kg	0.5	<0.50	<0.50	-	-	-	<0.50	<0.50	-	-	-	<0.50
1,1,2-Trichloroethane	mg/kg	0.5	<0.50	<0.50	-	-	-	<0.50	<0.50	-	-	-	<0.50

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Tetrachloroethene	mg/kg	0.5	<0.50	<0.50	-	-	-	<0.50	<0.50	-	-	-	<0.50
1,1,1,2-Tetrachloroethane	mg/kg	0.5	<0.50	<0.50	-	-	-	<0.50	<0.50	-	-	-	<0.50
1,1,2,2-Tetrachloroethane	mg/kg	0.5	<0.50	<0.50	-	-	-	<0.50	<0.50	-	-	-	<0.50
1,2-Dichlorobenzene	mg/kg	0.5	<0.50	<0.50	-	-	-	<0.50	<0.50	-	-	-	<0.50
1,4-Dichlorobenzene	mg/kg	0.5	<0.50	<0.50	-	-	-	<0.50	<0.50	-	-	-	<0.50
1,2,4-Trichlorobenzene	mg/kg	0.5	<0.50	<0.50	-	-	-	<0.50	<0.50	-	-	-	<0.50
Hexachlorobutadiene	mg/kg	0.5	<0.50	<0.50	-	-	-	<0.50	<0.50	-	-	-	<0.50
1,1-Dichloroethene	mg/kg	0.5	<0.50	<0.50	-	-	-	<0.50	<0.50	-	-	-	<0.50
Trichloroethene	mg/kg	0.5	<0.50	<0.50	-	-	-	<0.50	<0.50	-	-	-	<0.50
Chlorobenzene	mg/kg	0.5	<0.50	<0.50	-	-	-	<0.50	<0.50	-	-	-	<0.50
Sum of Chlorinated Hydrocarbons	mg/kg	0.5	<0.50	<0.50	-	-	-	<0.50	<0.50	-	-	-	<0.50
Other Chlorinated Hydrocarbon	mg/kg	0.5	<0.50	<0.50	-	-	-	<0.50	<0.50	-	-	-	<0.50
Toluene-d8 (Surr.)	%		130	119	128	120	114	120	105	78	71	115	98
1,2-Dichloroethane-d4 (Surr.)	%		122	140	139	131	129	137	130	119	115	108	108
4-Bromofluorobenzene (BFB) (Surr.)	%		124	112	120	114	112	115	131	133	119	115	117
Trifluorotoluene (Surr.)	%		79	119	126	118	114	122	103	104	104	102	102

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Certificate of Analysis

	Sample ID:	2022012835	2022012836	2022012837	2022012838
	Sample Name	WAC1_TP3_0.4-0.5	WAC1_TP3_0.9-1.0	WAC1_TP3_1.4-1.5	WAC1_TP3_1.7-1.8
Parameter	Units	PQL			
ESA-MP-01,ICP-01					
Arsenic	mg/kg	5	<5.0	14.6	25.7	6.3
Cadmium	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30
Chromium	mg/kg	5	10.7	14.3	11.4	6.3
Copper	mg/kg	5	9.9	19.9	8.6	9.1
Lead	mg/kg	10	<10.0	<10.0	<10.0	<10.0
Mercury	mg/kg	0.2	<0.20	<0.20	<0.20	<0.20
Nickel	mg/kg	10	<10.0	<10.0	<10.0	<10.0
Zinc	mg/kg	5	11.1	<5.0	<5.0	<5.0
ESA-P-12					
% Moisture Content	%		13.0	14.1	19.5	18.5
ESA-P-ORG(12 - 15)					
Acenaphthene	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30
Acenaphthylene	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30
Anthracene	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30
Benzo[a]anthracene	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30
Benzo[a]pyrene	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30
Benzo[b]fluoranthene	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30
Benzo[g,h,i]perylene	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30
Benzo[k]fluoranthene	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30
Chrysene	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30
Dibenzo[a,h]anthracene	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30
Fluoranthene	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30
Fluorene	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30
Indeno(1,2,3-cd)pyrene	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30
Naphthalene	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30
Phenanthrene	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30
Pyrene	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30

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Sum of Positive PAHs	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30
Benzo(a)pyrene TEQ (Zero)	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30
Benzo(a)pyrene TEQ (Half PQL)	mg/kg	0.3	0.36	0.36	0.36	0.36
Benzo(a)pyrene TEQ (PQL)	mg/kg	0.3	0.73	0.73	0.73	0.73
p-Terphenyl-d14 (Surr.)	%		76	82	70	71
aldrin	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10
a-BHC	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10
b-BHC	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10
d-BHC	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10
g-BHC (lindane)	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10
cis-chlordane	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10
trans-chlordane	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10
4,4'-DDD	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10
4,4'-DDE	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10
4,4'-DDT	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10
dieldrin	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10
endosulfan I	mg/kg	0.2	<0.20	<0.20	<0.20	<0.20
endosulfan II	mg/kg	0.2	<0.20	<0.20	<0.20	<0.20
endosulfan sulfate	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10
endrin	mg/kg	0.2	<0.20	<0.20	<0.20	<0.20
endrin aldehyde	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10
endrin ketone	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10
heptachlor	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10
heptachlor epoxide	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10
hexachlorobenzene	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10
methoxychlor	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10
TCMX (Surr.)	%		94	105	87	92
chlorpyrifos	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10
chlorpyrifos methyl	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10
diazinon	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10
fenchlorphos	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10
methyl parathion	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10
prophos	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10

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tributylphosphorotrithioite	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10
Aroclor 1016	mg/kg	0.5	<0.50	<0.50	<0.50	<0.50
Aroclor 1221	mg/kg	0.5	<0.50	<0.50	<0.50	<0.50
Aroclor 1232	mg/kg	0.5	<0.50	<0.50	<0.50	<0.50
Aroclor 1242	mg/kg	0.5	<0.50	<0.50	<0.50	<0.50
Aroclor 1248	mg/kg	0.5	<0.50	<0.50	<0.50	<0.50
Aroclor 1254	mg/kg	0.5	<0.50	<0.50	<0.50	<0.50
Aroclor 1260	mg/kg	0.5	<0.50	<0.50	<0.50	<0.50
2-fluorobiphenyl (Surr.)	%		81	91	78	79
ESA-P-ORG16						
PFBA	ug/kg	5	-	<5	-	-
PFPeA	ug/kg	5	-	<5	-	-
PFBS	ug/kg	5	-	<5	-	-
PFHxA	ug/kg	5	-	<5	-	-
PFPeS	ug/kg	5	-	<5	-	-
PFHpA	ug/kg	5	-	<5	-	-
PFOA	ug/kg	5	-	<5	-	-
PFHpS	ug/kg	5	-	<5	-	-
PFOS	ug/kg	5	-	<5	-	-
PFDA	ug/kg	5	-	<5	-	-
PFUdA	ug/kg	5	-	<5	-	-
PFDoA	ug/kg	5	-	<5	-	-
PFTrDA	ug/kg	5	-	<5	-	-
PFTeDA	ug/kg	5	-	<5	-	-
PFNA	ug/kg	5	-	<5	-	-
PFHxS	ug/kg	5	-	<5	-	-
MPFBA (Surr.)	%		-	79	-	-
M3PFBS (Surr.)	%		-	77	-	-
MPFOS (Surr.)	%		-	74	-	-
MPFHxA (Surr.)	%		-	74	-	-
MPFOA (Surr.)	%		-	77	-	-
MPFUdA (Surr.)	%		-	113	-	-

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ESA-P-ORG(3,8)						
>C10-C16	mg/kg	50	<50	<50	<50	<50
>C16-C34	mg/kg	100	<100	<100	<100	<100
>C34-C40	mg/kg	100	<100	<100	<100	<100
>C10-C40 (Sum of total)	mg/kg	50	<50	<50	<50	<50
>C10-C14	mg/kg	50	<50	<50	<50	<50
>C15-C28	mg/kg	100	<100	<100	<100	<100
>C29-C36	mg/kg	100	<100	<100	<100	<100
>C10-C36 (Sum of total)	mg/kg	50	<50	<50	<50	<50
ESA-P-ORG07 & ORG08						
Benzene	mg/kg	0.5	<0.50	<0.50	<0.50	<0.50
Toluene	mg/kg	0.5	<0.50	<0.50	<0.50	<0.50
Ethylbenzene	mg/kg	0.5	<0.50	<0.50	<0.50	<0.50
m.p Xylene	mg/kg	1	<1.0	<1.0	<1.0	<1.0
o Xylene	mg/kg	0.5	<0.50	<0.50	<0.50	<0.50
Sum of BTEX	mg/kg	1	<1.0	<1.0	<1.0	<1.0
Total Xylenes	mg/kg	1	<1.0	<1.0	<1.0	<1.0
Styrene	mg/kg	0.5	<0.50	<0.50	<0.50	<0.50
Sum of MAHs	mg/kg	1	<1.0	<1.0	<1.0	<1.0
vNaphthalene	mg/kg	0.5	<0.50	<0.50	<0.50	<0.50
C6-C9 Conc.	mg/kg	35	<35	<35	<35	<35
C6-C10 Conc.	mg/kg	35	<35	<35	<35	<35
C6-C10 minus BTEX (F1)	mg/kg	35	<35	<35	<35	<35
Vinyl Chloride	mg/kg	0.5	<0.50	-	-	-
trans-1,2-Dichloroethene	mg/kg	0.5	<0.50	-	-	-
Methylene chloride	mg/kg	0.5	<0.50	-	-	-
cis-1,2-Dichloroethene	mg/kg	0.5	<0.50	-	-	-
Bromochloromethane	mg/kg	0.5	<0.50	-	-	-
Chloroform	mg/kg	0.5	<0.50	-	-	-
1,1,1-Trichloroethane	mg/kg	0.5	<0.50	-	-	-
1,2-Dichloroethane	mg/kg	0.5	<0.50	-	-	-
Carbon tetrachloride	mg/kg	0.5	<0.50	-	-	-
1,1,2-Trichloroethane	mg/kg	0.5	<0.50	-	-	-

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Tetrachloroethene	mg/kg	0.5	<0.50	-	-	-
1,1,1,2-Tetrachloroethane	mg/kg	0.5	<0.50	-	-	-
1,1,2,2-Tetrachloroethane	mg/kg	0.5	<0.50	-	-	-
1,2-Dichlorobenzene	mg/kg	0.5	<0.50	-	-	-
1,4-Dichlorobenzene	mg/kg	0.5	<0.50	-	-	-
1,2,4-Trichlorobenzene	mg/kg	0.5	<0.50	-	-	-
Hexachlorobutadiene	mg/kg	0.5	<0.50	-	-	-
1,1-Dichloroethene	mg/kg	0.5	<0.50	-	-	-
Trichloroethene	mg/kg	0.5	<0.50	-	-	-
Chlorobenzene	mg/kg	0.5	<0.50	-	-	-
Sum of Chlorinated Hydrocarbons	mg/kg	0.5	<0.50	-	-	-
Other Chlorinated Hydrocarbon	mg/kg	0.5	<0.50	-	-	-
Toluene-d8 (Surr.)	%		114	114	121	118
1,2-Dichloroethane-d4 (Surr.)	%		103	135	117	135
4-Bromofluorobenzene (BFB) (Surr.)	%		131	138	127	134
Trifluorotoluene (Surr.)	%		76	72	75	74

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Accreditation No.14664
Accredited for compliance with ISO/IEC 17025 - Testing.

This Quality Control Report contains results of QAQC samples analysis and the Laboratory Acceptance Criteria.

This report supersedes any previous report(s) with this reference. This document shall not be reproduced, except in full.

This report has been electronically signed by authorised signatories below.

Authorised By

Kaiyu Li

General Comments

Duplicate samples and matrix spike may not be prepared on smaller jobs, however are analysed at frequency. QAQC samples shown within the report as e.g. Batch Blank, Batch Matrix Spike were performed on samples not reported on that Certificate of Analysis.

Blank This is the component of the analytical signal which is not derived from the sample but from reagents, glassware etc, can be determined by processing solvents and reagents in the same manner as for samples.
Duplicate This is the interlaboratory split of a random sample from the processed batch
Matrix Spike A portion of the sample is spiked with a known concentration of target analyte. The purpose of the matrix spike is to monitor the performance of the analytical method used and to determine whether matrix interferences exist.
LCS (Laboratory Control Sample): This comprises either a standard reference material or a control matrix (such as a blank sand or water) fortified with analytes representative of the analyte class.
Surr. (Surrogate Spike) Surrogates are known additions to each sample, blank and matrix spike or LCS in a batch. Surrogates are chosen as a compounds which are similar to the analyte of interest, however are not expected to be found in real samples.

Laboratory Acceptance Criteria

Blank shall be < PQL
Matrix Spikes and LCS: Generally 70-130% for inorganics/metals/PFAS, 60-140% for organics is acceptable. Matrix heterogeneity may result in matrix spike analyses falling outside these limits
RPD Duplicates: Global RPD Duplicates Acceptance Criteria is 30% however the following acceptance guidelines are equally applicable:
Results <10 times the PQL : No Limit
Results between 10-20 times the PQL : RPD must lie between 0-50%
Results >20 times the PQL : RPD must lie between 0-30%
Surrogate Recoveries : Recoveries must lie between 50-150%

SLS is responsible for all the information in the report, except that provided by the customer.

All sampling information included in the report has been provided by customer.

Information provided by the customer can affect the validity of the results.

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Quality Control Report

Contact:	Stephen Bowly	**Date Reported:**	3/05/2022
Customer:	ADE Consulting Group	**No. of Samples:**	25
Address:	Unit 6 7 Millennium Court Silverwater NSW	**Date Received:**	29/04/2022
		Date of Analysis:	29/04/2022

Cust Ref: 21.2044

Glossary:

*NATA accreditation does not cover the performance of this service
ND-not detected,
NT-not tested
INS-Insufficient material to perform the test
LCS-Laboratory Control Sample
RPD-Relative Percent Difference
N/A-Not Applicable
< less than
> greater than
PQL- Practical Quantitation Limit
^Analytical result might be compromised due to sample condition or holding time requirements
Reaction rate 1 = Slight
Reaction rate 2 = Moderate
Reaction rate 3 = High
Reaction rate 4 = Vigorous

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Quality Control Report

		Sample ID:	D202201282501	D202201283401
		Sample Name	WAC1_TP1_0.4-0.5	WAC1_TP3_0.0-0.1
Parameter	*Units*	*PQL*		
ESA-MP-01,ICP-01				
Arsenic			Pass	Pass
Cadmium			Pass	Pass
Chromium			Pass	Pass
Copper			Pass	Pass
Lead			Pass	Pass
Mercury			Pass	Pass
Nickel			Pass	Pass
Zinc			Pass	Pass

		Sample ID:	D202201282502	D202201283402
		Sample Name	WAC1_TP1_0.4-0.5	WAC1_TP3_0.0-0.1
Parameter	*Units*	*PQL*		
ESA-P-ORG7 & ORG8				
Benzene			Pass	Pass
Toluene			Pass	Pass
Ethylbenzene			Pass	Pass
m.p Xylene			Pass	Pass
o Xylene			Pass	Pass
Styrene			Pass	Pass
vNaphthalene			Pass	Pass
C6-C9			Pass	Pass
C6-C10			Pass	Pass
Vinyl Chloride			Pass	Pass
trans-1,2-Dichloroethene			Pass	Pass
Methylene chloride			Pass	Pass
cis-1,2-Dichloroethene			Pass	Pass
Bromochloromethane			Pass	Pass
Chloroform			Pass	Pass

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1,1,1-Trichloroethane			Pass	Pass
1,2-Dichloroethane			Pass	Pass
Carbon tetrachloride			Pass	Pass
1,1,2-Trichloroethane			Pass	Pass
Tetrachloroethene			Pass	Pass
1,1,1,2-Tetrachloroethane			Pass	Pass
1,1,2,2-Tetrachloroethane			Pass	Pass
1,2-Dichlorobenzene			Pass	Pass
1,4-Dichlorobenzene			Pass	Pass
1,2,4-Trichlorobenzene			Pass	Pass
Hexachlorobutadiene			Pass	Pass
1,1-Dichloroethene			Pass	Pass
Trichloroethene			Pass	Pass
Chlorobenzene			Pass	Pass
Toluene-d8	%		127	96
1,2-Dichloroethane-d4	%		134	96
4-Bromofluorobenzene (BFB)	%		115	114
Trifluorotoluene (Surr.)	%		126	102

		Sample ID:	**D202201282503**	**D202201283403**
		Sample Name	**WAC1_TP1_0.4-0.5**	**WAC1_TP3_0.0-0.1**
Parameter	***Units***	***PQL***		
ESA-P-ORG(12 - 15)				
Acenaphthene			Pass	Pass
Acenaphthylene			Pass	Pass
Anthracene			Pass	Pass
Benzo[a]anthracene			Pass	Pass
Benzo[a]pyrene			Pass	Pass
Benzo[b]fluoranthene			Pass	Pass
Benzo[g,h,i]perylene			Pass	Pass
Benzo[k]fluoranthene			Pass	Pass
Chrysene			Pass	Pass
Dibenzo[a,h]anthracene			Pass	Pass
Fluoranthene			Pass	Pass

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Fluorene			Pass	Pass
Indeno(1,2,3-cd)pyrene			Pass	Pass
Naphthalene			Pass	Pass
Phenanthrene			Pass	Pass
Pyrene			Pass	Pass
p-Terphenyl-d14 (Surr.)	%		87	76
aldrin			Pass	Pass
a-BHC			Pass	Pass
b-BHC			Pass	Pass
d-BHC			Pass	Pass
g-BHC (lindane)			Pass	Pass
cis-chlordane			Pass	Pass
trans-chlordane			Pass	Pass
4,4'-DDD			Pass	Pass
4,4'-DDE			Pass	Pass
4,4'-DDT			Pass	Pass
dieldrin			Pass	Pass
endosulfan I			Pass	Pass
endosulfan II			Pass	Pass
endosulfan sulfate			Pass	Pass
endrin			Pass	Pass
endrin aldehyde			Pass	Pass
endrin ketone			Pass	Pass
heptachlor			Pass	Pass
heptachlor epoxide			Pass	Pass
hexachlorobenzene			Pass	Pass
methoxychlor			Pass	Pass
TCMX (Surr.)	%		103	90
chlorpyrifos			Pass	Pass
chlorpyrifos methyl			Pass	Pass
diazinon			Pass	Pass
fenchlorphos			Pass	Pass
methyl parathion			Pass	Pass

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prophos			Pass	Pass
tributylphosphorotrithioite			Pass	Pass
Aroclor 1016			Pass	Pass
Aroclor 1221			Pass	Pass
Aroclor 1232			Pass	Pass
Aroclor 1242			Pass	Pass
Aroclor 1248			Pass	Pass
Aroclor 1254			Pass	Pass
Aroclor 1260			Pass	Pass
2-fluorobiphenyl (Surr.)	%		94	82

Sample ID:	**D202201282504**	**D202201283404**
Sample Name	**WAC1_TP1_0.4-0.5**	**WAC1_TP3_0.0-0.1**

Parameter	***Units***	***PQL***		
ESA-P-ORG(3,8)				
>C10-C16			Pass	Pass
>C16-C34			Pass	Pass
>C34-C40			Pass	Pass
>C10-C14			Pass	Pass
>C15-C28			Pass	Pass
>C29-C36			Pass	Pass

Sample ID:	**D202201282505**	**D202201283405**
Sample Name	**WAC1_TP1_0.4-0.5**	**WAC1_TP3_0.0-0.1**

Parameter	***Units***	***PQL***		
ESA-P-ORG16				
PFBA			Pass	Pass
PFPeA			Pass	Pass
PFBS			Pass	Pass
PFHxA			Pass	Pass
PFPeS			Pass	Pass
PFHpA			Pass	Pass
PFOA			Pass	Pass
PFHpS			Pass	Pass

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PFOS			Pass	Pass
PFDA			Pass	Pass
PFUdA			Pass	Pass
PFDoA			Pass	Pass
PFTrDA			Pass	Pass
PFTeDA			Pass	Pass
PFNA			Pass	Pass
PFHxS			Pass	Pass
MPFBA	%		73	73
M3PFBS	%		73	77
MPFOS	%		72	78
MPFHxA	%		74	75
MPFOA	%		78	95
MPFUdA	%		115	101

Sample ID: **Q2022003098**

Sample Name

Parameter	***Units***	***PQL***	Metals Blank - Soil
ESA-MP-01,ICP-01			
Arsenic	mg/kg	5	<5.0
Cadmium	mg/kg	0.3	<0.30
Chromium	mg/kg	5	<5.0
Copper	mg/kg	5	<5.0
Lead	mg/kg	10	<10.0
Mercury	mg/kg	0.2	<0.20
Nickel	mg/kg	10	<10.0
Zinc	mg/kg	5	<5.0

Sample ID: **Q2022003099**

Sample Name

Parameter	***Units***	***PQL***	Metals Blank Sp-Soil
ESA-MP-01,ICP-01			
Arsenic	%		100
Cadmium	%		106

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Chromium	%		101
Copper	%		100
Lead	%		101
Mercury	%		89
Nickel	%		103
Zinc	%		104

Sample ID:	**Q2022003104**
Sample Name	

Parameter	***Units***	***PQL***	VOCs MB Vic - Soil
ESA-P-ORG7 & ORG8			
Benzene	mg/kg	0.5	<0.50
Toluene	mg/kg	0.5	<0.50
Ethylbenzene	mg/kg	0.5	<0.50
m.p Xylene	mg/kg	1	<1.0
o Xylene	mg/kg	0.5	<0.50
Styrene	mg/kg	0.5	<0.50
vNaphthalene	mg/kg	0.5	<0.50
C6-C9	mg/kg	35	<35
C6-C10	mg/kg	35	<35
Vinyl Chloride	mg/kg	0.5	<0.50
trans-1,2-Dichloroethene	mg/kg	0.5	<0.50
Methylene chloride	mg/kg	0.5	<0.50
cis-1,2-Dichloroethene	mg/kg	0.5	<0.50
Bromochloromethane	mg/kg	0.5	<0.50
Chloroform	mg/kg	0.5	<0.50
1,1,1-Trichloroethane	mg/kg	0.5	<0.50
1,2-Dichloroethane	mg/kg	0.5	<0.50
Carbon tetrachloride	mg/kg	0.5	<0.50
1,1,2-Trichloroethane	mg/kg	0.5	<0.50
Tetrachloroethene	mg/kg	0.5	<0.50
1,1,1,2-Tetrachloroethane	mg/kg	0.5	<0.50
1,1,2,2-Tetrachloroethane	mg/kg	0.5	<0.50
1,2-Dichlorobenzene	mg/kg	0.5	<0.50

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1,4-Dichlorobenzene	mg/kg	0.5	<0.50
1,2,4-Trichlorobenzene	mg/kg	0.5	<0.50
Hexachlorobutadiene	mg/kg	0.5	<0.50
1,1-Dichloroethene	mg/kg	0.5	<0.50
Trichloroethene	mg/kg	0.5	<0.50
Chlorobenzene	mg/kg	0.5	<0.50

Sample ID: **Q2022003105**

Sample Name

Parameter	***Units***	***PQL***	VOCs LCS Vic - Soil
ESA-P-ORG7 & ORG8			
1,1-Dichloroethene	%		131
Benzene	%		127
Trichloroethene	%		106
Toluene	%		130
Chlorobenzene	%		129
Toluene-d8 (Surr.)	%		112
1,2-Dichloroethane-d4 (Surr.)	%		125
4-Bromofluorobenzene (BFB) (Surr.)	%		107
Trifluorotoluene (Surr.)	%		114

Sample ID: **Q2022003106**

Sample Name

Parameter	***Units***	***PQL***	PCB Blank - Soil
ESA-P-ORG(12 - 15)			
Acenaphthene	mg/kg	0.3	<0.30
Acenaphthylene	mg/kg	0.3	<0.30
Anthracene	mg/kg	0.3	<0.30
Benzo[a]anthracene	mg/kg	0.3	<0.30
Benzo[a]pyrene	mg/kg	0.3	<0.30
Benzo[b]fluoranthene	mg/kg	0.3	<0.30
Benzo[g,h,i]perylene	mg/kg	0.3	<0.30
Benzo[k]fluoranthene	mg/kg	0.3	<0.30
Chrysene	mg/kg	0.3	<0.30

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Dibenzo[a,h]anthracene	mg/kg	0.3	<0.30
Fluoranthene	mg/kg	0.3	<0.30
Fluorene	mg/kg	0.3	<0.30
Indeno(1,2,3-cd)pyrene	mg/kg	0.3	<0.30
Naphthalene	mg/kg	0.3	<0.30
Phenanthrene	mg/kg	0.3	<0.30
Pyrene	mg/kg	0.3	<0.30
aldrin	mg/kg	0.1	<0.10
a-BHC	mg/kg	0.1	<0.10
b-BHC	mg/kg	0.1	<0.10
d-BHC	mg/kg	0.1	<0.10
g-BHC (lindane)	mg/kg	0.1	<0.10
cis-chlordane	mg/kg	0.1	<0.10
trans-chlordane	mg/kg	0.1	<0.10
4,4'-DDD	mg/kg	0.1	<0.10
4,4'-DDE	mg/kg	0.1	<0.10
4,4'-DDT	mg/kg	0.1	<0.10
dieldrin	mg/kg	0.1	<0.10
endosulfan I	mg/kg	0.2	<0.20
endosulfan II	mg/kg	0.2	<0.20
endosulfan sulfate	mg/kg	0.1	<0.10
endrin	mg/kg	0.2	<0.20
endrin aldehyde	mg/kg	0.1	<0.10
endrin ketone	mg/kg	0.1	<0.10
heptachlor	mg/kg	0.1	<0.10
heptachlor epoxide	mg/kg	0.1	<0.10
hexachlorobenzene	mg/kg	0.1	<0.10
methoxychlor	mg/kg	0.1	<0.10
chlorpyrifos	mg/kg	0.1	<0.10
chlorpyrifos methyl	mg/kg	0.1	<0.10
diazinon	mg/kg	0.1	<0.10
fenchlorphos	mg/kg	0.1	<0.10
methyl parathion	mg/kg	0.1	<0.10

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prophos	mg/kg	0.1	<0.10
tributylphosphorotrithioite	mg/kg	0.1	<0.10
Aroclor 1016	mg/kg	0.5	<0.50
Aroclor 1221	mg/kg	0.5	<0.50
Aroclor 1232	mg/kg	0.5	<0.50
Aroclor 1242	mg/kg	0.5	<0.50
Aroclor 1248	mg/kg	0.5	<0.50
Aroclor 1254	mg/kg	0.5	<0.50
Aroclor 1260	mg/kg	0.5	<0.50

Sample ID: **Q2022003107**

Sample Name

Parameter	***Units***	***PQL***	PCB Blank Sp - Soil
ESA-P-ORG(12 - 15)			
Acenaphthene	%		99
Anthracene	%		102
Fluoranthene	%		93
Naphthalene	%		89
Phenanthrene	%		100
Pyrene	%		101
p-Terphenyl-d14 (Surr.)	%		100
aldrin	%		87
endrin	%		127
hexachlorobenzene	%		87
TCMX (Surr.)	%		113
chlorpyrifos	%		83
diazinon	%		84
2-fluorobiphenyl (Surr.)	%		107
Aroclor 1016	%		108

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Sample ID:	**Q2022003108**
Sample Name	

Parameter	*Units*	*PQL*	TRH Blank-Soil
ESA-P-ORG(3,8)			
>C10-C16	mg/kg	50	<50
>C16-C34	mg/kg	100	<100
>C34-C40	mg/kg	100	<100
>C10-C14	mg/kg	50	<50
>C15-C28	mg/kg	100	<100
>C29-C36	mg/kg	100	<100

Sample ID:	**Q2022003109**
Sample Name	

Parameter	*Units*	*PQL*	TRH Blank Spike-Soil
ESA-P-ORG(3,8)			
>C10-C16	%		86
>C10-C14	%		85

Sample ID:	**Q2022003126**
Sample Name	

Parameter	*Units*	*PQL*	PFAS Blank - Soil
ESA-P-ORG16			
PFBA	ug/kg	5	<5
PFPeA	ug/kg	5	<5
PFBS	ug/kg	5	<5
PFHxA	ug/kg	5	<5
PFPeS	ug/kg	5	<5
PFHpA	ug/kg	5	<5
PFOA	ug/kg	5	<5
PFHpS	ug/kg	5	<5
PFOS	ug/kg	5	<5
PFDA	ug/kg	5	<5
PFUdA	ug/kg	5	<5
PFDoA	ug/kg	5	<5

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PFTrDA	ug/kg	5	<5
PFTeDA	ug/kg	5	<5
PFNA	ug/kg	5	<5
PFHxS	ug/kg	5	<5
MPFBA (Surr.)	%		90
M3PFBS (Surr.)	%		82
MPFOS (Surr.)	%		97
MPFHxA (Surr.)	%		71
MPFOA (Surr.)	%		76
MPFUdA (Surr.)	%		81

Sample ID: **Q2022003127**

Sample Name

Parameter	***Units***	***PQL***	PFAS Blank Sp - Soil
ESA-P-ORG16			
PFBA	%		128
PFPeA	%		124
PFBS	%		117
PFHxA	%		125
PFPeS	%		120
PFHpA	%		119
PFOA	%		93
PFHpS	%		118
PFOS	%		94
PFDA	%		77
PFUdA	%		76
PFDoA	%		111
PFTrDA	%		80
PFTeDA	%		128
PFNA	%		78
PFHxS	%		101
MPFBA (Surr.)	%		88
M3PFBS (Surr.)	%		78
MPFOS (Surr.)	%		95

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MPFHxA (Surr.)	%		76
MPFOA (Surr.)	%		70
MPFUdA (Surr.)	%		89

Sample ID: **S202201282401**

Sample Name **WAC1_TP1 0.0-0.1**

Parameter	*Units*	*PQL*	
ESA-MP-01,ICP-01			
Arsenic	%		98
Cadmium	%		113
Chromium	%		105
Copper	%		110
Lead	%		108
Mercury	%		101
Nickel	%		106
Zinc	%		111

Sample ID: **S202201282402**

Sample Name **WAC1_TP1 0.0-0.1**

Parameter	*Units*	*PQL*	
ESA-P-ORG-07 & 08			
1,1-Dichloroethene	%		114
Benzene	%		110
Trichloroethene	%		99
Toluene	%		109
Chlorobenzene	%		109
Toluene-d8 (Surr.)	%		85
1,2-Dichloroethane-d4 (Surr.)	%		87
4-Bromofluorobenzene (Surr.)	%		98
Trifluorotoluene (Surr.)	%		81

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Sample ID:	**S202201282403**
Sample Name	**WAC1_TP1 0.0-0.1**

Parameter	*Units*	*PQL*	
ESA-P-ORG(12 - 15)			
Acenaphthene	%		116
Anthracene	%		120
Fluoranthene	%		113
Naphthalene	%		104
Phenanthrene	%		117
Pyrene	%		124
p-Terphenyl-d14 (Surr.)	%		118
aldrin	%		101
endrin	%		72
hexachlorobenzene	%		97
TCMX (Surr.)	%		127
chlorpyrifos	%		98
diazinon	%		101
Aroclor 1016	%		116
2-fluorobiphenyl (Surr.)	%		125

Sample ID:	**S202201282404**
Sample Name	**WAC1_TP1 0.0-0.1**

Parameter	*Units*	*PQL*	
ESA-P-ORG(3,8)			
>C10-C16	%		97
>C10-C14	%		96

Sample ID:	**S202201282405**
Sample Name	**WAC1_TP1 0.0-0.1**

Parameter	*Units*	*PQL*	
ESA-P-ORG16			
PFBA	%		123
PFPeA	%		128
PFBS	%		117
PFHxA	%		127

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PFPeS	%		121
PFHpA	%		125
PFOA	%		81
PFHpS	%		130
PFOS	%		73
PFDA	%		88
PFUdA	%		87
PFDoA	%		75
PFTrDA	%		87
PFTeDA	%		112
PFNA	%		78
PFHxS	%		96
MPFBA (Surr.)	%		82
M3PFBS (Surr.)	%		81
MPFOS (Surr.)	%		79
MPFHxA (Surr.)	%		78
MPFOA (Surr.)	%		75
MPFUdA (Surr.)	%		96

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A.B.N. 52 093 452 950

Analysis report: 21.2044_WAC1
Laboratory LOT NO: 2201915

Date Received: 29.04.2022
Date Analysed: 03.05.2022
Report Date: 03.05.2022
Client: ADE Consulting Group
Job Location: AF JV_SOP_WAC1
Analytical method: AS 4964-2004 "Method for the qualitative identification of asbestos in bulk samples" in conjunction with AD Envirotech's ABI Methods for Polarised Light Microscopy with dispersion staining

Analysis performed by:

Kim Foley
Approved asbestos identifier

Results Authorised By:

Kim Foley
Approved Signatory

Accreditation No.14664.
Accredited for compliance with ISO/IEC 17025 - Testing.
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

Tests not covered by NATA are denoted with *.

General Comments:

Sydney Laboratory Services is responsible for all the information in the report, except that provided by the customer. All sampling information included in the report has been provided by the client
Information provided by the client can affect the validity of the results.
Sample analysed as received.
Samples are stored for minimum period of 1 month if longer time is not advised by client.

Accreditation No.14664.
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The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

Tests not covered by NATA are denoted with *.

Client Sample ID.	Laboratory Sample No.	Sample Description/Matrix	Sample Dimensions (cm) unless stated otherwise	Result	Comments
WAC1_TP1_0.4-0.5	2022012825	Soil	39 grams	No Chrysotile asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Amosite asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Crocidolite asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Synthetic Mineral Fibres found	Nil
				Organic fibres found	Nil
WAC1_TP1_1.7-1.8	2022012828	Soil	37 grams	No Chrysotile asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Amosite asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Crocidolite asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Synthetic Mineral Fibres found	Nil
				Organic fibres found	Nil
WAC1_TP2_0.0-0.1	2022012829	Soil	74 grams	No Chrysotile asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Amosite asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Crocidolite asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Synthetic Mineral Fibres found	Nil
				Organic fibres found	Nil
WAC1_TP2_0.9-1.0	2022012831	Soil	44 grams	No Chrysotile asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Amosite asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Crocidolite asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Synthetic Mineral Fibres found	Nil
				Organic fibres found	Nil
WAC1_TP2_1.7-1.8	2022012833	Soil	50 grams	No Chrysotile asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Amosite asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Crocidolite asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Synthetic Mineral Fibres found	Nil
				Organic fibres found	Nil
WAC1_TP3_0.0-0.1	2022012834	Soil	48 grams	No Chrysotile asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Amosite asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Crocidolite asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Synthetic Mineral Fibres found	Nil
				Organic fibres found	Nil
WAC1_TP3_0.4-0.5	2022012835	Soil	63 grams	No Chrysotile asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Amosite asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Crocidolite asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Synthetic Mineral Fibres found	Nil
				Organic fibres found	Nil

Client Sample ID.	Laboratory Sample No.	Sample Description/Matrix	Sample Dimensions (cm) unless stated otherwise	Result	Comments
WAC1_TP3_0.9-1.0	2022012836	Soil	66 grams	No Chrysotile asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Amosite asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Crocidolite asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Synthetic Mineral Fibres found	Nil
				Organic fibres found	Nil
WAC1_TP3_1.7-1.8	2022012838	Soil	65 grams	No Chrysotile asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Amosite asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Crocidolite asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Synthetic Mineral Fibres found	Nil
				Organic fibres found	Nil

PFAS TRAY - ~~T89~~ T75

Jars TRAY - T39

Document Revision Date: 30.06.2020

ESA-F-02 COC - Chain Of Custody (Internal: Sydney Laboratory Services)

ADE CONSULTING GROUP — SOLUTIONS THROUGH INNOVATION

PROJECT:	AF JV_SOP_WAC1
PROJECT NUMBER - INVOICE NUMBER	21.2044
SAMPLES DELIVERED BY:	ADE Consulting Group 6/7 Millennium Ct, Silverwater NSW 2128
SAMPLERS:	Megan Lynch, monique Hutchins, Sinead O'Rourke
TURNAROUND:	24h: 48h: XX 72h: 4 WORKING DAYS:
SAMPLING DATE:	21/04/2022
AFTER TEST STORAGE:	ROOM TEMP: ☐ FRIDGE: X FREEZER: ☐ >>4
REPORT FORMAT:	HARD COPY: ☐ E-MAIL: X
CONSULTANTS SIGNATURE:	CONSULTANT E-MAIL: monique.hutchins@ade.group megan.lynch@ade.group
PROJECT MANAGERS SIGNATURE:	PROJECT MANAGERS E-MAIL: stephen.bowly@ade.group

2022012...

LABORATORY REFERENCE NO. (Lab use ONLY):	21.2044.WAC1
RECEIVED BY: Tree	SIGNATURE: TT
SAMPLES: 12 CHILLED: ☐ PRESERVED: X	PRESERVATION METHOD: X CUSTODY SEAL INTACT: X
MINIMAL HEADSPACE: ☐	WITHIN HOLDING TIME: ☐
DATE: 29-4-22 TIME: 7:00	TEMPERATURE UPON RECEIPT: X
LIMS LOT NO. 220917 LIMS/EXCEL SIGNATURE:	COMMENTS:

SAMPLE DATA				CONTAINER DATA		ANALYSES REQUIRED																NOTES
LIMS Sample ID (Lab Use)	Sample ID (ADE)	MATRIX	SAMPLE DATE	TYPE & PRESERVATIVE	NO.	pH/pH fox	BTEXN	8 Metal Suite	PAH	PCB	OCC/OPP	TCLP	VOC	PFAS	TRH	TOC	CEC	Ph/EC	Asbestos 65g			
846	WAC1_TP4_0.0-0.1	SOIL	21/04/2022	PFAS jar	1									X								POTENTIAL HAZARDOUS CONTAMINANTS:
847	WAC1_TP4_0.3	SOIL	21/04/2022	Jar / Bag	2		X	X	X	X	X		X		X				X			☐ ASBESTOS ☐ HYDROCARBONS ☐ LEAD/ARSENIC ☐ NO KNOWN CONTAMINATION ☐ OTHER:
848	WAC1_TP4_0.4	SOIL	21/04/2022	Jar / Bag	3		X	X	X	X	X		X		X				X			LAB PLEASE *EMAIL COC RECEIPT: ☐
849	WAC1_TP4_0.5	SOIL	21/04/2022	Jar / Bag	4		X	X	X	X	X		X		X				X			Sample Comments
850	WAC1_TP4_ BRa	SOIL	21/04/2022	Jar	5		X	X	X	X	X				X							
851	WAC1_TP5_0.0-0.1	SOIL	21/04/2022	Jar / Bag / PFAS	6		X	X	X	X	X		X	X	X				X			
852	WAC1_TP5_0.3-0.4	SOIL	21/04/2022	Jar / Bag	7		X	X	X	X	X		X		X				X			
853	WAC1_TP5_0.5-0.6	SOIL	21/04/2022	Jar / Bag / PFAS	8		X	X	X	X	X		X	X	X				X			
854	WAC1_TP6_0.0-0.1	SOIL	21/04/2022	Jar / Bag / PFAS	9		X	X	X	X	X		X	X	X				X			
855	WAC1_TP6_0.3-0.4	SOIL	21/04/2022	Jar / Bag	10		X	X	X	X	X		X		X				X			
856	WAC1_TP6_0.5-0.6	SOIL	21/04/2022	Jar / Bag	11		X	X	X	X	X		X	X	X				X			
857	WAC1_TP6_ BRb	SOIL	21/04/2022	Jar / Bag	12		X	X	X	X	X				X							

Comments:

Container Type and Preservative: P = Unpreserved Plastic; PN = Nitric Preserved Plastic; ORC = Nitric Preserved ORC; PNA = Sodium Hydroxide Preserved Plastic; PC = HCl preserved Plastic; VC = Vial HCl Preserved; SP = Sulfuric Preserved Plastic; VB = Vial Sodium Bisulphate Preserved; VS = Vial Sulfuric Preserved; V = Unpreserved Vial; G = Amber Glass Unpreserved; SG = Sulfuric Preserved Amber Glass; F = Formaldehyde Preserved Glass; HS = HCl preserved Speciation bottle; Z = Zinc Acetate Preserved Bottle; E = EDTA Preserved Bottle; ST = Sterile Bottle; J = Unpreserved Glass Jar; ASS = Plastic Bag for Acid Sulfate Soils; B = Unpreserved Bag.

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Due: 03.05.22

Sydney Laboratory Services

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Unit 4/10-11 Millennium Court,
Silverwater 2128
Ph: (02) 9648-6669

Accreditation No.14664
Accredited for compliance
with ISO/IEC 17025 - Testing.

SAMPLE RECEIPT NOTIFICATION (SRN)

Contact: Stephen Bowly / Thesan Naidoo / Monique Hitchens / Megan Lynch
Project name: 21.2044.WAC1
Number of samples: 15
COC number: 21.2044.WAC1
Turn around time: 48hrs
Date: 29/04/2022
Time received: 7:00am
SLS Reference: 2201917
Estimated Report Delivery Date: 03/05/2022

Sample information

☑	All samples have been received and logged into LIMS.
☑	No mistakes in the COC
☑	Evidence of chilling for samples
N/A	Samples were preserved
N/A	Custody seal intact
☑	Samples were delivered within holding time
☑	Samples to be tested for volatiles had zero headspace
☑	All samples were received in good condition (no broken jars, labelled correctly…).
☐	Samples have been subcontracted

Comments

This report contains:
Sample receipt non-conformities
Summary of samples and requested analysis
Requested report deliverables

Asbestos Samples are reported as per the State EPA guidelines

Contact details

If you have any questions with respect to these samples please contact:
sls@ade.group



Trianah Tumbridge

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SAMPLE RECEIPT NOTIFICATION (SRN)

Laboratory Sample ID	Client Sample ID	6 Metal Suite	8 Metal Suite	BTEX	PAH	OCP/OPP	PCB	vTRH (C6 - C10)	TRH (C10 - C40)	pH/EC	VOC	PFAS	Bulk	Dust	Dust Swab	Soil 65 grams	SOII 500 g NEPM	AAM
2022012846	WAC1_TP4_0.0-0.1											X						
2022012847	WAC1_TP4_0.3		X	X	X	X	X		X		X					X		
2022012848	WAC1_TP4_0.4		X	X	X	X	X		X		X					X		
2022012849	WAC1_TP4_0.5		X	X	X	X	X		X		X					X		
2022012850	WAC1_TP4_ BRa		X	X	X	X	X		X									
2022012851	WAC1_TP5_0.0-0.1		X	X	X	X	X		X		X	X				X		
2022012852	WAC1_TP5_0.3-0.4		X	X	X	X	X		X		X					X		
2022012853	WAC1_TP5_0.5-0.6		X	X	X	X	X		X		X	X				X		
2022012854	WAC1_TP6_0.0-0.1		X	X	X	X	X		X		X	X				X		
2022012855	WAC1_TP6_0.3-0.4		X	X	X	X	X		X		X					X		
2022012856	WAC1_TP6_0.5-0.6		X	X	X	X	X		X		X	X				X		
2022012857	WAC1_TP6_ BRb		X	X	X	X	X		X									

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Accreditation No.14664
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This certificate of analysis contains General Comments and Analytical Results. Quality Control Report and Laboratory Quality Acceptance Criteria have been issued separately.

This report supersedes any previous report(s) with this reference. This document shall not be reproduced, except in full.

This report has been electronically signed by authorised signatories below.

Authorised By

Kaiyu Li

General Comments

Samples are analysed on as received basis. Sampling is not covered by NATA accreditation.

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

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

Samples were analysed within holding time described by laboratory internal procedures if not stated otherwise. If samples delivered do not meet required analytical criteria, results will be marked with ^.

However surrogate standards are added to samples, results are not corrected for standards recoveries.

Analysis of VOC in water samples are performed on unfiltered waters (as received) spiked with surrogates and injection standards only.

SLS is responsible for all the information in the report, except that provided by the customer.

All sampling information included in the report has been provided by customer.

Information provided by the customer can affect the validity of the results.

Sydney Laboratory Services
A division of A. D. Envirotech Australia Pty Ltd
Unit 4/10-11 Millennium Court
Silverwater 2128
Ph: (02) 9648-6669

Certificate of Analysis

Contact:	Stephen Bowly	**Date Reported:**	3/05/2022
Customer:	ADE Consulting Group	**No. of Samples:**	12
Address:	Unit 6 7 Millennium Court Silverwater NSW	**Date Received:**	29/04/2022
		Date of Analysis:	29/04/2022
Cust Ref:	21.2044		

Glossary:

*NATA accreditation does not cover the performance of this service
ND-not detected,
NT-not tested
INS-Insufficient material to perform the test
LCS-Laboratory Control Sample
RPD-Relative Percent Difference
N/A-Not Applicable
< less than
> greater than
PQL- Practical Quantitation Limit
^Analytical result might be compromised due to sample condition or holding time requirements
Reaction rate 1 = Slight
Reaction rate 2 = Moderate
Reaction rate 3 = High
Reaction rate 4 = Vigorous

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Certificate of Analysis

	Sample ID:	2022012846	2022012847	2022012848	2022012849	2022012850	2022012851	2022012852	2022012853	2022012854	2022012855	2022012856
	Sample Name	WAC1_TP4_0.0-0.1	WAC1_TP4_0.3	WAC1_TP4_0.4	WAC1_TP4_0.5	WAC1_TP4_ BRa	WAC1_TP5_0.0-0.1	WAC1_TP5_0.3-0.4	WAC1_TP5_0.5-0.6	WAC1_TP6_0.0-0.1	WAC1_TP6_0.3-0.4	WAC1_TP6_0.5-0.6
Parameter	*Units*	*PQL*										
ESA-MP-01,ICP-01												
Arsenic	mg/kg	5	-	<5.0	13.4	16.8	7.0	6.1	<5.0	7.8	<5.0	5.5	<5.0
Cadmium	mg/kg	0.3	-	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Chromium	mg/kg	5	-	<5.0	<5.0	6.1	6.4	<5.0	<5.0	<5.0	7.6	6.8	<5.0
Copper	mg/kg	5	-	<5.0	14.8	29.5	9.3	41.8	<5.0	8.7	20.8	5.7	5.6
Lead	mg/kg	10	-	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	75.3	<10.0	<10.0	<10.0
Mercury	mg/kg	0.2	-	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Nickel	mg/kg	10	-	<10.0	<10.0	<10.0	<10.0	98.7	<10.0	<10.0	13.7	<10.0	<10.0
Zinc	mg/kg	5	-	<5.0	<5.0	<5.0	11.9	35.7	<5.0	<5.0	40.4	<5.0	<5.0
ESA-P-12													
% Moisture Content	%		8.9	9.7	14.2	6.5	4.2	3.1	7.8	12.5	11.9	16.3	16.1
ESA-P-ORG(12 - 15)													
Acenaphthene	mg/kg	0.3	-	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Acenaphthylene	mg/kg	0.3	-	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Anthracene	mg/kg	0.3	-	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Benzo[a]anthracene	mg/kg	0.3	-	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Benzo[a]pyrene	mg/kg	0.3	-	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Benzo[b]fluoranthene	mg/kg	0.3	-	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Benzo[g,h,i]perylene	mg/kg	0.3	-	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Benzo[k]fluoranthene	mg/kg	0.3	-	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Chrysene	mg/kg	0.3	-	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Dibenzo[a,h]anthracene	mg/kg	0.3	-	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Fluoranthene	mg/kg	0.3	-	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Fluorene	mg/kg	0.3	-	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Indeno(1,2,3-cd)pyrene	mg/kg	0.3	-	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Naphthalene	mg/kg	0.3	-	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Phenanthrene	mg/kg	0.3	-	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Pyrene	mg/kg	0.3	-	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30

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Sum of Positive PAHs	mg/kg	0.3	-	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Benzo(a)pyrene TEQ (Zero)	mg/kg	0.3	-	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Benzo(a)pyrene TEQ (Half PQL)	mg/kg	0.3	-	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36
Benzo(a)pyrene TEQ (PQL)	mg/kg	0.3	-	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73
p-Terphenyl-d14 (Surr.)	%		-	77	64	72	75	81	122	130	133	107	125
aldrin	mg/kg	0.1	-	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
a-BHC	mg/kg	0.1	-	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
b-BHC	mg/kg	0.1	-	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
d-BHC	mg/kg	0.1	-	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
g-BHC (lindane)	mg/kg	0.1	-	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
cis-chlordane	mg/kg	0.1	-	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
trans-chlordane	mg/kg	0.1	-	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
4,4'-DDD	mg/kg	0.1	-	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
4,4'-DDE	mg/kg	0.1	-	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
4,4'-DDT	mg/kg	0.1	-	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
dieldrin	mg/kg	0.1	-	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	0.26	<0.10	<0.10
endosulfan I	mg/kg	0.2	-	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
endosulfan II	mg/kg	0.2	-	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
endosulfan sulfate	mg/kg	0.1	-	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
endrin	mg/kg	0.2	-	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
endrin aldehyde	mg/kg	0.1	-	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
endrin ketone	mg/kg	0.1	-	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
heptachlor	mg/kg	0.1	-	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
heptachlor epoxide	mg/kg	0.1	-	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
hexachlorobenzene	mg/kg	0.1	-	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
methoxychlor	mg/kg	0.1	-	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
TCMX (Surr.)	%		-	98	82	87	98	100	124	134	136	124	127
chlorpyrifos	mg/kg	0.1	-	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
chlorpyrifos methyl	mg/kg	0.1	-	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
diazinon	mg/kg	0.1	-	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
fenchlorphos	mg/kg	0.1	-	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
methyl parathion	mg/kg	0.1	-	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
prophos	mg/kg	0.1	-	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10

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tributylphosphorotrithioite	mg/kg	0.1	-	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Aroclor 1016	mg/kg	0.5	-	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Aroclor 1221	mg/kg	0.5	-	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Aroclor 1232	mg/kg	0.5	-	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Aroclor 1242	mg/kg	0.5	-	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Aroclor 1248	mg/kg	0.5	-	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Aroclor 1254	mg/kg	0.5	-	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Aroclor 1260	mg/kg	0.5	-	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
2-fluorobiphenyl (Surr.)	%		-	85	71	77	84	87	129	100	103	109	130
ESA-P-ORG16													
PFBA	ug/kg	5	<5	-	-	-	-	<5	-	<5	<5	-	<5
PFPeA	ug/kg	5	<5	-	-	-	-	<5	-	<5	<5	-	<5
PFBS	ug/kg	5	<5	-	-	-	-	<5	-	<5	<5	-	<5
PFHxA	ug/kg	5	<5	-	-	-	-	<5	-	<5	<5	-	<5
PFPeS	ug/kg	5	<5	-	-	-	-	<5	-	<5	<5	-	<5
PFHpA	ug/kg	5	<5	-	-	-	-	<5	-	<5	<5	-	<5
PFOA	ug/kg	5	<5	-	-	-	-	<5	-	<5	<5	-	<5
PFHpS	ug/kg	5	<5	-	-	-	-	<5	-	<5	<5	-	<5
PFOS	ug/kg	5	<5	-	-	-	-	<5	-	<5	<5	-	<5
PFDA	ug/kg	5	<5	-	-	-	-	<5	-	<5	<5	-	<5
PFUdA	ug/kg	5	<5	-	-	-	-	<5	-	<5	<5	-	<5
PFDoA	ug/kg	5	<5	-	-	-	-	<5	-	<5	<5	-	<5
PFTrDA	ug/kg	5	<5	-	-	-	-	<5	-	<5	<5	-	<5
PFTeDA	ug/kg	5	<5	-	-	-	-	<5	-	<5	<5	-	<5
PFNA	ug/kg	5	<5	-	-	-	-	<5	-	<5	<5	-	<5
PFHxS	ug/kg	5	<5	-	-	-	-	<5	-	<5	<5	-	<5
MPFBA (Surr.)	%		70	-	-	-	-	87	-	80	77	-	80
M3PFBS (Surr.)	%		76	-	-	-	-	87	-	79	83	-	75
MPFOS (Surr.)	%		71	-	-	-	-	87	-	96	86	-	76
MPFHxA (Surr.)	%		84	-	-	-	-	80	-	77	78	-	81
MPFOA (Surr.)	%		76	-	-	-	-	79	-	93	73	-	77
MPFUdA (Surr.)	%		88	-	-	-	-	129	-	83	111	-	81

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ESA-P-ORG(3,8)													
>C10-C16	mg/kg	50	-	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
>C16-C34	mg/kg	100	-	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
>C34-C40	mg/kg	100	-	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
>C10-C40 (Sum of total)	mg/kg	50	-	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
>C10-C14	mg/kg	50	-	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
>C15-C28	mg/kg	100	-	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
>C29-C36	mg/kg	100	-	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
>C10-C36 (Sum of total)	mg/kg	50	-	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
ESA-P-ORG07 & ORG08													
Benzene	mg/kg	0.5	-	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Toluene	mg/kg	0.5	-	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Ethylbenzene	mg/kg	0.5	-	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
m.p Xylene	mg/kg	1	-	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
o Xylene	mg/kg	0.5	-	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Sum of BTEX	mg/kg	1	-	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Total Xylenes	mg/kg	1	-	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Styrene	mg/kg	0.5	-	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Sum of MAHs	mg/kg	1	-	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
vNaphthalene	mg/kg	0.5	-	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
C6-C9 Conc.	mg/kg	35	-	<35	<35	<35	<35	<35	<35	<35	<35	<35	<35
C6-C10 Conc.	mg/kg	35	-	<35	<35	<35	<35	<35	<35	<35	<35	<35	<35
C6-C10 minus BTEX (F1)	mg/kg	35	-	<35	<35	<35	<35	<35	<35	<35	<35	<35	<35
Vinyl Chloride	mg/kg	0.5	-	<0.50	<0.50	<0.50	-	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
trans-1,2-Dichloroethene	mg/kg	0.5	-	<0.50	<0.50	<0.50	-	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Methylene chloride	mg/kg	0.5	-	<0.50	<0.50	<0.50	-	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
cis-1,2-Dichloroethene	mg/kg	0.5	-	<0.50	<0.50	<0.50	-	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Bromochloromethane	mg/kg	0.5	-	<0.50	<0.50	<0.50	-	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Chloroform	mg/kg	0.5	-	<0.50	<0.50	<0.50	-	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
1,1,1-Trichloroethane	mg/kg	0.5	-	<0.50	<0.50	<0.50	-	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
1,2-Dichloroethane	mg/kg	0.5	-	<0.50	<0.50	<0.50	-	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Carbon tetrachloride	mg/kg	0.5	-	<0.50	<0.50	<0.50	-	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
1,1,2-Trichloroethane	mg/kg	0.5	-	<0.50	<0.50	<0.50	-	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50

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Tetrachloroethene	mg/kg	0.5	-	<0.50	<0.50	<0.50	-	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
1,1,1,2-Tetrachloroethane	mg/kg	0.5	-	<0.50	<0.50	<0.50	-	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
1,1,2,2-Tetrachloroethane	mg/kg	0.5	-	<0.50	<0.50	<0.50	-	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
1,2-Dichlorobenzene	mg/kg	0.5	-	<0.50	<0.50	<0.50	-	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
1,4-Dichlorobenzene	mg/kg	0.5	-	<0.50	<0.50	<0.50	-	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
1,2,4-Trichlorobenzene	mg/kg	0.5	-	<0.50	<0.50	<0.50	-	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Hexachlorobutadiene	mg/kg	0.5	-	<0.50	<0.50	<0.50	-	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
1,1-Dichloroethene	mg/kg	0.5	-	<0.50	<0.50	<0.50	-	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Trichloroethene	mg/kg	0.5	-	<0.50	<0.50	<0.50	-	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Chlorobenzene	mg/kg	0.5	-	<0.50	<0.50	<0.50	-	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Sum of Chlorinated Hydrocarbons	mg/kg	0.5	-	<0.50	<0.50	<0.50	-	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Other Chlorinated Hydrocarbon	mg/kg	0.5	-	<0.50	<0.50	<0.50	-	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Toluene-d8 (Surr.)	%		-	138	131	117	137	130	75	69	72	70	71
1,2-Dichloroethane-d4 (Surr.)	%		-	130	132	136	131	129	119	108	115	111	115
4-Bromofluorobenzene (BFB) (Surr.)	%		-	129	128	133	128	125	110	96	99	97	98
Trifluorotoluene (Surr.)	%		-	67	64	75	80	71	61	108	68	66	61

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Certificate of Analysis

Sample ID:	2022012857
Sample Name	WAC1_TP6_ BRb

Parameter	*Units*	*PQL*	
ESA-MP-01,ICP-01			
Arsenic	mg/kg	5	<5.0
Cadmium	mg/kg	0.3	<0.30
Chromium	mg/kg	5	<5.0
Copper	mg/kg	5	5.8
Lead	mg/kg	10	<10.0
Mercury	mg/kg	0.2	<0.20
Nickel	mg/kg	10	<10.0
Zinc	mg/kg	5	<5.0
ESA-P-12			
% Moisture Content	%		10.9
ESA-P-ORG(12 - 15)			
Acenaphthene	mg/kg	0.3	<0.30
Acenaphthylene	mg/kg	0.3	<0.30
Anthracene	mg/kg	0.3	<0.30
Benzo[a]anthracene	mg/kg	0.3	<0.30
Benzo[a]pyrene	mg/kg	0.3	<0.30
Benzo[b]fluoranthene	mg/kg	0.3	<0.30
Benzo[g,h,i]perylene	mg/kg	0.3	<0.30
Benzo[k]fluoranthene	mg/kg	0.3	<0.30
Chrysene	mg/kg	0.3	<0.30
Dibenzo[a,h]anthracene	mg/kg	0.3	<0.30
Fluoranthene	mg/kg	0.3	<0.30
Fluorene	mg/kg	0.3	<0.30
Indeno(1,2,3-cd)pyrene	mg/kg	0.3	<0.30
Naphthalene	mg/kg	0.3	<0.30
Phenanthrene	mg/kg	0.3	<0.30
Pyrene	mg/kg	0.3	<0.30

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Sum of Positive PAHs	mg/kg	0.3	<0.30
Benzo(a)pyrene TEQ (Zero)	mg/kg	0.3	<0.30
Benzo(a)pyrene TEQ (Half PQL)	mg/kg	0.3	0.36
Benzo(a)pyrene TEQ (PQL)	mg/kg	0.3	0.73
p-Terphenyl-d14 (Surr.)	%		133
aldrin	mg/kg	0.1	<0.10
a-BHC	mg/kg	0.1	<0.10
b-BHC	mg/kg	0.1	<0.10
d-BHC	mg/kg	0.1	<0.10
g-BHC (lindane)	mg/kg	0.1	<0.10
cis-chlordane	mg/kg	0.1	<0.10
trans-chlordane	mg/kg	0.1	<0.10
4,4'-DDD	mg/kg	0.1	<0.10
4,4'-DDE	mg/kg	0.1	<0.10
4,4'-DDT	mg/kg	0.1	<0.10
dieldrin	mg/kg	0.1	<0.10
endosulfan I	mg/kg	0.2	<0.20
endosulfan II	mg/kg	0.2	<0.20
endosulfan sulfate	mg/kg	0.1	<0.10
endrin	mg/kg	0.2	<0.20
endrin aldehyde	mg/kg	0.1	<0.10
endrin ketone	mg/kg	0.1	<0.10
heptachlor	mg/kg	0.1	<0.10
heptachlor epoxide	mg/kg	0.1	<0.10
hexachlorobenzene	mg/kg	0.1	<0.10
methoxychlor	mg/kg	0.1	<0.10
TCMX (Surr.)	%		115
chlorpyrifos	mg/kg	0.1	<0.10
chlorpyrifos methyl	mg/kg	0.1	<0.10
diazinon	mg/kg	0.1	<0.10
fenchlorphos	mg/kg	0.1	<0.10
methyl parathion	mg/kg	0.1	<0.10
prophos	mg/kg	0.1	<0.10

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tributylphosphorotrithioite	mg/kg	0.1	<0.10
Aroclor 1016	mg/kg	0.5	<0.50
Aroclor 1221	mg/kg	0.5	<0.50
Aroclor 1232	mg/kg	0.5	<0.50
Aroclor 1242	mg/kg	0.5	<0.50
Aroclor 1248	mg/kg	0.5	<0.50
Aroclor 1254	mg/kg	0.5	<0.50
Aroclor 1260	mg/kg	0.5	<0.50
2-fluorobiphenyl (Surr.)	%		138
ESA-P-ORG(3,8)			
>C10-C16	mg/kg	50	<50
>C16-C34	mg/kg	100	<100
>C34-C40	mg/kg	100	<100
>C10-C40 (Sum of total)	mg/kg	50	<50
>C10-C14	mg/kg	50	<50
>C15-C28	mg/kg	100	<100
>C29-C36	mg/kg	100	<100
>C10-C36 (Sum of total)	mg/kg	50	<50
ESA-P-ORG07 & ORG08			
Benzene	mg/kg	0.5	<0.50
Toluene	mg/kg	0.5	<0.50
Ethylbenzene	mg/kg	0.5	<0.50
m.p Xylene	mg/kg	1	<1.0
o Xylene	mg/kg	0.5	<0.50
Sum of BTEX	mg/kg	1	<1.0
Total Xylenes	mg/kg	1	<1.0
Styrene	mg/kg	0.5	<0.50
Sum of MAHs	mg/kg	1	<1.0
vNaphthalene	mg/kg	0.5	<0.50
C6-C9 Conc.	mg/kg	35	<35
C6-C10 Conc.	mg/kg	35	<35
C6-C10 minus BTEX (F1)	mg/kg	35	<35
Toluene-d8 (Surr.)	%		70

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1,2-Dichloroethane-d4 (Surr.)	%		112
4-Bromofluorobenzene (BFB) (Surr.)	%		95
Trifluorotoluene (Surr.)	%		79

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Accreditation No.14664
Accredited for compliance with ISO/IEC 17025 - Testing.

This Quality Control Report contains results of QAQC samples analysis and the Laboratory Acceptance Criteria.

This report supersedes any previous report(s) with this reference. This document shall not be reproduced, except in full.

This report has been electronically signed by authorised signatories below.

Authorised By

Kaiyu Li

General Comments

Duplicate samples and matrix spike may not be prepared on smaller jobs, however are analysed at frequency. QAQC samples shown within the report as e.g. Batch Blank, Batch Matrix Spike were performed on samples not reported on that Certificate of Analysis.

Blank This is the component of the analytical signal which is not derived from the sample but from reagents, glassware etc, can be determined by processing solvents and reagents in the same manner as for samples.
Duplicate This is the interlaboratory split of a random sample from the processed batch
Matrix Spike A portion of the sample is spiked with a known concentration of target analyte. The purpose of the matrix spike is to monitor the performance of the analytical method used and to determine whether matrix interferences exist.
LCS (Laboratory Control Sample): This comprises either a standard reference material or a control matrix (such as a blank sand or water) fortified with analytes representative of the analyte class.
Surr. (Surrogate Spike) Surrogates are known additions to each sample, blank and matrix spike or LCS in a batch. Surrogates are chosen as a compounds which are similar to the analyte of interest, however are not expected to be found in real samples.

Laboratory Acceptance Criteria

Blank shall be < PQL
Matrix Spikes and LCS: Generally 70-130% for inorganics/metals/PFAS, 60-140% for organics is acceptable. Matrix heterogeneity may result in matrix spike analyses falling outside these limits
RPD Duplicates: Global RPD Duplicates Acceptance Criteria is 30% however the following acceptance guidelines are equally applicable:
Results <10 times the PQL : No Limit
Results between 10-20 times the PQL : RPD must lie between 0-50%
Results >20 times the PQL : RPD must lie between 0-30%
Surrogate Recoveries : Recoveries must lie between 50-150%

SLS is responsible for all the information in the report, except that provided by the customer.

All sampling information included in the report has been provided by customer.

Information provided by the customer can affect the validity of the results.

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Quality Control Report

Contact:	Stephen Bowly	**Date Reported:**	3/05/2022
Customer:	ADE Consulting Group	**No. of Samples:**	45
Address:	Unit 6 7 Millennium Court Silverwater NSW	**Date Received:**	29/04/2022
		Date of Analysis:	29/04/2022

Cust Ref: 21.2044

Glossary:

*NATA accreditation does not cover the performance of this service
ND-not detected,
NT-not tested
INS-Insufficient material to perform the test
LCS-Laboratory Control Sample
RPD-Relative Percent Difference
N/A-Not Applicable
< less than
> greater than
PQL- Practical Quantitation Limit
^Analytical result might be compromised due to sample condition or holding time requirements
Reaction rate 1 = Slight
Reaction rate 2 = Moderate
Reaction rate 3 = High
Reaction rate 4 = Vigorous

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Quality Control Report

	Sample ID:	D202201282501	D202201283401	D202201285301	D202201288201
	Sample Name	WAC1_TP1_0.4-0.5	WAC1_TP3_0.0-0.1	WAC1_TP5_0.5-0.6	WAC1_TP8_0.3
Parameter	Units	PQL			
ESA-MP-01,ICP-01					
Arsenic			Pass	Pass	Pass	Pass
Cadmium			Pass	Pass	Pass	Pass
Chromium			Pass	Pass	Pass	Pass
Copper			Pass	Pass	Pass	Pass
Lead			Pass	Pass	Pass	Pass
Mercury			Pass	Pass	Pass	Pass
Nickel			Pass	Pass	Pass	Pass
Zinc			Pass	Pass	Pass	Pass

	Sample ID:	D202201282502	D202201283402	D202201285302	D202201288202
	Sample Name	WAC1_TP1_0.4-0.5	WAC1_TP3_0.0-0.1	WAC1_TP5_0.5-0.6	WAC1_TP8_0.3
Parameter	Units	PQL			
ESA-P-ORG7 & ORG8					
Benzene			Pass	Pass	Pass	Pass
Toluene			Pass	Pass	Pass	Pass
Ethylbenzene			Pass	Pass	Pass	Pass
m.p Xylene			Pass	Pass	Pass	Pass
o Xylene			Pass	Pass	Pass	Pass
Styrene			Pass	Pass	Pass	Pass
vNaphthalene			Pass	Pass	Pass	Pass
C6-C9			Pass	Pass	Pass	Pass
C6-C10			Pass	Pass	Pass	Pass
Vinyl Chloride			Pass	Pass	Pass	Pass
trans-1,2-Dichloroethene			Pass	Pass	Pass	Pass
Methylene chloride			Pass	Pass	Pass	Pass
cis-1,2-Dichloroethene			Pass	Pass	Pass	Pass
Bromochloromethane			Pass	Pass	Pass	Pass
Chloroform			Pass	Pass	Pass	Pass

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1,1,1-Trichloroethane			Pass	Pass	Pass	Pass
1,2-Dichloroethane			Pass	Pass	Pass	Pass
Carbon tetrachloride			Pass	Pass	Pass	Pass
1,1,2-Trichloroethane			Pass	Pass	Pass	Pass
Tetrachloroethene			Pass	Pass	Pass	Pass
1,1,1,2-Tetrachloroethane			Pass	Pass	Pass	Pass
1,1,2,2-Tetrachloroethane			Pass	Pass	Pass	Pass
1,2-Dichlorobenzene			Pass	Pass	Pass	Pass
1,4-Dichlorobenzene			Pass	Pass	Pass	Pass
1,2,4-Trichlorobenzene			Pass	Pass	Pass	Pass
Hexachlorobutadiene			Pass	Pass	Pass	Pass
1,1-Dichloroethene			Pass	Pass	Pass	Pass
Trichloroethene			Pass	Pass	Pass	Pass
Chlorobenzene			Pass	Pass	Pass	Pass
Toluene-d8	%		127	96	85	77
1,2-Dichloroethane-d4	%		134	96	115	132
4-Bromofluorobenzene (BFB)	%		115	114	137	110
Trifluorotoluene (Surr.)	%		126	102	60	71

		Sample ID:	**D202201282503**	**D202201283403**	**D202201285303**	**D202201288203**
		Sample Name	**WAC1_TP1_0.4-0.5**	**WAC1_TP3_0.0-0.1**	**WAC1_TP5_0.5-0.6**	**WAC1_TP8_0.3**
Parameter	***Units***	***PQL***				
ESA-P-ORG(12 - 15)						
Acenaphthene			Pass	Pass	Pass	Pass
Acenaphthylene			Pass	Pass	Pass	Pass
Anthracene			Pass	Pass	Pass	Pass
Benzo[a]anthracene			Pass	Pass	Pass	Pass
Benzo[a]pyrene			Pass	Pass	Pass	Pass
Benzo[b]fluoranthene			Pass	Pass	Pass	Pass
Benzo[g,h,i]perylene			Pass	Pass	Pass	Pass
Benzo[k]fluoranthene			Pass	Pass	Pass	Pass
Chrysene			Pass	Pass	Pass	Pass
Dibenzo[a,h]anthracene			Pass	Pass	Pass	Pass
Fluoranthene			Pass	Pass	Pass	Pass

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Fluorene			Pass	Pass	Pass	Pass
Indeno(1,2,3-cd)pyrene			Pass	Pass	Pass	Pass
Naphthalene			Pass	Pass	Pass	Pass
Phenanthrene			Pass	Pass	Pass	Pass
Pyrene			Pass	Pass	Pass	Pass
p-Terphenyl-d14 (Surr.)	%		87	76	96	112
aldrin			Pass	Pass	Pass	Pass
a-BHC			Pass	Pass	Pass	Pass
b-BHC			Pass	Pass	Pass	Pass
d-BHC			Pass	Pass	Pass	Pass
g-BHC (lindane)			Pass	Pass	Pass	Pass
cis-chlordane			Pass	Pass	Pass	Pass
trans-chlordane			Pass	Pass	Pass	Pass
4,4'-DDD			Pass	Pass	Pass	Pass
4,4'-DDE			Pass	Pass	Pass	Pass
4,4'-DDT			Pass	Pass	Pass	Pass
dieldrin			Pass	Pass	Pass	Pass
endosulfan I			Pass	Pass	Pass	Pass
endosulfan II			Pass	Pass	Pass	Pass
endosulfan sulfate			Pass	Pass	Pass	Pass
endrin			Pass	Pass	Pass	Pass
endrin aldehyde			Pass	Pass	Pass	Pass
endrin ketone			Pass	Pass	Pass	Pass
heptachlor			Pass	Pass	Pass	Pass
heptachlor epoxide			Pass	Pass	Pass	Pass
hexachlorobenzene			Pass	Pass	Pass	Pass
methoxychlor			Pass	Pass	Pass	Pass
TCMX (Surr.)	%		103	90	113	92
chlorpyrifos			Pass	Pass	Pass	Pass
chlorpyrifos methyl			Pass	Pass	Pass	Pass
diazinon			Pass	Pass	Pass	Pass
fenchlorphos			Pass	Pass	Pass	Pass
methyl parathion			Pass	Pass	Pass	Pass

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prophos			Pass	Pass	Pass	Pass
tributylphosphorotrithioite			Pass	Pass	Pass	Pass
Aroclor 1016			Pass	Pass	Pass	Pass
Aroclor 1221			Pass	Pass	Pass	Pass
Aroclor 1232			Pass	Pass	Pass	Pass
Aroclor 1242			Pass	Pass	Pass	Pass
Aroclor 1248			Pass	Pass	Pass	Pass
Aroclor 1254			Pass	Pass	Pass	Pass
Aroclor 1260			Pass	Pass	Pass	Pass
2-fluorobiphenyl (Surr.)	%		94	82	101	130

		Sample ID:	**D202201282504**	**D202201283404**	**D202201285304**	**D202201288204**
		Sample Name	**WAC1_TP1_0.4-0.5**	**WAC1_TP3_0.0-0.1**	**WAC1_TP5_0.5-0.6**	**WAC1_TP8_0.3**
Parameter	***Units***	***PQL***				
ESA-P-ORG(3,8)						
>C10-C16			Pass	Pass	Pass	Pass
>C16-C34			Pass	Pass	Pass	Pass
>C34-C40			Pass	Pass	Pass	Pass
>C10-C14			Pass	Pass	Pass	Pass
>C15-C28			Pass	Pass	Pass	Pass
>C29-C36			Pass	Pass	Pass	Pass

		Sample ID:	**D202201282505**	**D202201283405**
		Sample Name	**WAC1_TP1_0.4-0.5**	**WAC1_TP3_0.0-0.1**
Parameter	***Units***	***PQL***		
ESA-P-ORG16				
PFBA			Pass	Pass
PFPeA			Pass	Pass
PFBS			Pass	Pass
PFHxA			Pass	Pass
PFPeS			Pass	Pass
PFHpA			Pass	Pass
PFOA			Pass	Pass
PFHpS			Pass	Pass

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PFOS			Pass	Pass
PFDA			Pass	Pass
PFUdA			Pass	Pass
PFDoA			Pass	Pass
PFTrDA			Pass	Pass
PFTeDA			Pass	Pass
PFNA			Pass	Pass
PFHxS			Pass	Pass
MPFBA	%		73	73
M3PFBS	%		73	77
MPFOS	%		72	78
MPFHxA	%		74	75
MPFOA	%		78	95
MPFUdA	%		115	101

Sample ID:		**Q2022003098**	**Q2022003100**
Sample Name			
Parameter	***Units***	***PQL***	Metals Blank - Soil	Metals Blank - Soil
ESA-MP-01,ICP-01				
Arsenic	mg/kg	5	<5.0	<5.0
Cadmium	mg/kg	0.3	<0.30	<0.30
Chromium	mg/kg	5	<5.0	<5.0
Copper	mg/kg	5	<5.0	<5.0
Lead	mg/kg	10	<10.0	<10.0
Mercury	mg/kg	0.2	<0.20	<0.20
Nickel	mg/kg	10	<10.0	<10.0
Zinc	mg/kg	5	<5.0	<5.0

Sample ID:		**Q2022003099**	**Q2022003101**
Sample Name			
Parameter	***Units***	***PQL***	Metals Blank Sp-Soil	Metals Blank Sp-Soil
ESA-MP-01,ICP-01				
Arsenic	%		100	90
Cadmium	%		106	108

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Chromium	%		101	103
Copper	%		100	100
Lead	%		101	105
Mercury	%		89	83
Nickel	%		103	105
Zinc	%		104	105
		Sample ID:	**Q2022003104**	**Q2022003110**
		Sample Name		
Parameter	***Units***	***PQL***	VOCs MB Vic - Soil	VOCs MB Vic - Soil
ESA-P-ORG7 & ORG8				
Benzene	mg/kg	0.5	<0.50	<0.50
Toluene	mg/kg	0.5	<0.50	<0.50
Ethylbenzene	mg/kg	0.5	<0.50	<0.50
m.p Xylene	mg/kg	1	<1.0	<1.0
o Xylene	mg/kg	0.5	<0.50	<0.50
Styrene	mg/kg	0.5	<0.50	<0.50
vNaphthalene	mg/kg	0.5	<0.50	<0.50
C6-C9	mg/kg	35	<35	<35
C6-C10	mg/kg	35	<35	<35
Vinyl Chloride	mg/kg	0.5	<0.50	<0.50
trans-1,2-Dichloroethene	mg/kg	0.5	<0.50	<0.50
Methylene chloride	mg/kg	0.5	<0.50	<0.50
cis-1,2-Dichloroethene	mg/kg	0.5	<0.50	<0.50
Bromochloromethane	mg/kg	0.5	<0.50	<0.50
Chloroform	mg/kg	0.5	<0.50	<0.50
1,1,1-Trichloroethane	mg/kg	0.5	<0.50	<0.50
1,2-Dichloroethane	mg/kg	0.5	<0.50	<0.50
Carbon tetrachloride	mg/kg	0.5	<0.50	<0.50
1,1,2-Trichloroethane	mg/kg	0.5	<0.50	<0.50
Tetrachloroethene	mg/kg	0.5	<0.50	<0.50
1,1,1,2-Tetrachloroethane	mg/kg	0.5	<0.50	<0.50
1,1,2,2-Tetrachloroethane	mg/kg	0.5	<0.50	<0.50
1,2-Dichlorobenzene	mg/kg	0.5	<0.50	<0.50

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1,4-Dichlorobenzene	mg/kg	0.5	<0.50	<0.50
1,2,4-Trichlorobenzene	mg/kg	0.5	<0.50	<0.50
Hexachlorobutadiene	mg/kg	0.5	<0.50	<0.50
1,1-Dichloroethene	mg/kg	0.5	<0.50	<0.50
Trichloroethene	mg/kg	0.5	<0.50	<0.50
Chlorobenzene	mg/kg	0.5	<0.50	<0.50

Sample ID:	**Q2022003105**	**Q2022003111**

Sample Name

Parameter	***Units***	***PQL***	VOCs LCS Vic - Soil	VOCs LCS Vic - Soil
ESA-P-ORG7 & ORG8				
1,1-Dichloroethene	%		131	120
Benzene	%		127	95
Trichloroethene	%		106	112
Toluene	%		130	133
Chlorobenzene	%		129	135
Toluene-d8 (Surr.)	%		112	116
1,2-Dichloroethane-d4 (Surr.)	%		125	130
4-Bromofluorobenzene (BFB) (Surr.)	%		107	136
Trifluorotoluene (Surr.)	%		114	79

Sample ID:	**Q2022003106**	**Q2022003112**

Sample Name

Parameter	***Units***	***PQL***	PCB Blank - Soil	PCB Blank - Soil
ESA-P-ORG(12 - 15)				
Acenaphthene	mg/kg	0.3	<0.30	<0.30
Acenaphthylene	mg/kg	0.3	<0.30	<0.30
Anthracene	mg/kg	0.3	<0.30	<0.30
Benzo[a]anthracene	mg/kg	0.3	<0.30	<0.30
Benzo[a]pyrene	mg/kg	0.3	<0.30	<0.30
Benzo[b]fluoranthene	mg/kg	0.3	<0.30	<0.30
Benzo[g,h,i]perylene	mg/kg	0.3	<0.30	<0.30
Benzo[k]fluoranthene	mg/kg	0.3	<0.30	<0.30
Chrysene	mg/kg	0.3	<0.30	<0.30

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Dibenzo[a,h]anthracene	mg/kg	0.3	<0.30	<0.30
Fluoranthene	mg/kg	0.3	<0.30	<0.30
Fluorene	mg/kg	0.3	<0.30	<0.30
Indeno(1,2,3-cd)pyrene	mg/kg	0.3	<0.30	<0.30
Naphthalene	mg/kg	0.3	<0.30	<0.30
Phenanthrene	mg/kg	0.3	<0.30	<0.30
Pyrene	mg/kg	0.3	<0.30	<0.30
aldrin	mg/kg	0.1	<0.10	<0.10
a-BHC	mg/kg	0.1	<0.10	<0.10
b-BHC	mg/kg	0.1	<0.10	<0.10
d-BHC	mg/kg	0.1	<0.10	<0.10
g-BHC (lindane)	mg/kg	0.1	<0.10	<0.10
cis-chlordane	mg/kg	0.1	<0.10	<0.10
trans-chlordane	mg/kg	0.1	<0.10	<0.10
4,4'-DDD	mg/kg	0.1	<0.10	<0.10
4,4'-DDE	mg/kg	0.1	<0.10	<0.10
4,4'-DDT	mg/kg	0.1	<0.10	<0.10
dieldrin	mg/kg	0.1	<0.10	<0.10
endosulfan I	mg/kg	0.2	<0.20	<0.20
endosulfan II	mg/kg	0.2	<0.20	<0.20
endosulfan sulfate	mg/kg	0.1	<0.10	<0.10
endrin	mg/kg	0.2	<0.20	<0.20
endrin aldehyde	mg/kg	0.1	<0.10	<0.10
endrin ketone	mg/kg	0.1	<0.10	<0.10
heptachlor	mg/kg	0.1	<0.10	<0.10
heptachlor epoxide	mg/kg	0.1	<0.10	<0.10
hexachlorobenzene	mg/kg	0.1	<0.10	<0.10
methoxychlor	mg/kg	0.1	<0.10	<0.10
chlorpyrifos	mg/kg	0.1	<0.10	<0.10
chlorpyrifos methyl	mg/kg	0.1	<0.10	<0.10
diazinon	mg/kg	0.1	<0.10	<0.10
fenchlorphos	mg/kg	0.1	<0.10	<0.10
methyl parathion	mg/kg	0.1	<0.10	<0.10

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prophos	mg/kg	0.1	<0.10	<0.10
tributylphosphorotrithioite	mg/kg	0.1	<0.10	<0.10
Aroclor 1016	mg/kg	0.5	<0.50	<0.50
Aroclor 1221	mg/kg	0.5	<0.50	<0.50
Aroclor 1232	mg/kg	0.5	<0.50	<0.50
Aroclor 1242	mg/kg	0.5	<0.50	<0.50
Aroclor 1248	mg/kg	0.5	<0.50	<0.50
Aroclor 1254	mg/kg	0.5	<0.50	<0.50
Aroclor 1260	mg/kg	0.5	<0.50	<0.50
		Sample ID:	**Q2022003107**	**Q2022003113**
		Sample Name		
Parameter	***Units***	***PQL***	PCB Blank Sp - Soil	PCB Blank Sp - Soil
ESA-P-ORG(12 - 15)				
Acenaphthene	%		99	100
Anthracene	%		102	101
Fluoranthene	%		93	90
Naphthalene	%		89	91
Phenanthrene	%		100	94
Pyrene	%		101	94
p-Terphenyl-d14 (Surr.)	%		100	98
aldrin	%		87	84
endrin	%		127	100
hexachlorobenzene	%		87	92
TCMX (Surr.)	%		113	112
chlorpyrifos	%		83	80
diazinon	%		84	89
2-fluorobiphenyl (Surr.)	%		107	107
Aroclor 1016	%		108	104

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	Sample ID:	Q2022003108	Q2022003114
	Sample Name		

Parameter	Units	PQL	TRH Blank-Soil	TRH Blank-Soil
ESA-P-ORG(3,8)				
>C10-C16	mg/kg	50	<50	<50
>C16-C34	mg/kg	100	<100	<100
>C34-C40	mg/kg	100	<100	<100
>C10-C14	mg/kg	50	<50	<50
>C15-C28	mg/kg	100	<100	<100
>C29-C36	mg/kg	100	<100	<100

	Sample ID:	Q2022003109	Q2022003115
	Sample Name		

Parameter	Units	PQL	TRH Blank Spike-Soil	TRH Blank Spike-Soil
ESA-P-ORG(3,8)				
>C10-C16	%		86	92
>C10-C14	%		85	90

	Sample ID:	Q2022003126
	Sample Name	

Parameter	Units	PQL	PFAS Blank - Soil
ESA-P-ORG16			
PFBA	ug/kg	5	<5
PFPeA	ug/kg	5	<5
PFBS	ug/kg	5	<5
PFHxA	ug/kg	5	<5
PFPeS	ug/kg	5	<5
PFHpA	ug/kg	5	<5
PFOA	ug/kg	5	<5
PFHpS	ug/kg	5	<5
PFOS	ug/kg	5	<5
PFDA	ug/kg	5	<5
PFUdA	ug/kg	5	<5
PFDoA	ug/kg	5	<5

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PFTrDA	ug/kg	5	<5
PFTeDA	ug/kg	5	<5
PFNA	ug/kg	5	<5
PFHxS	ug/kg	5	<5
MPFBA (Surr.)	%		90
M3PFBS (Surr.)	%		82
MPFOS (Surr.)	%		97
MPFHxA (Surr.)	%		71
MPFOA (Surr.)	%		76
MPFUdA (Surr.)	%		81

Sample ID: **Q2022003127**

Sample Name

Parameter	***Units***	***PQL***	PFAS Blank Sp - Soil
ESA-P-ORG16			
PFBA	%		128
PFPeA	%		124
PFBS	%		117
PFHxA	%		125
PFPeS	%		120
PFHpA	%		119
PFOA	%		93
PFHpS	%		118
PFOS	%		94
PFDA	%		77
PFUdA	%		76
PFDoA	%		111
PFTrDA	%		80
PFTeDA	%		128
PFNA	%		78
PFHxS	%		101
MPFBA (Surr.)	%		88
M3PFBS (Surr.)	%		78
MPFOS (Surr.)	%		95

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MPFHxA (Surr.)	%		76	
MPFOA (Surr.)	%		70	
MPFUdA (Surr.)	%		89	

		Sample ID:	**S202201282401**	**S202201285201**
		Sample Name	**WAC1_TP1 0.0-0.1**	**WAC1_TP5_0.3-0.4**
Parameter	***Units***	***PQL***		
ESA-MP-01,ICP-01				
Arsenic	%		98	98
Cadmium	%		113	114
Chromium	%		105	104
Copper	%		110	103
Lead	%		108	110
Mercury	%		101	80
Nickel	%		106	108
Zinc	%		111	109

		Sample ID:	**S202201282402**	**S202201285202**
		Sample Name	**WAC1_TP1 0.0-0.1**	**WAC1_TP5_0.3-0.4**
Parameter	***Units***	***PQL***		
ESA-P-ORG-07 & 08				
1,1-Dichloroethene	%		114	114
Benzene	%		110	98
Trichloroethene	%		99	112
Toluene	%		109	133
Chlorobenzene	%		109	136
Toluene-d8 (Surr.)	%		85	129
1,2-Dichloroethane-d4 (Surr.)	%		87	132
4-Bromofluorobenzene (Surr.)	%		98	138
Trifluorotoluene (Surr.)	%		81	117

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	Sample ID:	S202201282403	S202201285203
	Sample Name	WAC1_TP1 0.0-0.1	WAC1_TP5_0.3-0.4

Parameter	Units	PQL		
ESA-P-ORG(12 - 15)				
Acenaphthene	%		116	82
Anthracene	%		120	81
Fluoranthene	%		113	73
Naphthalene	%		104	75
Phenanthrene	%		117	75
Pyrene	%		124	76
p-Terphenyl-d14 (Surr.)	%		118	83
aldrin	%		101	68
endrin	%		72	77
hexachlorobenzene	%		97	73
TCMX (Surr.)	%		127	97
chlorpyrifos	%		98	64
diazinon	%		101	70
Aroclor 1016	%		116	94
2-fluorobiphenyl (Surr.)	%		125	90

	Sample ID:	S202201282404	S202201285204
	Sample Name	WAC1_TP1 0.0-0.1	WAC1_TP5_0.3-0.4

Parameter	Units	PQL		
ESA-P-ORG(3,8)				
>C10-C16	%		97	76
>C10-C14	%		96	75

	Sample ID:	S202201282405
	Sample Name	WAC1_TP1 0.0-0.1

Parameter	Units	PQL	
ESA-P-ORG16			
PFBA	%		123
PFPeA	%		128
PFBS	%		117
PFHxA	%		127

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PFPeS	%		121
PFHpA	%		125
PFOA	%		81
PFHpS	%		130
PFOS	%		73
PFDA	%		88
PFUdA	%		87
PFDoA	%		75
PFTrDA	%		87
PFTeDA	%		112
PFNA	%		78
PFHxS	%		96
MPFBA (Surr.)	%		82
M3PFBS (Surr.)	%		81
MPFOS (Surr.)	%		79
MPFHxA (Surr.)	%		78
MPFOA (Surr.)	%		75
MPFUdA (Surr.)	%		96

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A.B.N. 52 093 452 950

Analysis report: 21.2044_WAC1
Laboratory LOT NO: 2201917

Date Received: 29.04.2022
Date Analysed: 03.05.2022
Report Date: 03.05.2022
Client: ADE Consulting Group
Job Location: AF JV_SOP_WAC1
Analytical method: AS 4964-2004 "Method for the qualitative identification of asbestos in bulk samples" in conjunction with AD Envirotech's ABI Methods for Polarised Light Microscopy with dispersion staining

Analysis performed by:



Kim Foley
Approved asbestos identifier

Results Authorised By:



Kim Foley
Approved Signatory

Accreditation No.14664.
Accredited for compliance with ISO/IEC 17025 - Testing.
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

Tests not covered by NATA are denoted with *.

General Comments:

Sydney Laboratory Services is responsible for all the information in the report, except that provided by the customer. All sampling information included in the report has been provided by the client
Information provided by the client can affect the validity of the results.
Sample analysed as received.
Samples are stored for minimum period of 1 month if longer time is not advised by client.

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The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

Tests not covered by NATA are denoted with *.

Client Sample ID.	Laboratory Sample No.	Sample Description/Matrix	Sample Dimensions (cm) unless stated otherwise	Result	Comments
WAC1_TP4_0.3	2022012847	Soil	64 grams	No Chrysotile asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Amosite asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Crocidolite asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Synthetic Mineral Fibres found	Nil
				Organic fibres found	Nil
WAC1_TP4_0.4	2022012848	Soil	94 grams	No Chrysotile asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Amosite asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Crocidolite asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Synthetic Mineral Fibres found	Nil
				Organic fibres found	Nil
WAC1-TP4_0.5	2022012849	Soil	51 grams	No Chrysotile asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Amosite asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Crocidolite asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Synthetic Mineral Fibres found	Nil
				Organic fibres found	Nil
WAC1_TP5_0.0-0.1	2022012851	Soil	78 grams	No Chrysotile asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Amosite asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Crocidolite asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Synthetic Mineral Fibres found	Nil
				Organic fibres found	Nil
WAC1_TP5_0.3-0.4	2022012852	Soil	79 grams	No Chrysotile asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Amosite asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Crocidolite asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Synthetic Mineral Fibres found	Nil
				Organic fibres found	Nil
WAC1_TP5_0.5-0.6	2022012853	Soil	51 grams	No Chrysotile asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Amosite asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Crocidolite asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Synthetic Mineral Fibres found	Nil
				Organic fibres found	Nil
WAC1_TP6_0.0-0.1	2022012854	Soil	56 grams	No Chrysotile asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Amosite asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Crocidolite asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Synthetic Mineral Fibres found	Nil
				Organic fibres found	Nil

Client Sample ID.	Laboratory Sample No.	Sample Description/Matrix	Sample Dimensions (cm) unless stated otherwise	Result	Comments
WAC1_TP6_0.3-0.4	2022012855	Soil	65 grams	No Chrysotile asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Amosite asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Crocidolite asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Synthetic Mineral Fibres found	Nil
				Organic fibres found	Nil
WAC1_TP6_0.5-0.6	2022012856	Soil	64 grams	No Chrysotile asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Amosite asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Crocidolite asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Synthetic Mineral Fibres found	Nil
				Organic fibres found	Nil

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SAMPLE RECEIPT NOTIFICATION (SRN)

Contact: Stephen Bowly / Thesan Naidoo / Monique Hitchens / Megan Lynch
Project name: 21.2044.WAC1
Number of samples: 15
COC number: 21.2044.WAC1
Turn around time: 48hrs
Date: 29/04/2022
Time received: 7:00am
SLS Reference: 2201921
Estimated Report Delivery Date: 03/05/2022

Sample information

☑	All samples have been received and logged into LIMS.
☑	No mistakes in the COC
☑	Evidence of chilling for samples
N/A	Samples were preserved
N/A	Custody seal intact
☑	Samples were delivered within holding time
☑	Samples to be tested for volatiles had zero headspace
☑	All samples were received in good condition (no broken jars, labelled correctly…).
☐	Samples have been subcontracted

Comments

This report contains:
Sample receipt non-conformities
Summary of samples and requested analysis
Requested report deliverables

Asbestos Samples are reported as per the State EPA guidelines

Contact details

If you have any questions with respect to these samples please contact:
sls@ade.group



Trianah Tumbridge

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SAMPLE RECEIPT NOTIFICATION (SRN)

Laboratory Sample ID	Client Sample ID	6 Metal Suite	8 Metal Suite	BTEX	PAH	OCP/OPP	PCB	vTRH (C6 - C10)	TRH (C10 - C40)	pH/EC	VOC	PFAS	Bulk	Dust	Dust Swab	Soil 65 grams	SOII 500 g NEPM	AAM
2022012878	WAC1_TP7_0.0-0.1		X	X	X	X	X		X		X	X				X		
2022012879	WAC1_TP7_0.3_		X	X	X	X	X		X							X		
2022012880	WAC1_TP8_0.1		X	X	X	X	X		X		X	X				X		
2022012881	WAC1_TP8_0.2		X	X	X	X	X		X		X							
2022012882	WAC1_TP8_0.3		X	X	X	X	X		X		X							
2022012883	WAC1_TP8_0.4		X	X	X	X	X		X									
2022012884	WAC1_TP8_0.5		X	X	X	X	X		X									
2022012885	WAC1_TP8_06		X	X	X	X	X		X									
2022012886	WAC1_TP8_0.7		X	X	X	X	X		X		X	X				X		
2022012887	WAC1_TP9_0.0-0.1		X	X	X	X	X		X		X	X				X		
2022012888	WAC1_TP9_0.2-0.3		X	X	X	X	X		X									
2022012889	WAC1_TP9_0.4-0.5		X	X	X	X	X		X									
2022012890	WAC1_TP9_0.8-0.9		X	X	X	X	X		X			X				X		
2022012891	WAC1_TP9_01.0-1.1		X	X	X	X	X		X									
2022012892	WAC1_TP9_0.3-0.4		X	X	X	X	X		X		X							
2022012893	WAC1_TP9_BRc		X	X	X	X	X		X									

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Accreditation No.14664
Accredited for compliance with ISO/IEC 17025 - Testing.

This certificate of analysis contains General Comments and Analytical Results. Quality Control Report and Laboratory Quality Acceptance Criteria have been issued separately.

This report supersedes any previous report(s) with this reference. This document shall not be reproduced, except in full.

This report has been electronically signed by authorised signatories below.

Authorised By



Kaiyu Li

General Comments

Samples are analysed on as received basis. Sampling is not covered by NATA accreditation.

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

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

Samples were analysed within holding time described by laboratory internal procedures if not stated otherwise. If samples delivered do not meet required analytical criteria, results will be marked with ^.

However surrogate standards are added to samples, results are not corrected for standards recoveries.

Analysis of VOC in water samples are performed on unfiltered waters (as received) spiked with surrogates and injection standards only.

SLS is responsible for all the information in the report, except that provided by the customer.

All sampling information included in the report has been provided by customer.

Information provided by the customer can affect the validity of the results.

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Certificate of Analysis

Contact:	Stephen Bowly	**Date Reported:**	3/05/2022
Customer:	ADE Consulting Group	**No. of Samples:**	16
Address:	Unit 6 7 Millennium Court Silverwater NSW	**Date Received:**	29/04/2022
		Date of Analysis:	29/04/2022
Cust Ref:	21.2044		

Glossary:

*NATA accreditation does not cover the performance of this service
ND-not detected,
NT-not tested
INS-Insufficient material to perform the test
LCS-Laboratory Control Sample
RPD-Relative Percent Difference
N/A-Not Applicable
< less than
> greater than
PQL- Practical Quantitation Limit
^Analytical result might be compromised due to sample condition or holding time requirements
Reaction rate 1 = Slight
Reaction rate 2 = Moderate
Reaction rate 3 = High
Reaction rate 4 = Vigorous

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Certificate of Analysis

	Sample ID:	2022012878	2022012879	2022012880	2022012881	2022012882	2022012883	2022012884	2022012885	2022012886	2022012887	2022012888
	Sample Name	WAC1_TP7_0.0-0.1	WAC1_TP7_0.3_	WAC1_TP8_0.1	WAC1_TP8_0.2	WAC1_TP8_0.3	WAC1_TP8_0.4	WAC1_TP8_0.5	WAC1_TP8_0.6	WAC1_TP8_0.7	WAC1_TP9_0.0-0.1	WAC1_TP9_0.2-0.3
Parameter	*Units*	*PQL*										
ESA-MP-01,ICP-01												
Arsenic	mg/kg	5	21.5	12.0	6.8	16.0	<5.0	<5.0	15.0	10.5	5.6	<5.0	16.3
Cadmium	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Chromium	mg/kg	5	8.9	<5.0	8.6	16.5	6.5	<5.0	7.9	9.4	<5.0	5.5	9.4
Copper	mg/kg	5	14.6	6.6	11.9	16.8	<5.0	<5.0	7.3	10.4	7.5	14.6	11.0
Lead	mg/kg	10	<10.0	<10.0	<10.0	10.4	<10.0	<10.0	14.6	<10.0	57.5	<10.0	12.1
Mercury	mg/kg	0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Nickel	mg/kg	10	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
Zinc	mg/kg	5	<5.0	<5.0	19.9	9.9	<5.0	<5.0	<5.0	<5.0	<5.0	43.8	6.7
ESA-P-12													
% Moisture Content	%		16.4	12.6	11.5	19.0	13.5	10.1	16.7	18.4	16.3	16.6	9.1
ESA-P-ORG(12 - 15)													
Acenaphthene	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Acenaphthylene	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Anthracene	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Benzo[a]anthracene	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Benzo[a]pyrene	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Benzo[b]fluoranthene	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Benzo[g,h,i]perylene	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Benzo[k]fluoranthene	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Chrysene	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Dibenzo[a,h]anthracene	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Fluoranthene	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Fluorene	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Indeno(1,2,3-cd)pyrene	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Naphthalene	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Phenanthrene	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Pyrene	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30

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Sum of Positive PAHs	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Benzo(a)pyrene TEQ (Zero)	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Benzo(a)pyrene TEQ (Half PQL)	mg/kg	0.3	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36
Benzo(a)pyrene TEQ (PQL)	mg/kg	0.3	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73
p-Terphenyl-d14 (Surr.)	%		135	138	132	108	103	112	106	118	99	109	127
aldrin	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
a-BHC	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
b-BHC	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
d-BHC	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
g-BHC (lindane)	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
cis-chlordane	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
trans-chlordane	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
4,4'-DDD	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
4,4'-DDE	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
4,4'-DDT	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
dieldrin	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
endosulfan I	mg/kg	0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
endosulfan II	mg/kg	0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
endosulfan sulfate	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
endrin	mg/kg	0.2	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
endrin aldehyde	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
endrin ketone	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
heptachlor	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
heptachlor epoxide	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
hexachlorobenzene	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
methoxychlor	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
TCMX (Surr.)	%		120	96	117	122	94	99	119	131	107	120	69
chlorpyrifos	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
chlorpyrifos methyl	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
diazinon	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
fenchlorphos	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
methyl parathion	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
prophos	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10

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tributylphosphorotrithioite	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Aroclor 1016	mg/kg	0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Aroclor 1221	mg/kg	0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Aroclor 1232	mg/kg	0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Aroclor 1242	mg/kg	0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Aroclor 1248	mg/kg	0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Aroclor 1254	mg/kg	0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Aroclor 1260	mg/kg	0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
2-fluorobiphenyl (Surr.)	%		139	95	78	111	97	132	110	121	102	113	132
ESA-P-ORG16													
PFBA	ug/kg	5	<5	-	<5	-	-	-	-	-	<5	<5	-
PFPeA	ug/kg	5	<5	-	<5	-	-	-	-	-	<5	<5	-
PFBS	ug/kg	5	<5	-	<5	-	-	-	-	-	<5	<5	-
PFHxA	ug/kg	5	<5	-	<5	-	-	-	-	-	<5	<5	-
PFPeS	ug/kg	5	<5	-	<5	-	-	-	-	-	<5	<5	-
PFHpA	ug/kg	5	<5	-	<5	-	-	-	-	-	<5	<5	-
PFOA	ug/kg	5	<5	-	<5	-	-	-	-	-	<5	<5	-
PFHpS	ug/kg	5	<5	-	<5	-	-	-	-	-	<5	<5	-
PFOS	ug/kg	5	<5	-	<5	-	-	-	-	-	<5	<5	-
PFDA	ug/kg	5	<5	-	<5	-	-	-	-	-	<5	<5	-
PFUdA	ug/kg	5	<5	-	<5	-	-	-	-	-	<5	<5	-
PFDoA	ug/kg	5	<5	-	<5	-	-	-	-	-	<5	<5	-
PFTrDA	ug/kg	5	<5	-	<5	-	-	-	-	-	<5	<5	-
PFTeDA	ug/kg	5	<5	-	<5	-	-	-	-	-	<5	<5	-
PFNA	ug/kg	5	<5	-	<5	-	-	-	-	-	<5	<5	-
PFHxS	ug/kg	5	<5	-	<5	-	-	-	-	-	<5	<5	-
MPFBA (Surr.)	%		116	-	122	-	-	-	-	-	82	115	-
M3PFBS (Surr.)	%		99	-	111	-	-	-	-	-	82	123	-
MPFOS (Surr.)	%		106	-	83	-	-	-	-	-	83	82	-
MPFHxA (Surr.)	%		84	-	127	-	-	-	-	-	74	129	-
MPFOA (Surr.)	%		112	-	97	-	-	-	-	-	79	75	-
MPFUdA (Surr.)	%		126	-	107	-	-	-	-	-	103	74	-

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ESA-P-ORG(3,8)													
>C10-C16	mg/kg	50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
>C16-C34	mg/kg	100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
>C34-C40	mg/kg	100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
>C10-C40 (Sum of total)	mg/kg	50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
>C10-C14	mg/kg	50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
>C15-C28	mg/kg	100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
>C29-C36	mg/kg	100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
>C10-C36 (Sum of total)	mg/kg	50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
ESA-P-ORG07 & ORG08													
Benzene	mg/kg	0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Toluene	mg/kg	0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Ethylbenzene	mg/kg	0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
m.p Xylene	mg/kg	1	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
o Xylene	mg/kg	0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Sum of BTEX	mg/kg	1	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Total Xylenes	mg/kg	1	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Styrene	mg/kg	0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Sum of MAHs	mg/kg	1	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
vNaphthalene	mg/kg	0.5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
C6-C9 Conc.	mg/kg	35	<35	<35	<35	<35	<35	<35	<35	<35	<35	<35	<35
C6-C10 Conc.	mg/kg	35	<35	<35	<35	<35	<35	<35	<35	<35	<35	<35	<35
C6-C10 minus BTEX (F1)	mg/kg	35	<35	<35	<35	<35	<35	<35	<35	<35	<35	<35	<35
Vinyl Chloride	mg/kg	0.5	<0.50	-	<0.50	<0.50	<0.50	-	-	-	<0.50	<0.50	-
trans-1,2-Dichloroethene	mg/kg	0.5	<0.50	-	<0.50	<0.50	<0.50	-	-	-	<0.50	<0.50	-
Methylene chloride	mg/kg	0.5	<0.50	-	<0.50	<0.50	<0.50	-	-	-	<0.50	<0.50	-
cis-1,2-Dichloroethene	mg/kg	0.5	<0.50	-	<0.50	<0.50	<0.50	-	-	-	<0.50	<0.50	-
Bromochloromethane	mg/kg	0.5	<0.50	-	<0.50	<0.50	<0.50	-	-	-	<0.50	<0.50	-
Chloroform	mg/kg	0.5	<0.50	-	<0.50	<0.50	<0.50	-	-	-	<0.50	<0.50	-
1,1,1-Trichloroethane	mg/kg	0.5	<0.50	-	<0.50	<0.50	<0.50	-	-	-	<0.50	<0.50	-
1,2-Dichloroethane	mg/kg	0.5	<0.50	-	<0.50	<0.50	<0.50	-	-	-	<0.50	<0.50	-
Carbon tetrachloride	mg/kg	0.5	<0.50	-	<0.50	<0.50	<0.50	-	-	-	<0.50	<0.50	-
1,1,2-Trichloroethane	mg/kg	0.5	<0.50	-	<0.50	<0.50	<0.50	-	-	-	<0.50	<0.50	-

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Tetrachloroethene	mg/kg	0.5	<0.50	-	<0.50	<0.50	<0.50	-	-	-	<0.50	<0.50	-
1,1,1,2-Tetrachloroethane	mg/kg	0.5	<0.50	-	<0.50	<0.50	<0.50	-	-	-	<0.50	<0.50	-
1,1,2,2-Tetrachloroethane	mg/kg	0.5	<0.50	-	<0.50	<0.50	<0.50	-	-	-	<0.50	<0.50	-
1,2-Dichlorobenzene	mg/kg	0.5	<0.50	-	<0.50	<0.50	<0.50	-	-	-	<0.50	<0.50	-
1,4-Dichlorobenzene	mg/kg	0.5	<0.50	-	<0.50	<0.50	<0.50	-	-	-	<0.50	<0.50	-
1,2,4-Trichlorobenzene	mg/kg	0.5	<0.50	-	<0.50	<0.50	<0.50	-	-	-	<0.50	<0.50	-
Hexachlorobutadiene	mg/kg	0.5	<0.50	-	<0.50	<0.50	<0.50	-	-	-	<0.50	<0.50	-
1,1-Dichloroethene	mg/kg	0.5	<0.50	-	<0.50	<0.50	<0.50	-	-	-	<0.50	<0.50	-
Trichloroethene	mg/kg	0.5	<0.50	-	<0.50	<0.50	<0.50	-	-	-	<0.50	<0.50	-
Chlorobenzene	mg/kg	0.5	<0.50	-	<0.50	<0.50	<0.50	-	-	-	<0.50	<0.50	-
Sum of Chlorinated Hydrocarbons	mg/kg	0.5	<0.50	-	<0.50	<0.50	<0.50	-	-	-	<0.50	<0.50	-
Other Chlorinated Hydrocarbon	mg/kg	0.5	<0.50	-	<0.50	<0.50	<0.50	-	-	-	<0.50	<0.50	-
Toluene-d8 (Surr.)	%		70	71	72	71	86	82	85	84	84	79	79
1,2-Dichloroethane-d4 (Surr.)	%		107	115	117	114	117	106	114	112	113	102	98
4-Bromofluorobenzene (BFB) (Surr.)	%		94	99	98	96	110	102	108	108	106	97	93
Trifluorotoluene (Surr.)	%		98	62	61	60	79	76	79	77	70	99	70

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Certificate of Analysis

	Sample ID:	2022012889	2022012890	2022012891	2022012892	2022012893
	Sample Name	WAC1_TP9_0.4-0.5	WAC1_TP9_0.8-0.9	WAC1_TP9_1.0-1.1	WAC1_TP9_0.3-0.4	WAC1_TP9_BRc
Parameter	Units	PQL				
ESA-MP-01,ICP-01						
Arsenic	mg/kg	5	15.0	18.1	5.9	18.8	9.2
Cadmium	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30	<0.30
Chromium	mg/kg	5	19.0	6.5	<5.0	12.4	5.4
Copper	mg/kg	5	12.1	11.5	7.5	13.4	11.2
Lead	mg/kg	10	10.0	<10.0	<10.0	11.5	<10.0
Mercury	mg/kg	0.2	<0.20	<0.20	<0.20	<0.20	<0.20
Nickel	mg/kg	10	<10.0	<10.0	<10.0	<10.0	<10.0
Zinc	mg/kg	5	12.2	<5.0	<5.0	19.9	<5.0
ESA-P-12						
% Moisture Content	%		19.6	18.4	12.1	19.2	16.4
ESA-P-ORG(12 - 15)						
Acenaphthene	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30	<0.30
Acenaphthylene	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30	<0.30
Anthracene	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30	<0.30
Benzo[a]anthracene	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30	<0.30
Benzo[a]pyrene	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30	<0.30
Benzo[b]fluoranthene	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30	<0.30
Benzo[g,h,i]perylene	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30	<0.30
Benzo[k]fluoranthene	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30	<0.30
Chrysene	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30	<0.30
Dibenzo[a,h]anthracene	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30	<0.30
Fluoranthene	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30	<0.30
Fluorene	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30	<0.30
Indeno(1,2,3-cd)pyrene	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30	<0.30
Naphthalene	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30	<0.30
Phenanthrene	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30	<0.30
Pyrene	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30	<0.30

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Sum of Positive PAHs	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30	<0.30
Benzo(a)pyrene TEQ (Zero)	mg/kg	0.3	<0.30	<0.30	<0.30	<0.30	<0.30
Benzo(a)pyrene TEQ (Half PQL)	mg/kg	0.3	0.36	0.36	0.36	0.36	0.36
Benzo(a)pyrene TEQ (PQL)	mg/kg	0.3	0.73	0.73	0.73	0.73	0.73
p-Terphenyl-d14 (Surr.)	%		100	108	93	117	122
aldrin	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10
a-BHC	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10
b-BHC	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10
d-BHC	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10
g-BHC (lindane)	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10
cis-chlordane	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10
trans-chlordane	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10
4,4'-DDD	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10
4,4'-DDE	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10
4,4'-DDT	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10
dieldrin	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10
endosulfan I	mg/kg	0.2	<0.20	<0.20	<0.20	<0.20	<0.20
endosulfan II	mg/kg	0.2	<0.20	<0.20	<0.20	<0.20	<0.20
endosulfan sulfate	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10
endrin	mg/kg	0.2	<0.20	<0.20	<0.20	<0.20	<0.20
endrin aldehyde	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10
endrin ketone	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10
heptachlor	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10
heptachlor epoxide	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10
hexachlorobenzene	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10
methoxychlor	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10
TCMX (Surr.)	%		107	120	99	84	77
chlorpyrifos	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10
chlorpyrifos methyl	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10
diazinon	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10
fenchlorphos	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10
methyl parathion	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10
prophos	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10

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tributylphosphorotrithioite	mg/kg	0.1	<0.10	<0.10	<0.10	<0.10	<0.10
Aroclor 1016	mg/kg	0.5	<0.50	<0.50	<0.50	<0.50	<0.50
Aroclor 1221	mg/kg	0.5	<0.50	<0.50	<0.50	<0.50	<0.50
Aroclor 1232	mg/kg	0.5	<0.50	<0.50	<0.50	<0.50	<0.50
Aroclor 1242	mg/kg	0.5	<0.50	<0.50	<0.50	<0.50	<0.50
Aroclor 1248	mg/kg	0.5	<0.50	<0.50	<0.50	<0.50	<0.50
Aroclor 1254	mg/kg	0.5	<0.50	<0.50	<0.50	<0.50	<0.50
Aroclor 1260	mg/kg	0.5	<0.50	<0.50	<0.50	<0.50	<0.50
2-fluorobiphenyl (Surr.)	%		101	113	94	139	119
ESA-P-ORG16							
PFBA	ug/kg	5	-	<5	-	-	-
PFPeA	ug/kg	5	-	<5	-	-	-
PFBS	ug/kg	5	-	<5	-	-	-
PFHxA	ug/kg	5	-	<5	-	-	-
PFPeS	ug/kg	5	-	<5	-	-	-
PFHpA	ug/kg	5	-	<5	-	-	-
PFOA	ug/kg	5	-	<5	-	-	-
PFHpS	ug/kg	5	-	<5	-	-	-
PFOS	ug/kg	5	-	<5	-	-	-
PFDA	ug/kg	5	-	<5	-	-	-
PFUdA	ug/kg	5	-	<5	-	-	-
PFDoA	ug/kg	5	-	<5	-	-	-
PFTrDA	ug/kg	5	-	<5	-	-	-
PFTeDA	ug/kg	5	-	<5	-	-	-
PFNA	ug/kg	5	-	<5	-	-	-
PFHxS	ug/kg	5	-	<5	-	-	-
MPFBA (Surr.)	%		-	95	-	-	-
M3PFBS (Surr.)	%		-	98	-	-	-
MPFOS (Surr.)	%		-	96	-	-	-
MPFHxA (Surr.)	%		-	84	-	-	-
MPFOA (Surr.)	%		-	72	-	-	-
MPFUdA (Surr.)	%		-	116	-	-	-

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ESA-P-ORG(3,8)							
>C10-C16	mg/kg	50	<50	<50	<50	<50	<50
>C16-C34	mg/kg	100	<100	<100	<100	<100	<100
>C34-C40	mg/kg	100	<100	<100	<100	<100	<100
>C10-C40 (Sum of total)	mg/kg	50	<50	<50	<50	<50	<50
>C10-C14	mg/kg	50	<50	<50	<50	<50	<50
>C15-C28	mg/kg	100	<100	<100	<100	<100	<100
>C29-C36	mg/kg	100	<100	<100	<100	<100	<100
>C10-C36 (Sum of total)	mg/kg	50	<50	<50	<50	<50	<50
ESA-P-ORG07 & ORG08							
Benzene	mg/kg	0.5	<0.50	<0.50	<0.50	<0.50	<0.50
Toluene	mg/kg	0.5	<0.50	<0.50	<0.50	<0.50	<0.50
Ethylbenzene	mg/kg	0.5	<0.50	<0.50	<0.50	<0.50	<0.50
m.p Xylene	mg/kg	1	<1.0	<1.0	<1.0	<1.0	<1.0
o Xylene	mg/kg	0.5	<0.50	<0.50	<0.50	<0.50	<0.50
Sum of BTEX	mg/kg	1	<1.0	<1.0	<1.0	<1.0	<1.0
Total Xylenes	mg/kg	1	<1.0	<1.0	<1.0	<1.0	<1.0
Styrene	mg/kg	0.5	<0.50	<0.50	<0.50	<0.50	<0.50
Sum of MAHs	mg/kg	1	<1.0	<1.0	<1.0	<1.0	<1.0
vNaphthalene	mg/kg	0.5	<0.50	<0.50	<0.50	<0.50	<0.50
C6-C9 Conc.	mg/kg	35	<35	<35	<35	<35	<35
C6-C10 Conc.	mg/kg	35	<35	<35	<35	<35	<35
C6-C10 minus BTEX (F1)	mg/kg	35	<35	<35	<35	<35	<35
Vinyl Chloride	mg/kg	0.5	-	-	-	<0.50	-
trans-1,2-Dichloroethene	mg/kg	0.5	-	-	-	<0.50	-
Methylene chloride	mg/kg	0.5	-	-	-	<0.50	-
cis-1,2-Dichloroethene	mg/kg	0.5	-	-	-	<0.50	-
Bromochloromethane	mg/kg	0.5	-	-	-	<0.50	-
Chloroform	mg/kg	0.5	-	-	-	<0.50	-
1,1,1-Trichloroethane	mg/kg	0.5	-	-	-	<0.50	-
1,2-Dichloroethane	mg/kg	0.5	-	-	-	<0.50	-
Carbon tetrachloride	mg/kg	0.5	-	-	-	<0.50	-
1,1,2-Trichloroethane	mg/kg	0.5	-	-	-	<0.50	-

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Tetrachloroethene	mg/kg	0.5	-	-	-	<0.50	-
1,1,1,2-Tetrachloroethane	mg/kg	0.5	-	-	-	<0.50	-
1,1,2,2-Tetrachloroethane	mg/kg	0.5	-	-	-	<0.50	-
1,2-Dichlorobenzene	mg/kg	0.5	-	-	-	<0.50	-
1,4-Dichlorobenzene	mg/kg	0.5	-	-	-	<0.50	-
1,2,4-Trichlorobenzene	mg/kg	0.5	-	-	-	<0.50	-
Hexachlorobutadiene	mg/kg	0.5	-	-	-	<0.50	-
1,1-Dichloroethene	mg/kg	0.5	-	-	-	<0.50	-
Trichloroethene	mg/kg	0.5	-	-	-	<0.50	-
Chlorobenzene	mg/kg	0.5	-	-	-	<0.50	-
Sum of Chlorinated Hydrocarbons	mg/kg	0.5	-	-	-	<0.50	-
Other Chlorinated Hydrocarbon	mg/kg	0.5	-	-	-	<0.50	-
Toluene-d8 (Surr.)	%		111	112	118	119	123
1,2-Dichloroethane-d4 (Surr.)	%		119	121	123	127	126
4-Bromofluorobenzene (BFB) (Surr.)	%		104	106	110	139	118
Trifluorotoluene (Surr.)	%		78	75	84	61	75

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A.C.N. 093 452 950
Unit 4/10-11 Millennium Court,
Silverwater 2128
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Accreditation No.14664
Accredited for compliance with ISO/IEC 17025 - Testing.

This Quality Control Report contains results of QAQC samples analysis and the Laboratory Acceptance Criteria.

This report supersedes any previous report(s) with this reference. This document shall not be reproduced, except in full.

This report has been electronically signed by authorised signatories below.

Authorised By

Kaiyu Li

General Comments

Duplicate samples and matrix spike may not be prepared on smaller jobs, however are analysed at frequency. QAQC samples shown within the report as e.g. Batch Blank, Batch Matrix Spike were performed on samples not reported on that Certificate of Analysis.

Blank This is the component of the analytical signal which is not derived from the sample but from reagents, glassware etc, can be determined by processing solvents and reagents in the same manner as for samples.
Duplicate This is the interlaboratory split of a random sample from the processed batch
Matrix Spike A portion of the sample is spiked with a known concentration of target analyte. The purpose of the matrix spike is to monitor the performance of the analytical method used and to determine whether matrix interferences exist.
LCS (Laboratory Control Sample): This comprises either a standard reference material or a control matrix (such as a blank sand or water) fortified with analytes representative of the analyte class.
Surr. (Surrogate Spike) Surrogates are known additions to each sample, blank and matrix spike or LCS in a batch. Surrogates are chosen as a compounds which are similar to the analyte of interest, however are not expected to be found in real samples.

Laboratory Acceptance Criteria

Blank shall be < PQL
Matrix Spikes and LCS: Generally 70-130% for inorganics/metals/PFAS, 60-140% for organics is acceptable. Matrix heterogeneity may result in matrix spike analyses falling outside these limits
RPD Duplicates: Global RPD Duplicates Acceptance Criteria is 30% however the following acceptance guidelines are equally applicable:
Results <10 times the PQL : No Limit
Results between 10-20 times the PQL : RPD must lie between 0-50%
Results >20 times the PQL : RPD must lie between 0-30%
Surrogate Recoveries : Recoveries must lie between 50-150%

SLS is responsible for all the information in the report, except that provided by the customer.

All sampling information included in the report has been provided by customer.

Information provided by the customer can affect the validity of the results.

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Silverwater 2128
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Quality Control Report

Contact:	Stephen Bowly	**Date Reported:**	3/05/2022
Customer:	ADE Consulting Group	**No. of Samples:**	42
Address:	Unit 6 7 Millennium Court Silverwater NSW	**Date Received:**	29/04/2022
		Date of Analysis:	29/04/2022

Cust Ref: 21.2044

Glossary:

*NATA accreditation does not cover the performance of this service
ND-not detected,
NT-not tested
INS-Insufficient material to perform the test
LCS-Laboratory Control Sample
RPD-Relative Percent Difference
N/A-Not Applicable
< less than
> greater than
PQL- Practical Quantitation Limit
^Analytical result might be compromised due to sample condition or holding time requirements
Reaction rate 1 = Slight
Reaction rate 2 = Moderate
Reaction rate 3 = High
Reaction rate 4 = Vigorous

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Quality Control Report

		Sample ID:	D202201282505	D202201283405
		Sample Name	WAC1_TP1_0.4-0.5	WAC1_TP3_0.0-0.1
Parameter	*Units*	*PQL*		
ESA-P-ORG16				
PFBA			Pass	Pass
PFPeA			Pass	Pass
PFBS			Pass	Pass
PFHxA			Pass	Pass
PFPeS			Pass	Pass
PFHpA			Pass	Pass
PFOA			Pass	Pass
PFHpS			Pass	Pass
PFOS			Pass	Pass
PFDA			Pass	Pass
PFUdA			Pass	Pass
PFDoA			Pass	Pass
PFTrDA			Pass	Pass
PFTeDA			Pass	Pass
PFNA			Pass	Pass
PFHxS			Pass	Pass
MPFBA	%		73	73
M3PFBS	%		73	77
MPFOS	%		72	78
MPFHxA	%		74	75
MPFOA	%		78	95
MPFUdA	%		115	101

		Sample ID:	D202201285301	D202201288201	D202201289301
		Sample Name	WAC1_TP5_0.5-0.6	WAC1_TP8_0.3	WAC1_TP9_BRc
Parameter	*Units*	*PQL*			
ESA-MP-01,ICP-01					
Arsenic			Pass	Pass	Pass

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Cadmium			Pass	Pass	Pass
Chromium			Pass	Pass	Pass
Copper			Pass	Pass	Pass
Lead			Pass	Pass	Pass
Mercury			Pass	Pass	Pass
Nickel			Pass	Pass	Pass
Zinc			Pass	Pass	Pass

		Sample ID:	**D202201285302**	**D202201288202**	**D202201289302**
		Sample Name	**WAC1_TP5_0.5-0.6**	**WAC1_TP8_0.3**	**WAC1_TP9_BRc**
Parameter	***Units***	***PQL***			
ESA-P-ORG7 & ORG8					
Benzene			Pass	Pass	Pass
Toluene			Pass	Pass	Pass
Ethylbenzene			Pass	Pass	Pass
m.p Xylene			Pass	Pass	Pass
o Xylene			Pass	Pass	Pass
Styrene			Pass	Pass	Pass
vNaphthalene			Pass	Pass	Pass
C6-C9			Pass	Pass	Pass
C6-C10			Pass	Pass	Pass
Vinyl Chloride			Pass	Pass	Pass
trans-1,2-Dichloroethene			Pass	Pass	Pass
Methylene chloride			Pass	Pass	Pass
cis-1,2-Dichloroethene			Pass	Pass	Pass
Bromochloromethane			Pass	Pass	Pass
Chloroform			Pass	Pass	Pass
1,1,1-Trichloroethane			Pass	Pass	Pass
1,2-Dichloroethane			Pass	Pass	Pass
Carbon tetrachloride			Pass	Pass	Pass
1,1,2-Trichloroethane			Pass	Pass	Pass
Tetrachloroethene			Pass	Pass	Pass
1,1,1,2-Tetrachloroethane			Pass	Pass	Pass
1,1,2,2-Tetrachloroethane			Pass	Pass	Pass

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1,2-Dichlorobenzene			Pass	Pass	Pass
1,4-Dichlorobenzene			Pass	Pass	Pass
1,2,4-Trichlorobenzene			Pass	Pass	Pass
Hexachlorobutadiene			Pass	Pass	Pass
1,1-Dichloroethene			Pass	Pass	Pass
Trichloroethene			Pass	Pass	Pass
Chlorobenzene			Pass	Pass	Pass
Toluene-d8	%		85	77	122
1,2-Dichloroethane-d4	%		115	132	126
4-Bromofluorobenzene (BFB)	%		137	110	118
Trifluorotoluene (Surr.)	%		60	71	73

Sample ID:		**D202201285303**	**D202201288203**	**D202201289303**
Sample Name		**WAC1_TP5_0.5-0.6**	**WAC1_TP8_0.3**	**WAC1_TP9_BRc**
Parameter	***Units***	***PQL***		
ESA-P-ORG(12 - 15)				
Acenaphthene			Pass	Pass	Pass
Acenaphthylene			Pass	Pass	Pass
Anthracene			Pass	Pass	Pass
Benzo[a]anthracene			Pass	Pass	Pass
Benzo[a]pyrene			Pass	Pass	Pass
Benzo[b]fluoranthene			Pass	Pass	Pass
Benzo[g,h,i]perylene			Pass	Pass	Pass
Benzo[k]fluoranthene			Pass	Pass	Pass
Chrysene			Pass	Pass	Pass
Dibenzo[a,h]anthracene			Pass	Pass	Pass
Fluoranthene			Pass	Pass	Pass
Fluorene			Pass	Pass	Pass
Indeno(1,2,3-cd)pyrene			Pass	Pass	Pass
Naphthalene			Pass	Pass	Pass
Phenanthrene			Pass	Pass	Pass
Pyrene			Pass	Pass	Pass
p-Terphenyl-d14 (Surr.)	%		96	112	119

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aldrin			Pass	Pass	Pass
a-BHC			Pass	Pass	Pass
b-BHC			Pass	Pass	Pass
d-BHC			Pass	Pass	Pass
g-BHC (lindane)			Pass	Pass	Pass
cis-chlordane			Pass	Pass	Pass
trans-chlordane			Pass	Pass	Pass
4,4'-DDD			Pass	Pass	Pass
4,4'-DDE			Pass	Pass	Pass
4,4'-DDT			Pass	Pass	Pass
dieldrin			Pass	Pass	Pass
endosulfan I			Pass	Pass	Pass
endosulfan II			Pass	Pass	Pass
endosulfan sulfate			Pass	Pass	Pass
endrin			Pass	Pass	Pass
endrin aldehyde			Pass	Pass	Pass
endrin ketone			Pass	Pass	Pass
heptachlor			Pass	Pass	Pass
heptachlor epoxide			Pass	Pass	Pass
hexachlorobenzene			Pass	Pass	Pass
methoxychlor			Pass	Pass	Pass
TCMX (Surr.)	%		113	92	94
chlorpyrifos			Pass	Pass	Pass
chlorpyrifos methyl			Pass	Pass	Pass
diazinon			Pass	Pass	Pass
fenchlorphos			Pass	Pass	Pass
methyl parathion			Pass	Pass	Pass
prophos			Pass	Pass	Pass
tributylphosphorotrithioite			Pass	Pass	Pass
Aroclor 1016			Pass	Pass	Pass
Aroclor 1221			Pass	Pass	Pass
Aroclor 1232			Pass	Pass	Pass
Aroclor 1242			Pass	Pass	Pass

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Aroclor 1248			Pass	Pass	Pass
Aroclor 1254			Pass	Pass	Pass
Aroclor 1260			Pass	Pass	Pass
2-fluorobiphenyl (Surr.)	%		101	130	137
		Sample ID:	**D202201285304**	**D202201288204**	**D202201289304**
		Sample Name	**WAC1_TP5_0.5-0.6**	**WAC1_TP8_0.3**	**WAC1_TP9_BRc**
Parameter	***Units***	***PQL***			
ESA-P-ORG(3,8)					
>C10-C16			Pass	Pass	Pass
>C16-C34			Pass	Pass	Pass
>C34-C40			Pass	Pass	Pass
>C10-C14			Pass	Pass	Pass
>C15-C28			Pass	Pass	Pass
>C29-C36			Pass	Pass	Pass
		Sample ID:	**D202201296701**		
		Sample Name	**Stockpile 2 -TP1**		
Parameter	***Units***	***PQL***			
ESA-MP-01,ICP-01					
Arsenic			Pass		
Cadmium			Pass		
Chromium			Pass		
Copper			Pass		
Lead			Pass		
Mercury			Pass		
Nickel			Pass		
Zinc			Pass		
		Sample ID:	**Q2022003100**	**Q2022003102**	
		Sample Name			
Parameter	***Units***	***PQL***	Metals Blank - Soil	Metals Blank - Soil	
ESA-MP-01,ICP-01					
Arsenic	mg/kg	5	<5.0	<5.0	
Cadmium	mg/kg	0.3	<0.30	<0.30	

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Chromium	mg/kg	5	<5.0	<5.0
Copper	mg/kg	5	<5.0	<5.0
Lead	mg/kg	10	<10.0	<10.0
Mercury	mg/kg	0.2	<0.20	<0.20
Nickel	mg/kg	10	<10.0	<10.0
Zinc	mg/kg	5	<5.0	<5.0
		Sample ID:	**Q2022003101**	**Q2022003103**
		Sample Name		

Parameter	***Units***	***PQL***	Metals Blank Sp-Soil	Metals Blank Sp-Soil
ESA-MP-01,ICP-01				
Arsenic	%		90	93
Cadmium	%		108	108
Chromium	%		103	100
Copper	%		100	100
Lead	%		105	104
Mercury	%		83	76
Nickel	%		105	104
Zinc	%		105	105
		Sample ID:	**Q2022003110**	**Q2022003120**
		Sample Name		

Parameter	***Units***	***PQL***	VOCs MB Vic - Soil	VOCs MB Vic - Soil
ESA-P-ORG7 & ORG8				
Benzene	mg/kg	0.5	<0.50	<0.50
Toluene	mg/kg	0.5	<0.50	<0.50
Ethylbenzene	mg/kg	0.5	<0.50	<0.50
m.p Xylene	mg/kg	1	<1.0	<1.0
o Xylene	mg/kg	0.5	<0.50	<0.50
Styrene	mg/kg	0.5	<0.50	<0.50
vNaphthalene	mg/kg	0.5	<0.50	<0.50
C6-C9	mg/kg	35	<35	<35
C6-C10	mg/kg	35	<35	<35
Vinyl Chloride	mg/kg	0.5	<0.50	<0.50
trans-1,2-Dichloroethene	mg/kg	0.5	<0.50	<0.50

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Methylene chloride	mg/kg	0.5	<0.50	<0.50
cis-1,2-Dichloroethene	mg/kg	0.5	<0.50	<0.50
Bromochloromethane	mg/kg	0.5	<0.50	<0.50
Chloroform	mg/kg	0.5	<0.50	<0.50
1,1,1-Trichloroethane	mg/kg	0.5	<0.50	<0.50
1,2-Dichloroethane	mg/kg	0.5	<0.50	<0.50
Carbon tetrachloride	mg/kg	0.5	<0.50	<0.50
1,1,2-Trichloroethane	mg/kg	0.5	<0.50	<0.50
Tetrachloroethene	mg/kg	0.5	<0.50	<0.50
1,1,1,2-Tetrachloroethane	mg/kg	0.5	<0.50	<0.50
1,1,2,2-Tetrachloroethane	mg/kg	0.5	<0.50	<0.50
1,2-Dichlorobenzene	mg/kg	0.5	<0.50	<0.50
1,4-Dichlorobenzene	mg/kg	0.5	<0.50	<0.50
1,2,4-Trichlorobenzene	mg/kg	0.5	<0.50	<0.50
Hexachlorobutadiene	mg/kg	0.5	<0.50	<0.50
1,1-Dichloroethene	mg/kg	0.5	<0.50	<0.50
Trichloroethene	mg/kg	0.5	<0.50	<0.50
Chlorobenzene	mg/kg	0.5	<0.50	<0.50

Sample ID:	**Q2022003111**	**Q2022003121**

Sample Name

Parameter	***Units***	***PQL***	VOCs LCS Vic - Soil	VOCs LCS Vic - Soil
ESA-P-ORG7 & ORG8				
1,1-Dichloroethene	%		120	97
Benzene	%		95	92
Trichloroethene	%		112	133
Toluene	%		133	127
Chlorobenzene	%		135	131
Toluene-d8 (Surr.)	%		116	122
1,2-Dichloroethane-d4 (Surr.)	%		130	127
4-Bromofluorobenzene (BFB) (Surr.)	%		136	126
Trifluorotoluene (Surr.)	%		79	85

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	Sample ID:	Q2022003112	Q2022003122
	Sample Name		

Parameter	Units	PQL	PCB Blank - Soil	PCB Blank - Soil
ESA-P-ORG(12 - 15)				
Acenaphthene	mg/kg	0.3	<0.30	<0.30
Acenaphthylene	mg/kg	0.3	<0.30	<0.30
Anthracene	mg/kg	0.3	<0.30	<0.30
Benzo[a]anthracene	mg/kg	0.3	<0.30	<0.30
Benzo[a]pyrene	mg/kg	0.3	<0.30	<0.30
Benzo[b]fluoranthene	mg/kg	0.3	<0.30	<0.30
Benzo[g,h,i]perylene	mg/kg	0.3	<0.30	<0.30
Benzo[k]fluoranthene	mg/kg	0.3	<0.30	<0.30
Chrysene	mg/kg	0.3	<0.30	<0.30
Dibenzo[a,h]anthracene	mg/kg	0.3	<0.30	<0.30
Fluoranthene	mg/kg	0.3	<0.30	<0.30
Fluorene	mg/kg	0.3	<0.30	<0.30
Indeno(1,2,3-cd)pyrene	mg/kg	0.3	<0.30	<0.30
Naphthalene	mg/kg	0.3	<0.30	<0.30
Phenanthrene	mg/kg	0.3	<0.30	<0.30
Pyrene	mg/kg	0.3	<0.30	<0.30
aldrin	mg/kg	0.1	<0.10	<0.10
a-BHC	mg/kg	0.1	<0.10	<0.10
b-BHC	mg/kg	0.1	<0.10	<0.10
d-BHC	mg/kg	0.1	<0.10	<0.10
g-BHC (lindane)	mg/kg	0.1	<0.10	<0.10
cis-chlordane	mg/kg	0.1	<0.10	<0.10
trans-chlordane	mg/kg	0.1	<0.10	<0.10
4,4'-DDD	mg/kg	0.1	<0.10	<0.10
4,4'-DDE	mg/kg	0.1	<0.10	<0.10
4,4'-DDT	mg/kg	0.1	<0.10	<0.10
dieldrin	mg/kg	0.1	<0.10	<0.10
endosulfan I	mg/kg	0.2	<0.20	<0.20
endosulfan II	mg/kg	0.2	<0.20	<0.20

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endosulfan sulfate	mg/kg	0.1	<0.10	<0.10
endrin	mg/kg	0.2	<0.20	<0.20
endrin aldehyde	mg/kg	0.1	<0.10	<0.10
endrin ketone	mg/kg	0.1	<0.10	<0.10
heptachlor	mg/kg	0.1	<0.10	<0.10
heptachlor epoxide	mg/kg	0.1	<0.10	<0.10
hexachlorobenzene	mg/kg	0.1	<0.10	<0.10
methoxychlor	mg/kg	0.1	<0.10	<0.10
chlorpyrifos	mg/kg	0.1	<0.10	<0.10
chlorpyrifos methyl	mg/kg	0.1	<0.10	<0.10
diazinon	mg/kg	0.1	<0.10	<0.10
fenchlorphos	mg/kg	0.1	<0.10	<0.10
methyl parathion	mg/kg	0.1	<0.10	<0.10
prophos	mg/kg	0.1	<0.10	<0.10
tributylphosphorotrithioite	mg/kg	0.1	<0.10	<0.10
Aroclor 1016	mg/kg	0.5	<0.50	<0.50
Aroclor 1221	mg/kg	0.5	<0.50	<0.50
Aroclor 1232	mg/kg	0.5	<0.50	<0.50
Aroclor 1242	mg/kg	0.5	<0.50	<0.50
Aroclor 1248	mg/kg	0.5	<0.50	<0.50
Aroclor 1254	mg/kg	0.5	<0.50	<0.50
Aroclor 1260	mg/kg	0.5	<0.50	<0.50
		Sample ID:	**Q2022003113**	**Q2022003123**
		Sample Name		

Parameter	***Units***	***PQL***	PCB Blank Sp - Soil	PCB Blank Sp - Soil
ESA-P-ORG(12 - 15)				
Acenaphthene	%		100	138
Anthracene	%		101	132
Fluoranthene	%		90	126
Naphthalene	%		91	130
Phenanthrene	%		94	129
Pyrene	%		94	139
p-Terphenyl-d14 (Surr.)	%		98	137

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aldrin	%		84	127
endrin	%		100	81
hexachlorobenzene	%		92	121
TCMX (Surr.)	%		112	76
chlorpyrifos	%		80	122
diazinon	%		89	124
2-fluorobiphenyl (Surr.)	%		107	106
Aroclor 1016	%		104	94
		Sample ID:	**Q2022003114**	**Q2022003124**
		Sample Name		

Parameter	***Units***	***PQL***	TRH Blank-Soil	TRH Blank-Soil
ESA-P-ORG(3,8)				
>C10-C16	mg/kg	50	<50	<50
>C16-C34	mg/kg	100	<100	<100
>C34-C40	mg/kg	100	<100	<100
>C10-C14	mg/kg	50	<50	<50
>C15-C28	mg/kg	100	<100	<100
>C29-C36	mg/kg	100	<100	<100
		Sample ID:	**Q2022003115**	**Q2022003125**
		Sample Name		

Parameter	***Units***	***PQL***	TRH Blank Spike-Soil	TRH Blank Spike-Soil
ESA-P-ORG(3,8)				
>C10-C16	%		92	106
>C10-C14	%		90	103
		Sample ID:	**Q2022003126**	
		Sample Name		

Parameter	***Units***	***PQL***	PFAS Blank - Soil
ESA-P-ORG16			
PFBA	ug/kg	5	<5
PFPeA	ug/kg	5	<5
PFBS	ug/kg	5	<5
PFHxA	ug/kg	5	<5

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PFPeS	ug/kg	5	<5
PFHpA	ug/kg	5	<5
PFOA	ug/kg	5	<5
PFHpS	ug/kg	5	<5
PFOS	ug/kg	5	<5
PFDA	ug/kg	5	<5
PFUdA	ug/kg	5	<5
PFDoA	ug/kg	5	<5
PFTrDA	ug/kg	5	<5
PFTeDA	ug/kg	5	<5
PFNA	ug/kg	5	<5
PFHxS	ug/kg	5	<5
MPFBA (Surr.)	%		90
M3PFBS (Surr.)	%		82
MPFOS (Surr.)	%		97
MPFHxA (Surr.)	%		71
MPFOA (Surr.)	%		76
MPFUdA (Surr.)	%		81

Sample ID: **Q2022003127**

Sample Name

Parameter	***Units***	***PQL***	PFAS Blank Sp - Soil
ESA-P-ORG16			
PFBA	%		128
PFPeA	%		124
PFBS	%		117
PFHxA	%		125
PFPeS	%		120
PFHpA	%		119
PFOA	%		93
PFHpS	%		118
PFOS	%		94
PFDA	%		77

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PFUdA	%		76
PFDoA	%		111
PFTrDA	%		80
PFTeDA	%		128
PFNA	%		78
PFHxS	%		101
MPFBA (Surr.)	%		88
M3PFBS (Surr.)	%		78
MPFOS (Surr.)	%		95
MPFHxA (Surr.)	%		76
MPFOA (Surr.)	%		70
MPFUdA (Surr.)	%		89

Sample ID: **S202201282405**

Sample Name **WAC1_TP1 0.0-0.1**

Parameter	*Units*	*PQL*	
ESA-P-ORG16			
PFBA	%		123
PFPeA	%		128
PFBS	%		117
PFHxA	%		127
PFPeS	%		121
PFHpA	%		125
PFOA	%		81
PFHpS	%		130
PFOS	%		73
PFDA	%		88
PFUdA	%		87
PFDoA	%		75
PFTrDA	%		87
PFTeDA	%		112
PFNA	%		78
PFHxS	%		96
MPFBA (Surr.)	%		82

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M3PFBS (Surr.)	%		81	
MPFOS (Surr.)	%		79	
MPFHxA (Surr.)	%		78	
MPFOA (Surr.)	%		75	
MPFUdA (Surr.)	%		96	

Sample ID:			**S202201285201**	**S202201289201**
Sample Name			**WAC1_TP5_0.3-0.4**	**WAC1_TP9_0.3-0.4**
Parameter	***Units***	***PQL***		
ESA-MP-01,ICP-01				
Arsenic	%		98	92
Cadmium	%		114	115
Chromium	%		104	104
Copper	%		103	107
Lead	%		110	109
Mercury	%		80	89
Nickel	%		108	107
Zinc	%		109	107

Sample ID:			**S202201285202**	**S202201289202**
Sample Name			**WAC1_TP5_0.3-0.4**	**WAC1_TP9_0.3-0.4**
Parameter	***Units***	***PQL***		
ESA-P-ORG-07 & 08				
1,1-Dichloroethene	%		114	111
Benzene	%		98	122
Trichloroethene	%		112	84
Toluene	%		133	112
Chlorobenzene	%		136	116
Toluene-d8 (Surr.)	%		129	119
1,2-Dichloroethane-d4 (Surr.)	%		132	128
4-Bromofluorobenzene (Surr.)	%		138	119
Trifluorotoluene (Surr.)	%		117	73

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		Sample ID:	S202201285203	S202201289203
		Sample Name	WAC1_TP5_0.3-0.4	WAC1_TP9_0.3-0.4
Parameter	*Units*	*PQL*		
ESA-P-ORG(12 - 15)				
Acenaphthene	%		82	125
Anthracene	%		81	126
Fluoranthene	%		73	106
Naphthalene	%		75	114
Phenanthrene	%		75	123
Pyrene	%		76	117
p-Terphenyl-d14 (Surr.)	%		83	124
aldrin	%		68	111
endrin	%		77	86
hexachlorobenzene	%		73	108
TCMX (Surr.)	%		97	85
chlorpyrifos	%		64	107
diazinon	%		70	109
Aroclor 1016	%		94	100
2-fluorobiphenyl (Surr.)	%		90	100

		Sample ID:	S202201285204	S202201289204
		Sample Name	WAC1_TP5_0.3-0.4	WAC1_TP9_0.3-0.4
Parameter	*Units*	*PQL*		
ESA-P-ORG(3,8)				
>C10-C16	%		76	100
>C10-C14	%		75	98

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A.B.N. 52 093 452 950

Analysis report: 21.2044_WAC1
Laboratory LOT NO: 2201921

Date Received: 29.04.2022
Date Analysed: 03.05.2022
Report Date: 03.05.2022
Client: ADE Consulting Group
Job Location: AF JV_SOP_WAC1
Analytical method: AS 4964-2004 "Method for the qualitative identification of asbestos in bulk samples" in conjunction with AD Envirotech's ABI Methods for Polarised Light Microscopy with dispersion staining

Analysis performed by:

Kim Foley
Approved asbestos identifier

Results Authorised By:

Kim Foley
Approved Signatory

Accreditation No.14664.
Accredited for compliance with ISO/IEC 17025 - Testing.
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

Tests not covered by NATA are denoted with *.

General Comments:

Sydney Laboratory Services is responsible for all the information in the report, except that provided by the customer. All sampling information included in the report has been provided by the client
Information provided by the client can affect the validity of the results.
Sample analysed as received.
Samples are stored for minimum period of 1 month if longer time is not advised by client.

Accreditation No.14664.
Accredited for compliance with ISO/IEC 17025 - Testing.
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

Tests not covered by NATA are denoted with *.

Client Sample ID.	Laboratory Sample No.	Sample Description/Matrix	Sample Dimensions (cm) unless stated otherwise	Result	Comments
WAC1_TP7_0.0-0.1	2022012878	Soil	59 grams	No Chrysotile asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Amosite asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Crocidolite asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Synthetic Mineral Fibres found	Nil
				Organic fibres found	Nil
WAC1_TP7_0.3	2022012879	Soil	54 grams	No Chrysotile asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Amosite asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Crocidolite asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Synthetic Mineral Fibres found	Nil
				Organic fibres found	Nil
WAC1_TP8_0.1	2022012880	Soil	49 grams	No Chrysotile asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Amosite asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Crocidolite asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Synthetic Mineral Fibres found	Nil
				Organic fibres found	Nil
WAC1_TP8_0.7	2022012886	Soil	41 grams	No Chrysotile asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Amosite asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Crocidolite asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Synthetic Mineral Fibres found	Nil
				Organic fibres found	Nil
WAC1_TP9_0.0-0.1	2022012887	Soil	98 grams	No Chrysotile asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Amosite asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Crocidolite asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Synthetic Mineral Fibres found	Nil
				Organic fibres found	Nil
WAC1_TP9_0.8-0.9	2022012890	Soil	85 grams	No Chrysotile asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Amosite asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Crocidolite asbestos found at reporting limit of 0.1 g/kg.	Nil
				No Synthetic Mineral Fibres found	Nil
				Organic fibres found	Nil

Document Revision Date: 30.06.2020

ESA-F-02 COC - Chain Of Custody (Internal: Sydney Laboratory Services)

ADE CONSULTING GROUP
SOLUTIONS THROUGH INNOVATION

PROJECT:	AF JV_SOP_WAC1
PROJECT NUMBER - INVOICE NUMBER	21.2044
SAMPLES DELIVERED BY:	ADE Consulting Group 6/7 Millennium Ct, Silverwater NSW 2128
SAMPLERS:	Shane Metcalfe
TURNAROUND:	24h: 48h: XX 72h: 4 WORKING DAYS:
SAMPLING DATE:	21/04/2022
AFTER TEST STORAGE:	ROOM TEMP: ☐ FRIDGE: X FREEZER: ☐ > >4 WEEKS: ☐ OTHER: ☐
REPORT FORMAT:	HARD COPY: ☐ E-MAIL: X
CONSULTANTS SIGNATURE:	CONSULTANT E-MAIL: stephen.bowly@ade.group
PROJECT MANAGERS SIGNATURE:	PROJECT MANAGERS E-MAIL: thesan.naidoo@ade.group

LABORATORY REFERENCE NO. (Lab use ONLY):	21-2044
RECEIVED BY: KF	SIGNATURE:
SAMPLES: 1 CHILLED: ☐ PRESERVED: ☐	PRESERVATION METHOD: X CUSTODY SEAL INTACT: ☐
MINIMAL HEADSPACE : ☐	WITHIN HOLDING TIME: ☐
DATE: 6-5-22 TIME: 7:00	TEMPERATURE UPON RECEIPT: °C
LIMS LOT NO. 220213	LIMS/EXCEL SIGNATURE: COMMENTS:

SAMPLE DATA				CONTAINER DATA		ANALYSES REQUIRED																		NOTES
LIMS Sample ID (Lab Use)	Sample ID (ADE)	MATRIX	SAMPLE DATE	TYPE & PRESERVATIVE	NO.	pH/pH fox	BTEXN	8 Metal Suite	PAH	PCB	OCC/OPP	TCLP (metals)	VOC	PFAS	TRH	TOC	CEC	Ph/EC	Asbestos 65g					POTENTIAL HAZARDOUS CONTAMINANTS: ☐ ASBESTOS ☐ HYDROCARBONS ☐ LEAD/ARSENIC ☐ NO KNOWN CONTAMINATION
2202014																								LAB PLEASE *EMAIL COC RECEIPT: ☐ OTHER:_____
183	WAC1_TP5_0.0-0.1		21/04/2022									x												Sample Comments

Comments:

Container Type and Preservative: P = Unpreserved Plastic; PN = Nitric Preserved Plastic; ORC = Nitric Preserved ORC; PNA = Sodium Hydroxide Preserved Plastic; PC = HCl preserved Plastic; VC = Vial HCl Preserved; SP = Sulfuric Preserved Plastic; VB = Vial Sodium Bisulphate Preserved; VS = Vial Sulfuric Preserved; V = Unpreserved Vial; G = Amber Glass Unpreserved; SG = Sulfuric Preserved Amber Glass; F = Formaldehyde Preserved Glass; HS = HCl preserved Speciation bottle; Z = Zinc Acetate Preserved Bottle; E = EDTA Preserved Bottle; ST = Sterile Bottle; J = Unpreserved Glass Jar; ASS = Plastic Bag for Acid Sulfate Soils; B = Unpreserved Bag.

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Due: 10.05.22

Sydney Laboratory Services

A division of A. D. Envirotech Australia Pty Ltd
A.C.N. 093 452 950
Unit 4/10-11 Millennium Court,
Silverwater 2128
Ph: (02) 9648-6669

Accreditation No.14664
Accredited for compliance with ISO/IEC 17025 - Testing.

SAMPLE RECEIPT NOTIFICATION (SRN)

Contact:	Thesan Naidoo
Project name:	21.2044
Number of samples:	1
COC number:	21.2044
Turn around time:	48 hours
Date:	06.05.2022
Time received:	7:00 AM
SLS Reference:	2202113
Estimated Report Delivery Date:	10.05.2022

Sample information

☑	All samples have been received and logged into LIMS.
☑	No mistakes in the COC
N/A	Samples were chilled
N/A	Samples were preserved
N/A	Custody seal intact
☑	Samples were delivered within holding time
N/A	Samples to be tested for volatiles had zero headspace
☑	All samples were received in good condition (no broken jars, labelled correctly…).
☐	Samples have been subcontracted

Comments

This report contains:
Sample reciept non-conformities
Summary of samples and requested analysis
Requested report deliverables

Contact details

If you have any questions with respect to these samples please contact:
sls@ade.group

Krista Johnston

Sydney Laboratory Services

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Silverwater 2128
Ph: (02) 9648-6669

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SAMPLE RECEIPT NOTIFICATION (SRN)

Laboratory Sample ID	Client Sample ID	TCLP PAH B(a)P PQL<0.2 ug/L	TCLP PAH B(a)P PQL<5.0 ug/L	TCLP Metals	TCLP PFAS
2022014183	WAC1_TP5_0.0-0.1			X	

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Accreditation No.14664
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This certificate of analysis contains General Comments and Analytical Results. Quality Control Report and Laboratory Quality Acceptance Criteria have been issued separately.

This report supersedes any previous report(s) with this reference. This document shall not be reproduced, except in full.

This report has been electronically signed by authorised signatories below.

Authorised By

Kaiyu Li

General Comments

Samples are analysed on as received basis. Sampling is not covered by NATA accreditation.

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

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

Samples were analysed within holding time described by laboratory internal procedures if not stated otherwise. If samples delivered do not meet required analytical criteria, results will be marked with ^.

However surrogate standards are added to samples, results are not corrected for standards recoveries.

Analysis of VOC in water samples are performed on unfiltered waters (as received) spiked with surrogates and injection standards only.

SLS is responsible for all the information in the report, except that provided by the customer.

All sampling information included in the report has been provided by customer.

Information provided by the customer can affect the validity of the results.

Certificate of Analysis

Contact: Thesan Naidoo

Customer: ADE Consulting Group

Address: Unit 6
7 Millennium Court
Silverwater NSW

Date Reported: 10/05/2022

No. of Samples: 1

Date Received: 9/05/2022

Date of Analysis: 10/05/2022

Cust Ref: 21.2044

Glossary:

*NATA accreditation does not cover the performance of this service
ND-not detected,
NT-not tested
INS-Insufficient material to perform the test
LCS-Laboratory Control Sample
RPD-Relative Percent Difference
N/A-Not Applicable
< less than
> greater than
PQL- Practical Quantitation Limit
^Analytical result might be compromised due to sample condition or holding time requirements
Reaction rate 1 = Slight
Reaction rate 2 = Moderate
Reaction rate 3 = High
Reaction rate 4 = Vigorous

Certificate of Analysis

	Sample ID:	2022014183
	Sample Name	WAC1_TP5_0.0-0.1

Parameter	Units	PQL	
ESA-MP-01,ICP-01			
Arsenic	mg/L	0.5	0.8
Cadmium	mg/L	0.05	<0.05
Chromium	mg/L	0.2	<0.2
Copper	mg/L	0.05	<0.05
Lead	mg/L	0.5	<0.5
Mercury	mg/L	0.01	<0.01
Nickel	mg/L	0.2	<0.2
Zinc	mg/L	0.05	<0.05
ESA-P-21			
pH A	-		8.3
pH B	-		1.1
Extraction Fluid	-		1

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Ph: (02) 9648-6669

Accreditation No.14664
Accredited for compliance with ISO/IEC 17025 - Testing.

This Quality Control Report contains results of QAQC samples analysis and the Laboratory Acceptance Criteria.

This report supersedes any previous report(s) with this reference. This document shall not be reproduced, except in full.

This report has been electronically signed by authorised signatories below.

Authorised By

Kaiyu Li

General Comments

Duplicate samples and matrix spike may not be prepared on smaller jobs, however are analysed at frequency. QAQC samples shown within the report as e.g. Batch Blank, Batch Matrix Spike were performed on samples not reported on that Certificate of Analysis.

Blank This is the component of the analytical signal which is not derived from the sample but from reagents, glassware etc, can be determined by processing solvents and reagents in the same manner as for samples.
Duplicate This is the interlaboratory split of a random sample from the processed batch
Matrix Spike A portion of the sample is spiked with a known concentration of target analyte. The purpose of the matrix spike is to monitor the performance of the analytical method used and to determine whether matrix interferences exist.
LCS (Laboratory Control Sample): This comprises either a standard reference material or a control matrix (such as a blank sand or water) fortified with analytes representative of the analyte class.
Surr. (Surrogate Spike) Surrogates are known additions to each sample, blank and matrix spike or LCS in a batch. Surrogates are chosen as a compounds which are similar to the analyte of interest, however are not expected to be found in real samples.

Laboratory Acceptance Criteria

Blank shall be < PQL
Matrix Spikes and LCS: Generally 70-130% for inorganics/metals/PFAS, 60-140% for organics is acceptable. Matrix heterogeneity may result in matrix spike analyses falling outside these limits
RPD Duplicates: Global RPD Duplicates Acceptance Criteria is 30% however the following acceptance guidelines are equally applicable:
Results <10 times the PQL : No Limit
Results between 10-20 times the PQL : RPD must lie between 0-50%
Results >20 times the PQL : RPD must lie between 0-30%
Surrogate Recoveries : Recoveries must lie between 50-150%

SLS is responsible for all the information in the report, except that provided by the customer.

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Silverwater 2128
Ph: (02) 9648-6669

Quality Control Report

Contact:	Thesan Naidoo	**Date Reported:**	10/05/2022
Customer:	ADE Consulting Group	**No. of Samples:**	4
Address:	Unit 6 7 Millennium Court Silverwater NSW	**Date Received:**	9/05/2022
		Date of Analysis:	10/05/2022

Cust Ref: 21.2044

Glossary:

*NATA accreditation does not cover the performance of this service
ND-not detected,
NT-not tested
INS-Insufficient material to perform the test
LCS-Laboratory Control Sample
RPD-Relative Percent Difference
N/A-Not Applicable
< less than
> greater than
PQL- Practical Quantitation Limit
^Analytical result might be compromised due to sample condition or holding time requirements
Reaction rate 1 = Slight
Reaction rate 2 = Moderate
Reaction rate 3 = High
Reaction rate 4 = Vigorous

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Quality Control Report

Sample ID:	**D202201338002**
Sample Name	**FDK-WAC9-TP2**

Parameter	*Units*	*PQL*	
ESA-MP-01,ICP-01			
Arsenic			Pass
Cadmium			Pass
Chromium			Pass
Copper			Pass
Lead			Pass
Mercury			Pass
Nickel			Pass
Zinc			Pass

Sample ID:	**Q2022003218**
Sample Name	

Parameter	*Units*	*PQL*	Metals Blank - TCLP
ESA-MP-01,ICP-01			
Arsenic	mg/L	0.5	<0.5
Cadmium	mg/L	0.05	<0.05
Chromium	mg/L	0.2	<0.2
Copper	mg/L	0.05	<0.05
Lead	mg/L	0.5	<0.5
Mercury	mg/L	0.01	<0.01
Nickel	mg/L	0.2	<0.2
Zinc	mg/L	0.05	<0.05

Sample ID:	**Q2022003219**
Sample Name	

Parameter	*Units*	*PQL*	Metals Blank Sp-TCLP
ESA-MP-01,ICP-01			
Arsenic	%		105
Cadmium	%		111
Chromium	%		104

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Copper	%		105
Lead	%		109
Mercury	%		100
Nickel	%		105
Zinc	%		104

Sample ID: **S202201337902**

Sample Name **FDK-WAC9-TP1**

Parameter	*Units*	*PQL*	
ESA-MP-01,ICP-01			
Arsenic	%		99
Cadmium	%		111
Chromium	%		104
Copper	%		105
Lead	%		110
Mercury	%		105
Nickel	%		104
Zinc	%		105

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#07

Document Revision Date: 30.06.2020

ESA-F-02 COC - Chain Of Custody (SLS)

ADE CONSULTING GROUP SOLUTIONS THROUGH INNOVATION

PROJECT:	AFJV SMW
PROJECT NUMBER	21.2044_SOP_WAC1
SAMPLES DELIVERED BY:	ADE Consulting Group 6/7 Millennium Ct, Silverwater NSW 2128
SAMPLERS:	Shane Metcalfe,
TURNAROUND:	24h: 48h: xx 72h: ☐ 5 WORKING DAYS:
SAMPLING DATE:	21.04.2022
AFTER TEST STORAGE:	ROOM TEMP: ☐ FRIDGE: X FREEZER: ☐ >4 WEEKS: ☐ OTHER: ☐
REPORT FORMAT:	HARD COPY: ☐ E-MAIL: X
CONSULTANTS SIGNATURE:	CONSULTANT E-MAIL: Shane Metcalfe@ade.group, megan.lynch@ade.group
PROJECT MANAGERS SIGNATURE:	PROJECT MANAGERS E-MAIL: stephen.bowly@ade.group

LABORATORY REFERENCE NO. (Lab use ONLY):	21.2044 WAC1		
RECEIVED BY: 14	SIGNATURE:		
SAMPLES: 2 CHILLED: ☐	PRESERVED: ☐	PRESERVATION METHOD: X	CUSTODY SEAL INTACT: ☑
MINIMAL HEADSPACE : ☐	WITHIN HOLDING TIME: ☑		
DATE: 29-4-22	TIME: 7:00	TEMPERATURE UPON RECEIPT:	°C
LIMS LOT NO. 2201933	LIMS/EXCEL SIGNATURE:	COMMENTS:	

SAMPLE DATA				CONTAINER DATA		ANALYSES REQUIRED: Chem Lab																Asbestos						Mould	NOTES
LIMS Sample ID (Lab Use)	Sample ID (ADE)	MATRIX	SAMPLE DATE	TYPE & PRESERVATIVE	NO.	6 Metal Suite	8 Metal Suite	BTEX	PAH	OCP/OPP	PCB	vTRH (C6-C10)	TRH (C10-C40)	pH/EC	pH/pH fox	Standard suite	Bulk	Dust	Dust Swab	Soil 65g	Soil 500g NEPM	Airborne Asbesos Monitoring	Mould	POTENTIAL HAZARDOUS CONTAMINANTS: ☑ ASBESTOS ☐ HYDROCARBONS ☐ LEAD/ARSENIC ☐ NO KNOWN CONTAMINATION ☐ OTHER:_____ LAB PLEASE *EMAIL COC RECEIPT: ☑ Sample Comments
2022012 958	TB	W	21.04.2022	WATER	1			X																
959	TS	W	21.04.2022	WATER	2			X																

Comments:

Container Type and Preservative: P = Unpreserved Plastic; PN = Nitric Preserved Plastic; ORC = Nitric Preserved ORC; PNA = Sodium Hydroxide Preserved Plastic; PC = HCl preserved Plastic; VC = Vial HCl Preserved; SP = Sulfuric Preserved Plastic; VB = Vial Sodium Bisulphate Preserved; VS = Vial Sulfuric Preserved; V = Unpreserved Vial; G = Amber Glass Unpreserved; SG = Sulfuric Preserved Amber Glass; F = Formaldehyde Preserved Glass; HS = HCl preserved Speciation bottle; Z = Zinc Acetate Preserved Bottle; E = EDTA Preserved Bottle; ST = Sterile Bottle; J = Unpreserved Glass Jar; ASS = Plastic Bag for Acid Sulfate Soils; B = Unpreserved Bag.

Due: 03-05-22

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Unit 4/10-11 Millennium Court,
Silverwater 2128
Ph: (02) 9648-6669

Accreditation No.14664
Accredited for compliance with ISO/IEC 17025 - Testing.

SAMPLE RECEIPT NOTIFICATION (SRN)

Contact: Stephen Bowly
Project name: 21.2044_SOP_WAC1
Number of samples: 2
COC number: 21.2044_SOP_WAC1
Turn around time: 48 Hours
Date: 29.04.2022
Time received: 7:00 AM
SLS Reference: 2201933
Estimated Report Delivery Date: 03.05.2022

Sample information

☑	All samples have been received and logged into LIMS.
☑	No mistakes in the COC
☑	Evidence of chilling for samples
N/A	Samples were preserved
N/A	Custody seal intact
☑	Samples were delivered within holding time
☑	Samples to be tested for volatiles had zero headspace
☑	All samples were received in good condition (no broken jars, labelled correctly…).
☐	Samples have been subcontracted

Comments

This report contains:
Sample reciept non-conformities
Summary of samples and requested analysis
Requested report deliverables

Asbestos Samples are reported as per the State EPA guidelines

Contact details

If you have any questions with respect to these samples please contact:
sls@ade.group



Krista Johnston

Sydney Laboratory Services

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A.C.N. 093 452 950
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Silverwater 2128
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SAMPLE RECEIPT NOTIFICATION (SRN)

Laboratory Sample ID	Client Sample ID	6 Metal Suite	8 Metal Suite	BTEX	PAH	OCP/OPP	PCB	vTRH	TRH	pH/EC	pH/pH fox	PFAS	Bulk	Dust	Dust Swab	Soil 65 grams	SOIl 500 g NEPM	AAM
2022012958	TB			X														
2022012959	TS			X														

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This certificate of analysis contains General Comments and Analytical Results. Quality Control Report and Laboratory Quality Acceptance Criteria have been issued separately.

This report supersedes any previous report(s) with this reference. This document shall not be reproduced, except in full.

This report has been electronically signed by authorised signatories below.

Authorised By

Kaiyu Li

General Comments

Samples are analysed on as received basis. Sampling is not covered by NATA accreditation.

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

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

Samples were analysed within holding time described by laboratory internal procedures if not stated otherwise. If samples delivered do not meet required analytical criteria, results will be marked with ^.

However surrogate standards are added to samples, results are not corrected for standards recoveries.

Analysis of VOC in water samples are performed on unfiltered waters (as received) spiked with surrogates and injection standards only.

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All sampling information included in the report has been provided by customer.

Information provided by the customer can affect the validity of the results.

Certificate of Analysis

Contact:	Stephen Bowly	**Date Reported:**	3/05/2022
Customer:	ADE Consulting Group	**No. of Samples:**	2
Address:	Unit 6 7 Millennium Court Silverwater NSW	**Date Received:**	29/04/2022
		Date of Analysis:	29/04/2022

Cust Ref: 21.2044 SOP WAC1

Glossary:

*NATA accreditation does not cover the performance of this service
ND-not detected,
NT-not tested
INS-Insufficient material to perform the test
LCS-Laboratory Control Sample
RPD-Relative Percent Difference
N/A-Not Applicable
< less than
> greater than
PQL- Practical Quantitation Limit
^Analytical result might be compromised due to sample condition or holding time requirements
Reaction rate 1 = Slight
Reaction rate 2 = Moderate
Reaction rate 3 = High
Reaction rate 4 = Vigorous

Certificate of Analysis

	Sample ID:	2022012958	2022012959
	Sample Name	TB	TS
Parameter	Units	PQL	
ESA-P-ORG08 & ORG10			
Benzene		1	<1 ug/L	110%
Toluene		1	<1 ug/L	99%
Ethylbenzene		1	<1 ug/L	94%
m,p Xylene		2	<2 ug/L	95%
o Xylene		1	<1 ug/L	97%
Fluorobenzene (Surr.)	%		76	103

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Unit 4/10-11 Millennium Court,
Silverwater 2128
Ph: (02) 9648-6669

Accreditation No.14664
Accredited for compliance with ISO/IEC 17025 - Testing.

This Quality Control Report contains results of QAQC samples analysis and the Laboratory Acceptance Criteria.

This report supersedes any previous report(s) with this reference. This document shall not be reproduced, except in full.

This report has been electronically signed by authorised signatories below.

Authorised By



Kaiyu Li

General Comments

Duplicate samples and matrix spike may not be prepared on smaller jobs, however are analysed at frequency. QAQC samples shown within the report as e.g. Batch Blank, Batch Matrix Spike were performed on samples not reported on that Certificate of Analysis.

Blank This is the component of the analytical signal which is not derived from the sample but from reagents, glassware etc, can be determined by processing solvents and reagents in the same manner as for samples.
Duplicate This is the interlaboratory split of a random sample from the processed batch
Matrix Spike A portion of the sample is spiked with a known concentration of target analyte. The purpose of the matrix spike is to monitor the performance of the analytical method used and to determine whether matrix interferences exist.
LCS (Laboratory Control Sample): This comprises either a standard reference material or a control matrix (such as a blank sand or water) fortified with analytes representative of the analyte class.
Surr. (Surrogate Spike) Surrogates are known additions to each sample, blank and matrix spike or LCS in a batch. Surrogates are chosen as a compounds which are similar to the analyte of interest, however are not expected to be found in real samples.

Laboratory Acceptance Criteria

Blank shall be < PQL
Matrix Spikes and LCS: Generally 70-130% for inorganics/metals/PFAS, 60-140% for organics is acceptable. Matrix heterogeneity may result in matrix spike analyses falling outside these limits
RPD Duplicates: Global RPD Duplicates Acceptance Criteria is 30% however the following acceptance guidelines are equally applicable:
Results <10 times the PQL : No Limit
Results between 10-20 times the PQL : RPD must lie between 0-50%
Results >20 times the PQL : RPD must lie between 0-30%
Surrogate Recoveries : Recoveries must lie between 50-150%

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Information provided by the customer can affect the validity of the results.

Quality Control Report

Contact:	Stephen Bowly	**Date Reported:**	3/05/2022
Customer:	ADE Consulting Group	**No. of Samples:**	5
Address:	Unit 6 7 Millennium Court Silverwater NSW	**Date Received:**	29/04/2022
		Date of Analysis:	29/04/2022

Cust Ref: 21.2044 SOP WAC1

Glossary:

*NATA accreditation does not cover the performance of this service
ND-not detected,
NT-not tested
INS-Insufficient material to perform the test
LCS-Laboratory Control Sample
RPD-Relative Percent Difference
N/A-Not Applicable
< less than
> greater than
PQL- Practical Quantitation Limit
^Analytical result might be compromised due to sample condition or holding time requirements
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Reaction rate 3 = High
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Quality Control Report

	Sample ID:	D202201284002	D202201284501
	Sample Name	21.1029 WAC74.TP2	21.1029 WAC74.BR
Parameter	**Units**	**PQL**	
ESA-P-ORG7 & ORG8			
Benzene			Pass	Pass
Toluene			Pass	Pass
Ethylbenzene			Pass	Pass
m.p Xylene			Pass	Pass
o Xylene			Pass	Pass
Fluorobenzene (Surr.)	%		67	73

	Sample ID:	Q2022003084
	Sample Name	
Parameter	**Units**	**PQL**	BTEX Blank - Soil
ESA-P-ORG7 & ORG8			
Benzene	mg/kg	0.5	<0.50
Toluene	mg/kg	0.5	<0.50
Ethylbenzene	mg/kg	1	<1.0
m.p Xylene	mg/kg	2	<2.0
o Xylene	mg/kg	1	<1.0

		Sample ID:	**Q2022003085**
		Sample Name	
Parameter	***Units***	***PQL***	BTEX Blank Sp-Soil
ESA-P-ORG7 & ORG8			
Benzene	%		98
Toluene	%		87
Ethylbenzene	%		82
m.p Xylene	%		83
o Xylene	%		81
Fluorobenzene (Surr.)	%		85

		Sample ID:	**S202201283902**
		Sample Name	**21.1029 WAC74.TP1**
Parameter	***Units***	***PQL***	
ESA-P-ORG-07 & 08			
Benzene	%		106
Toluene	%		94
Ethylbenzene	%		88
m.p Xylene	%		89
o Xylene	%		88
Fluorobenzene (Surr.)	%		91

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Silverwater 2128
Ph: (02) 9648-6669

Document Revision Date: 30.06.2020

ESA-F-02 COC - Chain Of Custody (External: Envirolab)

ADECONSULTINGGROUP SOLUTIONS THROUGH INNOVATION

PROJECT:	Sydney Metro West_Sydney Olympic Park	LABORATORY REFERENCE NO. (Lab use ONLY):	294280
PROJECT NUMBER - INVOICE NUMBER	21.2044_SOP_WAC1		
SAMPLES DELIVERED BY:	ADE Consulting Group 6/7 Millennium Ct, Silverwater NSW 2128	RECEIVED BY: Kelly Wayne	SIGNATURE:
SAMPLERS:	Sinead O'Rourke, Megan Lynch	SAMPLES: CHILLED: ☑	PRESERVED: ☑ PRESERVATION METHOD: ICE
TURNAROUND:	24h: 48h: 72h: 4 WORKING DAYS: xx	MINIMAL HEADSPACE: ☐	WITHIN HOLDING TIME: ☐
SAMPLING DATE:	21.02.2022	DATE: 28/4/22	TIME: 1550
AFTER TEST STORAGE:	ROOM TEMP: ☐ FRIDGE: X FREEZER: ☐ >>4 WEEKS: ☐ OTHER: ☐	LIMS LOT NO.	LIMS/EXCEL SIGNATURE:
REPORT FORMAT:	HARD COPY: ☐ E-MAIL: X		
CONSULTANTS SIGNATURE:	CONSULTANT E-MAIL: sinead.orourke@ade.group, megan.lynch@ade.group		
PROJECT MANAGERS SIGNATURE:	PROJECT MANAGERS E-MAIL: thesan.naidoo@ADE.group		

| | | | | | | | ANALYSES REQUIRED | | | | | | |

Envirolab Services Pty Ltd
ABN 37 112 535 645
12 Ashley St Chatswood NSW 2067
ph 02 9910 6200 fax 02 9910 6201
customerservice@envirolab.com.au
www.envirolab.com.au

SAMPLE RECEIPT ADVICE

Client Details

Client	ADE CONSULTING GROUP PTY LTD
Attention	Thesan Naidoo

Sample Login Details

Your reference	21.2044_SOP_WAC1
Envirolab Reference	294280
Date Sample Received	28/04/2022
Date Instructions Received	28/04/2022
Date Results Expected to be Reported	02/05/2022

Sample Condition

Samples received in appropriate condition for analysis	Yes
No. of Samples Provided	2 Soil
Turnaround Time Requested	2 days
Temperature on Receipt (°C)	13
Cooling Method	Ice
Sampling Date Provided	YES

Comments

Nil

Please direct any queries to:

Aileen Hie	Jacinta Hurst
Phone: 02 9910 6200	**Phone: 02 9910 6200**
Fax: 02 9910 6201	**Fax: 02 9910 6201**
Email: ahie@envirolab.com.au	**Email: jhurst@envirolab.com.au**

Analysis Underway, details on the following page:

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Sample ID	vTRH(C6-C10)/BTEXN in Soil	svTRH (C10-C40) in Soil	PAHs in Soil	Organochlorine Pesticides in soil	Organophosphorus Pesticides in Soil	PCBs in Soil	Acid Extractable metals in soil
SOP_WAC1_TP4_SRa	✓	✓	✓	✓	✓	✓	✓
SOP_WAC1_TP6_SRb	✓	✓	✓	✓	✓	✓	✓

The '✓' indicates the testing you have requested. **THIS IS NOT A REPORT OF THE RESULTS.**

Additional Info

Sample storage - Waters are routinely disposed of approximately 1 month and soils approximately 2 months from receipt.
Requests for longer term sample storage must be received in writing.
Please contact the laboratory immediately if observed settled sediment present in water samples is to be included in the extraction and/or analysis (exceptions include certain Physical Tests (pH/EC/BOD/COD/Apparent Colour etc.), Solids testing, Total Recoverable metals and PFAS analysis where solids are included by default.
TAT for Micro is dependent on incubation. This varies from 3 to 6 days.

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CERTIFICATE OF ANALYSIS 294280

Client Details

Client	ADE CONSULTING GROUP PTY LTD
Attention	Thesan Naidoo
Address	Unit 6, 7 Millenium Court, Silverwater, NSW, 2128

Sample Details

Your Reference	**21.2044_SOP_WAC1**
Number of Samples	2 Soil
Date samples received	28/04/2022
Date completed instructions received	28/04/2022

Analysis Details

Please refer to the following pages for results, methodology summary and quality control data.

Samples were analysed as received from the client. Results relate specifically to the samples as received.

Results are reported on a dry weight basis for solids and on an as received basis for other matrices.

Report Details

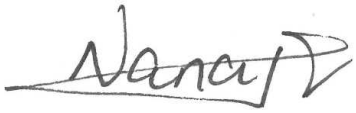
Date results requested by	02/05/2022
Date of Issue	02/05/2022

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Accredited for compliance with ISO/IEC 17025 - Testing. **Tests not covered by NATA are denoted with ***

Results Approved By
Dragana Tomas, Senior Chemist
Hannah Nguyen, Metals Supervisor
Liam Timmins, Chemist

Authorised By



Nancy Zhang, Laboratory Manager

vTRH(C6-C10)/BTEXN in Soil			
Our Reference		294280-1	294280-2
Your Reference	UNITS	SOP_WAC1_TP4_SRa	SOP_WAC1_TP6_SRb
Date Sampled		21/02/2022	21/02/2022
Type of sample		Soil	Soil
Date extracted	-	29/04/2022	29/04/2022
Date analysed	-	02/05/2022	02/05/2022
TRH C_6 - C_9	mg/kg	<25	<25
TRH C_6 - C_{10}	mg/kg	<25	<25
vTPH C_6 - C_{10} less BTEX (F1)	mg/kg	<25	<25
Benzene	mg/kg	<0.2	<0.2
Toluene	mg/kg	<0.5	<0.5
Ethylbenzene	mg/kg	<1	<1
m+p-xylene	mg/kg	<2	<2
o-Xylene	mg/kg	<1	<1
Naphthalene	mg/kg	<1	<1
Total +ve Xylenes	mg/kg	<1	<1
Surrogate aaa-Trifluorotoluene	%	80	87

svTRH (C10-C40) in Soil			
Our Reference	UNITS	294280-1	294280-2
Your Reference		SOP_WAC1_TP4_SRa	SOP_WAC1_TP6_SRb
Date Sampled		21/02/2022	21/02/2022
Type of sample		Soil	Soil
Date extracted	-	29/04/2022	29/04/2022
Date analysed	-	02/05/2022	02/05/2022
TRH C_{10} - C_{14}	mg/kg	<50	<50
TRH C_{15} - C_{28}	mg/kg	<100	<100
TRH C_{29} - C_{36}	mg/kg	<100	<100
Total +ve TRH (C10-C36)	mg/kg	<50	<50
TRH >C_{10} -C_{16}	mg/kg	<50	<50
TRH >C_{10} - C_{16} less Naphthalene (F2)	mg/kg	<50	<50
TRH >C_{16} -C_{34}	mg/kg	<100	<100
TRH >C_{34} -C_{40}	mg/kg	<100	<100
Total +ve TRH (>C10-C40)	mg/kg	<50	<50
Surrogate o-Terphenyl	%	81	80

PAHs in Soil			
Our Reference		294280-1	294280-2
Your Reference	UNITS	SOP_WAC1_TP4_SRa	SOP_WAC1_TP6_SRb
Date Sampled		21/02/2022	21/02/2022
Type of sample		Soil	Soil
Date extracted	-	29/04/2022	29/04/2022
Date analysed	-	29/04/2022	29/04/2022
Naphthalene	mg/kg	<0.1	<0.1
Acenaphthylene	mg/kg	<0.1	<0.1
Acenaphthene	mg/kg	<0.1	<0.1
Fluorene	mg/kg	<0.1	<0.1
Phenanthrene	mg/kg	<0.1	<0.1
Anthracene	mg/kg	<0.1	<0.1
Fluoranthene	mg/kg	<0.1	<0.1
Pyrene	mg/kg	<0.1	<0.1
Benzo(a)anthracene	mg/kg	<0.1	<0.1
Chrysene	mg/kg	<0.1	<0.1
Benzo(b,j+k)fluoranthene	mg/kg	<0.2	<0.2
Benzo(a)pyrene	mg/kg	<0.05	<0.05
Indeno(1,2,3-c,d)pyrene	mg/kg	<0.1	<0.1
Dibenzo(a,h)anthracene	mg/kg	<0.1	<0.1
Benzo(g,h,i)perylene	mg/kg	<0.1	<0.1
Total +ve PAH's	mg/kg	<0.05	<0.05
Benzo(a)pyrene TEQ calc (zero)	mg/kg	<0.5	<0.5
Benzo(a)pyrene TEQ calc(half)	mg/kg	<0.5	<0.5
Benzo(a)pyrene TEQ calc(PQL)	mg/kg	<0.5	<0.5
Surrogate p-Terphenyl-d14	%	118	113

Organochlorine Pesticides in soil			
Our Reference		294280-1	294280-2
Your Reference	UNITS	SOP_WAC1_TP4_SRa	SOP_WAC1_TP6_SRb
Date Sampled		21/02/2022	21/02/2022
Type of sample		Soil	Soil
Date extracted	-	29/04/2022	29/04/2022
Date analysed	-	29/04/2022	29/04/2022
alpha-BHC	mg/kg	<0.1	<0.1
HCB	mg/kg	<0.1	<0.1
beta-BHC	mg/kg	<0.1	<0.1
gamma-BHC	mg/kg	<0.1	<0.1
Heptachlor	mg/kg	<0.1	<0.1
delta-BHC	mg/kg	<0.1	<0.1
Aldrin	mg/kg	<0.1	0.1
Heptachlor Epoxide	mg/kg	<0.1	<0.1
gamma-Chlordane	mg/kg	<0.1	<0.1
alpha-chlordane	mg/kg	<0.1	<0.1
Endosulfan I	mg/kg	<0.1	<0.1
pp-DDE	mg/kg	<0.1	<0.1
Dieldrin	mg/kg	<0.1	0.5
Endrin	mg/kg	<0.1	<0.1
Endosulfan II	mg/kg	<0.1	<0.1
pp-DDD	mg/kg	<0.1	<0.1
Endrin Aldehyde	mg/kg	<0.1	<0.1
pp-DDT	mg/kg	<0.1	<0.1
Endosulfan Sulphate	mg/kg	<0.1	<0.1
Methoxychlor	mg/kg	<0.1	<0.1
Total +ve DDT+DDD+DDE	mg/kg	<0.1	<0.1
Surrogate TCMX	%	105	105

Organophosphorus Pesticides in Soil			
Our Reference	UNITS	294280-1	294280-2
Your Reference		SOP_WAC1_TP4_SRa	SOP_WAC1_TP6_SRb
Date Sampled		21/02/2022	21/02/2022
Type of sample		Soil	Soil
Date extracted	-	29/04/2022	29/04/2022
Date analysed	-	29/04/2022	29/04/2022
Dichlorvos	mg/kg	<0.1	<0.1
Dimethoate	mg/kg	<0.1	<0.1
Diazinon	mg/kg	<0.1	<0.1
Chlorpyriphos-methyl	mg/kg	<0.1	<0.1
Ronnel	mg/kg	<0.1	<0.1
Fenitrothion	mg/kg	<0.1	<0.1
Malathion	mg/kg	<0.1	<0.1
Chlorpyriphos	mg/kg	<0.1	<0.1
Parathion	mg/kg	<0.1	<0.1
Bromophos-ethyl	mg/kg	<0.1	<0.1
Ethion	mg/kg	<0.1	<0.1
Azinphos-methyl (Guthion)	mg/kg	<0.1	<0.1
Surrogate TCMX	%	105	105

PCBs in Soil			
Our Reference		294280-1	294280-2
Your Reference	UNITS	SOP_WAC1_TP4_SRa	SOP_WAC1_TP6_SRb
Date Sampled		21/02/2022	21/02/2022
Type of sample		Soil	Soil
Date extracted	-	29/04/2022	29/04/2022
Date analysed	-	29/04/2022	29/04/2022
Aroclor 1016	mg/kg	<0.1	<0.1
Aroclor 1221	mg/kg	<0.1	<0.1
Aroclor 1232	mg/kg	<0.1	<0.1
Aroclor 1242	mg/kg	<0.1	<0.1
Aroclor 1248	mg/kg	<0.1	<0.1
Aroclor 1254	mg/kg	<0.1	<0.1
Aroclor 1260	mg/kg	<0.1	<0.1
Total +ve PCBs (1016-1260)	mg/kg	<0.1	<0.1
Surrogate TCMX	%	105	105

Acid Extractable metals in soil			
Our Reference		294280-1	294280-2
Your Reference	UNITS	SOP_WAC1_TP4_SRa	SOP_WAC1_TP6_SRb
Date Sampled		21/02/2022	21/02/2022
Type of sample		Soil	Soil
Date prepared	-	29/04/2022	29/04/2022
Date analysed	-	02/05/2022	02/05/2022
Arsenic	mg/kg	<4	<4
Cadmium	mg/kg	<0.4	<0.4
Chromium	mg/kg	4	7
Copper	mg/kg	7	13
Lead	mg/kg	5	9
Mercury	mg/kg	<0.1	<0.1
Nickel	mg/kg	11	8
Zinc	mg/kg	11	15

Moisture			
Our Reference		294280-1	294280-2
Your Reference	UNITS	SOP_WAC1_TP4_SRa	SOP_WAC1_TP6_SRb
Date Sampled		21/02/2022	21/02/2022
Type of sample		Soil	Soil
Date prepared	-	29/04/2022	29/04/2022
Date analysed	-	02/05/2022	02/05/2022
Moisture	%	8.0	9.6

Method ID	Methodology Summary
Inorg-008	Moisture content determined by heating at 105+/-5 °C for a minimum of 12 hours.
Metals-020	Determination of various metals by ICP-AES.
Metals-021	Determination of Mercury by Cold Vapour AAS.
Org-020	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-FID. F2 = (>C10-C16)-Naphthalene as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater (HSLs Tables 1A (3, 4)). Note Naphthalene is determined from the VOC analysis.
Org-020	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-FID. F2 = (>C10-C16)-Naphthalene as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater (HSLs Tables 1A (3, 4)). Note Naphthalene is determined from the VOC analysis. Note, the Total +ve TRH PQL is reflective of the lowest individual PQL and is therefore "Total +ve TRH" is simply a sum of the positive individual TRH fractions (>C10-C40).
Org-021	Soil samples are extracted with dichloromethane/acetone and waters with dichloromethane and analysed by GC-ECD.
Org-021	Soil samples are extracted with dichloromethane/acetone and waters with dichloromethane and analysed by GC-ECD. Note, the Total +ve PCBs PQL is reflective of the lowest individual PQL and is therefore" Total +ve PCBs" is simply a sum of the positive individual PCBs.
Org-022	Determination of VOCs sampled onto coconut shell charcoal sorbent tubes, that can be desorbed using carbon disulphide, and analysed by GC-MS.
Org-022/025	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-MS/GC-MSMS.
Org-022/025	Soil samples are extracted with dichloromethane/acetone and waters with dichloromethane and analysed by GC-MS/GC-MSMS. Note, the Total +ve reported DDD+DDE+DDT PQL is reflective of the lowest individual PQL and is therefore simply a sum of the positive individually report DDD+DDE+DDT.

Method ID	Methodology Summary
Org-022/025	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-MS and/or GC-MS/MS. Benzo(a)pyrene TEQ as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater - 2013. For soil results:- 1. 'EQ PQL'values are assuming all contributing PAHs reported as <PQL are actually at the PQL. This is the most conservative approach and can give false positive TEQs given that PAHs that contribute to the TEQ calculation may not be present. 2. 'EQ zero'values are assuming all contributing PAHs reported as <PQL are zero. This is the least conservative approach and is more susceptible to false negative TEQs when PAHs that contribute to the TEQ calculation are present but below PQL. 3. 'EQ half PQL'values are assuming all contributing PAHs reported as <PQL are half the stipulated PQL. Hence a mid-point between the most and least conservative approaches above. Note, the Total +ve PAHs PQL is reflective of the lowest individual PQL and is therefore "Total +ve PAHs" is simply a sum of the positive individual PAHs.
Org-023	Soil samples are extracted with methanol and spiked into water prior to analysing by purge and trap GC-MS.
Org-023	Soil samples are extracted with methanol and spiked into water prior to analysing by purge and trap GC-MS. Water samples are analysed directly by purge and trap GC-MS. F1 = (C6-C10)-BTEX as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater.
Org-023	Soil samples are extracted with methanol and spiked into water prior to analysing by purge and trap GC-MS. Water samples are analysed directly by purge and trap GC-MS. F1 = (C6-C10)-BTEX as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater. Note, the Total +ve Xylene PQL is reflective of the lowest individual PQL and is therefore "Total +ve Xylenes" is simply a sum of the positive individual Xylenes.

QUALITY CONTROL: vTRH(C6-C10)/BTEXN in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-1	[NT]
Date extracted	-			29/04/2022	[NT]	[NT]	[NT]	[NT]	29/04/2022	[NT]
Date analysed	-			02/05/2022	[NT]	[NT]	[NT]	[NT]	02/05/2022	[NT]
TRH C_6 - C_9	mg/kg	25	Org-023	<25	[NT]	[NT]	[NT]	[NT]	94	[NT]
TRH C_6 - C_{10}	mg/kg	25	Org-023	<25	[NT]	[NT]	[NT]	[NT]	94	[NT]
Benzene	mg/kg	0.2	Org-023	<0.2	[NT]	[NT]	[NT]	[NT]	100	[NT]
Toluene	mg/kg	0.5	Org-023	<0.5	[NT]	[NT]	[NT]	[NT]	96	[NT]
Ethylbenzene	mg/kg	1	Org-023	<1	[NT]	[NT]	[NT]	[NT]	92	[NT]
m+p-xylene	mg/kg	2	Org-023	<2	[NT]	[NT]	[NT]	[NT]	90	[NT]
o-Xylene	mg/kg	1	Org-023	<1	[NT]	[NT]	[NT]	[NT]	96	[NT]
Naphthalene	mg/kg	1	Org-023	<1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Surrogate aaa-Trifluorotoluene	%		Org-023	99	[NT]	[NT]	[NT]	[NT]	104	[NT]

QUALITY CONTROL: svTRH (C10-C40) in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-1	[NT]
Date extracted	-			29/04/2022	[NT]	[NT]	[NT]	[NT]	29/04/2022	[NT]
Date analysed	-			02/05/2022	[NT]	[NT]	[NT]	[NT]	02/05/2022	[NT]
TRH C_{10} - C_{14}	mg/kg	50	Org-020	<50	[NT]	[NT]	[NT]	[NT]	130	[NT]
TRH C_{15} - C_{28}	mg/kg	100	Org-020	<100	[NT]	[NT]	[NT]	[NT]	110	[NT]
TRH C_{29} - C_{36}	mg/kg	100	Org-020	<100	[NT]	[NT]	[NT]	[NT]	83	[NT]
TRH >C_{10} -C_{16}	mg/kg	50	Org-020	<50	[NT]	[NT]	[NT]	[NT]	130	[NT]
TRH >C_{16} -C_{34}	mg/kg	100	Org-020	<100	[NT]	[NT]	[NT]	[NT]	110	[NT]
TRH >C_{34} -C_{40}	mg/kg	100	Org-020	<100	[NT]	[NT]	[NT]	[NT]	83	[NT]
Surrogate o-Terphenyl	%		Org-020	88	[NT]	[NT]	[NT]	[NT]	121	[NT]

QUALITY CONTROL: PAHs in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-1	[NT]
Date extracted	-			29/04/2022	[NT]	[NT]	[NT]	[NT]	29/04/2022	[NT]
Date analysed	-			29/04/2022	[NT]	[NT]	[NT]	[NT]	29/04/2022	[NT]
Naphthalene	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	95	[NT]
Acenaphthylene	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Acenaphthene	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	104	[NT]
Fluorene	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	104	[NT]
Phenanthrene	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	101	[NT]
Anthracene	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Fluoranthene	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	104	[NT]
Pyrene	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	104	[NT]
Benzo(a)anthracene	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Chrysene	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	100	[NT]
Benzo(b,j+k)fluoranthene	mg/kg	0.2	Org-022/025	<0.2	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Benzo(a)pyrene	mg/kg	0.05	Org-022/025	<0.05	[NT]	[NT]	[NT]	[NT]	100	[NT]
Indeno(1,2,3-c,d)pyrene	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Dibenzo(a,h)anthracene	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Benzo(g,h,i)perylene	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Surrogate p-Terphenyl-d14	%		Org-022/025	120	[NT]	[NT]	[NT]	[NT]	119	[NT]

QUALITY CONTROL: Organochlorine Pesticides in soil					Duplicate				Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-1	[NT]
Date extracted	-			29/04/2022	[NT]	[NT]	[NT]	[NT]	29/04/2022	[NT]
Date analysed	-			29/04/2022	[NT]	[NT]	[NT]	[NT]	29/04/2022	[NT]
alpha-BHC	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	107	[NT]
HCB	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
beta-BHC	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	105	[NT]
gamma-BHC	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Heptachlor	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	107	[NT]
delta-BHC	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Aldrin	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	105	[NT]
Heptachlor Epoxide	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	104	[NT]
gamma-Chlordane	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
alpha-chlordane	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Endosulfan I	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
pp-DDE	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	104	[NT]
Dieldrin	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	103	[NT]
Endrin	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	108	[NT]
Endosulfan II	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
pp-DDD	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	104	[NT]
Endrin Aldehyde	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
pp-DDT	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Endosulfan Sulphate	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	125	[NT]
Methoxychlor	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Surrogate TCMX	%		Org-022/025	111	[NT]	[NT]	[NT]	[NT]	113	[NT]

QUALITY CONTROL: Organophosphorus Pesticides in Soil					Duplicate				Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-1	[NT]
Date extracted	-			29/04/2022	[NT]	[NT]	[NT]	[NT]	29/04/2022	[NT]
Date analysed	-			29/04/2022	[NT]	[NT]	[NT]	[NT]	29/04/2022	[NT]
Dichlorvos	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	118	[NT]
Dimethoate	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Diazinon	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Chlorpyriphos-methyl	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Ronnel	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	106	[NT]
Fenitrothion	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	112	[NT]
Malathion	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	116	[NT]
Chlorpyriphos	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	105	[NT]
Parathion	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	111	[NT]
Bromophos-ethyl	mg/kg	0.1	Org-022	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Ethion	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	109	[NT]
Azinphos-methyl (Guthion)	mg/kg	0.1	Org-022/025	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Surrogate TCMX	%		Org-022/025	111	[NT]	[NT]	[NT]	[NT]	113	[NT]

QUALITY CONTROL: PCBs in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-1	[NT]
Date extracted	-			29/04/2022	[NT]	[NT]	[NT]	[NT]	29/04/2022	[NT]
Date analysed	-			29/04/2022	[NT]	[NT]	[NT]	[NT]	29/04/2022	[NT]
Aroclor 1016	mg/kg	0.1	Org-021	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Aroclor 1221	mg/kg	0.1	Org-021	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Aroclor 1232	mg/kg	0.1	Org-021	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Aroclor 1242	mg/kg	0.1	Org-021	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Aroclor 1248	mg/kg	0.1	Org-021	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Aroclor 1254	mg/kg	0.1	Org-021	<0.1	[NT]	[NT]	[NT]	[NT]	106	[NT]
Aroclor 1260	mg/kg	0.1	Org-021	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Surrogate TCMX	%		Org-021	111	[NT]	[NT]	[NT]	[NT]	113	[NT]

QUALITY CONTROL: Acid Extractable metals in soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-1	[NT]
Date prepared	-			29/04/2022	[NT]	[NT]	[NT]	[NT]	29/04/2022	[NT]
Date analysed	-			02/05/2022	[NT]	[NT]	[NT]	[NT]	02/05/2022	[NT]
Arsenic	mg/kg	4	Metals-020	<4	[NT]	[NT]	[NT]	[NT]	99	[NT]
Cadmium	mg/kg	0.4	Metals-020	<0.4	[NT]	[NT]	[NT]	[NT]	96	[NT]
Chromium	mg/kg	1	Metals-020	<1	[NT]	[NT]	[NT]	[NT]	91	[NT]
Copper	mg/kg	1	Metals-020	<1	[NT]	[NT]	[NT]	[NT]	89	[NT]
Lead	mg/kg	1	Metals-020	<1	[NT]	[NT]	[NT]	[NT]	91	[NT]
Mercury	mg/kg	0.1	Metals-021	<0.1	[NT]	[NT]	[NT]	[NT]	110	[NT]
Nickel	mg/kg	1	Metals-020	<1	[NT]	[NT]	[NT]	[NT]	92	[NT]
Zinc	mg/kg	1	Metals-020	<1	[NT]	[NT]	[NT]	[NT]	96	[NT]

Result Definitions

NT	Not tested
NA	Test not required
INS	Insufficient sample for this test
PQL	Practical Quantitation Limit
<	Less than
>	Greater than
RPD	Relative Percent Difference
LCS	Laboratory Control Sample
NS	Not specified
NEPM	National Environmental Protection Measure
NR	Not Reported

Quality Control Definitions

Blank	This is the component of the analytical signal which is not derived from the sample but from reagents, glassware etc, can be determined by processing solvents and reagents in exactly the same manner as for samples.
Duplicate	This is the complete duplicate analysis of a sample from the process batch. If possible, the sample selected should be one where the analyte concentration is easily measurable.
Matrix Spike	A portion of the sample is spiked with a known concentration of target analyte. The purpose of the matrix spike is to monitor the performance of the analytical method used and to determine whether matrix interferences exist.
LCS (Laboratory Control Sample)	This comprises either a standard reference material or a control matrix (such as a blank sand or water) fortified with analytes representative of the analyte class. It is simply a check sample.
Surrogate Spike	Surrogates are known additions to each sample, blank, matrix spike and LCS in a batch, of compounds which are similar to the analyte of interest, however are not expected to be found in real samples.

Australian Drinking Water Guidelines recommend that Thermotolerant Coliform, Faecal Enterococci, & E.Coli levels are less than 1cfu/100mL. The recommended maximums are taken from "Australian Drinking Water Guidelines", published by NHMRC & ARMC 2011.

The recommended maximums for analytes in urine are taken from “2018 TLVs and BEIs”, as published by ACGIH (where available). Limit provided for Nickel is a precautionary guideline as per Position Paper prepared by AIOH Exposure Standards Committee, 2016.

Guideline limits for Rinse Water Quality reported as per analytical requirements and specifications of AS 4187, Amdt 2 2019, Table 7.2

Laboratory Acceptance Criteria

Duplicate sample and matrix spike recoveries may not be reported on smaller jobs, however, were analysed at a frequency to meet or exceed NEPM requirements. All samples are tested in batches of 20. The duplicate sample RPD and matrix spike recoveries for the batch were within the laboratory acceptance criteria.

Filters, swabs, wipes, tubes and badges will not have duplicate data as the whole sample is generally extracted during sample extraction.

Spikes for Physical and Aggregate Tests are not applicable.

For VOCs in water samples, three vials are required for duplicate or spike analysis.

Duplicates: >10xPQL - RPD acceptance criteria will vary depending on the analytes and the analytical techniques but is typically in the range 20%-50% – see ELN-P05 QA/QC tables for details; <10xPQL - RPD are higher as the results approach PQL and the estimated measurement uncertainty will statistically increase.

Matrix Spikes, LCS and Surrogate recoveries: Generally 70-130% for inorganics/metals (not SPOCAS); 60-140% for organics/SPOCAS (+/-50% surrogates) and 10-140% for labile SVOCs (including labile surrogates), ultra trace organics and speciated phenols is acceptable.

In circumstances where no duplicate and/or sample spike has been reported at 1 in 10 and/or 1 in 20 samples respectively, the sample volume submitted was insufficient in order to satisfy laboratory QA/QC protocols.

When samples are received where certain analytes are outside of recommended technical holding times (THTs), the analysis has proceeded. Where analytes are on the verge of breaching THTs, every effort will be made to analyse within the THT or as soon as practicable.

Where sampling dates are not provided, Envirolab are not in a position to comment on the validity of the analysis where recommended technical holding times may have been breached.

Measurement Uncertainty estimates are available for most tests upon request.

Analysis of aqueous samples typically involves the extraction/digestion and/or analysis of the liquid phase only (i.e. NOT any settled sediment phase but inclusive of suspended particles if present), unless stipulated on the Envirolab COC and/or by correspondence. Notable exceptions include certain Physical Tests (pH/EC/BOD/COD/Apparent Colour etc.), Solids testing, total recoverable metals and PFAS where solids are included by default.

Samples for Microbiological analysis (not Amoeba forms) received outside of the 2-8°C temperature range do not meet the ideal cooling conditions as stated in AS2031-2012.

Appendix E - Laboratory Analytical Certificates (ERM, 2022b)

eurofins | Environment Testing

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

Eurofins Environment Testing Australia Pty Ltd
ABN: 50 005 085 521

Melbourne
6 Monterey Road
Dandenong South VIC 3175
Phone : +61 3 8564 5000
NATA # 1261 Site # 1254

Sydney
Unit F3, Building F
16 Mars Road
Lane Cove West NSW 2066
Phone : +61 2 9900 8400
NATA # 1261 Site # 18217

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

Newcastle
4/52 Industrial Drive
Mayfield East NSW 2304
PO Box 60 Wickham 2293
Phone : +61 2 4968 8448
NATA # 1261 Site # 25079

Eurofins ARL Pty Ltd
ABN: 91 05 0159 898

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

Eurofins Environment Testing NZ Limited
NZBN: 9429046024954

Auckland
35 O'Rorke Road
Penrose, Auckland 1061
Phone : +64 9 526 45 51
IANZ # 1327

Christchurch
43 Detroit Drive
Rolleston, Christchurch 7675
Phone : 0800 856 450
IANZ # 1290

Sample Receipt Advice

Company name:	ERM Sydney
Contact name:	Jessica Lawrence
Project name:	SOP
Project ID:	628507
Turnaround time:	5 Day
Date/Time received	Jan 25, 2022 4:06 PM
Eurofins reference	858847

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:

John Nguyen on phone : or by email: JohnNguyen@eurofins.com

Results will be delivered electronically via email to Jessica Lawrence - jessica.lawrence@erm.com.

Note: A copy of these results will also be delivered to the general ERM Sydney email address.

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eurofins | Environment Testing

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

Eurofins Environment Testing Australia Pty Ltd
ABN: 50 005 085 521

Melbourne
6 Monterey Road
Dandenong South VIC 3175
Phone : +61 3 8564 5000
NATA # 1261 Site # 1254

Sydney
Unit F3, Building F
16 Mars Road
Lane Cove West NSW 2066
Phone : +61 2 9900 8400
NATA # 1261 Site # 18217

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

Newcastle
4/52 Industrial Drive
Mayfield East NSW 2304
PO Box 60 Wickham 2293
Phone : +61 2 4968 8448
NATA # 1261 Site # 25079

Eurofins ARL Pty Ltd
ABN: 91 05 0159 898

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

Eurofins Environment Testing NZ Limited
NZBN: 9429046024954

Auckland
35 O'Rorke Road
Penrose, Auckland 1061
Phone : +64 9 526 45 51
IANZ # 1327

Christchurch
43 Detroit Drive
Rolleston, Christchurch 7675
Phone : 0800 856 450
IANZ # 1290

Company Name: ERM Sydney
Address: Level 15, 309 Kent St
Sydney
NSW 2000

Project Name: SOP
Project ID: 628507

Order No.:
Report #: 858847
Phone: 02 8584 8888
Fax: 02 8584 8800

Received: Jan 25, 2022 4:06 PM
Due: Feb 2, 2022
Priority: 5 Day
Contact Name: Jessica Lawrence

Eurofins Analytical Services Manager : John Nguyen

Sample Detail						Moisture Set	Suite B10B:TRH/BTEXN/PAH/OCP/OPP/PCB/M8
Melbourne Laboratory - NATA # 1261 Site # 1254							
Sydney Laboratory - NATA # 1261 Site # 18217						X	X
Brisbane Laboratory - NATA # 1261 Site # 20794							
Mayfield Laboratory - NATA # 1261 Site # 25079							
Perth Laboratory - NATA # 2377 Site # 2370							
External Laboratory							
No	**Sample ID**	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**		
1	TRIP01_220117	Jan 17, 2022		Soil	S22-Ja35819	X	X
Test Counts						1	1

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ERM Sydney
Level 15, 309 Kent St
Sydney
NSW 2000

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: **Nicholas Grbich**

Report ***858847-S***
Project name SOP
Project ID 628507
Received Date Jan 25, 2022

Client Sample ID			**TRIP01_220117**
Sample Matrix			**Soil**
Eurofins Sample No.			**S22-Ja35819**
Date Sampled			**Jan 17, 2022**
Test/Reference	LOR	Unit	
Total Recoverable Hydrocarbons			
TRH C6-C9	20	mg/kg	< 20
TRH C10-C14	20	mg/kg	< 20
TRH C15-C28	50	mg/kg	< 50
TRH C29-C36	50	mg/kg	< 50
TRH C10-C36 (Total)	50	mg/kg	< 50
Naphthalene[N02]	0.5	mg/kg	< 0.5
TRH C6-C10	20	mg/kg	< 20
TRH C6-C10 less BTEX (F1)[N04]	20	mg/kg	< 20
TRH >C10-C16	50	mg/kg	< 50
TRH >C10-C16 less Naphthalene (F2)[N01]	50	mg/kg	< 50
TRH >C16-C34	100	mg/kg	< 100
TRH >C34-C40	100	mg/kg	< 100
TRH >C10-C40 (total)*	100	mg/kg	< 100
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	%	102
Polycyclic Aromatic Hydrocarbons			
Benzo(a)pyrene TEQ (lower bound) *	0.5	mg/kg	< 0.5
Benzo(a)pyrene TEQ (medium bound) *	0.5	mg/kg	0.6
Benzo(a)pyrene TEQ (upper bound) *	0.5	mg/kg	1.2
Acenaphthene	0.5	mg/kg	< 0.5
Acenaphthylene	0.5	mg/kg	< 0.5
Anthracene	0.5	mg/kg	< 0.5
Benz(a)anthracene	0.5	mg/kg	< 0.5
Benzo(a)pyrene	0.5	mg/kg	< 0.5
Benzo(b&j)fluoranthene[N07]	0.5	mg/kg	< 0.5
Benzo(g.h.i)perylene	0.5	mg/kg	< 0.5
Benzo(k)fluoranthene	0.5	mg/kg	< 0.5
Chrysene	0.5	mg/kg	< 0.5
Dibenz(a.h)anthracene	0.5	mg/kg	< 0.5

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Client Sample ID			TRIP01_220117
Sample Matrix			Soil
Eurofins Sample No.			S22-Ja35819
Date Sampled			Jan 17, 2022
Test/Reference	LOR	Unit	
Polycyclic Aromatic Hydrocarbons			
Fluoranthene	0.5	mg/kg	< 0.5
Fluorene	0.5	mg/kg	< 0.5
Indeno(1.2.3-cd)pyrene	0.5	mg/kg	< 0.5
Naphthalene	0.5	mg/kg	< 0.5
Phenanthrene	0.5	mg/kg	< 0.5
Pyrene	0.5	mg/kg	< 0.5
Total PAH*	0.5	mg/kg	< 0.5
2-Fluorobiphenyl (surr.)	1	%	106
p-Terphenyl-d14 (surr.)	1	%	117
Organochlorine Pesticides			
Chlordanes - Total	0.1	mg/kg	< 0.1
4.4'-DDD	0.05	mg/kg	< 0.05
4.4'-DDE	0.05	mg/kg	< 0.05
4.4'-DDT	0.05	mg/kg	< 0.05
a-HCH	0.05	mg/kg	< 0.05
Aldrin	0.05	mg/kg	< 0.05
b-HCH	0.05	mg/kg	< 0.05
d-HCH	0.05	mg/kg	< 0.05
Dieldrin	0.05	mg/kg	< 0.05
Endosulfan I	0.05	mg/kg	< 0.05
Endosulfan II	0.05	mg/kg	< 0.05
Endosulfan sulphate	0.05	mg/kg	< 0.05
Endrin	0.05	mg/kg	< 0.05
Endrin aldehyde	0.05	mg/kg	< 0.05
Endrin ketone	0.05	mg/kg	< 0.05
g-HCH (Lindane)	0.05	mg/kg	< 0.05
Heptachlor	0.05	mg/kg	< 0.05
Heptachlor epoxide	0.05	mg/kg	< 0.05
Hexachlorobenzene	0.05	mg/kg	< 0.05
Methoxychlor	0.05	mg/kg	< 0.05
Toxaphene	0.5	mg/kg	< 0.5
Aldrin and Dieldrin (Total)*	0.05	mg/kg	< 0.05
DDT + DDE + DDD (Total)*	0.05	mg/kg	< 0.05
Vic EPA IWRG 621 OCP (Total)*	0.1	mg/kg	< 0.1
Vic EPA IWRG 621 Other OCP (Total)*	0.1	mg/kg	< 0.1
Dibutylchlorendate (surr.)	1	%	85
Tetrachloro-m-xylene (surr.)	1	%	91
Organophosphorus Pesticides			
Azinphos-methyl	0.2	mg/kg	< 0.2
Bolstar	0.2	mg/kg	< 0.2
Chlorfenvinphos	0.2	mg/kg	< 0.2
Chlorpyrifos	0.2	mg/kg	< 0.2
Chlorpyrifos-methyl	0.2	mg/kg	< 0.2
Coumaphos	2	mg/kg	< 2
Demeton-S	0.2	mg/kg	< 0.2
Demeton-O	0.2	mg/kg	< 0.2
Diazinon	0.2	mg/kg	< 0.2
Dichlorvos	0.2	mg/kg	< 0.2
Dimethoate	0.2	mg/kg	< 0.2

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Client Sample ID			TRIP01_220117
Sample Matrix			Soil
Eurofins Sample No.			S22-Ja35819
Date Sampled			Jan 17, 2022
Test/Reference	LOR	Unit	
Organophosphorus Pesticides			
Disulfoton	0.2	mg/kg	< 0.2
EPN	0.2	mg/kg	< 0.2
Ethion	0.2	mg/kg	< 0.2
Ethoprop	0.2	mg/kg	< 0.2
Ethyl parathion	0.2	mg/kg	< 0.2
Fenitrothion	0.2	mg/kg	< 0.2
Fensulfothion	0.2	mg/kg	< 0.2
Fenthion	0.2	mg/kg	< 0.2
Malathion	0.2	mg/kg	< 0.2
Merphos	0.2	mg/kg	< 0.2
Methyl parathion	0.2	mg/kg	< 0.2
Mevinphos	0.2	mg/kg	< 0.2
Monocrotophos	2	mg/kg	< 2
Naled	0.2	mg/kg	< 0.2
Omethoate	2	mg/kg	< 2
Phorate	0.2	mg/kg	< 0.2
Pirimiphos-methyl	0.2	mg/kg	< 0.2
Pyrazophos	0.2	mg/kg	< 0.2
Ronnel	0.2	mg/kg	< 0.2
Terbufos	0.2	mg/kg	< 0.2
Tetrachlorvinphos	0.2	mg/kg	< 0.2
Tokuthion	0.2	mg/kg	< 0.2
Trichloronate	0.2	mg/kg	< 0.2
Triphenylphosphate (surr.)	1	%	93
Polychlorinated Biphenyls			
Aroclor-1016	0.1	mg/kg	< 0.1
Aroclor-1221	0.1	mg/kg	< 0.1
Aroclor-1232	0.1	mg/kg	< 0.1
Aroclor-1242	0.1	mg/kg	< 0.1
Aroclor-1248	0.1	mg/kg	< 0.1
Aroclor-1254	0.1	mg/kg	< 0.1
Aroclor-1260	0.1	mg/kg	< 0.1
Total PCB*	0.1	mg/kg	< 0.1
Dibutylchlorendate (surr.)	1	%	85
Tetrachloro-m-xylene (surr.)	1	%	91
Heavy Metals			
Arsenic	2	mg/kg	9.8
Cadmium	0.4	mg/kg	< 0.4
Chromium	5	mg/kg	8.6
Copper	5	mg/kg	31
Lead	5	mg/kg	12
Mercury	0.1	mg/kg	< 0.1
Nickel	5	mg/kg	< 5
Zinc	5	mg/kg	41
% Moisture	1	%	9.5

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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	Sydney	Jan 31, 2022	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
Total Recoverable Hydrocarbons - 2013 NEPM Fractions	Sydney	Jan 31, 2022	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
Total Recoverable Hydrocarbons - 2013 NEPM Fractions	Sydney	Jan 31, 2022	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
BTEX	Sydney	Jan 31, 2022	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
Polycyclic Aromatic Hydrocarbons	Sydney	Jan 31, 2022	14 Days
- Method: LTM-ORG-2130 PAH and Phenols in Soil and Water			
Organochlorine Pesticides	Sydney	Jan 31, 2022	14 Days
- Method: LTM-ORG-2220 OCP & PCB in Soil and Water			
Organophosphorus Pesticides	Sydney	Jan 31, 2022	14 Days
- Method: LTM-ORG-2200 Organophosphorus Pesticides by GC-MS			
Polychlorinated Biphenyls	Sydney	Jan 31, 2022	28 Days
- Method: LTM-ORG-2220 OCP & PCB in Soil and Water			
Metals M8	Sydney	Jan 31, 2022	28 Days
- Method: LTM-MET-3040 Metals in Waters, Soils & Sediments by ICP-MS			
% Moisture	Sydney	Jan 31, 2022	14 Days
- Method: LTM-GEN-7080 Moisture			

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Quality Control Results

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Method Blank							
Total Recoverable Hydrocarbons							
TRH C6-C9	mg/kg	< 20			20	Pass	
TRH C10-C14	mg/kg	< 20			20	Pass	
TRH C15-C28	mg/kg	< 50			50	Pass	
TRH C29-C36	mg/kg	< 50			50	Pass	
Naphthalene	mg/kg	< 0.5			0.5	Pass	
TRH C6-C10	mg/kg	< 20			20	Pass	
TRH >C10-C16	mg/kg	< 50			50	Pass	
TRH >C16-C34	mg/kg	< 100			100	Pass	
TRH >C34-C40	mg/kg	< 100			100	Pass	
Method Blank							
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							
Polycyclic Aromatic Hydrocarbons							
Acenaphthene	mg/kg	< 0.5			0.5	Pass	
Acenaphthylene	mg/kg	< 0.5			0.5	Pass	
Anthracene	mg/kg	< 0.5			0.5	Pass	
Benz(a)anthracene	mg/kg	< 0.5			0.5	Pass	
Benzo(a)pyrene	mg/kg	< 0.5			0.5	Pass	
Benzo(b&j)fluoranthene	mg/kg	< 0.5			0.5	Pass	
Benzo(g.h.i)perylene	mg/kg	< 0.5			0.5	Pass	
Benzo(k)fluoranthene	mg/kg	< 0.5			0.5	Pass	
Chrysene	mg/kg	< 0.5			0.5	Pass	
Dibenz(a.h)anthracene	mg/kg	< 0.5			0.5	Pass	
Fluoranthene	mg/kg	< 0.5			0.5	Pass	
Fluorene	mg/kg	< 0.5			0.5	Pass	
Indeno(1.2.3-cd)pyrene	mg/kg	< 0.5			0.5	Pass	
Naphthalene	mg/kg	< 0.5			0.5	Pass	
Phenanthrene	mg/kg	< 0.5			0.5	Pass	
Pyrene	mg/kg	< 0.5			0.5	Pass	
Method Blank							
Organochlorine Pesticides							
Chlordanes - Total	mg/kg	< 0.1			0.1	Pass	
4.4'-DDD	mg/kg	< 0.05			0.05	Pass	
4.4'-DDE	mg/kg	< 0.05			0.05	Pass	
4.4'-DDT	mg/kg	< 0.05			0.05	Pass	
a-HCH	mg/kg	< 0.05			0.05	Pass	
Aldrin	mg/kg	< 0.05			0.05	Pass	
b-HCH	mg/kg	< 0.05			0.05	Pass	
d-HCH	mg/kg	< 0.05			0.05	Pass	
Dieldrin	mg/kg	< 0.05			0.05	Pass	
Endosulfan I	mg/kg	< 0.05			0.05	Pass	
Endosulfan II	mg/kg	< 0.05			0.05	Pass	
Endosulfan sulphate	mg/kg	< 0.05			0.05	Pass	
Endrin	mg/kg	< 0.05			0.05	Pass	

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Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
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	
Aroclor-1260	mg/kg	< 0.1			0.1	Pass	
Total PCB*	mg/kg	< 0.1			0.1	Pass	

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Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Method Blank							
Heavy Metals							
Arsenic	mg/kg	< 2			2	Pass	
Cadmium	mg/kg	< 0.4			0.4	Pass	
Chromium	mg/kg	< 5			5	Pass	
Copper	mg/kg	< 5			5	Pass	
Lead	mg/kg	< 5			5	Pass	
Mercury	mg/kg	< 0.1			0.1	Pass	
Nickel	mg/kg	< 5			5	Pass	
Zinc	mg/kg	< 5			5	Pass	
LCS - % Recovery							
Total Recoverable Hydrocarbons							
TRH C6-C9	%	77			70-130	Pass	
TRH C10-C14	%	104			70-130	Pass	
Naphthalene	%	76			70-130	Pass	
TRH C6-C10	%	75			70-130	Pass	
TRH >C10-C16	%	102			70-130	Pass	
LCS - % Recovery							
BTEX							
Benzene	%	80			70-130	Pass	
Toluene	%	77			70-130	Pass	
Ethylbenzene	%	77			70-130	Pass	
m&p-Xylenes	%	77			70-130	Pass	
o-Xylene	%	78			70-130	Pass	
Xylenes - Total*	%	77			70-130	Pass	
LCS - % Recovery							
Polycyclic Aromatic Hydrocarbons							
Acenaphthene	%	98			70-130	Pass	
Acenaphthylene	%	101			70-130	Pass	
Anthracene	%	100			70-130	Pass	
Benz(a)anthracene	%	100			70-130	Pass	
Benzo(a)pyrene	%	99			70-130	Pass	
Benzo(b&j)fluoranthene	%	91			70-130	Pass	
Benzo(g.h.i)perylene	%	116			70-130	Pass	
Benzo(k)fluoranthene	%	100			70-130	Pass	
Chrysene	%	99			70-130	Pass	
Dibenz(a.h)anthracene	%	103			70-130	Pass	
Fluoranthene	%	95			70-130	Pass	
Fluorene	%	98			70-130	Pass	
Indeno(1.2.3-cd)pyrene	%	109			70-130	Pass	
Naphthalene	%	102			70-130	Pass	
Phenanthrene	%	101			70-130	Pass	
Pyrene	%	92			70-130	Pass	
LCS - % Recovery							
Organochlorine Pesticides							
Chlordanes - Total	%	87			70-130	Pass	
4.4'-DDD	%	88			70-130	Pass	
4.4'-DDE	%	89			70-130	Pass	
4.4'-DDT	%	94			70-130	Pass	
a-HCH	%	76			70-130	Pass	
Aldrin	%	78			70-130	Pass	
b-HCH	%	84			70-130	Pass	
d-HCH	%	96			70-130	Pass	
Dieldrin	%	80			70-130	Pass	

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Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Endosulfan I	%	95			70-130	Pass	
Endosulfan II	%	83			70-130	Pass	
Endosulfan sulphate	%	91			70-130	Pass	
Endrin	%	89			70-130	Pass	
Endrin aldehyde	%	81			70-130	Pass	
Endrin ketone	%	101			70-130	Pass	
g-HCH (Lindane)	%	89			70-130	Pass	
Heptachlor	%	79			70-130	Pass	
Heptachlor epoxide	%	76			70-130	Pass	
Hexachlorobenzene	%	83			70-130	Pass	
Methoxychlor	%	85			70-130	Pass	
LCS - % Recovery							
Organophosphorus Pesticides							
Diazinon	%	93			70-130	Pass	
Dimethoate	%	99			70-130	Pass	
Ethion	%	104			70-130	Pass	
Fenitrothion	%	88			70-130	Pass	
Methyl parathion	%	103			70-130	Pass	
Mevinphos	%	104			70-130	Pass	
LCS - % Recovery							
Polychlorinated Biphenyls							
Aroclor-1016	%	83			70-130	Pass	
Aroclor-1260	%	92			70-130	Pass	
LCS - % Recovery							
Heavy Metals							
Arsenic	%	89			80-120	Pass	
Cadmium	%	89			80-120	Pass	
Chromium	%	89			80-120	Pass	
Copper	%	88			80-120	Pass	
Lead	%	89			80-120	Pass	
Mercury	%	89			80-120	Pass	
Nickel	%	90			80-120	Pass	
Zinc	%	87			80-120	Pass	

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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
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.
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:

John Nguyen	Analytical Services Manager
Andrew Sullivan	Senior Analyst-Organic (NSW)
John Nguyen	Senior Analyst-Metal (NSW)
Roopesh Rangarajan	Senior Analyst-Volatile (NSW)



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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Company Name: ERM Sydney
Address: Level 15, 309 Kent St
Sydney
NSW 2000

Project Name: SOP
Project ID: 628507

Order No.:
Report #: 858994
Phone: 02 8584 8888
Fax: 02 8584 8800

Received: Jan 27, 2022 5:05 PM
Due: Feb 3, 2022
Priority: 5 Day
Contact Name: Nicholas Grbich

Eurofins Analytical Services Manager : John Nguyen

Sample Detail						Moisture Set	Eurofins Suite SVV: SVOC/VOC	Per- and Polyfluoroalkyl Substances (PFASs) - Short	Suite B10B:TRH/BTEXN/PAH/OCP/OPP/PCB/M8
Melbourne Laboratory - NATA # 1261 Site # 1254									
Sydney Laboratory - NATA # 1261 Site # 18217						X	X	X	X
Brisbane Laboratory - NATA # 1261 Site # 20794									
Mayfield Laboratory - NATA # 1261 Site # 25079									
Perth Laboratory - NATA # 2377 Site # 2370									
External Laboratory									
No	**Sample ID**	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**				
1	TRIP02_220119	Jan 19, 2022		Soil	S22-Ja37011	X	X		X
2	TRIP04_220119	Jan 19, 2022		Soil	S22-Ja37012	X		X	X
3	TRIP05_220120	Jan 20, 2022		Soil	S22-Ja37013	X	X	X	X
4	TRIP06_220121	Jan 21, 2022		Soil	S22-Ja37014	X		X	X
Test Counts						4	2	3	4

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ERM Sydney
Level 15, 309 Kent St
Sydney
NSW 2000

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: **Nicholas Grbich**

Report ***858994-S***
Project name SOP
Project ID 628507
Received Date Jan 27, 2022

Client Sample ID			**TRIP02_220119**	**TRIP04_220119**	**TRIP05_220120**	**TRIP06_220121**
Sample Matrix			**Soil**	**Soil**	**Soil**	**Soil**
Eurofins Sample No.			**S22-Ja37011**	**S22-Ja37012**	**S22-Ja37013**	**S22-Ja37014**
Date Sampled			**Jan 19, 2022**	**Jan 19, 2022**	**Jan 20, 2022**	**Jan 21, 2022**
Test/Reference	LOR	Unit				
Total Recoverable Hydrocarbons						
TRH C6-C9	20	mg/kg	< 20	< 20	< 20	< 20
TRH C10-C14	20	mg/kg	33	25	< 20	< 20
TRH C15-C28	50	mg/kg	62	52	< 50	< 50
TRH C29-C36	50	mg/kg	< 50	< 50	< 50	< 50
TRH C10-C36 (Total)	50	mg/kg	95	77	< 50	< 50
Naphthalene[N02]	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
TRH C6-C10	20	mg/kg	< 20	< 20	< 20	< 20
TRH C6-C10 less BTEX (F1)[N04]	20	mg/kg	< 20	< 20	< 20	< 20
TRH >C10-C16	50	mg/kg	< 50	< 50	< 50	< 50
TRH >C10-C16 less Naphthalene (F2)[N01]	50	mg/kg	< 50	< 50	< 50	< 50
TRH >C16-C34	100	mg/kg	< 100	< 100	< 100	< 100
TRH >C34-C40	100	mg/kg	< 100	< 100	< 100	< 100
TRH >C10-C40 (total)*	100	mg/kg	< 100	< 100	< 100	< 100
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	%	99	90	97	77
Volatile Organics						
1.1-Dichloroethane	0.5	mg/kg	< 0.5	-	< 0.5	-
1.1-Dichloroethene	0.5	mg/kg	< 0.5	-	< 0.5	-
1.1.1-Trichloroethane	0.5	mg/kg	< 0.5	-	< 0.5	-
1.1.1.2-Tetrachloroethane	0.5	mg/kg	< 0.5	-	< 0.5	-
1.1.2-Trichloroethane	0.5	mg/kg	< 0.5	-	< 0.5	-
1.1.2.2-Tetrachloroethane	0.5	mg/kg	< 0.5	-	< 0.5	-
1.2-Dibromoethane	0.5	mg/kg	< 0.5	-	< 0.5	-
1.2-Dichlorobenzene	0.5	mg/kg	< 0.5	-	< 0.5	-
1.2-Dichloroethane	0.5	mg/kg	< 0.5	-	< 0.5	-
1.2-Dichloropropane	0.5	mg/kg	< 0.5	-	< 0.5	-
1.2.3-Trichloropropane	0.5	mg/kg	< 0.5	-	< 0.5	-
1.2.4-Trimethylbenzene	0.5	mg/kg	< 0.5	-	< 0.5	-
1.3-Dichlorobenzene	0.5	mg/kg	< 0.5	-	< 0.5	-

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Client Sample ID			TRIP02_220119	TRIP04_220119	TRIP05_220120	TRIP06_220121
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			S22-Ja37011	S22-Ja37012	S22-Ja37013	S22-Ja37014
Date Sampled			Jan 19, 2022	Jan 19, 2022	Jan 20, 2022	Jan 21, 2022
Test/Reference	LOR	Unit				
Volatile Organics						
1.3-Dichloropropane	0.5	mg/kg	< 0.5	-	< 0.5	-
1.3.5-Trimethylbenzene	0.5	mg/kg	< 0.5	-	< 0.5	-
1.4-Dichlorobenzene	0.5	mg/kg	< 0.5	-	< 0.5	-
2-Butanone (MEK)	0.5	mg/kg	< 0.5	-	< 0.5	-
2-Propanone (Acetone)	0.5	mg/kg	< 0.5	-	< 0.5	-
4-Chlorotoluene	0.5	mg/kg	< 0.5	-	< 0.5	-
4-Methyl-2-pentanone (MIBK)	0.5	mg/kg	< 0.5	-	< 0.5	-
Allyl chloride	0.5	mg/kg	< 0.5	-	< 0.5	-
Benzene	0.1	mg/kg	< 0.1	-	< 0.1	-
Bromobenzene	0.5	mg/kg	< 0.5	-	< 0.5	-
Bromochloromethane	0.5	mg/kg	< 0.5	-	< 0.5	-
Bromodichloromethane	0.5	mg/kg	< 0.5	-	< 0.5	-
Bromoform	0.5	mg/kg	< 0.5	-	< 0.5	-
Bromomethane	0.5	mg/kg	< 0.5	-	< 0.5	-
Carbon disulfide	0.5	mg/kg	< 0.5	-	< 0.5	-
Carbon Tetrachloride	0.5	mg/kg	< 0.5	-	< 0.5	-
Chlorobenzene	0.5	mg/kg	< 0.5	-	< 0.5	-
Chloroethane	0.5	mg/kg	< 0.5	-	< 0.5	-
Chloroform	0.5	mg/kg	< 0.5	-	< 0.5	-
Chloromethane	0.5	mg/kg	< 0.5	-	< 0.5	-
cis-1.2-Dichloroethene	0.5	mg/kg	< 0.5	-	< 0.5	-
cis-1.3-Dichloropropene	0.5	mg/kg	< 0.5	-	< 0.5	-
Dibromochloromethane	0.5	mg/kg	< 0.5	-	< 0.5	-
Dibromomethane	0.5	mg/kg	< 0.5	-	< 0.5	-
Dichlorodifluoromethane	0.5	mg/kg	< 0.5	-	< 0.5	-
Ethylbenzene	0.1	mg/kg	< 0.1	-	< 0.1	-
Iodomethane	0.5	mg/kg	< 0.5	-	< 0.5	-
Isopropyl benzene (Cumene)	0.5	mg/kg	< 0.5	-	< 0.5	-
m&p-Xylenes	0.2	mg/kg	< 0.2	-	< 0.2	-
Methylene Chloride	0.5	mg/kg	< 0.5	-	< 0.5	-
o-Xylene	0.1	mg/kg	< 0.1	-	< 0.1	-
Styrene	0.5	mg/kg	< 0.5	-	< 0.5	-
Tetrachloroethene	0.5	mg/kg	< 0.5	-	< 0.5	-
Toluene	0.1	mg/kg	< 0.1	-	< 0.1	-
trans-1.2-Dichloroethene	0.5	mg/kg	< 0.5	-	< 0.5	-
trans-1.3-Dichloropropene	0.5	mg/kg	< 0.5	-	< 0.5	-
Trichloroethene	0.5	mg/kg	< 0.5	-	< 0.5	-
Trichlorofluoromethane	0.5	mg/kg	< 0.5	-	< 0.5	-
Vinyl chloride	0.5	mg/kg	< 0.5	-	< 0.5	-
Xylenes - Total*	0.3	mg/kg	< 0.3	-	< 0.3	-
Total MAH*	0.5	mg/kg	< 0.5	-	< 0.5	-
Vic EPA IWRG 621 CHC (Total)*	0.5	mg/kg	< 0.5	-	< 0.5	-
Vic EPA IWRG 621 Other CHC (Total)*	0.5	mg/kg	< 0.5	-	< 0.5	-
4-Bromofluorobenzene (surr.)	1	%	99	-	97	-
Toluene-d8 (surr.)	1	%	95	-	99	-

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Client Sample ID			TRIP02_220119	TRIP04_220119	TRIP05_220120	TRIP06_220121
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			S22-Ja37011	S22-Ja37012	S22-Ja37013	S22-Ja37014
Date Sampled			Jan 19, 2022	Jan 19, 2022	Jan 20, 2022	Jan 21, 2022
Test/Reference	LOR	Unit				
Polycyclic Aromatic Hydrocarbons						
Benzo(a)pyrene TEQ (lower bound) *	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene TEQ (medium bound) *	0.5	mg/kg	0.6	0.6	0.6	0.6
Benzo(a)pyrene TEQ (upper bound) *	0.5	mg/kg	1.2	1.2	1.2	1.2
Acenaphthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Acenaphthylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benz(a)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(b&j)fluoranthene[N07]	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(g.h.i)perylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(k)fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chrysene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Dibenz(a.h)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Fluorene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Indeno(1.2.3-cd)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Naphthalene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Phenanthrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Total PAH*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2-Fluorobiphenyl (surr.)	1	%	128	107	101	132
p-Terphenyl-d14 (surr.)	1	%	111	112	101	135
Organochlorine Pesticides						
Chlordanes - Total	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
4.4'-DDD	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
4.4'-DDE	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
4.4'-DDT	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
a-HCH	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Aldrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
b-HCH	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
d-HCH	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Dieldrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endosulfan I	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endosulfan II	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endosulfan sulphate	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endrin aldehyde	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endrin ketone	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
g-HCH (Lindane)	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Heptachlor	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Heptachlor epoxide	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Hexachlorobenzene	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Methoxychlor	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Toxaphene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Aldrin and Dieldrin (Total)*	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
DDT + DDE + DDD (Total)*	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Vic EPA IWRG 621 OCP (Total)*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Vic EPA IWRG 621 Other OCP (Total)*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Dibutylchlorendate (surr.)	1	%	98	85	91	137
Tetrachloro-m-xylene (surr.)	1	%	121	121	102	130

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Client Sample ID			TRIP02_220119	TRIP04_220119	TRIP05_220120	TRIP06_220121
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			S22-Ja37011	S22-Ja37012	S22-Ja37013	S22-Ja37014
Date Sampled			Jan 19, 2022	Jan 19, 2022	Jan 20, 2022	Jan 21, 2022
Test/Reference	LOR	Unit				
Organophosphorus Pesticides						
Azinphos-methyl	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Bolstar	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Chlorfenvinphos	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Chlorpyrifos	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Chlorpyrifos-methyl	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Coumaphos	2	mg/kg	< 2	< 2	< 2	< 2
Demeton-S	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Demeton-O	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Diazinon	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Dichlorvos	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Dimethoate	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Disulfoton	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
EPN	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Ethion	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Ethoprop	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Ethyl parathion	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Fenitrothion	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Fensulfothion	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Fenthion	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Malathion	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Merphos	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Methyl parathion	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Mevinphos	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Monocrotophos	2	mg/kg	< 2	< 2	< 2	< 2
Naled	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Omethoate	2	mg/kg	< 2	< 2	< 2	< 2
Phorate	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Pirimiphos-methyl	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Pyrazophos	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Ronnel	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Terbufos	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Tetrachlorvinphos	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Tokuthion	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Trichloronate	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Triphenylphosphate (surr.)	1	%	119	86	119	131
Polychlorinated Biphenyls						
Aroclor-1016	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Aroclor-1221	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Aroclor-1232	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Aroclor-1242	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Aroclor-1248	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Aroclor-1254	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Aroclor-1260	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Total PCB*	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Dibutylchlorendate (surr.)	1	%	98	85	91	137
Tetrachloro-m-xylene (surr.)	1	%	121	121	102	130

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Client Sample ID			TRIP02_220119	TRIP04_220119	TRIP05_220120	TRIP06_220121
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			S22-Ja37011	S22-Ja37012	S22-Ja37013	S22-Ja37014
Date Sampled			Jan 19, 2022	Jan 19, 2022	Jan 20, 2022	Jan 21, 2022
Test/Reference	LOR	Unit				
Semivolatile Organics						
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	-
2-Methyl-4.6-dinitrophenol	5	mg/kg	< 5	-	< 5	-
1-Chloronaphthalene	0.5	mg/kg	< 0.5	-	< 0.5	-
1-Naphthylamine	0.5	mg/kg	< 1	-	< 1	-
1.2-Dichlorobenzene	0.5	mg/kg	< 0.5	-	< 0.5	-
1.2.3-Trichlorobenzene	0.5	mg/kg	< 0.5	-	< 0.5	-
1.2.3.4-Tetrachlorobenzene	0.5	mg/kg	< 0.5	-	< 0.5	-
1.2.3.5-Tetrachlorobenzene	0.5	mg/kg	< 0.5	-	< 0.5	-
1.2.4-Trichlorobenzene	0.5	mg/kg	< 0.5	-	< 0.5	-
1.2.4.5-Tetrachlorobenzene	0.5	mg/kg	< 0.5	-	< 0.5	-
1.3-Dichlorobenzene	0.5	mg/kg	< 0.5	-	< 0.5	-
1.3.5-Trichlorobenzene	0.5	mg/kg	< 0.5	-	< 0.5	-
1.4-Dichlorobenzene	0.5	mg/kg	< 0.5	-	< 0.5	-
2-Chloronaphthalene	0.5	mg/kg	< 0.5	-	< 0.5	-
2-Chlorophenol	0.5	mg/kg	< 0.5	-	< 0.5	-
2-Fluorobiphenyl (surr.)	1	%	128	-	101	-
2-Methylnaphthalene	0.5	mg/kg	1.2	-	< 0.5	-
2-Methylphenol (o-Cresol)	0.2	mg/kg	< 0.2	-	< 0.2	-
2-Naphthylamine	0.5	mg/kg	< 0.5	-	< 0.5	-
2-Nitroaniline	1	mg/kg	< 1	-	< 1	-
2-Nitrophenol	1	mg/kg	< 1	-	< 1	-
2-Picoline	0.5	mg/kg	< 0.5	-	< 0.5	-
2.3.4.6-Tetrachlorophenol	0.5	mg/kg	< 0.5	-	< 0.5	-
2.4-Dichlorophenol	0.5	mg/kg	< 0.5	-	< 0.5	-
2.4-Dimethylphenol	0.5	mg/kg	< 0.5	-	< 0.5	-
2.4-Dinitrophenol	5	mg/kg	< 5	-	< 5	-
2.4-Dinitrotoluene	0.5	mg/kg	< 0.5	-	< 0.5	-
2.4.5-Trichlorophenol	1	mg/kg	< 1	-	< 1	-
2.4.6-Tribromophenol (surr.)	1	%	69	-	78	-
2.4.6-Trichlorophenol	1	mg/kg	< 1	-	< 1	-
2.6-Dichlorophenol	0.5	mg/kg	< 0.5	-	< 0.5	-
2.6-Dinitrotoluene	1	mg/kg	< 1	-	< 1	-
3&4-Methylphenol (m&p-Cresol)	0.4	mg/kg	< 0.4	-	< 0.4	-
3-Methylcholanthrene	0.5	mg/kg	< 0.5	-	< 0.5	-
3.3'-Dichlorobenzidine	0.5	mg/kg	< 0.5	-	< 0.5	-
4-Aminobiphenyl	0.5	mg/kg	< 0.5	-	< 0.5	-
4-Bromophenyl phenyl ether	0.5	mg/kg	< 0.5	-	< 0.5	-
4-Chloro-3-methylphenol	1	mg/kg	< 1	-	< 1	-
4-Chlorophenyl phenyl ether	0.5	mg/kg	< 0.5	-	< 0.5	-
4-Nitrophenol	5	mg/kg	< 5	-	< 5	-
4.4'-DDD	0.5	mg/kg	< 0.5	-	< 0.5	-
4.4'-DDE	0.5	mg/kg	< 0.5	-	< 0.5	-
4.4'-DDT	1	mg/kg	< 1	-	< 1	-
7.12-Dimethylbenz(a)anthracene	0.5	mg/kg	< 1	-	< 1	-
a-HCH	0.5	mg/kg	< 0.5	-	< 0.5	-
Acenaphthene	0.5	mg/kg	< 0.5	-	< 0.5	-
Acenaphthylene	0.5	mg/kg	< 0.5	-	< 0.5	-

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Client Sample ID			TRIP02_220119	TRIP04_220119	TRIP05_220120	TRIP06_220121
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			S22-Ja37011	S22-Ja37012	S22-Ja37013	S22-Ja37014
Date Sampled			Jan 19, 2022	Jan 19, 2022	Jan 20, 2022	Jan 21, 2022
Test/Reference	LOR	Unit				
Semivolatile Organics						
Acetophenone	0.5	mg/kg	< 0.5	-	< 0.5	-
Aldrin	0.5	mg/kg	< 0.5	-	< 0.5	-
Aniline	0.5	mg/kg	< 0.5	-	< 0.5	-
Anthracene	0.5	mg/kg	< 0.5	-	< 0.5	-
b-HCH	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	-
Benzyl chloride	0.5	mg/kg	< 0.5	-	< 0.5	-
Bis(2-chloroethoxy)methane	0.5	mg/kg	< 0.5	-	< 0.5	-
Bis(2-chloroisopropyl)ether	0.5	mg/kg	< 0.5	-	< 0.5	-
Bis(2-ethylhexyl)phthalate	5	mg/kg	< 5	-	< 5	-
Butyl benzyl phthalate	0.5	mg/kg	< 0.5	-	< 0.5	-
Chrysene	0.5	mg/kg	< 0.5	-	< 0.5	-
d-HCH	0.5	mg/kg	< 0.5	-	< 0.5	-
Di-n-butyl phthalate	0.5	mg/kg	< 0.5	-	< 0.5	-
Di-n-octyl phthalate	0.5	mg/kg	< 0.5	-	< 0.5	-
Dibenz(a.h)anthracene	0.5	mg/kg	< 0.5	-	< 0.5	-
Dibenz(a.j)acridine	0.5	mg/kg	< 0.5	-	< 0.5	-
Dibenzofuran	0.5	mg/kg	< 0.5	-	< 0.5	-
Dieldrin	0.5	mg/kg	< 0.5	-	< 0.5	-
Diethyl phthalate	0.5	mg/kg	< 0.5	-	< 0.5	-
Dimethyl phthalate	0.5	mg/kg	< 0.5	-	< 0.5	-
Dimethylaminoazobenzene	0.5	mg/kg	< 0.5	-	< 0.5	-
Diphenylamine	0.5	mg/kg	< 0.5	-	< 0.5	-
Endosulfan I	0.5	mg/kg	< 0.5	-	< 0.5	-
Endosulfan II	0.5	mg/kg	< 0.5	-	< 0.5	-
Endosulfan sulphate	0.5	mg/kg	< 0.5	-	< 0.5	-
Endrin	0.5	mg/kg	< 0.5	-	< 0.5	-
Endrin aldehyde	0.5	mg/kg	< 0.5	-	< 0.5	-
Endrin ketone	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	-
g-HCH (Lindane)	0.5	mg/kg	< 0.5	-	< 0.5	-
Heptachlor	0.5	mg/kg	< 0.5	-	< 0.5	-
Heptachlor epoxide	0.5	mg/kg	< 0.5	-	< 0.5	-
Hexachlorobenzene	0.5	mg/kg	< 0.5	-	< 0.5	-
Hexachlorobutadiene	0.5	mg/kg	< 0.5	-	< 0.5	-
Hexachlorocyclopentadiene	1	mg/kg	< 1	-	< 1	-
Hexachloroethane	0.5	mg/kg	< 0.5	-	< 0.5	-
Indeno(1.2.3-cd)pyrene	0.5	mg/kg	< 0.5	-	< 0.5	-
Methoxychlor	0.5	mg/kg	< 0.5	-	< 0.5	-
N-Nitrosodibutylamine	0.5	mg/kg	< 0.5	-	< 0.5	-
N-Nitrosodipropylamine	0.5	mg/kg	< 0.5	-	< 0.5	-
N-Nitrosopiperidine	0.5	mg/kg	< 0.5	-	< 0.5	-
Naphthalene	0.5	mg/kg	< 0.5	-	< 0.5	-
Nitrobenzene	0.5	mg/kg	< 0.5	-	< 0.5	-

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Client Sample ID			TRIP02_220119	TRIP04_220119	TRIP05_220120	TRIP06_220121
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			S22-Ja37011	S22-Ja37012	S22-Ja37013	S22-Ja37014
Date Sampled			Jan 19, 2022	Jan 19, 2022	Jan 20, 2022	Jan 21, 2022
Test/Reference	LOR	Unit				
Semivolatile Organics						
Nitrobenzene-d5 (surr.)	1	%	120	-	109	-
Pentachlorobenzene	0.5	mg/kg	< 0.5	-	< 0.5	-
Pentachloronitrobenzene	0.5	mg/kg	< 0.5	-	< 0.5	-
Pentachlorophenol	1	mg/kg	< 1	-	< 1	-
Phenanthrene	0.5	mg/kg	< 0.5	-	< 0.5	-
Phenol	0.5	mg/kg	< 0.5	-	< 0.5	-
Phenol-d6 (surr.)	1	%	134	-	117	-
Pronamide	0.5	mg/kg	< 0.5	-	< 0.5	-
Pyrene	0.5	mg/kg	< 0.5	-	< 0.5	-
Trifluralin	0.5	mg/kg	< 0.5	-	< 0.5	-
Heavy Metals						
Arsenic	2	mg/kg	7.0	9.1	11	7.9
Cadmium	0.4	mg/kg	0.4	< 0.4	< 0.4	< 0.4
Chromium	5	mg/kg	8.2	8.6	8.8	7.9
Copper	5	mg/kg	33	30	52	51
Lead	5	mg/kg	15	15	20	18
Mercury	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Nickel	5	mg/kg	23	23	38	31
Zinc	5	mg/kg	140	130	160	300
% Moisture	1	%	5.9	5.1	7.7	6.6
Per- and Polyfluoroalkyl Substances (PFASs) - Short						
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)[N11]	10	ug/kg	-	< 10	< 10	< 10
13C2-6:2 FTSA (surr.)	1	%	-	78	89	86
Perfluorohexanesulfonic acid (PFHxS)[N11]	5	ug/kg	-	< 5	< 5	< 5
Perfluorooctanesulfonic acid (PFOS)[N11]	5	ug/kg	-	< 5	< 5	< 5
18O2-PFHxS (surr.)	1	%	-	87	96	96
13C8-PFOS (surr.)	1	%	-	82	96	92
Perfluorooctanoic acid (PFOA)[N11]	5	ug/kg	-	< 5	< 5	< 5
13C8-PFOA (surr.)	1	%	-	89	98	94
Sum (PFHxS + PFOS)*	5	ug/kg	-	< 5	< 5	< 5
Sum of US EPA PFAS (PFOS + PFOA)*	5	ug/kg	-	< 5	< 5	< 5
Sum of enHealth PFAS (PFHxS + PFOS + PFOA)*	5	ug/kg	-	< 5	< 5	< 5

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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	Sydney	Feb 01, 2022	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
Total Recoverable Hydrocarbons - 2013 NEPM Fractions	Sydney	Feb 01, 2022	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
Total Recoverable Hydrocarbons - 2013 NEPM Fractions	Sydney	Feb 01, 2022	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
BTEX	Sydney	Feb 01, 2022	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
Polycyclic Aromatic Hydrocarbons	Sydney	Feb 01, 2022	14 Days
- Method: LTM-ORG-2130 PAH and Phenols in Soil and Water			
Organochlorine Pesticides	Sydney	Feb 01, 2022	14 Days
- Method: LTM-ORG-2220 OCP & PCB in Soil and Water			
Organophosphorus Pesticides	Sydney	Feb 01, 2022	14 Days
- Method: LTM-ORG-2200 Organophosphorus Pesticides by GC-MS			
Polychlorinated Biphenyls	Sydney	Feb 01, 2022	28 Days
- Method: LTM-ORG-2220 OCP & PCB in Soil and Water			
Metals M8	Sydney	Feb 01, 2022	28 Days
- Method: LTM-MET-3040 Metals in Waters, Soils & Sediments by ICP-MS			
Volatile Organics	Sydney	Feb 01, 2022	7 Days
- Method: LTM-ORG-2150 VOCs in Soils Liquid and other Aqueous Matrices			
Semivolatile Organics	Sydney	Feb 01, 2022	14 Day
- Method: LTM-ORG-2190 SVOC in Water & Soil by GC-MS			
% Moisture	Sydney	Jan 31, 2022	14 Days
- Method: LTM-GEN-7080 Moisture			
Per- and Polyfluoroalkyl Substances (PFASs) - Short	Sydney	Feb 01, 2022	28 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			

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Quality Control Results

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

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

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Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
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	
Aroclor-1260	mg/kg	< 0.1			0.1	Pass	
Total PCB*	mg/kg	< 0.1			0.1	Pass	
Method Blank							
Semivolatile Organics							
2-Methyl-4.6-dinitrophenol	mg/kg	< 5			5	Pass	
1-Chloronaphthalene	mg/kg	< 0.5			0.5	Pass	
1-Naphthylamine	mg/kg	< 0.5			0.5	Pass	

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Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
1.2-Dichlorobenzene	mg/kg	< 0.5			0.5	Pass	
1.2.3-Trichlorobenzene	mg/kg	< 0.5			0.5	Pass	
1.2.3.4-Tetrachlorobenzene	mg/kg	< 0.5			0.5	Pass	
1.2.3.5-Tetrachlorobenzene	mg/kg	< 0.5			0.5	Pass	
1.2.4-Trichlorobenzene	mg/kg	< 0.5			0.5	Pass	
1.2.4.5-Tetrachlorobenzene	mg/kg	< 0.5			0.5	Pass	
1.3-Dichlorobenzene	mg/kg	< 0.5			0.5	Pass	
1.3.5-Trichlorobenzene	mg/kg	< 0.5			0.5	Pass	
1.4-Dichlorobenzene	mg/kg	< 0.5			0.5	Pass	
2-Chloronaphthalene	mg/kg	< 0.5			0.5	Pass	
2-Chlorophenol	mg/kg	< 0.5			0.5	Pass	
2-Methylnaphthalene	mg/kg	< 0.5			0.5	Pass	
2-Methylphenol (o-Cresol)	mg/kg	< 0.2			0.2	Pass	
2-Naphthylamine	mg/kg	< 0.5			0.5	Pass	
2-Nitroaniline	mg/kg	< 1			1	Pass	
2-Nitrophenol	mg/kg	< 1			1	Pass	
2-Picoline	mg/kg	< 0.5			0.5	Pass	
2.3.4.6-Tetrachlorophenol	mg/kg	< 0.5			0.5	Pass	
2.4-Dichlorophenol	mg/kg	< 0.5			0.5	Pass	
2.4-Dimethylphenol	mg/kg	< 0.5			0.5	Pass	
2.4-Dinitrophenol	mg/kg	< 5			5	Pass	
2.4-Dinitrotoluene	mg/kg	< 0.5			0.5	Pass	
2.4.5-Trichlorophenol	mg/kg	< 1			1	Pass	
2.4.6-Trichlorophenol	mg/kg	< 1			1	Pass	
2.6-Dichlorophenol	mg/kg	< 0.5			0.5	Pass	
2.6-Dinitrotoluene	mg/kg	< 1			1	Pass	
3&4-Methylphenol (m&p-Cresol)	mg/kg	< 0.4			0.4	Pass	
3-Methylcholanthrene	mg/kg	< 0.5			0.5	Pass	
3.3'-Dichlorobenzidine	mg/kg	< 0.5			0.5	Pass	
4-Aminobiphenyl	mg/kg	< 0.5			0.5	Pass	
4-Bromophenyl phenyl ether	mg/kg	< 0.5			0.5	Pass	
4-Chloro-3-methylphenol	mg/kg	< 1			1	Pass	
4-Chlorophenyl phenyl ether	mg/kg	< 0.5			0.5	Pass	
4-Nitrophenol	mg/kg	< 5			5	Pass	
4.4'-DDD	mg/kg	< 0.5			0.5	Pass	
4.4'-DDE	mg/kg	< 0.5			0.5	Pass	
4.4'-DDT	mg/kg	< 1			1	Pass	
7.12-Dimethylbenz(a)anthracene	mg/kg	< 0.5			0.5	Pass	
a-HCH	mg/kg	< 0.5			0.5	Pass	
Acetophenone	mg/kg	< 0.5			0.5	Pass	
Aldrin	mg/kg	< 0.5			0.5	Pass	
Aniline	mg/kg	< 0.5			0.5	Pass	
b-HCH	mg/kg	< 0.5			0.5	Pass	
Benzyl chloride	mg/kg	< 0.5			0.5	Pass	
Bis(2-chloroethoxy)methane	mg/kg	< 0.5			0.5	Pass	
Bis(2-chloroisopropyl)ether	mg/kg	< 0.5			0.5	Pass	
Bis(2-ethylhexyl)phthalate	mg/kg	< 5			5	Pass	
Butyl benzyl phthalate	mg/kg	< 0.5			0.5	Pass	
d-HCH	mg/kg	< 0.5			0.5	Pass	
Di-n-butyl phthalate	mg/kg	< 0.5			0.5	Pass	
Di-n-octyl phthalate	mg/kg	< 0.5			0.5	Pass	
Dibenz(a.j)acridine	mg/kg	< 0.5			0.5	Pass	
Dibenzofuran	mg/kg	< 0.5			0.5	Pass	
Dieldrin	mg/kg	< 0.5			0.5	Pass	

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Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Diethyl phthalate	mg/kg	< 0.5			0.5	Pass	
Dimethyl phthalate	mg/kg	< 0.5			0.5	Pass	
Dimethylaminoazobenzene	mg/kg	< 0.5			0.5	Pass	
Diphenylamine	mg/kg	< 0.5			0.5	Pass	
Endosulfan I	mg/kg	< 0.5			0.5	Pass	
Endosulfan II	mg/kg	< 0.5			0.5	Pass	
Endosulfan sulphate	mg/kg	< 0.5			0.5	Pass	
Endrin	mg/kg	< 0.5			0.5	Pass	
Endrin aldehyde	mg/kg	< 0.5			0.5	Pass	
Endrin ketone	mg/kg	< 0.5			0.5	Pass	
g-HCH (Lindane)	mg/kg	< 0.5			0.5	Pass	
Heptachlor	mg/kg	< 0.5			0.5	Pass	
Heptachlor epoxide	mg/kg	< 0.5			0.5	Pass	
Hexachlorobenzene	mg/kg	< 0.5			0.5	Pass	
Hexachlorobutadiene	mg/kg	< 0.5			0.5	Pass	
Hexachlorocyclopentadiene	mg/kg	< 1			1	Pass	
Hexachloroethane	mg/kg	< 0.5			0.5	Pass	
Methoxychlor	mg/kg	< 0.5			0.5	Pass	
N-Nitrosodibutylamine	mg/kg	< 0.5			0.5	Pass	
N-Nitrosodipropylamine	mg/kg	< 0.5			0.5	Pass	
N-Nitrosopiperidine	mg/kg	< 0.5			0.5	Pass	
Nitrobenzene	mg/kg	< 0.5			0.5	Pass	
Pentachlorobenzene	mg/kg	< 0.5			0.5	Pass	
Pentachloronitrobenzene	mg/kg	< 0.5			0.5	Pass	
Pentachlorophenol	mg/kg	< 1			1	Pass	
Phenol	mg/kg	< 0.5			0.5	Pass	
Pronamide	mg/kg	< 0.5			0.5	Pass	
Trifluralin	mg/kg	< 0.5			0.5	Pass	
Method Blank							
Heavy Metals							
Arsenic	mg/kg	< 2			2	Pass	
Cadmium	mg/kg	< 0.4			0.4	Pass	
Chromium	mg/kg	< 5			5	Pass	
Copper	mg/kg	< 5			5	Pass	
Lead	mg/kg	< 5			5	Pass	
Mercury	mg/kg	< 0.1			0.1	Pass	
Nickel	mg/kg	< 5			5	Pass	
Zinc	mg/kg	< 5			5	Pass	
Method Blank							
Per- and Polyfluoroalkyl Substances (PFASs) - Short							
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)	ug/kg	< 10			10	Pass	
Perfluorohexanesulfonic acid (PFHxS)	ug/kg	< 5			5	Pass	
Perfluorooctanesulfonic acid (PFOS)	ug/kg	< 5			5	Pass	
Perfluorooctanoic acid (PFOA)	ug/kg	< 5			5	Pass	
Sum of US EPA PFAS (PFOS + PFOA)*	ug/kg	-			5	N/A	
LCS - % Recovery							
Total Recoverable Hydrocarbons							
TRH C6-C9	%	74			70-130	Pass	
TRH C10-C14	%	110			70-130	Pass	
Naphthalene	%	103			70-130	Pass	
TRH C6-C10	%	73			70-130	Pass	
TRH >C10-C16	%	109			70-130	Pass	
LCS - % Recovery							
BTEX							

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Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Benzene	%	85			70-130	Pass	
Toluene	%	87			70-130	Pass	
Ethylbenzene	%	78			70-130	Pass	
m&p-Xylenes	%	87			70-130	Pass	
o-Xylene	%	90			70-130	Pass	
Xylenes - Total*	%	88			70-130	Pass	
LCS - % Recovery							
Volatile Organics							
1.1-Dichloroethene	%	104			70-130	Pass	
1.1.1-Trichloroethane	%	101			70-130	Pass	
1.2-Dichlorobenzene	%	114			70-130	Pass	
1.2-Dichloroethane	%	112			70-130	Pass	
Trichloroethene	%	102			70-130	Pass	
LCS - % Recovery							
Polycyclic Aromatic Hydrocarbons							
Acenaphthene	%	104			70-130	Pass	
Acenaphthylene	%	99			70-130	Pass	
Anthracene	%	97			70-130	Pass	
Benz(a)anthracene	%	114			70-130	Pass	
Benzo(a)pyrene	%	117			70-130	Pass	
Benzo(b&j)fluoranthene	%	115			70-130	Pass	
Benzo(g.h.i)perylene	%	122			70-130	Pass	
Benzo(k)fluoranthene	%	110			70-130	Pass	
Chrysene	%	110			70-130	Pass	
Dibenz(a.h)anthracene	%	111			70-130	Pass	
Fluoranthene	%	111			70-130	Pass	
Fluorene	%	101			70-130	Pass	
Indeno(1.2.3-cd)pyrene	%	116			70-130	Pass	
Naphthalene	%	103			70-130	Pass	
Phenanthrene	%	101			70-130	Pass	
Pyrene	%	104			70-130	Pass	
LCS - % Recovery							
Organochlorine Pesticides							
Chlordanes - Total	%	85			70-130	Pass	
4.4'-DDD	%	73			70-130	Pass	
4.4'-DDE	%	91			70-130	Pass	
4.4'-DDT	%	101			70-130	Pass	
a-HCH	%	84			70-130	Pass	
Aldrin	%	78			70-130	Pass	
b-HCH	%	82			70-130	Pass	
d-HCH	%	93			70-130	Pass	
Dieldrin	%	81			70-130	Pass	
Endosulfan I	%	97			70-130	Pass	
Endosulfan II	%	91			70-130	Pass	
Endosulfan sulphate	%	86			70-130	Pass	
Endrin	%	91			70-130	Pass	
Endrin aldehyde	%	71			70-130	Pass	
Endrin ketone	%	89			70-130	Pass	
g-HCH (Lindane)	%	90			70-130	Pass	
Heptachlor	%	77			70-130	Pass	
Heptachlor epoxide	%	78			70-130	Pass	
Hexachlorobenzene	%	85			70-130	Pass	
Methoxychlor	%	90			70-130	Pass	
LCS - % Recovery							

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Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Organophosphorus Pesticides							
Diazinon	%	95			70-130	Pass	
Dimethoate	%	107			70-130	Pass	
Ethion	%	107			70-130	Pass	
Fenitrothion	%	80			70-130	Pass	
Methyl parathion	%	91			70-130	Pass	
Mevinphos	%	98			70-130	Pass	
LCS - % Recovery							
Polychlorinated Biphenyls							
Aroclor-1016	%	82			70-130	Pass	
Aroclor-1260	%	87			70-130	Pass	
LCS - % Recovery							
Semivolatile Organics							
2-Methyl-4.6-dinitrophenol	%	90			25-140	Pass	
1.2.4-Trichlorobenzene	%	83			70-130	Pass	
1.4-Dichlorobenzene	%	82			70-130	Pass	
2-Chlorophenol	%	97			25-140	Pass	
2-Methylphenol (o-Cresol)	%	100			25-140	Pass	
2-Nitrophenol	%	117			25-140	Pass	
2.4-Dichlorophenol	%	98			25-140	Pass	
2.4-Dimethylphenol	%	95			25-140	Pass	
2.4-Dinitrophenol	%	82			25-140	Pass	
2.4-Dinitrotoluene	%	108			70-130	Pass	
2.4.5-Trichlorophenol	%	95			25-140	Pass	
2.4.6-Trichlorophenol	%	86			25-140	Pass	
2.6-Dichlorophenol	%	96			25-140	Pass	
3&4-Methylphenol (m&p-Cresol)	%	102			25-140	Pass	
4-Chloro-3-methylphenol	%	99			25-140	Pass	
4-Nitrophenol	%	105			25-140	Pass	
Endrin aldehyde	%	76			70-130	Pass	
N-Nitrosodipropylamine	%	89			70-130	Pass	
Pentachlorophenol	%	70			25-140	Pass	
Phenol	%	102			25-140	Pass	
LCS - % Recovery							
Heavy Metals							
Arsenic	%	102			80-120	Pass	
Cadmium	%	106			80-120	Pass	
Chromium	%	106			80-120	Pass	
Copper	%	99			80-120	Pass	
Lead	%	104			80-120	Pass	
Mercury	%	100			80-120	Pass	
Nickel	%	100			80-120	Pass	
Zinc	%	89			80-120	Pass	
LCS - % Recovery							
Per- and Polyfluoroalkyl Substances (PFASs) - Short							
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)	%	99			50-150	Pass	
Perfluorohexanesulfonic acid (PFHxS)	%	104			50-150	Pass	
Perfluorooctanesulfonic acid (PFOS)	%	106			50-150	Pass	
Perfluorooctanoic acid (PFOA)	%	110			50-150	Pass	

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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
N01	F2 is determined by arithmetically subtracting the "naphthalene" value from the ">C10-C16" value. The naphthalene value used in this calculation is obtained from volatiles (Purge & Trap analysis).
N02	Where we have reported both volatile (P&T GCMS) and semivolatile (GCMS) naphthalene data, results may not be identical. Provided correct sample handling protocols have been followed, any observed differences in results are likely to be due to procedural differences within each methodology. Results determined by both techniques have passed all QAQC acceptance criteria, and are entirely technically valid.
N04	F1 is determined by arithmetically subtracting the "Total BTEX" value from the "C6-C10" value. The "Total BTEX" value is obtained by summing the concentrations of BTEX analytes. The "C6-C10" value is obtained by quantitating against a standard of mixed aromatic/aliphatic analytes.
N07	Please note:- These two PAH isomers closely co-elute using the most contemporary analytical methods and both the reported concentration (and the TEQ) apply specifically to the total of the two co-eluting PAHs
N11	Isotope dilution is used for calibration of each native compound for which an exact labelled analogue is available (Isotope Dilution Quantitation). The isotopically labelled analogues allow identification and recovery correction of the concentration of the associated native PFAS compounds.
Q08	The matrix spike recovery is outside of the recommended acceptance criteria. An acceptable recovery was obtained for the laboratory control sample indicating a sample matrix interference.
Q15	The RPD reported passes Eurofins Environment Testing's QC - Acceptance Criteria as defined in the Internal Quality Control Review and Glossary page of this report.

Authorised by:

John Nguyen	Analytical Services Manager
Andrew Sullivan	Senior Analyst-Organic (NSW)
Andrew Sullivan	Senior Analyst-PFAS (NSW)
John Nguyen	Senior Analyst-Metal (NSW)
Roopesh Rangarajan	Senior Analyst-Volatile (NSW)



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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Company Name: ERM Sydney
Address: Level 15, 309 Kent St
Sydney
NSW 2000

Project Name: SOP
Project ID: 0628507

Order No.:
Report #: 859812
Phone: 02 8584 8888
Fax: 02 8584 8800

Received: Jan 31, 2022 5:44 PM
Due: Feb 3, 2022
Priority: 2 Day
Contact Name: Nicholas Grbich

Eurofins Analytical Services Manager : John Nguyen

Sample Detail						Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs) - Short	Suite B10B:TRH/BTEXN/PAH/OCP/OPP/PCB/M8
Melbourne Laboratory - NATA # 1261 Site # 1254								
Sydney Laboratory - NATA # 1261 Site # 18217						X	X	X
Brisbane Laboratory - NATA # 1261 Site # 20794								
Mayfield Laboratory - NATA # 1261 Site # 25079								
Perth Laboratory - NATA # 2377 Site # 2370								
External Laboratory								
No	**Sample ID**	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**			
1	TRIP07_220124	Jan 24, 2022		Soil	S22-Fe01783	X	X	X
Test Counts						1	1	1

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ERM Sydney
Level 15, 309 Kent St
Sydney
NSW 2000

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: **Nicholas Grbich**

Report ***859812-S***
Project name SOP
Project ID 0628507
Received Date Jan 31, 2022

Client Sample ID			**TRIP07_220124**
Sample Matrix			**Soil**
Eurofins Sample No.			**S22-Fe01783**
Date Sampled			**Jan 24, 2022**
Test/Reference	LOR	Unit	
Total Recoverable Hydrocarbons			
TRH C6-C9	20	mg/kg	< 20
TRH C10-C14	20	mg/kg	< 20
TRH C15-C28	50	mg/kg	< 50
TRH C29-C36	50	mg/kg	< 50
TRH C10-C36 (Total)	50	mg/kg	< 50
Naphthalene[N02]	0.5	mg/kg	< 0.5
TRH C6-C10	20	mg/kg	< 20
TRH C6-C10 less BTEX (F1)[N04]	20	mg/kg	< 20
TRH >C10-C16	50	mg/kg	< 50
TRH >C10-C16 less Naphthalene (F2)[N01]	50	mg/kg	< 50
TRH >C16-C34	100	mg/kg	< 100
TRH >C34-C40	100	mg/kg	< 100
TRH >C10-C40 (total)*	100	mg/kg	< 100
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	%	99
Polycyclic Aromatic Hydrocarbons			
Benzo(a)pyrene TEQ (lower bound) *	0.5	mg/kg	< 0.5
Benzo(a)pyrene TEQ (medium bound) *	0.5	mg/kg	0.6
Benzo(a)pyrene TEQ (upper bound) *	0.5	mg/kg	1.2
Acenaphthene	0.5	mg/kg	< 0.5
Acenaphthylene	0.5	mg/kg	< 0.5
Anthracene	0.5	mg/kg	< 0.5
Benz(a)anthracene	0.5	mg/kg	< 0.5
Benzo(a)pyrene	0.5	mg/kg	< 0.5
Benzo(b&j)fluoranthene[N07]	0.5	mg/kg	< 0.5
Benzo(g.h.i)perylene	0.5	mg/kg	< 0.5
Benzo(k)fluoranthene	0.5	mg/kg	< 0.5
Chrysene	0.5	mg/kg	< 0.5
Dibenz(a.h)anthracene	0.5	mg/kg	< 0.5

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Client Sample ID			TRIP07_220124
Sample Matrix			Soil
Eurofins Sample No.			S22-Fe01783
Date Sampled			Jan 24, 2022
Test/Reference	LOR	Unit	
Polycyclic Aromatic Hydrocarbons			
Fluoranthene	0.5	mg/kg	< 0.5
Fluorene	0.5	mg/kg	< 0.5
Indeno(1.2.3-cd)pyrene	0.5	mg/kg	< 0.5
Naphthalene	0.5	mg/kg	< 0.5
Phenanthrene	0.5	mg/kg	< 0.5
Pyrene	0.5	mg/kg	< 0.5
Total PAH*	0.5	mg/kg	< 0.5
2-Fluorobiphenyl (surr.)	1	%	109
p-Terphenyl-d14 (surr.)	1	%	112
Organochlorine Pesticides			
Chlordanes - Total	0.1	mg/kg	< 0.1
4.4'-DDD	0.05	mg/kg	< 0.05
4.4'-DDE	0.05	mg/kg	< 0.05
4.4'-DDT	0.05	mg/kg	< 0.05
a-HCH	0.05	mg/kg	< 0.05
Aldrin	0.05	mg/kg	< 0.05
b-HCH	0.05	mg/kg	< 0.05
d-HCH	0.05	mg/kg	< 0.05
Dieldrin	0.05	mg/kg	< 0.05
Endosulfan I	0.05	mg/kg	< 0.05
Endosulfan II	0.05	mg/kg	< 0.05
Endosulfan sulphate	0.05	mg/kg	< 0.05
Endrin	0.05	mg/kg	< 0.05
Endrin aldehyde	0.05	mg/kg	< 0.05
Endrin ketone	0.05	mg/kg	< 0.05
g-HCH (Lindane)	0.05	mg/kg	< 0.05
Heptachlor	0.05	mg/kg	< 0.05
Heptachlor epoxide	0.05	mg/kg	< 0.05
Hexachlorobenzene	0.05	mg/kg	< 0.05
Methoxychlor	0.05	mg/kg	< 0.05
Toxaphene	0.5	mg/kg	< 0.5
Aldrin and Dieldrin (Total)*	0.05	mg/kg	< 0.05
DDT + DDE + DDD (Total)*	0.05	mg/kg	< 0.05
Vic EPA IWRG 621 OCP (Total)*	0.1	mg/kg	< 0.1
Vic EPA IWRG 621 Other OCP (Total)*	0.1	mg/kg	< 0.1
Dibutylchlorendate (surr.)	1	%	100
Tetrachloro-m-xylene (surr.)	1	%	117
Organophosphorus Pesticides			
Azinphos-methyl	0.2	mg/kg	< 0.2
Bolstar	0.2	mg/kg	< 0.2
Chlorfenvinphos	0.2	mg/kg	< 0.2
Chlorpyrifos	0.2	mg/kg	< 0.2
Chlorpyrifos-methyl	0.2	mg/kg	< 0.2
Coumaphos	2	mg/kg	< 2
Demeton-S	0.2	mg/kg	< 0.2
Demeton-O	0.2	mg/kg	< 0.2
Diazinon	0.2	mg/kg	< 0.2
Dichlorvos	0.2	mg/kg	< 0.2
Dimethoate	0.2	mg/kg	< 0.2

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Client Sample ID			TRIP07_220124
Sample Matrix			Soil
Eurofins Sample No.			S22-Fe01783
Date Sampled			Jan 24, 2022
Test/Reference	LOR	Unit	
Organophosphorus Pesticides			
Disulfoton	0.2	mg/kg	< 0.2
EPN	0.2	mg/kg	< 0.2
Ethion	0.2	mg/kg	< 0.2
Ethoprop	0.2	mg/kg	< 0.2
Ethyl parathion	0.2	mg/kg	< 0.2
Fenitrothion	0.2	mg/kg	< 0.2
Fensulfothion	0.2	mg/kg	< 0.2
Fenthion	0.2	mg/kg	< 0.2
Malathion	0.2	mg/kg	< 0.2
Merphos	0.2	mg/kg	< 0.2
Methyl parathion	0.2	mg/kg	< 0.2
Mevinphos	0.2	mg/kg	< 0.2
Monocrotophos	2	mg/kg	< 2
Naled	0.2	mg/kg	< 0.2
Omethoate	2	mg/kg	< 2
Phorate	0.2	mg/kg	< 0.2
Pirimiphos-methyl	0.2	mg/kg	< 0.2
Pyrazophos	0.2	mg/kg	< 0.2
Ronnel	0.2	mg/kg	< 0.2
Terbufos	0.2	mg/kg	< 0.2
Tetrachlorvinphos	0.2	mg/kg	< 0.2
Tokuthion	0.2	mg/kg	< 0.2
Trichloronate	0.2	mg/kg	< 0.2
Triphenylphosphate (surr.)	1	%	115
Polychlorinated Biphenyls			
Aroclor-1016	0.1	mg/kg	< 0.1
Aroclor-1221	0.1	mg/kg	< 0.1
Aroclor-1232	0.1	mg/kg	< 0.1
Aroclor-1242	0.1	mg/kg	< 0.1
Aroclor-1248	0.1	mg/kg	< 0.1
Aroclor-1254	0.1	mg/kg	< 0.1
Aroclor-1260	0.1	mg/kg	< 0.1
Total PCB*	0.1	mg/kg	< 0.1
Dibutylchlorendate (surr.)	1	%	100
Tetrachloro-m-xylene (surr.)	1	%	117
Heavy Metals			
Arsenic	2	mg/kg	8.1
Cadmium	0.4	mg/kg	< 0.4
Chromium	5	mg/kg	6.6
Copper	5	mg/kg	31
Lead	5	mg/kg	17
Mercury	0.1	mg/kg	< 0.1
Nickel	5	mg/kg	5.9
Zinc	5	mg/kg	38
% Moisture	1	%	9.0

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Client Sample ID			TRIP07_220124
Sample Matrix			**Soil**
Eurofins Sample No.			**S22-Fe01783**
Date Sampled			**Jan 24, 2022**
Test/Reference	LOR	Unit	
Per- and Polyfluoroalkyl Substances (PFASs) - Short			
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)[N11]	10	ug/kg	< 10
13C2-6:2 FTSA (surr.)	1	%	99
Perfluorohexanesulfonic acid (PFHxS)[N11]	5	ug/kg	< 5
Perfluorooctanesulfonic acid (PFOS)[N11]	5	ug/kg	< 5
18O2-PFHxS (surr.)	1	%	101
13C8-PFOS (surr.)	1	%	107
Perfluorooctanoic acid (PFOA)[N11]	5	ug/kg	< 5
13C8-PFOA (surr.)	1	%	103
Sum (PFHxS + PFOS)*	5	ug/kg	< 5
Sum of US EPA PFAS (PFOS + PFOA)*	5	ug/kg	< 5
Sum of enHealth PFAS (PFHxS + PFOS + PFOA)*	5	ug/kg	< 5

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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	Sydney	Feb 02, 2022	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
Total Recoverable Hydrocarbons - 2013 NEPM Fractions	Sydney	Feb 02, 2022	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
Total Recoverable Hydrocarbons - 2013 NEPM Fractions	Sydney	Feb 02, 2022	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
BTEX	Sydney	Feb 02, 2022	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
Polycyclic Aromatic Hydrocarbons	Sydney	Feb 02, 2022	14 Days
- Method: LTM-ORG-2130 PAH and Phenols in Soil and Water			
Organochlorine Pesticides	Sydney	Feb 02, 2022	14 Days
- Method: LTM-ORG-2220 OCP & PCB in Soil and Water			
Organophosphorus Pesticides	Sydney	Feb 02, 2022	14 Days
- Method: LTM-ORG-2200 Organophosphorus Pesticides by GC-MS			
Polychlorinated Biphenyls	Sydney	Feb 02, 2022	28 Days
- Method: LTM-ORG-2220 OCP & PCB in Soil and Water			
Metals M8	Sydney	Feb 02, 2022	28 Days
- Method: LTM-MET-3040 Metals in Waters, Soils & Sediments by ICP-MS			
% Moisture	Sydney	Feb 02, 2022	14 Days
- Method: LTM-GEN-7080 Moisture			
Per- and Polyfluoroalkyl Substances (PFASs) - Short	Sydney	Feb 02, 2022	28 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			

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Company Name: ERM Sydney
Address: Level 15, 309 Kent St
Sydney
NSW 2000

Project Name: SOP
Project ID: 0628507

Order No.:
Report #: 859812
Phone: 02 8584 8888
Fax: 02 8584 8800

Received: Jan 31, 2022 5:44 PM
Due: Feb 3, 2022
Priority: 2 Day
Contact Name: Nicholas Grbich

Eurofins Analytical Services Manager : John Nguyen

Sample Detail						Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs) - Short	Suite B10B:TRH/BTEXN/PAH/OCP/OPP/PCB/M8
Melbourne Laboratory - NATA # 1261 Site # 1254								
Sydney Laboratory - NATA # 1261 Site # 18217						X	X	X
Brisbane Laboratory - NATA # 1261 Site # 20794								
Mayfield Laboratory - NATA # 1261 Site # 25079								
Perth Laboratory - NATA # 2377 Site # 2370								
External Laboratory								
No	**Sample ID**	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**			
1	TRIP07_220124	Jan 24, 2022		Soil	S22-Fe01783	X	X	X
Test Counts						1	1	1

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Internal Quality Control Review and Glossary

General

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

Holding Times

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

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

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

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

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

Units

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

Terms

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

QC - Acceptance Criteria

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

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

Results <10 times the LOR: No Limit

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

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

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

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

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

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QC Data General Comments

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

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Quality Control Results

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Method Blank							
Total Recoverable Hydrocarbons							
TRH C6-C9	mg/kg	< 20			20	Pass	
TRH C10-C14	mg/kg	< 20			20	Pass	
TRH C15-C28	mg/kg	< 50			50	Pass	
TRH C29-C36	mg/kg	< 50			50	Pass	
Naphthalene	mg/kg	< 0.5			0.5	Pass	
TRH C6-C10	mg/kg	< 20			20	Pass	
TRH >C10-C16	mg/kg	< 50			50	Pass	
TRH >C16-C34	mg/kg	< 100			100	Pass	
TRH >C34-C40	mg/kg	< 100			100	Pass	
Method Blank							
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							
Polycyclic Aromatic Hydrocarbons							
Acenaphthene	mg/kg	< 0.5			0.5	Pass	
Acenaphthylene	mg/kg	< 0.5			0.5	Pass	
Anthracene	mg/kg	< 0.5			0.5	Pass	
Benz(a)anthracene	mg/kg	< 0.5			0.5	Pass	
Benzo(a)pyrene	mg/kg	< 0.5			0.5	Pass	
Benzo(b&j)fluoranthene	mg/kg	< 0.5			0.5	Pass	
Benzo(g.h.i)perylene	mg/kg	< 0.5			0.5	Pass	
Benzo(k)fluoranthene	mg/kg	< 0.5			0.5	Pass	
Chrysene	mg/kg	< 0.5			0.5	Pass	
Dibenz(a.h)anthracene	mg/kg	< 0.5			0.5	Pass	
Fluoranthene	mg/kg	< 0.5			0.5	Pass	
Fluorene	mg/kg	< 0.5			0.5	Pass	
Indeno(1.2.3-cd)pyrene	mg/kg	< 0.5			0.5	Pass	
Naphthalene	mg/kg	< 0.5			0.5	Pass	
Phenanthrene	mg/kg	< 0.5			0.5	Pass	
Pyrene	mg/kg	< 0.5			0.5	Pass	
Method Blank							
Organochlorine Pesticides							
Chlordanes - Total	mg/kg	< 0.1			0.1	Pass	
4.4'-DDD	mg/kg	< 0.05			0.05	Pass	
4.4'-DDE	mg/kg	< 0.05			0.05	Pass	
4.4'-DDT	mg/kg	< 0.05			0.05	Pass	
a-HCH	mg/kg	< 0.05			0.05	Pass	
Aldrin	mg/kg	< 0.05			0.05	Pass	
b-HCH	mg/kg	< 0.05			0.05	Pass	
d-HCH	mg/kg	< 0.05			0.05	Pass	
Dieldrin	mg/kg	< 0.05			0.05	Pass	
Endosulfan I	mg/kg	< 0.05			0.05	Pass	
Endosulfan II	mg/kg	< 0.05			0.05	Pass	
Endosulfan sulphate	mg/kg	< 0.05			0.05	Pass	
Endrin	mg/kg	< 0.05			0.05	Pass	

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Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
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	
Aroclor-1260	mg/kg	< 0.1			0.1	Pass	
Total PCB*	mg/kg	< 0.1			0.1	Pass	

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Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Method Blank							
Heavy Metals							
Arsenic	mg/kg	< 2			2	Pass	
Cadmium	mg/kg	< 0.4			0.4	Pass	
Chromium	mg/kg	< 5			5	Pass	
Copper	mg/kg	< 5			5	Pass	
Lead	mg/kg	< 5			5	Pass	
Mercury	mg/kg	< 0.1			0.1	Pass	
Nickel	mg/kg	< 5			5	Pass	
Zinc	mg/kg	< 5			5	Pass	
Method Blank							
Per- and Polyfluoroalkyl Substances (PFASs) - Short							
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)	ug/kg	< 10			10	Pass	
Perfluorohexanesulfonic acid (PFHxS)	ug/kg	< 5			5	Pass	
Perfluorooctanesulfonic acid (PFOS)	ug/kg	< 5			5	Pass	
Perfluorooctanoic acid (PFOA)	ug/kg	< 5			5	Pass	
LCS - % Recovery							
Total Recoverable Hydrocarbons							
TRH C6-C9	%	80			70-130	Pass	
TRH C10-C14	%	81			70-130	Pass	
Naphthalene	%	123			70-130	Pass	
TRH C6-C10	%	74			70-130	Pass	
TRH >C10-C16	%	78			70-130	Pass	
LCS - % Recovery							
BTEX							
Benzene	%	97			70-130	Pass	
Toluene	%	120			70-130	Pass	
Ethylbenzene	%	115			70-130	Pass	
m&p-Xylenes	%	113			70-130	Pass	
o-Xylene	%	116			70-130	Pass	
Xylenes - Total*	%	114			70-130	Pass	
LCS - % Recovery							
Polycyclic Aromatic Hydrocarbons							
Acenaphthene	%	97			70-130	Pass	
Acenaphthylene	%	98			70-130	Pass	
Anthracene	%	86			70-130	Pass	
Benz(a)anthracene	%	102			70-130	Pass	
Benzo(a)pyrene	%	104			70-130	Pass	
Benzo(b&j)fluoranthene	%	98			70-130	Pass	
Benzo(g.h.i)perylene	%	107			70-130	Pass	
Benzo(k)fluoranthene	%	99			70-130	Pass	
Chrysene	%	100			70-130	Pass	
Dibenz(a.h)anthracene	%	100			70-130	Pass	
Fluoranthene	%	93			70-130	Pass	
Fluorene	%	96			70-130	Pass	
Indeno(1.2.3-cd)pyrene	%	106			70-130	Pass	
Naphthalene	%	97			70-130	Pass	
Phenanthrene	%	84			70-130	Pass	
Pyrene	%	94			70-130	Pass	
LCS - % Recovery							
Organochlorine Pesticides							
Chlordanes - Total	%	94			70-130	Pass	
4.4'-DDD	%	93			70-130	Pass	
4.4'-DDE	%	99			70-130	Pass	

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Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
4.4'-DDT	%	115			70-130	Pass	
a-HCH	%	93			70-130	Pass	
Aldrin	%	82			70-130	Pass	
b-HCH	%	89			70-130	Pass	
d-HCH	%	99			70-130	Pass	
Dieldrin	%	93			70-130	Pass	
Endosulfan I	%	119			70-130	Pass	
Endosulfan II	%	97			70-130	Pass	
Endosulfan sulphate	%	90			70-130	Pass	
Endrin	%	104			70-130	Pass	
Endrin aldehyde	%	81			70-130	Pass	
Endrin ketone	%	94			70-130	Pass	
g-HCH (Lindane)	%	97			70-130	Pass	
Heptachlor	%	86			70-130	Pass	
Heptachlor epoxide	%	82			70-130	Pass	
Hexachlorobenzene	%	93			70-130	Pass	
Methoxychlor	%	102			70-130	Pass	
LCS - % Recovery							
Organophosphorus Pesticides							
Diazinon	%	79			70-130	Pass	
Dimethoate	%	86			70-130	Pass	
Ethion	%	92			70-130	Pass	
Fenitrothion	%	80			70-130	Pass	
Methyl parathion	%	81			70-130	Pass	
Mevinphos	%	82			70-130	Pass	
LCS - % Recovery							
Polychlorinated Biphenyls							
Aroclor-1016	%	90			70-130	Pass	
Aroclor-1260	%	99			70-130	Pass	
LCS - % Recovery							
Heavy Metals							
Arsenic	%	102			80-120	Pass	
Cadmium	%	101			80-120	Pass	
Chromium	%	105			80-120	Pass	
Copper	%	99			80-120	Pass	
Lead	%	105			80-120	Pass	
Mercury	%	93			80-120	Pass	
Nickel	%	104			80-120	Pass	
Zinc	%	104			80-120	Pass	
LCS - % Recovery							
Per- and Polyfluoroalkyl Substances (PFASs) - Short							
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)	%	107			50-150	Pass	
Perfluorohexanesulfonic acid (PFHxS)	%	104			50-150	Pass	
Perfluorooctanesulfonic acid (PFOS)	%	103			50-150	Pass	
Perfluorooctanoic acid (PFOA)	%	111			50-150	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Spike - % Recovery									
Total Recoverable Hydrocarbons				Result 1					
TRH C6-C9	S22-Ja35293	NCP	%	103			70-130	Pass	
TRH C10-C14	S22-Ja40514	NCP	%	92			70-130	Pass	
Naphthalene	S22-Ja35195	NCP	%	106			70-130	Pass	
TRH C6-C10	S22-Ja35293	NCP	%	99			70-130	Pass	
TRH >C10-C16	S22-Ja40514	NCP	%	87			70-130	Pass	
Spike - % Recovery									

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Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
BTEX				Result 1					
Benzene	S22-Ja35195	NCP	%	77			70-130	Pass	
Toluene	S22-Ja35195	NCP	%	83			70-130	Pass	
Ethylbenzene	S22-Ja35195	NCP	%	90			70-130	Pass	
m&p-Xylenes	S22-Ja35195	NCP	%	86			70-130	Pass	
o-Xylene	S22-Ja35195	NCP	%	88			70-130	Pass	
Xylenes - Total*	S22-Ja35195	NCP	%	87			70-130	Pass	
Spike - % Recovery									
Polycyclic Aromatic Hydrocarbons				Result 1					
Acenaphthene	S22-Ja35268	NCP	%	121			70-130	Pass	
Acenaphthylene	S22-Ja35268	NCP	%	119			70-130	Pass	
Anthracene	S22-Ja35268	NCP	%	104			70-130	Pass	
Benz(a)anthracene	S22-Ja35268	NCP	%	112			70-130	Pass	
Benzo(a)pyrene	S22-Ja35268	NCP	%	112			70-130	Pass	
Benzo(b&j)fluoranthene	S22-Ja35268	NCP	%	119			70-130	Pass	
Benzo(g.h.i)perylene	S22-Ja37012	NCP	%	79			70-130	Pass	
Benzo(k)fluoranthene	S22-Ja35268	NCP	%	121			70-130	Pass	
Chrysene	S22-Ja35268	NCP	%	119			70-130	Pass	
Dibenz(a.h)anthracene	S22-Ja35268	NCP	%	116			70-130	Pass	
Fluoranthene	S22-Ja35268	NCP	%	125			70-130	Pass	
Fluorene	S22-Ja35268	NCP	%	117			70-130	Pass	
Indeno(1.2.3-cd)pyrene	S22-Ja37012	NCP	%	79			70-130	Pass	
Naphthalene	S22-Ja35268	NCP	%	128			70-130	Pass	
Phenanthrene	S22-Ja35268	NCP	%	115			70-130	Pass	
Pyrene	S22-Ja35268	NCP	%	118			70-130	Pass	
Spike - % Recovery									
Organochlorine Pesticides				Result 1					
Chlordanes - Total	S22-Ja37012	NCP	%	87			70-130	Pass	
4.4'-DDD	S22-Ja37012	NCP	%	73			70-130	Pass	
4.4'-DDE	S22-Ja37012	NCP	%	93			70-130	Pass	
4.4'-DDT	S22-Ja37012	NCP	%	71			70-130	Pass	
a-HCH	S22-Ja37012	NCP	%	77			70-130	Pass	
Aldrin	S22-Ja37012	NCP	%	74			70-130	Pass	
b-HCH	S22-Ja37012	NCP	%	80			70-130	Pass	
d-HCH	S22-Ja37012	NCP	%	88			70-130	Pass	
Dieldrin	S22-Ja37012	NCP	%	79			70-130	Pass	
Endosulfan I	S22-Ja37012	NCP	%	94			70-130	Pass	
Endosulfan II	S22-Ja37012	NCP	%	84			70-130	Pass	
Endosulfan sulphate	S22-Ja37012	NCP	%	74			70-130	Pass	
Endrin	S22-Ja37012	NCP	%	78			70-130	Pass	
Endrin ketone	S22-Ja37012	NCP	%	81			70-130	Pass	
g-HCH (Lindane)	S22-Ja37012	NCP	%	87			70-130	Pass	
Heptachlor	S22-Ja37012	NCP	%	77			70-130	Pass	
Heptachlor epoxide	S22-Ja37012	NCP	%	76			70-130	Pass	
Hexachlorobenzene	S22-Ja37012	NCP	%	89			70-130	Pass	
Spike - % Recovery									
Organophosphorus Pesticides				Result 1					
Diazinon	S22-Ja35157	NCP	%	89			70-130	Pass	
Dimethoate	S22-Ja37012	NCP	%	118			70-130	Pass	
Ethion	S22-Ja37012	NCP	%	125			70-130	Pass	
Fenitrothion	S22-Ja37012	NCP	%	90			70-130	Pass	
Methyl parathion	S22-Ja37012	NCP	%	98			70-130	Pass	
Mevinphos	S22-Ja35157	NCP	%	122			70-130	Pass	
Spike - % Recovery									

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Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Polychlorinated Biphenyls				Result 1					
Aroclor-1016	W22-Ja30714	NCP	%	76			70-130	Pass	
Aroclor-1260	W22-Ja30714	NCP	%	87			70-130	Pass	
Spike - % Recovery									
Heavy Metals				Result 1					
Arsenic	S22-Fe01821	NCP	%	104			75-125	Pass	
Cadmium	S22-Fe01821	NCP	%	96			75-125	Pass	
Chromium	S22-Fe01821	NCP	%	104			75-125	Pass	
Copper	S22-Fe01821	NCP	%	97			75-125	Pass	
Lead	S22-Fe01821	NCP	%	100			75-125	Pass	
Mercury	S22-Fe01821	NCP	%	101			75-125	Pass	
Nickel	S22-Fe01821	NCP	%	100			75-125	Pass	
Zinc	S22-Ja35196	NCP	%	93			75-125	Pass	
Spike - % Recovery									
Per- and Polyfluoroalkyl Substances (PFASs) - Short				Result 1					
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)	S22-Ja36048	NCP	%	106			50-150	Pass	
Perfluorohexanesulfonic acid (PFHxS)	S22-Ja36048	NCP	%	103			50-150	Pass	
Perfluorooctanesulfonic acid (PFOS)	S22-Ja36048	NCP	%	104			50-150	Pass	
Perfluorooctanoic acid (PFOA)	S22-Ja36048	NCP	%	111			50-150	Pass	
Test	**Lab Sample ID**	**QA Source**	**Units**	**Result 1**			**Acceptance Limits**	**Pass Limits**	**Qualifying Code**
Duplicate									
Total Recoverable Hydrocarbons				Result 1	Result 2	RPD			
TRH C6-C9	S22-Fe01783	CP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH C10-C14	S22-Ja40512	NCP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH C15-C28	S22-Ja40512	NCP	mg/kg	< 50	< 50	<1	30%	Pass	
TRH C29-C36	S22-Ja40512	NCP	mg/kg	< 50	< 50	<1	30%	Pass	
Naphthalene	S22-Fe01783	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
TRH C6-C10	S22-Fe01783	CP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH >C10-C16	S22-Ja40512	NCP	mg/kg	< 50	< 50	<1	30%	Pass	
TRH >C16-C34	S22-Ja40512	NCP	mg/kg	< 100	< 100	<1	30%	Pass	
TRH >C34-C40	S22-Ja40512	NCP	mg/kg	< 100	< 100	<1	30%	Pass	
Duplicate									
BTEX				Result 1	Result 2	RPD			
Benzene	S22-Fe01783	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Toluene	S22-Fe01783	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Ethylbenzene	S22-Fe01783	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
m&p-Xylenes	S22-Fe01783	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
o-Xylene	S22-Fe01783	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Xylenes - Total*	S22-Fe01783	CP	mg/kg	< 0.3	< 0.3	<1	30%	Pass	
Duplicate									
Polycyclic Aromatic Hydrocarbons				Result 1	Result 2	RPD			
Acenaphthene	S22-Fe01783	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Acenaphthylene	S22-Fe01783	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Anthracene	S22-Fe01783	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benz(a)anthracene	S22-Fe01783	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(a)pyrene	S22-Fe01783	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(b&j)fluoranthene	S22-Fe01783	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(g.h.i)perylene	S22-Fe01783	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(k)fluoranthene	S22-Fe01783	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chrysene	S22-Fe01783	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dibenz(a.h)anthracene	S22-Fe01783	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	

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Duplicate									
Polycyclic Aromatic Hydrocarbons				Result 1	Result 2	RPD			
Fluoranthene	S22-Fe01783	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Fluorene	S22-Fe01783	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Indeno(1.2.3-cd)pyrene	S22-Fe01783	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Naphthalene	S22-Fe01783	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Phenanthrene	S22-Fe01783	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Pyrene	S22-Fe01783	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
Organochlorine Pesticides				Result 1	Result 2	RPD			
Chlordanes - Total	S22-Fe01783	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
4.4'-DDD	S22-Fe01783	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
4.4'-DDE	S22-Fe01783	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
4.4'-DDT	S22-Fe01783	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
a-HCH	S22-Fe01783	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Aldrin	S22-Fe01783	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
b-HCH	S22-Fe01783	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
d-HCH	S22-Fe01783	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Dieldrin	S22-Fe01783	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan I	S22-Fe01783	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan II	S22-Fe01783	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan sulphate	S22-Fe01783	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin	S22-Fe01783	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin aldehyde	S22-Fe01783	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin ketone	S22-Fe01783	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
g-HCH (Lindane)	S22-Fe01783	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Heptachlor	S22-Fe01783	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Heptachlor epoxide	S22-Fe01783	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Hexachlorobenzene	S22-Fe01783	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Methoxychlor	S22-Fe01783	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Toxaphene	S22-Fe01783	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
Organophosphorus Pesticides				Result 1	Result 2	RPD			
Azinphos-methyl	S22-Fe01783	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Bolstar	S22-Fe01783	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Chlorfenvinphos	S22-Fe01783	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Chlorpyrifos	S22-Fe01783	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Chlorpyrifos-methyl	S22-Fe01783	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Coumaphos	S22-Fe01783	CP	mg/kg	< 2	< 2	<1	30%	Pass	
Demeton-S	S22-Fe01783	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Demeton-O	S22-Fe01783	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Diazinon	S22-Fe01783	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Dichlorvos	S22-Fe01783	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Dimethoate	S22-Fe01783	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Disulfoton	S22-Fe01783	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
EPN	S22-Fe01783	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Ethion	S22-Fe01783	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Ethoprop	S22-Fe01783	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Ethyl parathion	S22-Fe01783	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Fenitrothion	S22-Fe01783	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Fensulfothion	S22-Fe01783	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Fenthion	S22-Fe01783	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Malathion	S22-Fe01783	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Merphos	S22-Fe01783	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Methyl parathion	S22-Fe01783	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Mevinphos	S22-Fe01783	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	

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Duplicate									
Organophosphorus Pesticides				Result 1	Result 2	RPD			
Monocrotophos	S22-Fe01783	CP	mg/kg	< 2	< 2	<1	30%	Pass	
Naled	S22-Fe01783	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Omethoate	S22-Fe01783	CP	mg/kg	< 2	< 2	<1	30%	Pass	
Phorate	S22-Fe01783	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Pirimiphos-methyl	S22-Fe01783	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Pyrazophos	S22-Fe01783	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Ronnel	S22-Fe01783	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Terbufos	S22-Fe01783	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Tetrachlorvinphos	S22-Fe01783	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Tokuthion	S22-Fe01783	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Trichloronate	S22-Fe01783	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Duplicate									
Polychlorinated Biphenyls				Result 1	Result 2	RPD			
Aroclor-1016	S22-Fe01783	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Aroclor-1221	S22-Fe01783	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Aroclor-1232	S22-Fe01783	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Aroclor-1242	S22-Fe01783	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Aroclor-1248	S22-Fe01783	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Aroclor-1254	S22-Fe01783	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Aroclor-1260	S22-Fe01783	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Total PCB*	S22-Fe01783	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Duplicate									
Heavy Metals				Result 1	Result 2	RPD			
Arsenic	S22-Fe01833	NCP	mg/kg	8.5	9.9	15	30%	Pass	
Cadmium	S22-Fe01833	NCP	mg/kg	< 0.4	< 0.4	<1	30%	Pass	
Chromium	S22-Fe01833	NCP	mg/kg	14	16	9.0	30%	Pass	
Copper	S22-Fe01833	NCP	mg/kg	26	27	5.0	30%	Pass	
Lead	S22-Fe01833	NCP	mg/kg	13	16	18	30%	Pass	
Mercury	S22-Fe01833	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Nickel	S22-Fe01833	NCP	mg/kg	10	12	18	30%	Pass	
Zinc	S22-Fe01833	NCP	mg/kg	55	67	20	30%	Pass	
Duplicate									
				Result 1	Result 2	RPD			
% Moisture	S22-Fe01783	CP	%	9.0	7.4	20	30%	Pass	
Duplicate									
Per- and Polyfluoroalkyl Substances (PFASs) - Short				Result 1	Result 2	RPD			
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)	S22-Fe01783	CP	ug/kg	< 10	< 10	<1	30%	Pass	
Perfluorohexanesulfonic acid (PFHxS)	S22-Fe01783	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorooctanesulfonic acid (PFOS)	S22-Fe01783	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorooctanoic acid (PFOA)	S22-Fe01783	CP	ug/kg	< 5	< 5	<1	30%	Pass	

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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
N01	F2 is determined by arithmetically subtracting the "naphthalene" value from the ">C10-C16" value. The naphthalene value used in this calculation is obtained from volatiles (Purge & Trap analysis).
N02	Where we have reported both volatile (P&T GCMS) and semivolatile (GCMS) naphthalene data, results may not be identical. Provided correct sample handling protocols have been followed, any observed differences in results are likely to be due to procedural differences within each methodology. Results determined by both techniques have passed all QAQC acceptance criteria, and are entirely technically valid.
N04	F1 is determined by arithmetically subtracting the "Total BTEX" value from the "C6-C10" value. The "Total BTEX" value is obtained by summing the concentrations of BTEX analytes. The "C6-C10" value is obtained by quantitating against a standard of mixed aromatic/aliphatic analytes.
N07	Please note:- These two PAH isomers closely co-elute using the most contemporary analytical methods and both the reported concentration (and the TEQ) apply specifically to the total of the two co-eluting PAHs
N11	Isotope dilution is used for calibration of each native compound for which an exact labelled analogue is available (Isotope Dilution Quantitation). The isotopically labelled analogues allow identification and recovery correction of the concentration of the associated native PFAS compounds.

Authorised by:

John Nguyen	Analytical Services Manager
Andrew Sullivan	Senior Analyst-Organic (NSW)
Andrew Sullivan	Senior Analyst-PFAS (NSW)
John Nguyen	Senior Analyst-Metal (NSW)
Roopesh Rangarajan	Senior Analyst-Volatile (NSW)



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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ALS Environmental

CERTIFICATE OF ANALYSIS

Work Order	: **ES2201561**	Page	: 1 of 14
Client	: **ENVIRONMENTAL RESOURCES MANAGEMENT (ERM)**	Laboratory	: Environmental Division Sydney
Contact	: NICHOLAS GRBICH	Contact	: Customer Services ES
Address	: LEVEL 1 45 WATT STREET NEWCASTLE NSW 2300	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
Telephone	: ----	Telephone	: +61-2-8784 8555
Project	: 0628507	Date Samples Received	: 18-Jan-2022 18:35
Order number	: ----	Date Analysis Commenced	: 19-Jan-2022
C-O-C number	: ----	Issue Date	: 25-Jan-2022 17:41
Sampler	: Taj Morrison		
Site	: ----		
Quote number	: EN/114		
No. of samples received	: 8		
No. of samples analysed	: 8		

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

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

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results
- Surrogate Control Limits

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

Signatories

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

Signatories	*Position*	*Accreditation Category*
Ankit Joshi	Inorganic Chemist	Sydney Inorganics, Smithfield, NSW
Edwandy Fadjar	Organic Coordinator	Sydney Organics, Smithfield, NSW
Ivan Taylor	Analyst	Sydney Inorganics, Smithfield, NSW

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General Comments

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

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

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

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

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.
- 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.
- TDS by method EA-015 may bias high for various samples due to the presence of fine particulate matter, which may pass through the prescribed GF/C paper.
- EK057G: It has been noted that Nitrite is greater than NOx on sample 1, however this difference is within the limits of experimental variation.
- It has been noted that Nitrite is greater than NOx, however this difference is within the limits of experimental variation.
- 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.
- Sodium Adsorption Ratio (where reported): Where results for Na, Ca or Mg are <LOR, a concentration at half the reported LOR is incorporated into the SAR calculation. This represents a conservative approach for Na relative to the assumption that <LOR = zero concentration and a conservative approach for Ca & Mg relative to the assumption that <LOR is equivalent to the LOR concentration.

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Analytical Results

Sub-Matrix: WATER (Matrix: WATER)			Sample ID	SMW_BH038	SMW_BH035_S	SMW_BH051	SMW_BH035	R01_2201117
			Sampling date / time	17-Jan-2022 00:00	18-Jan-2022 00:00	18-Jan-2022 00:00	18-Jan-2022 00:00	17-Jan-2022 00:00
Compound	CAS Number	LOR	Unit	ES2201561-001	ES2201561-002	ES2201561-003	ES2201561-004	ES2201561-005
				Result	Result	Result	Result	Result
EA015: Total Dissolved Solids dried at 180 ± 5 °C								
Total Dissolved Solids @180°C	----	10	mg/L	2430	4260	4100	11600	---
ED037P: Alkalinity by PC Titrator								
Hydroxide Alkalinity as CaCO3	DMO-210-001	1	mg/L	163	<1	<1	<1	---
Carbonate Alkalinity as CaCO3	3812-32-6	1	mg/L	46	<1	<1	<1	---
Bicarbonate Alkalinity as CaCO3	71-52-3	1	mg/L	<1	131	149	568	---
Total Alkalinity as CaCO3	----	1	mg/L	208	131	149	568	---
ED041G: Sulfate (Turbidimetric) as SO4 2- by DA								
Sulfate as SO4 - Turbidimetric	14808-79-8	1	mg/L	291	500	421	10	---
ED045G: Chloride by Discrete Analyser								
Chloride	16887-00-6	1	mg/L	836	1070	1630	5610	---
ED093F: Dissolved Major Cations								
Calcium	7440-70-2	1	mg/L	272	63	24	509	---
Magnesium	7439-95-4	1	mg/L	<1	58	85	364	---
Sodium	7440-23-5	1	mg/L	514	814	1130	2600	---
Potassium	7440-09-7	1	mg/L	10	9	18	45	---
EG020F: Dissolved Metals by ICP-MS								
Arsenic	7440-38-2	0.001	mg/L	<0.001	<0.001	<0.001	<0.001	---
Cadmium	7440-43-9	0.0001	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	---
Chromium	7440-47-3	0.001	mg/L	0.014	<0.001	<0.001	<0.001	---
Copper	7440-50-8	0.001	mg/L	<0.001	0.001	0.002	0.004	---
Nickel	7440-02-0	0.001	mg/L	<0.001	0.105	0.080	0.026	---
Lead	7439-92-1	0.001	mg/L	<0.001	<0.001	<0.001	<0.001	---
Zinc	7440-66-6	0.005	mg/L	<0.005	0.456	0.164	0.030	---
Iron	7439-89-6	0.05	mg/L	<0.05	4.80	0.53	0.34	---
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
Iron	7439-89-6	0.05	mg/L	---	---	---	---	<0.05
EG035F: Dissolved Mercury by FIMS								

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Analytical Results

Sub-Matrix: WATER (Matrix: WATER)			Sample ID	SMW_BH038	SMW_BH035_S	SMW_BH051	SMW_BH035	R01_2201117
			Sampling date / time	17-Jan-2022 00:00	18-Jan-2022 00:00	18-Jan-2022 00:00	18-Jan-2022 00:00	17-Jan-2022 00:00
Compound	CAS Number	LOR	Unit	ES2201561-001	ES2201561-002	ES2201561-003	ES2201561-004	ES2201561-005
				Result	Result	Result	Result	Result
EG035F: Dissolved Mercury by FIMS - Continued								
Mercury	7439-97-6	0.0001	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	----
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.0001	mg/L	----	----	----	----	<0.0001
EK055G: Ammonia as N by Discrete Analyser								
Ammonia as N	7664-41-7	0.01	mg/L	**0.61**	**0.18**	**0.19**	**5.59**	**0.01**
EK057G: Nitrite as N by Discrete Analyser								
Nitrite as N	14797-65-0	0.01	mg/L	**1.01**	<0.01	<0.01	<0.01	----
EK058G: Nitrate as N by Discrete Analyser								
Nitrate as N	14797-55-8	0.01	mg/L	<0.01	**0.06**	**0.06**	**0.08**	----
EK059G: Nitrite plus Nitrate as N (NOx) by Discrete Analyser								
Nitrite + Nitrate as N	----	0.01	mg/L	**1.00**	**0.06**	**0.06**	**0.08**	**0.03**
EK061G: Total Kjeldahl Nitrogen By Discrete Analyser								
Total Kjeldahl Nitrogen as N	----	0.1	mg/L	**0.9**	**17.1**	**0.7**	**8.2**	<0.1
EK062G: Total Nitrogen as N (TKN + NOx) by Discrete Analyser								
^ Total Nitrogen as N	----	0.1	mg/L	**1.9**	**17.2**	**0.8**	**8.3**	<0.1
EK067G: Total Phosphorus as P by Discrete Analyser								
Total Phosphorus as P	----	0.01	mg/L	**0.01**	**15.0**	**0.14**	**0.64**	<0.01
EN055: Ionic Balance								
ø Total Anions	----	0.01	meq/L	**33.8**	**43.2**	**57.7**	**170**	----
ø Total Cations	----	0.01	meq/L	**36.2**	**43.6**	**57.8**	**170**	----
ø Ionic Balance	----	0.01	%	**3.41**	**0.40**	**0.07**	**0.06**	----
EP074A: Monocyclic Aromatic Hydrocarbons								
Styrene	100-42-5	5	µg/L	<5	<5	<5	<5	<5
Isopropylbenzene	98-82-8	5	µg/L	<5	<5	<5	<5	<5
n-Propylbenzene	103-65-1	5	µg/L	<5	<5	<5	<5	<5
1.3.5-Trimethylbenzene	108-67-8	5	µg/L	<5	<5	<5	<5	<5
sec-Butylbenzene	135-98-8	5	µg/L	<5	<5	<5	<5	<5
1.2.4-Trimethylbenzene	95-63-6	5	µg/L	<5	<5	<5	<5	<5
tert-Butylbenzene	98-06-6	5	µg/L	<5	<5	<5	<5	<5
p-Isopropyltoluene	99-87-6	5	µg/L	<5	<5	<5	<5	<5
n-Butylbenzene	104-51-8	5	µg/L	<5	<5	<5	<5	<5
EP074B: Oxygenated Compounds								
Vinyl Acetate	108-05-4	50	µg/L	<50	<50	<50	<50	<50

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Analytical Results

Sub-Matrix: WATER (Matrix: WATER)			Sample ID	SMW_BH038	SMW_BH035_S	SMW_BH051	SMW_BH035	R01_2201117
			Sampling date / time	17-Jan-2022 00:00	18-Jan-2022 00:00	18-Jan-2022 00:00	18-Jan-2022 00:00	17-Jan-2022 00:00
Compound	CAS Number	LOR	Unit	ES2201561-001	ES2201561-002	ES2201561-003	ES2201561-004	ES2201561-005
				Result	Result	Result	Result	Result
EP074B: Oxygenated Compounds - Continued								
2-Butanone (MEK)	78-93-3	50	µg/L	<50	<50	<50	<50	<50
4-Methyl-2-pentanone (MIBK)	108-10-1	50	µg/L	<50	<50	<50	<50	<50
2-Hexanone (MBK)	591-78-6	50	µg/L	<50	<50	<50	<50	<50
EP074C: Sulfonated Compounds								
Carbon disulfide	75-15-0	5	µg/L	<5	<5	<5	<5	<5
EP074D: Fumigants								
2.2-Dichloropropane	594-20-7	5	µg/L	<5	<5	<5	<5	<5
1.2-Dichloropropane	78-87-5	5	µg/L	<5	<5	<5	<5	<5
cis-1.3-Dichloropropylene	10061-01-5	5	µg/L	<5	<5	<5	<5	<5
trans-1.3-Dichloropropylene	10061-02-6	5	µg/L	<5	<5	<5	<5	<5
1.2-Dibromoethane (EDB)	106-93-4	5	µg/L	<5	<5	<5	<5	<5
EP074E: Halogenated Aliphatic Compounds								
Dichlorodifluoromethane	75-71-8	50	µg/L	<50	<50	<50	<50	<50
Chloromethane	74-87-3	50	µg/L	<50	<50	<50	<50	<50
Vinyl chloride	75-01-4	50	µg/L	<50	<50	<50	<50	<50
Bromomethane	74-83-9	50	µg/L	<50	<50	<50	<50	<50
Chloroethane	75-00-3	50	µg/L	<50	<50	<50	<50	<50
Trichlorofluoromethane	75-69-4	50	µg/L	<50	<50	<50	<50	<50
1.1-Dichloroethene	75-35-4	5	µg/L	<5	<5	<5	<5	<5
Iodomethane	74-88-4	5	µg/L	<5	<5	<5	<5	<5
trans-1.2-Dichloroethene	156-60-5	5	µg/L	<5	<5	<5	<5	<5
1.1-Dichloroethane	75-34-3	5	µg/L	<5	<5	<5	<5	<5
cis-1.2-Dichloroethene	156-59-2	5	µg/L	<5	<5	<5	<5	<5
1.1.1-Trichloroethane	71-55-6	5	µg/L	<5	<5	<5	<5	<5
1.1-Dichloropropylene	563-58-6	5	µg/L	<5	<5	<5	<5	<5
Carbon Tetrachloride	56-23-5	5	µg/L	<5	<5	<5	<5	<5
1.2-Dichloroethane	107-06-2	5	µg/L	<5	<5	<5	<5	<5
Trichloroethene	79-01-6	5	µg/L	<5	<5	<5	<5	<5
Dibromomethane	74-95-3	5	µg/L	<5	<5	<5	<5	<5
1.1.2-Trichloroethane	79-00-5	5	µg/L	<5	<5	<5	<5	<5
1.3-Dichloropropane	142-28-9	5	µg/L	<5	<5	<5	<5	<5
Tetrachloroethene	127-18-4	5	µg/L	<5	<5	<5	<5	<5
1.1.1.2-Tetrachloroethane	630-20-6	5	µg/L	<5	<5	<5	<5	<5
trans-1.4-Dichloro-2-butene	110-57-6	5	µg/L	<5	<5	<5	<5	<5

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Analytical Results

Sub-Matrix: WATER (Matrix: WATER)			Sample ID	SMW_BH038	SMW_BH035_S	SMW_BH051	SMW_BH035	R01_2201117
			Sampling date / time	17-Jan-2022 00:00	18-Jan-2022 00:00	18-Jan-2022 00:00	18-Jan-2022 00:00	17-Jan-2022 00:00
Compound	CAS Number	LOR	Unit	ES2201561-001	ES2201561-002	ES2201561-003	ES2201561-004	ES2201561-005
				Result	Result	Result	Result	Result
EP074E: Halogenated Aliphatic Compounds - Continued								
cis-1.4-Dichloro-2-butene	1476-11-5	5	µg/L	<5	<5	<5	<5	<5
1.1.2.2-Tetrachloroethane	79-34-5	5	µg/L	<5	<5	<5	<5	<5
1.2.3-Trichloropropane	96-18-4	5	µg/L	<5	<5	<5	<5	<5
Pentachloroethane	76-01-7	5	µg/L	<5	<5	<5	<5	<5
1.2-Dibromo-3-chloropropane	96-12-8	5	µg/L	<5	<5	<5	<5	<5
Hexachlorobutadiene	87-68-3	5	µg/L	<5	<5	<5	<5	<5
EP074F: Halogenated Aromatic Compounds								
Chlorobenzene	108-90-7	5	µg/L	<5	<5	<5	<5	<5
Bromobenzene	108-86-1	5	µg/L	<5	<5	<5	<5	<5
2-Chlorotoluene	95-49-8	5	µg/L	<5	<5	<5	<5	<5
4-Chlorotoluene	106-43-4	5	µg/L	<5	<5	<5	<5	<5
1.3-Dichlorobenzene	541-73-1	5	µg/L	<5	<5	<5	<5	<5
1.4-Dichlorobenzene	106-46-7	5	µg/L	<5	<5	<5	<5	<5
1.2-Dichlorobenzene	95-50-1	5	µg/L	<5	<5	<5	<5	<5
1.2.4-Trichlorobenzene	120-82-1	5	µg/L	<5	<5	<5	<5	<5
1.2.3-Trichlorobenzene	87-61-6	5	µg/L	<5	<5	<5	<5	<5
EP074G: Trihalomethanes								
Chloroform	67-66-3	5	µg/L	<5	<5	<5	<5	<5
Bromodichloromethane	75-27-4	5	µg/L	<5	<5	<5	<5	<5
Dibromochloromethane	124-48-1	5	µg/L	<5	<5	<5	<5	<5
Bromoform	75-25-2	5	µg/L	<5	<5	<5	<5	<5
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

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Analytical Results

Sub-Matrix: WATER (Matrix: WATER)			Sample ID	SMW_BH038	SMW_BH035_S	SMW_BH051	SMW_BH035	R01_2201117
			Sampling date / time	17-Jan-2022 00:00	18-Jan-2022 00:00	18-Jan-2022 00:00	18-Jan-2022 00:00	17-Jan-2022 00:00
Compound	CAS Number	LOR	Unit	ES2201561-001	ES2201561-002	ES2201561-003	ES2201561-004	ES2201561-005
				Result	Result	Result	Result	Result
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued								
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
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
EP074S: VOC Surrogates								
1.2-Dichloroethane-D4	17060-07-0	5	%	**99.6**	**105**	**107**	**116**	**99.6**
Toluene-D8	2037-26-5	5	%	**113**	**123**	**123**	**129**	**119**

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Analytical Results

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

Compound	CAS Number	LOR	Unit	Sample ID	SMW_BH038	SMW_BH035_S	SMW_BH051	SMW_BH035	R01_2201117
				Sampling date / time	17-Jan-2022 00:00	18-Jan-2022 00:00	18-Jan-2022 00:00	18-Jan-2022 00:00	17-Jan-2022 00:00
					ES2201561-001	ES2201561-002	ES2201561-003	ES2201561-004	ES2201561-005
					Result	Result	Result	Result	Result
EP074S: VOC Surrogates - Continued									
4-Bromofluorobenzene	460-00-4	5	%		**104**	**111**	**109**	**113**	**105**
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	1.0	%		**17.4**	**20.0**	**18.2**	**18.3**	**17.9**
2-Chlorophenol-D4	93951-73-6	1.0	%		**30.0**	**48.9**	**46.4**	**44.3**	**37.9**
2.4.6-Tribromophenol	118-79-6	1.0	%		**36.1**	**74.6**	**85.2**	**70.6**	**71.6**
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	1.0	%		**56.6**	**70.8**	**67.1**	**67.2**	**56.3**
Anthracene-d10	1719-06-8	1.0	%		**73.1**	**93.8**	**88.9**	**84.9**	**75.3**
4-Terphenyl-d14	1718-51-0	1.0	%		**72.6**	**88.3**	**81.7**	**80.2**	**75.4**
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	2	%		**99.2**	**102**	**104**	**113**	**97.2**
Toluene-D8	2037-26-5	2	%		**113**	**117**	**116**	**122**	**113**
4-Bromofluorobenzene	460-00-4	2	%		**116**	**114**	**111**	**118**	**107**

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Analytical Results

Sub-Matrix: WATER (Matrix: WATER)			Sample ID	R01_2201118	Trip blank	Trip spike	----	----
			Sampling date / time	18-Jan-2022 00:00	13-Jan-2022 00:00	13-Jan-2022 00:00	---	---
Compound	CAS Number	LOR	Unit	ES2201561-006	ES2201561-007	ES2201561-008	------	------
				Result	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	----	----	---	---
Iron	7439-89-6	0.05	mg/L	<0.05	----	----	---	---
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.0001	mg/L	<0.0001	----	----	---	---
EK055G: Ammonia as N by Discrete Analyser								
Ammonia as N	7664-41-7	0.01	mg/L	<0.01	----	----	---	---
EK059G: Nitrite plus Nitrate as N (NOx) by Discrete Analyser								
Nitrite + Nitrate as N	----	0.01	mg/L	**0.03**	----	----	---	---
EK061G: Total Kjeldahl Nitrogen By Discrete Analyser								
Total Kjeldahl Nitrogen as N	----	0.1	mg/L	<0.1	----	----	---	---
EK062G: Total Nitrogen as N (TKN + NOx) by Discrete Analyser								
^ Total Nitrogen as N	----	0.1	mg/L	<0.1	----	----	---	---
EK067G: Total Phosphorus as P by Discrete Analyser								
Total Phosphorus as P	----	0.01	mg/L	<0.01	----	----	---	---
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								
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	----	----	---	---

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Analytical Results

Sub-Matrix: WATER (Matrix: WATER)			Sample ID	R01_2201118	Trip blank	Trip spike	----	----
			Sampling date / time	18-Jan-2022 00:00	13-Jan-2022 00:00	13-Jan-2022 00:00	---	---
Compound	CAS Number	LOR	Unit	ES2201561-006	ES2201561-007	ES2201561-008	------	------
				Result	Result	Result	---	---
EP074B: Oxygenated Compounds - Continued								
2-Hexanone (MBK)	591-78-6	50	µg/L	<50	----	----	---	---
EP074C: Sulfonated Compounds								
Carbon disulfide	75-15-0	5	µg/L	<5	----	----	---	---
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	----	----	---	---
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	----	----	---	---

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Analytical Results

Sub-Matrix: WATER (Matrix: WATER)			Sample ID	R01_2201118	Trip blank	Trip spike	---	---
			Sampling date / time	18-Jan-2022 00:00	13-Jan-2022 00:00	13-Jan-2022 00:00	---	---
Compound	CAS Number	LOR	Unit	ES2201561-006	ES2201561-007	ES2201561-008	------	------
				Result	Result	Result	---	---
EP074E: Halogenated Aliphatic Compounds - Continued								
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	----	----	---	---
Hexachlorobutadiene	87-68-3	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	----	----	---	---
1.3-Dichlorobenzene	541-73-1	5	µg/L	<5	----	----	---	---
1.4-Dichlorobenzene	106-46-7	5	µg/L	<5	----	----	---	---
1.2-Dichlorobenzene	95-50-1	5	µg/L	<5	----	----	---	---
1.2.4-Trichlorobenzene	120-82-1	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)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	----	----	---	---
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	----	----	---	---

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Analytical Results

Sub-Matrix: WATER (Matrix: WATER)			Sample ID	R01_2201118	Trip blank	Trip spike	----	----
			Sampling date / time	18-Jan-2022 00:00	13-Jan-2022 00:00	13-Jan-2022 00:00	---	---
Compound	CAS Number	LOR	Unit	ES2201561-006	ES2201561-007	ES2201561-008	------	------
				Result	Result	Result	---	---
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued								
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	<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	<20	----	---	---
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	20	µg/L	<20	<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	<1	17	---	---
Toluene	108-88-3	2	µg/L	<2	<2	18	---	---
Ethylbenzene	100-41-4	2	µg/L	<2	<2	17	---	---
meta- & para-Xylene	108-38-3 106-42-3	2	µg/L	<2	<2	18	---	---
ortho-Xylene	95-47-6	2	µg/L	<2	<2	18	---	---
^ Total Xylenes	----	2	µg/L	<2	<2	36	---	---
^ Sum of BTEX	----	1	µg/L	<1	<1	88	---	---
Naphthalene	91-20-3	5	µg/L	<5	<5	19	---	---
EP074S: VOC Surrogates								
1.2-Dichloroethane-D4	17060-07-0	5	%	98.5	----	----	---	---
Toluene-D8	2037-26-5	5	%	115	----	----	---	---
4-Bromofluorobenzene	460-00-4	5	%	100	----	----	---	---
EP075(SIM)S: Phenolic Compound Surrogates								

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Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	R01_2201118	Trip blank	Trip spike	----	----
				Sampling date / time	18-Jan-2022 00:00	13-Jan-2022 00:00	13-Jan-2022 00:00	---	---
Compound	CAS Number	LOR	Unit		ES2201561-006	ES2201561-007	ES2201561-008	------	------
					Result	Result	Result	---	---
EP075(SIM)S: Phenolic Compound Surrogates - Continued									
Phenol-d6	13127-88-3	1.0	%		16.8	----	----	---	---
2-Chlorophenol-D4	93951-73-6	1.0	%		44.1	----	----	---	---
2.4.6-Tribromophenol	118-79-6	1.0	%		73.6	----	----	---	---
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	1.0	%		65.0	----	----	---	---
Anthracene-d10	1719-06-8	1.0	%		77.0	----	----	---	---
4-Terphenyl-d14	1718-51-0	1.0	%		79.1	----	----	---	---
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	2	%		95.6	101	99.4	---	---
Toluene-D8	2037-26-5	2	%		109	109	110	---	---
4-Bromofluorobenzene	460-00-4	2	%		106	109	110	---	---

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Surrogate Control Limits

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

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CHAIN OF CUSTODY

ALS Laboratory: please tick →

☐ADELAIDE 21 Burma Road Pooraka SA 5095 Ph: 08 8359 0890 E: adelaide@alsglobal.com

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☐WOLLONGONG 99 Kenny Street Wollongong NSW 2500 Ph: 02 4225 3125 E: portkembla@alsglobal.com

CLIENT: ERM	TURNAROUND REQUIREMENTS : (Standard TAT may be longer for some tests e.g., Ultra Trace Organics)	☑ Standard TAT (List due date):	FOR LABORATORY USE ONLY (Circle)
OFFICE: Newcastle		☐ Non Standard or urgent TAT (List due date):	Custody Seal Intact? Yes No N/A
PROJECT: 0628507	ALS QUOTE NO.:	COC SEQUENCE NUMBER (Circle)	Free ice / frozen ice bricks present upon receipt? Yes No N/A
ORDER NUMBER:		COC: 1 2 3 4 5 6 7	Random Sample Temperature on Receipt: °C
PROJECT MANAGER: Nicholas Grbich	CONTACT PH: 0415 833 925	OF: 1 2 3 4 5 6 7	Other comment: 2.6
SAMPLER: Taj Marson	SAMPLER MOBILE: 0467 295 082		
COC emailed to ALS? (YES / NO)	EDD FORMAT (or default):		
Email Reports to (will default to PM if no other addresses are listed): PM			
Email Invoice to (will default to PM if no other addresses are listed): PM			

RELINQUISHED BY:	RECEIVED BY:	RELINQUISHED BY:	RECEIVED BY:
Taj Marson	[illegible]		
DATE/TIME: 18/01/22	DATE/TIME: 18/1/22 1835	DATE/TIME:	DATE/TIME:

COMMENTS/SPECIAL HANDLING/STORAGE OR DISPOSAL:

ALS USE	SAMPLE DETAILS MATRIX: SOLID (S) WATER (W)			CONTAINER INFORMATION		ANALYSIS REQUIRED including SUITES (NB. Suite Codes must be listed to attract suite price) Where Metals are required, specify Total (unfiltered bottle required) or Dissolved (field filtered bottle required).								Additional Information
LAB ID	SAMPLE ID	DATE / TIME	MATRIX	TYPE & PRESERVATIVE (refer to codes below)	TOTAL CONTAINERS	TRH & BTEX N	PAHS	VOC's	Heavy Metals (Total & Dissolved) plus Hg	Phenols	Major anions & cations	TDS	Ammonia, nitrate, total nitrogen, total phosphorus	Comments on likely contaminant levels, dilutions, or samples requiring specific QC analysis etc.
1	SMW-BH038	17/01/22	W		6	X	X	X	X		X	X	X	
2	SMW_BH035_S	18/01/22	W		6	X	X	X	X		X	X	X	
3	SMW-BH051	18/01/22	W		6	X	X	X	X		X	X	X	
4	SMW-BH035	18/01/22	W		6	X	X	X	X		X	X	X	
5	RO1-[illegible]220117	17/01/22	W		5	X	X	X	X				X	
6	RO1-220118	18/01/22	W		5	X	X	X	X				X	
7	Trip blank & Trip spike	18/01/22	W		2	X								
				TOTAL										

Environmental Division Sydney
Work Order Reference
ES2201561

HT

Telephone : + 61-2-8784 8555

Water Container Codes: P = Unpreserved Plastic; N = Nitric Preserved Plastic; ORC = Nitric Preserved ORC; SH = Sodium Hydroxide/Cd Preserved; S = Sodium Hydroxide Preserved Plastic; AG = A
V = VOA Vial HCl Preserved; VB = VOA Vial Sodium Bisulphate Preserved; VS = VOA Vial Sulfuric Preserved; AV = Airfreight Unpreserved Vial SG = Sulfuric Preserved Amber Glass; H = HCl preserve
Z = Zinc Acetate Preserved Bottle; E = EDTA Preserved Bottles; ST = Sterile Bottle; ASS = Plastic Bag for Acid Sulphate Soils; B = Unpreserved Bag.

c
ric Preserved Plastic; F = Formaldehyde Preserved Glass;

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ALS Environmental

CERTIFICATE OF ANALYSIS

Work Order	: **ES2201683**	Page	: 1 of 87
Client	: **ENVIRONMENTAL RESOURCES MANAGEMENT (ERM)**	Laboratory	: Environmental Division Sydney
Contact	: MS JESSICA LAWRENCE	Contact	: Customer Services ES
Address	: LEVEL 15 309 KENT STREET SYDNEY NSW AUSTRALIA 2000	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
Telephone	: +61 02 8584 8888	Telephone	: +61-2-8784 8555
Project	: 0628507 SOP	Date Samples Received	: 19-Jan-2022 14:40
Order number	: ----	Date Analysis Commenced	: 24-Jan-2022
C-O-C number	: ----	Issue Date	: 01-Feb-2022 15:23
Sampler	: Ant R		
Site	: ----		
Quote number	: EN/114		
No. of samples received	: 36		
No. of samples analysed	: 36		

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

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

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results
- 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.

Signatories	*Position*	*Accreditation Category*
Alana Smylie	Asbestos Identifier	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

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General Comments

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

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

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

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

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.
- 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.
- 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-dichlorothene, trans-1,2-dichlorothene, 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 Zinc on sample ES2201943 # 002. Confirmed by redigestion and reanalysis.
- EP080: The trip spike and its control have been analysed for volatile TPH and BTEXN only. The trip spike and control were prepared in the lab using reagent grade sand spiked with petrol. The spike was dispatched from the lab and the control retained.
- EP075: Where reported, 'Sum of PAH' is the sum of the USEPA 16 priority PAHs
- EA200 'Am' Amosite (brown asbestos)

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- 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.

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Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	TS 1	TB	SOP_BH103_0.2_220117	SOP_BH103_1.0_220117	SOP_BH104_1.0_220117
			Sampling date / time	14-Jan-2022 00:00	17-Jan-2022 00:00	17-Jan-2022 00:00	17-Jan-2022 00:00	17-Jan-2022 00:00
Compound	CAS Number	LOR	Unit	ES2201683-001	ES2201683-002	ES2201683-003	ES2201683-004	ES2201683-005
				Result	Result	Result	Result	Result
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	----	1.0	%	----	----	8.0	8.7	9.0
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	----	----	175	---	352
APPROVED IDENTIFIER:	----	-	--	----	----	A. SMYLIE	---	A. SMYLIE
EG005(ED093)T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	----	----	<5	10	10
Cadmium	7440-43-9	1	mg/kg	----	----	<1	<1	<1
Chromium	7440-47-3	2	mg/kg	----	----	<2	6	7
Copper	7440-50-8	5	mg/kg	----	----	27	26	32
Lead	7439-92-1	5	mg/kg	----	----	5	17	17
Nickel	7440-02-0	2	mg/kg	----	----	<2	4	9
Zinc	7440-66-6	5	mg/kg	----	----	6	34	72
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
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

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Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

Compound	CAS Number	LOR	Unit	Sample ID	TS 1	TB	SOP_BH103_0.2_220117	SOP_BH103_1.0_220117	SOP_BH104_1.0_220117
				Sampling date / time	14-Jan-2022 00:00	17-Jan-2022 00:00	17-Jan-2022 00:00	17-Jan-2022 00:00	17-Jan-2022 00:00
					ES2201683-001	ES2201683-002	ES2201683-003	ES2201683-004	ES2201683-005
					Result	Result	Result	Result	Result
EP068A: Organochlorine Pesticides (OC) - Continued									
Dieldrin	60-57-1	0.05	mg/kg		----	----	<0.05	<0.05	<0.05
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
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

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Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

Compound	CAS Number	LOR	Unit	Sample ID	TS 1	TB	SOP_BH103_0.2_220117	SOP_BH103_1.0_220117	SOP_BH104_1.0_220117
				Sampling date / time	14-Jan-2022 00:00	17-Jan-2022 00:00	17-Jan-2022 00:00	17-Jan-2022 00:00	17-Jan-2022 00:00
					ES2201683-001	ES2201683-002	ES2201683-003	ES2201683-004	ES2201683-005
					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

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Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

Compound	CAS Number	LOR	Unit	Sample ID	TS 1	TB	SOP_BH103_0.2_220117	SOP_BH103_1.0_220117	SOP_BH104_1.0_220117
				Sampling date / time	14-Jan-2022 00:00	17-Jan-2022 00:00	17-Jan-2022 00:00	17-Jan-2022 00:00	17-Jan-2022 00:00
					ES2201683-001	ES2201683-002	ES2201683-003	ES2201683-004	ES2201683-005
					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)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

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Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

Compound	CAS Number	LOR	Unit	Sample ID	TS 1	TB	SOP_BH103_0.2_220117	SOP_BH103_1.0_220117	SOP_BH104_1.0_220117
				Sampling date / time	14-Jan-2022 00:00	17-Jan-2022 00:00	17-Jan-2022 00:00	17-Jan-2022 00:00	17-Jan-2022 00:00
					ES2201683-001	ES2201683-002	ES2201683-003	ES2201683-004	ES2201683-005
					Result	Result	Result	Result	Result
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued									
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**
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg		----	----	**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
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

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Analytical Results

Sub-Matrix: SOIL
(Matrix: SOIL)

Compound	CAS Number	LOR	Unit	Sample ID	TS 1	TB	SOP_BH103_0.2_220117	SOP_BH103_1.0_220117	SOP_BH104_1.0_220117
				Sampling date / time	14-Jan-2022 00:00	17-Jan-2022 00:00	17-Jan-2022 00:00	17-Jan-2022 00:00	17-Jan-2022 00:00
					ES2201683-001	ES2201683-002	ES2201683-003	ES2201683-004	ES2201683-005
					Result	Result	Result	Result	Result
EP075B: Polynuclear Aromatic Hydrocarbons - Continued									
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
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

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Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	TS 1	TB	SOP_BH103_0.2_220117	SOP_BH103_1.0_220117	SOP_BH104_1.0_220117
			Sampling date / time	14-Jan-2022 00:00	17-Jan-2022 00:00	17-Jan-2022 00:00	17-Jan-2022 00:00	17-Jan-2022 00:00
Compound	CAS Number	LOR	Unit	ES2201683-001	ES2201683-002	ES2201683-003	ES2201683-004	ES2201683-005
				Result	Result	Result	Result	Result
EP075D: Nitrosamines - Continued								
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								
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

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Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

Compound	CAS Number	LOR	Unit	Sample ID	TS 1	TB	SOP_BH103_0.2_220117	SOP_BH103_1.0_220117	SOP_BH104_1.0_220117
				Sampling date / time	14-Jan-2022 00:00	17-Jan-2022 00:00	17-Jan-2022 00:00	17-Jan-2022 00:00	17-Jan-2022 00:00
					ES2201683-001	ES2201683-002	ES2201683-003	ES2201683-004	ES2201683-005
					Result	Result	Result	Result	Result
EP075G: Chlorinated Hydrocarbons - Continued									
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
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

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Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	TS 1	TB	SOP_BH103_0.2_220117	SOP_BH103_1.0_220117	SOP_BH104_1.0_220117
			Sampling date / time	14-Jan-2022 00:00	17-Jan-2022 00:00	17-Jan-2022 00:00	17-Jan-2022 00:00	17-Jan-2022 00:00
Compound	CAS Number	LOR	Unit	ES2201683-001	ES2201683-002	ES2201683-003	ES2201683-004	ES2201683-005
				Result	Result	Result	Result	Result
EP075J: Organophosphorus Pesticides - Continued								
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
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	<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
>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	<0.2	<0.2
Toluene	108-88-3	0.5	mg/kg	**16.7**	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	100-41-4	0.5	mg/kg	**2.7**	<0.5	<0.5	<0.5	<0.5
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	**14.6**	<0.5	<0.5	<0.5	<0.5
ortho-Xylene	95-47-6	0.5	mg/kg	**5.8**	<0.5	<0.5	<0.5	<0.5
^ Sum of BTEX	----	0.2	mg/kg	**39.8**	<0.2	<0.2	<0.2	<0.2
^ Total Xylenes	----	0.5	mg/kg	**20.4**	<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

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Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	TS 1	TB	SOP_BH103_0.2_220117	SOP_BH103_1.0_220117	SOP_BH104_1.0_220117
			Sampling date / time	14-Jan-2022 00:00	17-Jan-2022 00:00	17-Jan-2022 00:00	17-Jan-2022 00:00	17-Jan-2022 00:00
Compound	CAS Number	LOR	Unit	ES2201683-001	ES2201683-002	ES2201683-003	ES2201683-004	ES2201683-005
				Result	Result	Result	Result	Result
EP231A: Perfluoroalkyl Sulfonic Acids - Continued								
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
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**	**120**	**118**
EP068S: Organochlorine Pesticide Surrogate								
Dibromo-DDE	21655-73-2	0.05	%	----	----	**80.2**	**108**	**107**
EP068T: Organophosphorus Pesticide Surrogate								
DEF	78-48-8	0.05	%	----	----	**70.5**	**96.4**	**92.3**
EP074S: VOC Surrogates								
1.2-Dichloroethane-D4	17060-07-0	0.5	%	---	---	**95.3**	---	**82.6**
Toluene-D8	2037-26-5	0.5	%	---	---	**92.2**	---	**90.5**
4-Bromofluorobenzene	460-00-4	0.5	%	---	---	**102**	---	**91.8**
EP075(SIM)S: Phenolic Compound Surrogates								

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Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	TS 1	TB	SOP_BH103_0.2_220117	SOP_BH103_1.0_220117	SOP_BH104_1.0_220117
			Sampling date / time	14-Jan-2022 00:00	17-Jan-2022 00:00	17-Jan-2022 00:00	17-Jan-2022 00:00	17-Jan-2022 00:00
Compound	CAS Number	LOR	Unit	ES2201683-001	ES2201683-002	ES2201683-003	ES2201683-004	ES2201683-005
				Result	Result	Result	Result	Result
EP075(SIM)S: Phenolic Compound Surrogates - Continued								
Phenol-d6	13127-88-3	0.5	%	----	----	94.0	95.7	94.9
2-Chlorophenol-D4	93951-73-6	0.5	%	----	----	94.2	98.3	96.9
2.4.6-Tribromophenol	118-79-6	0.5	%	----	----	71.8	87.9	83.4
EP075(SIM)T: PAH Surrogates								
2-Fluorobiphenyl	321-60-8	0.5	%	----	----	100.0	105	103
Anthracene-d10	1719-06-8	0.5	%	----	----	111	115	114
4-Terphenyl-d14	1718-51-0	0.5	%	----	----	95.2	97.6	99.7
EP075S: Acid Extractable Surrogates								
2-Fluorophenol	367-12-4	0.5	%	----	----	90.5	---	101
Phenol-d6	13127-88-3	0.5	%	----	----	91.7	---	98.4
2-Chlorophenol-D4	93951-73-6	0.5	%	----	----	87.7	---	99.7
2.4.6-Tribromophenol	118-79-6	0.5	%	----	----	46.6	---	78.3
EP075T: Base/Neutral Extractable Surrogates								
Nitrobenzene-D5	4165-60-0	0.5	%	----	----	92.7	---	96.1
1.2-Dichlorobenzene-D4	2199-69-1	0.5	%	----	----	90.0	---	93.7
2-Fluorobiphenyl	321-60-8	0.5	%	----	----	98.1	---	104
Anthracene-d10	1719-06-8	0.5	%	----	----	113	---	121
4-Terphenyl-d14	1718-51-0	0.5	%	----	----	95.3	---	104
EP080S: TPH(V)/BTEX Surrogates								
1.2-Dichloroethane-D4	17060-07-0	0.2	%	87.5	89.0	97.4	95.3	83.6
Toluene-D8	2037-26-5	0.2	%	95.9	90.4	96.8	90.5	94.9
4-Bromofluorobenzene	460-00-4	0.2	%	93.7	86.1	108	96.8	96.7
EP231S: PFAS Surrogate								
13C4-PFOS	----	0.0002	%	----	----	104	---	106
13C8-PFOA	----	0.0002	%	----	----	108	---	114

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Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	SOP_BH104_2.0_2201 17	SOP_BH105_0.2_2201 17	SOP_BH105_2.0_2201 17	SOP_BH106_0.2_2201 17	SOP_BH106_1.0_2201 17
			Sampling date / time	17-Jan-2022 00:00	17-Jan-2022 00:00	17-Jan-2022 00:00	17-Jan-2022 00:00	17-Jan-2022 00:00
Compound	CAS Number	LOR	Unit	ES2201683-006	ES2201683-007	ES2201683-008	ES2201683-009	ES2201683-010
				Result	Result	Result	Result	Result
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	----	1.0	%	11.0	9.9	10.8	12.2	9.4
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	----	228	----	397	----
APPROVED IDENTIFIER:	----	-	--	----	A. SMYLIE	----	A. SMYLIE	----
EG005(ED093)T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	8	6	6	11	7
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	<1	<1
Chromium	7440-47-3	2	mg/kg	6	7	7	21	4
Copper	7440-50-8	5	mg/kg	37	99	52	21	18
Lead	7439-92-1	5	mg/kg	20	11	17	28	10
Nickel	7440-02-0	2	mg/kg	24	12	36	10	<2
Zinc	7440-66-6	5	mg/kg	120	33	137	27	15
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	<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	<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

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Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	SOP_BH104_2.0_220117	SOP_BH105_0.2_220117	SOP_BH105_2.0_220117	SOP_BH106_0.2_220117	SOP_BH106_1.0_220117
				Sampling date / time	17-Jan-2022 00:00	17-Jan-2022 00:00	17-Jan-2022 00:00	17-Jan-2022 00:00	17-Jan-2022 00:00
Compound	CAS Number	LOR	Unit		ES2201683-006	ES2201683-007	ES2201683-008	ES2201683-009	ES2201683-010
					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	72-54-8/72-55-9/50-29-3	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
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

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Analytical Results

Sub-Matrix: SOIL
(Matrix: SOIL)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH104_2.0_220117	SOP_BH105_0.2_220117	SOP_BH105_2.0_220117	SOP_BH106_0.2_220117	SOP_BH106_1.0_220117
				Sampling date / time	17-Jan-2022 00:00	17-Jan-2022 00:00	17-Jan-2022 00:00	17-Jan-2022 00:00	17-Jan-2022 00:00
					ES2201683-006	ES2201683-007	ES2201683-008	ES2201683-009	ES2201683-010
					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	---

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Analytical Results

Sub-Matrix: SOIL
(Matrix: SOIL)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH104_2.0_220117	SOP_BH105_0.2_220117	SOP_BH105_2.0_220117	SOP_BH106_0.2_220117	SOP_BH106_1.0_220117
				Sampling date / time	17-Jan-2022 00:00	17-Jan-2022 00:00	17-Jan-2022 00:00	17-Jan-2022 00:00	17-Jan-2022 00:00
					ES2201683-006	ES2201683-007	ES2201683-008	ES2201683-009	ES2201683-010
					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)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		<0.5	<0.5	<0.5	<0.5	<0.5
Anthracene	120-12-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5

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Analytical Results

Sub-Matrix: SOIL
(Matrix: SOIL)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH104_2.0_220117	SOP_BH105_0.2_220117	SOP_BH105_2.0_220117	SOP_BH106_0.2_220117	SOP_BH106_1.0_220117
				Sampling date / time	17-Jan-2022 00:00	17-Jan-2022 00:00	17-Jan-2022 00:00	17-Jan-2022 00:00	17-Jan-2022 00:00
					ES2201683-006	ES2201683-007	ES2201683-008	ES2201683-009	ES2201683-010
					Result	Result	Result	Result	Result
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued									
Fluoranthene	206-44-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Pyrene	129-00-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benz(a)anthracene	56-55-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Chrysene	218-01-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg		<0.5	<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		<0.5	<0.5	<0.5	<0.5	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg		**0.6**	**0.6**	**0.6**	**0.6**	**0.6**
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg		**1.2**	**1.2**	**1.2**	**1.2**	**1.2**
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	----

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Analytical Results

Sub-Matrix: SOIL
(Matrix: SOIL)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH104_2.0_220117	SOP_BH105_0.2_220117	SOP_BH105_2.0_220117	SOP_BH106_0.2_220117	SOP_BH106_1.0_220117
				Sampling date / time	17-Jan-2022 00:00	17-Jan-2022 00:00	17-Jan-2022 00:00	17-Jan-2022 00:00	17-Jan-2022 00:00
					ES2201683-006	ES2201683-007	ES2201683-008	ES2201683-009	ES2201683-010
					Result	Result	Result	Result	Result
EP075B: Polynuclear Aromatic Hydrocarbons - Continued									
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	----
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	----

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Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	SOP_BH104_2.0_220117	SOP_BH105_0.2_220117	SOP_BH105_2.0_220117	SOP_BH106_0.2_220117	SOP_BH106_1.0_220117
			Sampling date / time	17-Jan-2022 00:00	17-Jan-2022 00:00	17-Jan-2022 00:00	17-Jan-2022 00:00	17-Jan-2022 00:00
Compound	CAS Number	LOR	Unit	ES2201683-006	ES2201683-007	ES2201683-008	ES2201683-009	ES2201683-010
				Result	Result	Result	Result	Result
EP075D: Nitrosamines - Continued								
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								
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	----

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Analytical Results

Sub-Matrix: SOIL
(Matrix: SOIL)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH104_2.0_220117	SOP_BH105_0.2_220117	SOP_BH105_2.0_220117	SOP_BH106_0.2_220117	SOP_BH106_1.0_220117
				Sampling date / time	17-Jan-2022 00:00	17-Jan-2022 00:00	17-Jan-2022 00:00	17-Jan-2022 00:00	17-Jan-2022 00:00
					ES2201683-006	ES2201683-007	ES2201683-008	ES2201683-009	ES2201683-010
					Result	Result	Result	Result	Result
EP075G: Chlorinated Hydrocarbons - Continued									
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	----
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	---

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Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	SOP_BH104_2.0_220117	SOP_BH105_0.2_220117	SOP_BH105_2.0_220117	SOP_BH106_0.2_220117	SOP_BH106_1.0_220117
				Sampling date / time	17-Jan-2022 00:00	17-Jan-2022 00:00	17-Jan-2022 00:00	17-Jan-2022 00:00	17-Jan-2022 00:00
Compound	CAS Number	LOR	Unit		ES2201683-006	ES2201683-007	ES2201683-008	ES2201683-009	ES2201683-010
					Result	Result	Result	Result	Result
EP075J: Organophosphorus Pesticides - Continued									
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	<100	<100	<100	<100	
C29 - C36 Fraction	----	100	mg/kg	<100	<100	<100	<100	<100	
^ C10 - C36 Fraction (sum)	----	50	mg/kg	<50	<50	<50	<50	<50	
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
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	<100	<100	<100	<100	<100	
>C34 - C40 Fraction	----	100	mg/kg	<100	<100	<100	<100	<100	
^ >C10 - C40 Fraction (sum)	----	50	mg/kg	<50	<50	<50	<50	<50	
^ >C10 - C16 Fraction minus Naphthalene (F2)	----	50	mg/kg	<50	<50	<50	<50	<50	
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	----	

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Analytical Results

Sub-Matrix: SOIL
(Matrix: SOIL)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH104_2.0_220117	SOP_BH105_0.2_220117	SOP_BH105_2.0_220117	SOP_BH106_0.2_220117	SOP_BH106_1.0_220117
				Sampling date / time	17-Jan-2022 00:00	17-Jan-2022 00:00	17-Jan-2022 00:00	17-Jan-2022 00:00	17-Jan-2022 00:00
					ES2201683-006	ES2201683-007	ES2201683-008	ES2201683-009	ES2201683-010
					Result	Result	Result	Result	Result
EP231A: Perfluoroalkyl Sulfonic Acids - Continued									
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.0002	mg/kg		----	----	----	<0.0002	----
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.0002	mg/kg		----	----	----	**0.0003**	----
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		----	----	----	**0.0003**	----
Sum of PFAS (WA DER List)	----	0.0002	mg/kg		----	----	----	**0.0005**	----
EP066S: PCB Surrogate									
Decachlorobiphenyl	2051-24-3	0.1	%		**115**	**115**	**114**	**78.1**	**108**
EP068S: Organochlorine Pesticide Surrogate									
Dibromo-DDE	21655-73-2	0.05	%		**79.6**	**73.6**	**74.1**	**78.3**	**71.5**
EP068T: Organophosphorus Pesticide Surrogate									
DEF	78-48-8	0.05	%		**85.6**	**93.0**	**71.9**	**73.0**	**83.9**
EP074S: VOC Surrogates									
1.2-Dichloroethane-D4	17060-07-0	0.5	%		----	**93.9**	----	**90.0**	----
Toluene-D8	2037-26-5	0.5	%		----	**93.8**	----	**91.2**	----
4-Bromofluorobenzene	460-00-4	0.5	%		----	**100**	----	**88.8**	----
EP075(SIM)S: Phenolic Compound Surrogates									

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Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH104_2.0_220117	SOP_BH105_0.2_220117	SOP_BH105_2.0_220117	SOP_BH106_0.2_220117	SOP_BH106_1.0_220117
				Sampling date / time	17-Jan-2022 00:00	17-Jan-2022 00:00	17-Jan-2022 00:00	17-Jan-2022 00:00	17-Jan-2022 00:00
					ES2201683-006	ES2201683-007	ES2201683-008	ES2201683-009	ES2201683-010
					Result	Result	Result	Result	Result
EP075(SIM)S: Phenolic Compound Surrogates - Continued									
Phenol-d6	13127-88-3	0.5	%		103	97.6	95.3	96.0	102
2-Chlorophenol-D4	93951-73-6	0.5	%		104	97.8	95.7	96.1	101
2.4.6-Tribromophenol	118-79-6	0.5	%		86.9	79.7	77.0	77.8	81.6
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	0.5	%		110	104	101	102	106
Anthracene-d10	1719-06-8	0.5	%		122	115	112	112	118
4-Terphenyl-d14	1718-51-0	0.5	%		105	98.9	98.0	97.8	103
EP075S: Acid Extractable Surrogates									
2-Fluorophenol	367-12-4	0.5	%		----	109	----	112	----
Phenol-d6	13127-88-3	0.5	%		----	97.4	----	95.1	----
2-Chlorophenol-D4	93951-73-6	0.5	%		----	103	----	101	----
2.4.6-Tribromophenol	118-79-6	0.5	%		----	92.0	----	93.8	----
EP075T: Base/Neutral Extractable Surrogates									
Nitrobenzene-D5	4165-60-0	0.5	%		----	92.8	----	89.8	----
1.2-Dichlorobenzene-D4	2199-69-1	0.5	%		----	89.6	----	88.8	----
2-Fluorobiphenyl	321-60-8	0.5	%		----	104	----	101	----
Anthracene-d10	1719-06-8	0.5	%		----	116	----	112	----
4-Terphenyl-d14	1718-51-0	0.5	%		----	95.5	----	93.4	----
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	0.2	%		116	96.2	92.5	81.5	98.4
Toluene-D8	2037-26-5	0.2	%		108	98.4	88.8	95.6	94.9
4-Bromofluorobenzene	460-00-4	0.2	%		113	105	91.5	94.2	99.7
EP231S: PFAS Surrogate									
13C4-PFOS	----	0.0002	%		----	----	----	106	----
13C8-PFOA	----	0.0002	%		----	----	----	108	----

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Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	SOP_BH110_0.2_2201 17	SOP_BH110_1.3_2201 18	SOP_BH111_1.0_2201 18	SOP_BH111_3.0_2201 18	SOP_BH112_1.0_2201 18
			Sampling date / time	17-Jan-2022 00:00	18-Jan-2022 00:00	18-Jan-2022 00:00	18-Jan-2022 00:00	18-Jan-2022 00:00
Compound	CAS Number	LOR	Unit	ES2201683-011	ES2201683-012	ES2201683-013	ES2201683-014	ES2201683-015
				Result	Result	Result	Result	Result
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	----	1.0	%	3.2	7.4	27.0	11.6	23.5
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	300	----	542	---	534
APPROVED IDENTIFIER:	----	-	--	A. SMYLIE	----	A. SMYLIE	---	A. SMYLIE
EG005(ED093)T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	<5	6	9	7	12
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	<1	<1
Chromium	7440-47-3	2	mg/kg	6	4	18	8	15
Copper	7440-50-8	5	mg/kg	39	24	18	22	19
Lead	7439-92-1	5	mg/kg	<5	10	30	20	18
Nickel	7440-02-0	2	mg/kg	57	4	2	4	3
Zinc	7440-66-6	5	mg/kg	25	14	6	21	10
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	<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	<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

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Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	SOP_BH110_0.2_220117	SOP_BH110_1.3_220118	SOP_BH111_1.0_220118	SOP_BH111_3.0_220118	SOP_BH112_1.0_220118
				Sampling date / time	17-Jan-2022 00:00	18-Jan-2022 00:00	18-Jan-2022 00:00	18-Jan-2022 00:00	18-Jan-2022 00:00
Compound	CAS Number	LOR	Unit		ES2201683-011	ES2201683-012	ES2201683-013	ES2201683-014	ES2201683-015
					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

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Analytical Results

Sub-Matrix: SOIL
(Matrix: SOIL)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH110_0.2_220117	SOP_BH110_1.3_220118	SOP_BH111_1.0_220118	SOP_BH111_3.0_220118	SOP_BH112_1.0_220118
				Sampling date / time	17-Jan-2022 00:00	18-Jan-2022 00:00	18-Jan-2022 00:00	18-Jan-2022 00:00	18-Jan-2022 00:00
					ES2201683-011	ES2201683-012	ES2201683-013	ES2201683-014	ES2201683-015
					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

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Analytical Results

Sub-Matrix: SOIL
(Matrix: SOIL)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH110_0.2_220117	SOP_BH110_1.3_220118	SOP_BH111_1.0_220118	SOP_BH111_3.0_220118	SOP_BH112_1.0_220118
				Sampling date / time	17-Jan-2022 00:00	18-Jan-2022 00:00	18-Jan-2022 00:00	18-Jan-2022 00:00	18-Jan-2022 00:00
					ES2201683-011	ES2201683-012	ES2201683-013	ES2201683-014	ES2201683-015
					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)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		<0.5	<0.5	<0.5	<0.5	<0.5
Anthracene	120-12-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5

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Analytical Results

Sub-Matrix: SOIL
(Matrix: SOIL)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH110_0.2_220117	SOP_BH110_1.3_220118	SOP_BH111_1.0_220118	SOP_BH111_3.0_220118	SOP_BH112_1.0_220118
				Sampling date / time	17-Jan-2022 00:00	18-Jan-2022 00:00	18-Jan-2022 00:00	18-Jan-2022 00:00	18-Jan-2022 00:00
					ES2201683-011	ES2201683-012	ES2201683-013	ES2201683-014	ES2201683-015
					Result	Result	Result	Result	Result
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued									
Fluoranthene	206-44-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Pyrene	129-00-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benz(a)anthracene	56-55-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Chrysene	218-01-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg		<0.5	<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		<0.5	<0.5	<0.5	<0.5	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg		**0.6**	**0.6**	**0.6**	**0.6**	**0.6**
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg		**1.2**	**1.2**	**1.2**	**1.2**	**1.2**
EP075A: 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	0.5	mg/kg		<0.5	----	<0.5	---	<0.5
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	1	mg/kg		<1	----	<1	---	<1
EP075B: Polynuclear Aromatic Hydrocarbons									
Naphthalene	91-20-3	0.5	mg/kg		<0.5	----	<0.5	---	<0.5
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
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

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Analytical Results

Sub-Matrix: SOIL
(Matrix: SOIL)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH110_0.2_220117	SOP_BH110_1.3_220118	SOP_BH111_1.0_220118	SOP_BH111_3.0_220118	SOP_BH112_1.0_220118
				Sampling date / time	17-Jan-2022 00:00	18-Jan-2022 00:00	18-Jan-2022 00:00	18-Jan-2022 00:00	18-Jan-2022 00:00
					ES2201683-011	ES2201683-012	ES2201683-013	ES2201683-014	ES2201683-015
					Result	Result	Result	Result	Result
EP075B: Polynuclear Aromatic Hydrocarbons - Continued									
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
N-2-Fluorenyl Acetamide	53-96-3	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) & Benzo(k)fluoranthene	205-99-2 207-08-9	1	mg/kg		<1	----	<1	---	<1
7.12-Dimethylbenz(a)anthracene	57-97-6	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
3-Methylcholanthrene	56-49-5	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 PAHs	----	0.5	mg/kg		<0.5	----	<0.5	---	<0.5
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg		<0.5	----	<0.5	---	<0.5
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg		**0.6**	----	**0.6**	---	**0.6**
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg		**1.2**	----	**1.2**	---	**1.2**
EP075C: Phthalate Esters									
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

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Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	SOP_BH110_0.2_220117	SOP_BH110_1.3_220118	SOP_BH111_1.0_220118	SOP_BH111_3.0_220118	SOP_BH112_1.0_220118
				Sampling date / time	17-Jan-2022 00:00	18-Jan-2022 00:00	18-Jan-2022 00:00	18-Jan-2022 00:00	18-Jan-2022 00:00
Compound	CAS Number	LOR	Unit		ES2201683-011	ES2201683-012	ES2201683-013	ES2201683-014	ES2201683-015
					Result	Result	Result	Result	Result
EP075D: Nitrosamines - Continued									
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
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

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Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH110_0.2_220117	SOP_BH110_1.3_220118	SOP_BH111_1.0_220118	SOP_BH111_3.0_220118	SOP_BH112_1.0_220118
				Sampling date / time	17-Jan-2022 00:00	18-Jan-2022 00:00	18-Jan-2022 00:00	18-Jan-2022 00:00	18-Jan-2022 00:00
					ES2201683-011	ES2201683-012	ES2201683-013	ES2201683-014	ES2201683-015
					Result	Result	Result	Result	Result
EP075G: Chlorinated Hydrocarbons - Continued									
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
EP075I: Organochlorine Pesticides									
alpha-BHC	319-84-6	0.5	mg/kg		<0.5	----	<0.5	---	<0.5
beta-BHC	319-85-7	0.5	mg/kg		<0.5	----	<0.5	---	<0.5
gamma-BHC	58-89-9	0.5	mg/kg		<0.5	----	<0.5	---	<0.5
delta-BHC	319-86-8	0.5	mg/kg		<0.5	----	<0.5	---	<0.5
Heptachlor	76-44-8	0.5	mg/kg		<0.5	----	<0.5	---	<0.5
Aldrin	309-00-2	0.5	mg/kg		<0.5	----	<0.5	---	<0.5
Heptachlor epoxide	1024-57-3	0.5	mg/kg		<0.5	----	<0.5	---	<0.5
alpha-Endosulfan	959-98-8	0.5	mg/kg		<0.5	----	<0.5	---	<0.5
4.4`-DDE	72-55-9	0.5	mg/kg		<0.5	----	<0.5	---	<0.5
Dieldrin	60-57-1	0.5	mg/kg		<0.5	----	<0.5	---	<0.5
Endrin	72-20-8	0.5	mg/kg		<0.5	----	<0.5	---	<0.5
beta-Endosulfan	33213-65-9	0.5	mg/kg		<0.5	----	<0.5	---	<0.5
4.4`-DDD	72-54-8	0.5	mg/kg		<0.5	----	<0.5	---	<0.5
Endosulfan sulfate	1031-07-8	0.5	mg/kg		<0.5	----	<0.5	---	<0.5
4.4`-DDT	50-29-3	1.0	mg/kg		<1.0	----	<1.0	---	<1.0
EP075J: Organophosphorus Pesticides									
Dichlorvos	62-73-7	0.5	mg/kg		<0.5	----	<0.5	---	<0.5
Dimethoate	60-51-5	0.5	mg/kg		<0.5	----	<0.5	---	<0.5
Diazinon	333-41-5	0.5	mg/kg		<0.5	----	<0.5	---	<0.5
Chlorpyrifos-methyl	5598-13-0	0.5	mg/kg		<0.5	----	<0.5	---	<0.5
Malathion	121-75-5	0.5	mg/kg		<0.5	----	<0.5	---	<0.5

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Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	SOP_BH110_0.2_2201 17	SOP_BH110_1.3_2201 18	SOP_BH111_1.0_2201 18	SOP_BH111_3.0_2201 18	SOP_BH112_1.0_2201 18
				Sampling date / time	17-Jan-2022 00:00	18-Jan-2022 00:00	18-Jan-2022 00:00	18-Jan-2022 00:00	18-Jan-2022 00:00
Compound	CAS Number	LOR	Unit		ES2201683-011	ES2201683-012	ES2201683-013	ES2201683-014	ES2201683-015
					Result	Result	Result	Result	Result
EP075J: Organophosphorus Pesticides - Continued									
Fenthion	55-38-9	0.5	mg/kg		<0.5	----	<0.5	---	<0.5
Chlorpyrifos	2921-88-2	0.5	mg/kg		<0.5	----	<0.5	---	<0.5
Pirimphos-ethyl	23505-41-1	0.5	mg/kg		<0.5	----	<0.5	---	<0.5
Chlorfenvinphos	470-90-6	0.5	mg/kg		<0.5	----	<0.5	---	<0.5
Prothiofos	34643-46-4	0.5	mg/kg		<0.5	----	<0.5	---	<0.5
Ethion	563-12-2	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	<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		**120**	<100	<100	<100	<100
^ C10 - C36 Fraction (sum)	----	50	mg/kg		**120**	<50	<50	<50	<50
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		**100**	<100	<100	<100	<100
>C34 - C40 Fraction	----	100	mg/kg		**120**	<100	<100	<100	<100
^ >C10 - C40 Fraction (sum)	----	50	mg/kg		**220**	<50	<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		**0.0005**	----	<0.0002	<0.0002	<0.0002

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Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	SOP_BH110_0.2_220117	SOP_BH110_1.3_220118	SOP_BH111_1.0_220118	SOP_BH111_3.0_220118	SOP_BH112_1.0_220118
				Sampling date / time	17-Jan-2022 00:00	18-Jan-2022 00:00	18-Jan-2022 00:00	18-Jan-2022 00:00	18-Jan-2022 00:00
Compound	CAS Number	LOR	Unit		ES2201683-011	ES2201683-012	ES2201683-013	ES2201683-014	ES2201683-015
					Result	Result	Result	Result	Result
EP231A: Perfluoroalkyl Sulfonic Acids - Continued									
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.0002	mg/kg		<0.0002	----	<0.0002	<0.0002	<0.0002
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.0002	mg/kg		<0.0002	----	<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	<0.001
Perfluoropentanoic acid (PFPeA)	2706-90-3	0.0002	mg/kg		<0.0002	----	<0.0002	<0.0002	<0.0002
Perfluorohexanoic acid (PFHxA)	307-24-4	0.0002	mg/kg		<0.0002	----	<0.0002	<0.0002	<0.0002
Perfluoroheptanoic acid (PFHpA)	375-85-9	0.0002	mg/kg		<0.0002	----	<0.0002	<0.0002	<0.0002
Perfluorooctanoic acid (PFOA)	335-67-1	0.0002	mg/kg		<0.0002	----	<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	<0.0005
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.0005	mg/kg		<0.0005	----	<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	<0.0005
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.0005	mg/kg		<0.0005	----	<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	<0.0002
Sum of PFAS (WA DER List)	----	0.0002	mg/kg		**0.0005**	----	<0.0002	<0.0002	<0.0002
EP066S: PCB Surrogate									
Decachlorobiphenyl	2051-24-3	0.1	%		**71.5**	**104**	**93.3**	**124**	**77.9**
EP068S: Organochlorine Pesticide Surrogate									
Dibromo-DDE	21655-73-2	0.05	%		**66.6**	**68.3**	**70.1**	**71.9**	**72.6**
EP068T: Organophosphorus Pesticide Surrogate									
DEF	78-48-8	0.05	%		**75.3**	**74.0**	**83.3**	**85.2**	**76.1**
EP074S: VOC Surrogates									
1.2-Dichloroethane-D4	17060-07-0	0.5	%		**104**	**----**	**84.0**	**----**	**83.7**
Toluene-D8	2037-26-5	0.5	%		**104**	**----**	**93.9**	**----**	**99.6**
4-Bromofluorobenzene	460-00-4	0.5	%		**108**	**----**	**90.3**	**----**	**93.6**
EP075(SIM)S: Phenolic Compound Surrogates									

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Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH110_0.2_2201 17	SOP_BH110_1.3_2201 18	SOP_BH111_1.0_2201 18	SOP_BH111_3.0_2201 18	SOP_BH112_1.0_2201 18
				Sampling date / time	17-Jan-2022 00:00	18-Jan-2022 00:00	18-Jan-2022 00:00	18-Jan-2022 00:00	18-Jan-2022 00:00
					ES2201683-011	ES2201683-012	ES2201683-013	ES2201683-014	ES2201683-015
					Result	Result	Result	Result	Result
EP075(SIM)S: Phenolic Compound Surrogates - Continued									
Phenol-d6	13127-88-3	0.5	%		90.4	99.3	96.1	99.5	98.8
2-Chlorophenol-D4	93951-73-6	0.5	%		90.5	100	96.8	99.4	99.0
2.4.6-Tribromophenol	118-79-6	0.5	%		75.7	82.7	77.7	76.4	79.0
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	0.5	%		99.4	106	103	106	105
Anthracene-d10	1719-06-8	0.5	%		112	116	115	116	116
4-Terphenyl-d14	1718-51-0	0.5	%		95.6	102	100	103	103
EP075S: Acid Extractable Surrogates									
2-Fluorophenol	367-12-4	0.5	%		102	----	108	---	116
Phenol-d6	13127-88-3	0.5	%		90.6	----	92.6	---	99.8
2-Chlorophenol-D4	93951-73-6	0.5	%		94.9	----	99.0	---	105
2.4.6-Tribromophenol	118-79-6	0.5	%		84.6	----	89.6	---	100
EP075T: Base/Neutral Extractable Surrogates									
Nitrobenzene-D5	4165-60-0	0.5	%		87.5	----	87.7	---	94.6
1.2-Dichlorobenzene-D4	2199-69-1	0.5	%		83.2	----	85.6	---	92.9
2-Fluorobiphenyl	321-60-8	0.5	%		94.6	----	98.0	---	103
Anthracene-d10	1719-06-8	0.5	%		111	----	114	---	115
4-Terphenyl-d14	1718-51-0	0.5	%		91.1	----	95.2	---	96.3
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	0.2	%		107	88.3	81.8	86.3	80.6
Toluene-D8	2037-26-5	0.2	%		109	92.2	89.2	89.8	94.6
4-Bromofluorobenzene	460-00-4	0.2	%		114	86.5	94.7	85.8	98.6
EP231S: PFAS Surrogate									
13C4-PFOS	----	0.0002	%		107	----	103	97.5	115
13C8-PFOA	----	0.0002	%		110	----	108	113	108

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Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	SOP_BH112_5.0_2201 18	SOP_BH113_0.1_2201 18	TS 7	TB	SOP_BH113_0.3_2201 18
			Sampling date / time	18-Jan-2022 00:00	18-Jan-2022 00:00	14-Jan-2022 00:00	17-Jan-2022 00:00	18-Jan-2022 00:00
Compound	CAS Number	LOR	Unit	ES2201683-016	ES2201683-017	ES2201683-018	ES2201683-019	ES2201683-021
				Result	Result	Result	Result	Result
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	----	1.0	%	8.8	3.9	----	---	19.1
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	----	172	----	---	129
APPROVED IDENTIFIER:	----	-	--	----	A. SMYLIE	----	---	A. SMYLIE
EG005(ED093)T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	15	<5	----	---	7
Cadmium	7440-43-9	1	mg/kg	<1	<1	----	---	<1
Chromium	7440-47-3	2	mg/kg	8	10	----	---	14
Copper	7440-50-8	5	mg/kg	59	73	----	---	10
Lead	7439-92-1	5	mg/kg	12	<5	----	---	11
Nickel	7440-02-0	2	mg/kg	25	131	----	---	2
Zinc	7440-66-6	5	mg/kg	149	43	----	---	<5
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
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

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Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	SOP_BH112_5.0_220118	SOP_BH113_0.1_220118	TS 7	TB	SOP_BH113_0.3_220118
			Sampling date / time	18-Jan-2022 00:00	18-Jan-2022 00:00	14-Jan-2022 00:00	17-Jan-2022 00:00	18-Jan-2022 00:00
Compound	CAS Number	LOR	Unit	ES2201683-016	ES2201683-017	ES2201683-018	ES2201683-019	ES2201683-021
				Result	Result	Result	Result	Result
EP068A: Organochlorine Pesticides (OC) - Continued								
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
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

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Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH112_5.0_220118	SOP_BH113_0.1_220118	TS 7	TB	SOP_BH113_0.3_220118
				Sampling date / time	18-Jan-2022 00:00	18-Jan-2022 00:00	14-Jan-2022 00:00	17-Jan-2022 00:00	18-Jan-2022 00:00
					ES2201683-016	ES2201683-017	ES2201683-018	ES2201683-019	ES2201683-021
					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

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Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	SOP_BH112_5.0_220118	SOP_BH113_0.1_220118	TS 7	TB	SOP_BH113_0.3_220118
				Sampling date / time	18-Jan-2022 00:00	18-Jan-2022 00:00	14-Jan-2022 00:00	17-Jan-2022 00:00	18-Jan-2022 00:00
Compound	CAS Number	LOR	Unit		ES2201683-016	ES2201683-017	ES2201683-018	ES2201683-019	ES2201683-021
					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)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

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Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH112_5.0_220118	SOP_BH113_0.1_220118	TS 7	TB	SOP_BH113_0.3_220118
				Sampling date / time	18-Jan-2022 00:00	18-Jan-2022 00:00	14-Jan-2022 00:00	17-Jan-2022 00:00	18-Jan-2022 00:00
					ES2201683-016	ES2201683-017	ES2201683-018	ES2201683-019	ES2201683-021
					Result	Result	Result	Result	Result
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued									
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**
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg		**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
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

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Analytical Results

Sub-Matrix: SOIL
(Matrix: SOIL)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH112_5.0_220118	SOP_BH113_0.1_220118	TS 7	TB	SOP_BH113_0.3_220118
				Sampling date / time	18-Jan-2022 00:00	18-Jan-2022 00:00	14-Jan-2022 00:00	17-Jan-2022 00:00	18-Jan-2022 00:00
					ES2201683-016	ES2201683-017	ES2201683-018	ES2201683-019	ES2201683-021
					Result	Result	Result	Result	Result
EP075B: Polynuclear Aromatic Hydrocarbons - Continued									
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
Benz(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-Dimethylbenz(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
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

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Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	SOP_BH112_5.0_220118	SOP_BH113_0.1_220118	TS 7	TB	SOP_BH113_0.3_220118
				Sampling date / time	18-Jan-2022 00:00	18-Jan-2022 00:00	14-Jan-2022 00:00	17-Jan-2022 00:00	18-Jan-2022 00:00
Compound	CAS Number	LOR	Unit		ES2201683-016	ES2201683-017	ES2201683-018	ES2201683-019	ES2201683-021
					Result	Result	Result	Result	Result
EP075D: Nitrosamines - Continued									
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									
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	

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Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	SOP_BH112_5.0_220118	SOP_BH113_0.1_220118	TS 7	TB	SOP_BH113_0.3_220118
			Sampling date / time	18-Jan-2022 00:00	18-Jan-2022 00:00	14-Jan-2022 00:00	17-Jan-2022 00:00	18-Jan-2022 00:00
Compound	CAS Number	LOR	Unit	ES2201683-016	ES2201683-017	ES2201683-018	ES2201683-019	ES2201683-021
				Result	Result	Result	Result	Result
EP075G: Chlorinated Hydrocarbons - Continued								
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
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

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Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	SOP_BH112_5.0_220118	SOP_BH113_0.1_220118	TS 7	TB	SOP_BH113_0.3_220118
			Sampling date / time	18-Jan-2022 00:00	18-Jan-2022 00:00	14-Jan-2022 00:00	17-Jan-2022 00:00	18-Jan-2022 00:00
Compound	CAS Number	LOR	Unit	ES2201683-016	ES2201683-017	ES2201683-018	ES2201683-019	ES2201683-021
				Result	Result	Result	Result	Result
EP075J: Organophosphorus Pesticides - Continued								
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
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	<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
>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	<0.2	<0.2
Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	**12.1**	<0.5	<0.5
Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	**2.0**	<0.5	<0.5
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	**10.7**	<0.5	<0.5
ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	**4.4**	<0.5	<0.5
^ Sum of BTEX	----	0.2	mg/kg	<0.2	<0.2	**29.2**	<0.2	<0.2
^ Total Xylenes	----	0.5	mg/kg	<0.5	<0.5	**15.1**	<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

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Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	SOP_BH112_5.0_220118	SOP_BH113_0.1_220118	TS 7	TB	SOP_BH113_0.3_220118
				Sampling date / time	18-Jan-2022 00:00	18-Jan-2022 00:00	14-Jan-2022 00:00	17-Jan-2022 00:00	18-Jan-2022 00:00
Compound	CAS Number	LOR	Unit		ES2201683-016	ES2201683-017	ES2201683-018	ES2201683-019	ES2201683-021
					Result	Result	Result	Result	Result
EP231A: Perfluoroalkyl Sulfonic Acids - Continued									
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
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	%		**109**	**82.1**	----	---	**93.2**
EP068S: Organochlorine Pesticide Surrogate									
Dibromo-DDE	21655-73-2	0.05	%		**79.8**	**76.7**	----	---	**75.8**
EP068T: Organophosphorus Pesticide Surrogate									
DEF	78-48-8	0.05	%		**88.4**	**84.6**	----	---	**88.3**
EP074S: VOC Surrogates									
1.2-Dichloroethane-D4	17060-07-0	0.5	%		---	---	---	---	**85.7**
Toluene-D8	2037-26-5	0.5	%		---	---	---	---	**99.5**
4-Bromofluorobenzene	460-00-4	0.5	%		---	---	---	---	**92.5**
EP075(SIM)S: Phenolic Compound Surrogates									

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Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	SOP_BH112_5.0_220118	SOP_BH113_0.1_220118	TS 7	TB	SOP_BH113_0.3_220118
				Sampling date / time	18-Jan-2022 00:00	18-Jan-2022 00:00	14-Jan-2022 00:00	17-Jan-2022 00:00	18-Jan-2022 00:00
Compound	CAS Number	LOR	Unit		ES2201683-016	ES2201683-017	ES2201683-018	ES2201683-019	ES2201683-021
					Result	Result	Result	Result	Result
EP075(SIM)S: Phenolic Compound Surrogates - Continued									
Phenol-d6	13127-88-3	0.5	%		95.0	91.4	----	---	95.9
2-Chlorophenol-D4	93951-73-6	0.5	%		95.0	99.3	----	---	96.3
2.4.6-Tribromophenol	118-79-6	0.5	%		70.9	87.7	----	---	70.6
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	0.5	%		101	109	----	---	103
Anthracene-d10	1719-06-8	0.5	%		111	106	----	---	114
4-Terphenyl-d14	1718-51-0	0.5	%		97.6	107	----	---	100
EP075S: Acid Extractable Surrogates									
2-Fluorophenol	367-12-4	0.5	%		----	----	----	---	118
Phenol-d6	13127-88-3	0.5	%		----	----	----	---	106
2-Chlorophenol-D4	93951-73-6	0.5	%		----	----	----	---	105
2.4.6-Tribromophenol	118-79-6	0.5	%		----	----	----	---	88.7
EP075T: Base/Neutral Extractable Surrogates									
Nitrobenzene-D5	4165-60-0	0.5	%		----	----	----	---	91.3
1.2-Dichlorobenzene-D4	2199-69-1	0.5	%		----	----	----	---	92.0
2-Fluorobiphenyl	321-60-8	0.5	%		----	----	----	---	103
Anthracene-d10	1719-06-8	0.5	%		----	----	----	---	113
4-Terphenyl-d14	1718-51-0	0.5	%		----	----	----	---	96.2
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	0.2	%		95.2	94.2	87.6	92.0	83.3
Toluene-D8	2037-26-5	0.2	%		97.7	97.2	92.5	97.6	94.9
4-Bromofluorobenzene	460-00-4	0.2	%		91.3	90.7	89.6	94.4	98.7
EP231S: PFAS Surrogate									
13C4-PFOS	----	0.0002	%		106	----	----	---	114
13C8-PFOA	----	0.0002	%		109	----	----	---	114

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Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	SOP_BH114_0.3_220118	SOP_BH114_2._220118	SOP_BH115_0.1_220118	SOP_BH115_2._220118	SOP_BH116_0.2_220117
			Sampling date / time	18-Jan-2022 00:00	18-Jan-2022 00:00	18-Jan-2022 00:00	18-Jan-2022 00:00	17-Jan-2022 00:00
Compound	CAS Number	LOR	Unit	ES2201683-022	ES2201683-023	ES2201683-024	ES2201683-025	ES2201683-026
				Result	Result	Result	Result	Result
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	----	1.0	%	17.9	7.6	3.4	7.5	3.8
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	453	----	732	---	347
APPROVED IDENTIFIER:	----	-	--	A. SMYLIE	----	A. SMYLIE	---	A. SMYLIE
EG005(ED093)T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	7	7	<5	<5	<5
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	<1	<1
Chromium	7440-47-3	2	mg/kg	12	6	10	4	9
Copper	7440-50-8	5	mg/kg	10	49	81	39	34
Lead	7439-92-1	5	mg/kg	14	15	<5	20	6
Nickel	7440-02-0	2	mg/kg	<2	7	138	4	67
Zinc	7440-66-6	5	mg/kg	<5	40	45	26	29
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	<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	<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

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Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH114_0.3_220118	SOP_BH114_2._220118	SOP_BH115_0.1_220118	SOP_BH115_2._220118	SOP_BH116_0.2_220117
				Sampling date / time	18-Jan-2022 00:00	18-Jan-2022 00:00	18-Jan-2022 00:00	18-Jan-2022 00:00	17-Jan-2022 00:00
					ES2201683-022	ES2201683-023	ES2201683-024	ES2201683-025	ES2201683-026
					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**	72-54-8/72-55-9/50-29-3	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
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

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Analytical Results

Sub-Matrix: SOIL
(Matrix: SOIL)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH114_0.3_220118	SOP_BH114_2._220118	SOP_BH115_0.1_220118	SOP_BH115_2._220118	SOP_BH116_0.2_220117
				Sampling date / time	18-Jan-2022 00:00	18-Jan-2022 00:00	18-Jan-2022 00:00	18-Jan-2022 00:00	17-Jan-2022 00:00
					ES2201683-022	ES2201683-023	ES2201683-024	ES2201683-025	ES2201683-026
					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

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Analytical Results

Sub-Matrix: SOIL
(Matrix: SOIL)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH114_0.3_220118	SOP_BH114_2._220118	SOP_BH115_0.1_220118	SOP_BH115_2._220118	SOP_BH116_0.2_220117
				Sampling date / time	18-Jan-2022 00:00	18-Jan-2022 00:00	18-Jan-2022 00:00	18-Jan-2022 00:00	17-Jan-2022 00:00
					ES2201683-022	ES2201683-023	ES2201683-024	ES2201683-025	ES2201683-026
					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)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		<0.5	<0.5	<0.5	<0.5	<0.5
Anthracene	120-12-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5

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Analytical Results

Sub-Matrix: SOIL
(Matrix: SOIL)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH114_0.3_220118	SOP_BH114_2._220118	SOP_BH115_0.1_220118	SOP_BH115_2._220118	SOP_BH116_0.2_220117
				Sampling date / time	18-Jan-2022 00:00	18-Jan-2022 00:00	18-Jan-2022 00:00	18-Jan-2022 00:00	17-Jan-2022 00:00
					ES2201683-022	ES2201683-023	ES2201683-024	ES2201683-025	ES2201683-026
					Result	Result	Result	Result	Result
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued									
Fluoranthene	206-44-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Pyrene	129-00-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benz(a)anthracene	56-55-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Chrysene	218-01-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg		<0.5	<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		<0.5	<0.5	<0.5	<0.5	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg		**0.6**	**0.6**	**0.6**	**0.6**	**0.6**
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg		**1.2**	**1.2**	**1.2**	**1.2**	**1.2**
EP075A: 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	0.5	mg/kg		<0.5	----	<0.5	---	<0.5
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	1	mg/kg		<1	----	<1	---	<1
EP075B: Polynuclear Aromatic Hydrocarbons									
Naphthalene	91-20-3	0.5	mg/kg		<0.5	----	<0.5	---	<0.5
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
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

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Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	SOP_BH114_0.3_220118	SOP_BH114_2._220118	SOP_BH115_0.1_220118	SOP_BH115_2._220118	SOP_BH116_0.2_220117
				Sampling date / time	18-Jan-2022 00:00	18-Jan-2022 00:00	18-Jan-2022 00:00	18-Jan-2022 00:00	17-Jan-2022 00:00
Compound	CAS Number	LOR	Unit		ES2201683-022	ES2201683-023	ES2201683-024	ES2201683-025	ES2201683-026
					Result	Result	Result	Result	Result
EP075B: Polynuclear Aromatic Hydrocarbons - Continued									
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
N-2-Fluorenyl Acetamide	53-96-3	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) & Benzo(k)fluoranthene	205-99-2 207-08-9	1	mg/kg		<1	----	<1	---	<1
7.12-Dimethylbenz(a)anthracene	57-97-6	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
3-Methylcholanthrene	56-49-5	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 PAHs	----	0.5	mg/kg		<0.5	----	<0.5	---	<0.5
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg		<0.5	----	<0.5	---	<0.5
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg		**0.6**	----	**0.6**	---	**0.6**
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg		**1.2**	----	**1.2**	---	**1.2**
EP075C: Phthalate Esters									
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

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Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	SOP_BH114_0.3_220118	SOP_BH114_2._220118	SOP_BH115_0.1_220118	SOP_BH115_2._220118	SOP_BH116_0.2_220117
				Sampling date / time	18-Jan-2022 00:00	18-Jan-2022 00:00	18-Jan-2022 00:00	18-Jan-2022 00:00	17-Jan-2022 00:00
Compound	CAS Number	LOR	Unit		ES2201683-022	ES2201683-023	ES2201683-024	ES2201683-025	ES2201683-026
					Result	Result	Result	Result	Result
EP075D: Nitrosamines - Continued									
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
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

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Analytical Results

Sub-Matrix: SOIL
(Matrix: SOIL)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH114_0.3_220118	SOP_BH114_2._220118	SOP_BH115_0.1_220118	SOP_BH115_2._220118	SOP_BH116_0.2_220117
				Sampling date / time	18-Jan-2022 00:00	18-Jan-2022 00:00	18-Jan-2022 00:00	18-Jan-2022 00:00	17-Jan-2022 00:00
					ES2201683-022	ES2201683-023	ES2201683-024	ES2201683-025	ES2201683-026
					Result	Result	Result	Result	Result
EP075G: Chlorinated Hydrocarbons - Continued									
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
EP075I: Organochlorine Pesticides									
alpha-BHC	319-84-6	0.5	mg/kg		<0.5	----	<0.5	---	<0.5
beta-BHC	319-85-7	0.5	mg/kg		<0.5	----	<0.5	---	<0.5
gamma-BHC	58-89-9	0.5	mg/kg		<0.5	----	<0.5	---	<0.5
delta-BHC	319-86-8	0.5	mg/kg		<0.5	----	<0.5	---	<0.5
Heptachlor	76-44-8	0.5	mg/kg		<0.5	----	<0.5	---	<0.5
Aldrin	309-00-2	0.5	mg/kg		<0.5	----	<0.5	---	<0.5
Heptachlor epoxide	1024-57-3	0.5	mg/kg		<0.5	----	<0.5	---	<0.5
alpha-Endosulfan	959-98-8	0.5	mg/kg		<0.5	----	<0.5	---	<0.5
4.4`-DDE	72-55-9	0.5	mg/kg		<0.5	----	<0.5	---	<0.5
Dieldrin	60-57-1	0.5	mg/kg		<0.5	----	<0.5	---	<0.5
Endrin	72-20-8	0.5	mg/kg		<0.5	----	<0.5	---	<0.5
beta-Endosulfan	33213-65-9	0.5	mg/kg		<0.5	----	<0.5	---	<0.5
4.4`-DDD	72-54-8	0.5	mg/kg		<0.5	----	<0.5	---	<0.5
Endosulfan sulfate	1031-07-8	0.5	mg/kg		<0.5	----	<0.5	---	<0.5
4.4`-DDT	50-29-3	1.0	mg/kg		<1.0	----	<1.0	---	<1.0
EP075J: Organophosphorus Pesticides									
Dichlorvos	62-73-7	0.5	mg/kg		<0.5	----	<0.5	---	<0.5
Dimethoate	60-51-5	0.5	mg/kg		<0.5	----	<0.5	---	<0.5
Diazinon	333-41-5	0.5	mg/kg		<0.5	----	<0.5	---	<0.5
Chlorpyrifos-methyl	5598-13-0	0.5	mg/kg		<0.5	----	<0.5	---	<0.5
Malathion	121-75-5	0.5	mg/kg		<0.5	----	<0.5	---	<0.5

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Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	SOP_BH114_0.3_220118	SOP_BH114_2._220118	SOP_BH115_0.1_220118	SOP_BH115_2._220118	SOP_BH116_0.2_220117
				Sampling date / time	18-Jan-2022 00:00	18-Jan-2022 00:00	18-Jan-2022 00:00	18-Jan-2022 00:00	17-Jan-2022 00:00
Compound	CAS Number	LOR	Unit		ES2201683-022	ES2201683-023	ES2201683-024	ES2201683-025	ES2201683-026
					Result	Result	Result	Result	Result
EP075J: Organophosphorus Pesticides - Continued									
Fenthion	55-38-9	0.5	mg/kg		<0.5	----	<0.5	---	<0.5
Chlorpyrifos	2921-88-2	0.5	mg/kg		<0.5	----	<0.5	---	<0.5
Pirimphos-ethyl	23505-41-1	0.5	mg/kg		<0.5	----	<0.5	---	<0.5
Chlorfenvinphos	470-90-6	0.5	mg/kg		<0.5	----	<0.5	---	<0.5
Prothiofos	34643-46-4	0.5	mg/kg		<0.5	----	<0.5	---	<0.5
Ethion	563-12-2	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	<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	<50	<50
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		<100	<100	<100	<100	<100
>C34 - C40 Fraction	----	100	mg/kg		<100	<100	<100	<100	100
^ >C10 - C40 Fraction (sum)	----	50	mg/kg		<50	<50	<50	<50	100
^ >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	---	---	---	---

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Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	SOP_BH114_0.3_220118	SOP_BH114_2._220118	SOP_BH115_0.1_220118	SOP_BH115_2._220118	SOP_BH116_0.2_220117
			Sampling date / time	18-Jan-2022 00:00	18-Jan-2022 00:00	18-Jan-2022 00:00	18-Jan-2022 00:00	17-Jan-2022 00:00
Compound	CAS Number	LOR	Unit	ES2201683-022	ES2201683-023	ES2201683-024	ES2201683-025	ES2201683-026
				Result	Result	Result	Result	Result
EP231A: Perfluoroalkyl Sulfonic Acids - Continued								
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	----	----	----	----
EP066S: PCB Surrogate								
Decachlorobiphenyl	2051-24-3	0.1	%	**100**	**78.7**	**88.8**	**101**	**85.8**
EP068S: Organochlorine Pesticide Surrogate								
Dibromo-DDE	21655-73-2	0.05	%	**75.2**	**74.6**	**72.8**	**81.1**	**73.0**
EP068T: Organophosphorus Pesticide Surrogate								
DEF	78-48-8	0.05	%	**89.8**	**71.5**	**76.9**	**76.3**	**82.5**
EP074S: VOC Surrogates								
1.2-Dichloroethane-D4	17060-07-0	0.5	%	**84.5**	----	**96.1**	----	**93.6**
Toluene-D8	2037-26-5	0.5	%	**97.8**	----	**107**	----	**100**
4-Bromofluorobenzene	460-00-4	0.5	%	**92.2**	----	**94.0**	----	**101**
EP075(SIM)S: Phenolic Compound Surrogates								

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Analytical Results

Sub-Matrix: SOIL
(Matrix: SOIL)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH114_0.3_220118	SOP_BH114_2._220118	SOP_BH115_0.1_220118	SOP_BH115_2._220118	SOP_BH116_0.2_220117
				Sampling date / time	18-Jan-2022 00:00	18-Jan-2022 00:00	18-Jan-2022 00:00	18-Jan-2022 00:00	17-Jan-2022 00:00
					ES2201683-022	ES2201683-023	ES2201683-024	ES2201683-025	ES2201683-026
					Result	Result	Result	Result	Result
EP075(SIM)S: Phenolic Compound Surrogates - Continued									
Phenol-d6	13127-88-3	0.5	%		96.4	85.1	96.0	93.6	95.1
2-Chlorophenol-D4	93951-73-6	0.5	%		96.8	88.5	97.2	100	95.8
2.4.6-Tribromophenol	118-79-6	0.5	%		70.1	85.0	70.6	92.5	69.7
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	0.5	%		103	98.8	103	110	101
Anthracene-d10	1719-06-8	0.5	%		115	100	115	107	113
4-Terphenyl-d14	1718-51-0	0.5	%		102	102	101	109	98.1
EP075S: Acid Extractable Surrogates									
2-Fluorophenol	367-12-4	0.5	%		114	----	103	---	110
Phenol-d6	13127-88-3	0.5	%		100	----	101	---	100
2-Chlorophenol-D4	93951-73-6	0.5	%		104	----	101	---	106
2.4.6-Tribromophenol	118-79-6	0.5	%		87.0	----	60.0	---	83.4
EP075T: Base/Neutral Extractable Surrogates									
Nitrobenzene-D5	4165-60-0	0.5	%		92.0	----	93.9	---	92.6
1.2-Dichlorobenzene-D4	2199-69-1	0.5	%		89.3	----	91.2	---	90.7
2-Fluorobiphenyl	321-60-8	0.5	%		102	----	104	---	101
Anthracene-d10	1719-06-8	0.5	%		115	----	117	---	114
4-Terphenyl-d14	1718-51-0	0.5	%		95.6	----	94.2	---	93.2
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	0.2	%		82.2	91.4	92.8	95.1	95.6
Toluene-D8	2037-26-5	0.2	%		92.6	89.7	102	97.5	106
4-Bromofluorobenzene	460-00-4	0.2	%		96.2	82.8	101	89.5	106
EP231S: PFAS Surrogate									
13C4-PFOS	----	0.0002	%		109	----	----	---	---
13C8-PFOA	----	0.0002	%		109	----	----	---	---

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Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	SOP_BH116_2.0_2201 17	SOP_BH117_0.2_2201 17	SOP_BH117_3.0_2201 18	SOP_BH119_0.2_2201 17	SOP_BH119_1.0_2201 17
			Sampling date / time	17-Jan-2022 00:00	17-Jan-2022 00:00	18-Jan-2022 00:00	17-Jan-2022 00:00	17-Jan-2022 00:00
Compound	CAS Number	LOR	Unit	ES2201683-027	ES2201683-028	ES2201683-029	ES2201683-030	ES2201683-031
				Result	Result	Result	Result	Result
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	----	1.0	%	12.8	6.7	9.6	1.8	14.2
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	----	407	----	532	----
APPROVED IDENTIFIER:	----	-	--	----	A. SMYLIE	----	A. SMYLIE	----
EG005(ED093)T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	6	<5	10	<5	<5
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	<1	<1
Chromium	7440-47-3	2	mg/kg	4	7	7	8	2
Copper	7440-50-8	5	mg/kg	19	49	45	52	11
Lead	7439-92-1	5	mg/kg	13	<5	21	<5	8
Nickel	7440-02-0	2	mg/kg	2	76	6	99	<2
Zinc	7440-66-6	5	mg/kg	14	30	40	34	7
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	<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	<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

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Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH116_2.0_220117	SOP_BH117_0.2_220117	SOP_BH117_3.0_220118	SOP_BH119_0.2_220117	SOP_BH119_1.0_220117
				Sampling date / time	17-Jan-2022 00:00	17-Jan-2022 00:00	18-Jan-2022 00:00	17-Jan-2022 00:00	17-Jan-2022 00:00
					ES2201683-027	ES2201683-028	ES2201683-029	ES2201683-030	ES2201683-031
					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**	72-54-8/72-55-9/50-29-3	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
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

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Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH116_2.0_220117	SOP_BH117_0.2_220117	SOP_BH117_3.0_220118	SOP_BH119_0.2_220117	SOP_BH119_1.0_220117
				Sampling date / time	17-Jan-2022 00:00	17-Jan-2022 00:00	18-Jan-2022 00:00	17-Jan-2022 00:00	17-Jan-2022 00:00
					ES2201683-027	ES2201683-028	ES2201683-029	ES2201683-030	ES2201683-031
					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

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Analytical Results

Sub-Matrix: SOIL
(Matrix: SOIL)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH116_2.0_220117	SOP_BH117_0.2_220117	SOP_BH117_3.0_220118	SOP_BH119_0.2_220117	SOP_BH119_1.0_220117
				Sampling date / time	17-Jan-2022 00:00	17-Jan-2022 00:00	18-Jan-2022 00:00	17-Jan-2022 00:00	17-Jan-2022 00:00
					ES2201683-027	ES2201683-028	ES2201683-029	ES2201683-030	ES2201683-031
					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)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		<0.5	<0.5	<0.5	<0.5	<0.5
Anthracene	120-12-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5

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Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	SOP_BH116_2.0_2201 17	SOP_BH117_0.2_2201 17	SOP_BH117_3.0_2201 18	SOP_BH119_0.2_2201 17	SOP_BH119_1.0_2201 17
				Sampling date / time	17-Jan-2022 00:00	17-Jan-2022 00:00	18-Jan-2022 00:00	17-Jan-2022 00:00	17-Jan-2022 00:00
Compound	CAS Number	LOR	Unit		ES2201683-027	ES2201683-028	ES2201683-029	ES2201683-030	ES2201683-031
					Result	Result	Result	Result	Result
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued									
Fluoranthene	206-44-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Pyrene	129-00-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benz(a)anthracene	56-55-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Chrysene	218-01-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg		<0.5	<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		<0.5	<0.5	<0.5	<0.5	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg		**0.6**	**0.6**	**0.6**	**0.6**	**0.6**
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg		**1.2**	**1.2**	**1.2**	**1.2**	**1.2**
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

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Analytical Results

Sub-Matrix: SOIL
(Matrix: SOIL)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH116_2.0_220117	SOP_BH117_0.2_220117	SOP_BH117_3.0_220118	SOP_BH119_0.2_220117	SOP_BH119_1.0_220117
				Sampling date / time	17-Jan-2022 00:00	17-Jan-2022 00:00	18-Jan-2022 00:00	17-Jan-2022 00:00	17-Jan-2022 00:00
					ES2201683-027	ES2201683-028	ES2201683-029	ES2201683-030	ES2201683-031
					Result	Result	Result	Result	Result
EP075B: Polynuclear Aromatic Hydrocarbons - Continued									
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
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

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Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	SOP_BH116_2.0_2201 17	SOP_BH117_0.2_2201 17	SOP_BH117_3.0_2201 18	SOP_BH119_0.2_2201 17	SOP_BH119_1.0_2201 17
				Sampling date / time	17-Jan-2022 00:00	17-Jan-2022 00:00	18-Jan-2022 00:00	17-Jan-2022 00:00	17-Jan-2022 00:00
Compound	CAS Number	LOR	Unit		ES2201683-027	ES2201683-028	ES2201683-029	ES2201683-030	ES2201683-031
					Result	Result	Result	Result	Result
EP075D: Nitrosamines - Continued									
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									
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

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Analytical Results

Sub-Matrix: SOIL
(Matrix: SOIL)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH116_2.0_220117	SOP_BH117_0.2_220117	SOP_BH117_3.0_220118	SOP_BH119_0.2_220117	SOP_BH119_1.0_220117
				Sampling date / time	17-Jan-2022 00:00	17-Jan-2022 00:00	18-Jan-2022 00:00	17-Jan-2022 00:00	17-Jan-2022 00:00
					ES2201683-027	ES2201683-028	ES2201683-029	ES2201683-030	ES2201683-031
					Result	Result	Result	Result	Result
EP075G: Chlorinated Hydrocarbons - Continued									
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
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

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Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	SOP_BH116_2.0_220117	SOP_BH117_0.2_220117	SOP_BH117_3.0_220118	SOP_BH119_0.2_220117	SOP_BH119_1.0_220117
			Sampling date / time	17-Jan-2022 00:00	17-Jan-2022 00:00	18-Jan-2022 00:00	17-Jan-2022 00:00	17-Jan-2022 00:00
Compound	CAS Number	LOR	Unit	ES2201683-027	ES2201683-028	ES2201683-029	ES2201683-030	ES2201683-031
				Result	Result	Result	Result	Result
EP075J: Organophosphorus Pesticides - Continued								
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	<100	<100	<100	<100
C29 - C36 Fraction	----	100	mg/kg	<100	<100	<100	<100	<100
^ C10 - C36 Fraction (sum)	----	50	mg/kg	<50	<50	<50	<50	<50
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions								
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	<100	<100	<100	<100	<100
>C34 - C40 Fraction	----	100	mg/kg	<100	<100	<100	<100	<100
^ >C10 - C40 Fraction (sum)	----	50	mg/kg	<50	<50	<50	<50	<50
^ >C10 - C16 Fraction minus Naphthalene (F2)	----	50	mg/kg	<50	<50	<50	<50	<50
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

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Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	SOP_BH116_2.0_220117	SOP_BH117_0.2_220117	SOP_BH117_3.0_220118	SOP_BH119_0.2_220117	SOP_BH119_1.0_220117
			Sampling date / time	17-Jan-2022 00:00	17-Jan-2022 00:00	18-Jan-2022 00:00	17-Jan-2022 00:00	17-Jan-2022 00:00
Compound	CAS Number	LOR	Unit	ES2201683-027	ES2201683-028	ES2201683-029	ES2201683-030	ES2201683-031
				Result	Result	Result	Result	Result
EP231A: Perfluoroalkyl Sulfonic Acids - Continued								
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
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	%	**95.3**	**96.4**	**99.7**	**99.9**	**89.3**
EP068S: Organochlorine Pesticide Surrogate								
Dibromo-DDE	21655-73-2	0.05	%	**67.7**	**70.5**	**62.8**	**66.1**	**82.0**
EP068T: Organophosphorus Pesticide Surrogate								
DEF	78-48-8	0.05	%	**71.7**	**78.4**	**64.2**	**64.6**	**82.9**
EP074S: VOC Surrogates								
1.2-Dichloroethane-D4	17060-07-0	0.5	%	---	**97.3**	---	---	**83.5**
Toluene-D8	2037-26-5	0.5	%	---	**111**	---	---	**92.0**
4-Bromofluorobenzene	460-00-4	0.5	%	---	**106**	---	---	**94.9**
EP075(SIM)S: Phenolic Compound Surrogates								

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Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH116_2.0_220117	SOP_BH117_0.2_220117	SOP_BH117_3.0_220118	SOP_BH119_0.2_220117	SOP_BH119_1.0_220117
				Sampling date / time	17-Jan-2022 00:00	17-Jan-2022 00:00	18-Jan-2022 00:00	17-Jan-2022 00:00	17-Jan-2022 00:00
					ES2201683-027	ES2201683-028	ES2201683-029	ES2201683-030	ES2201683-031
					Result	Result	Result	Result	Result
EP075(SIM)S: Phenolic Compound Surrogates - Continued									
Phenol-d6	13127-88-3	0.5	%		93.4	91.6	93.6	92.7	92.6
2-Chlorophenol-D4	93951-73-6	0.5	%		100	92.2	99.3	99.3	92.7
2.4.6-Tribromophenol	118-79-6	0.5	%		91.5	66.7	88.0	83.5	71.9
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	0.5	%		108	97.3	109	109	97.7
Anthracene-d10	1719-06-8	0.5	%		106	109	106	107	111
4-Terphenyl-d14	1718-51-0	0.5	%		109	93.5	107	106	97.6
EP075S: Acid Extractable Surrogates									
2-Fluorophenol	367-12-4	0.5	%		----	110	----	---	102
Phenol-d6	13127-88-3	0.5	%		----	99.3	----	---	96.2
2-Chlorophenol-D4	93951-73-6	0.5	%		----	103	----	---	95.7
2.4.6-Tribromophenol	118-79-6	0.5	%		----	73.8	----	---	71.3
EP075T: Base/Neutral Extractable Surrogates									
Nitrobenzene-D5	4165-60-0	0.5	%		----	93.3	----	---	86.8
1.2-Dichlorobenzene-D4	2199-69-1	0.5	%		----	92.0	----	---	89.2
2-Fluorobiphenyl	321-60-8	0.5	%		----	103	----	---	96.8
Anthracene-d10	1719-06-8	0.5	%		----	117	----	---	114
4-Terphenyl-d14	1718-51-0	0.5	%		----	93.4	----	---	90.5
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	0.2	%		86.6	99.4	91.9	77.8	85.8
Toluene-D8	2037-26-5	0.2	%		87.2	117	95.3	80.5	96.5
4-Bromofluorobenzene	460-00-4	0.2	%		82.6	112	87.6	73.4	101
EP231S: PFAS Surrogate									
13C4-PFOS	----	0.0002	%		----	----	----	110	114
13C8-PFOA	----	0.0002	%		----	----	----	110	108

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Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	SOP_BH119_3.0_220117	DUP01_220117	Trip Spike Control 1	Trip Spike Control 7	----
			Sampling date / time	17-Jan-2022 00:00	17-Jan-2022 00:00	14-Jan-2022 00:00	14-Jan-2022 00:00	----
Compound	CAS Number	LOR	Unit	ES2201683-032	ES2201683-033	ES2201683-036	ES2201683-037	----
				Result	Result	Result	Result	----
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	----	1.0	%	9.2	7.4	----	----	----
EG005(ED093)T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	7	10	----	----	----
Cadmium	7440-43-9	1	mg/kg	<1	<1	----	----	----
Chromium	7440-47-3	2	mg/kg	7	7	----	----	----
Copper	7440-50-8	5	mg/kg	58	29	----	----	----
Lead	7439-92-1	5	mg/kg	14	13	----	----	----
Nickel	7440-02-0	2	mg/kg	32	4	----	----	----
Zinc	7440-66-6	5	mg/kg	154	38	----	----	----
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	----	----	----
EP066: Polychlorinated Biphenyls (PCB)								
Total Polychlorinated biphenyls	----	0.1	mg/kg	<0.1	<0.1	----	----	----
EP068A: Organochlorine Pesticides (OC)								
alpha-BHC	319-84-6	0.05	mg/kg	<0.05	<0.05	----	----	----
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	<0.05	----	----	----
beta-BHC	319-85-7	0.05	mg/kg	<0.05	<0.05	----	----	----
gamma-BHC	58-89-9	0.05	mg/kg	<0.05	<0.05	----	----	----
delta-BHC	319-86-8	0.05	mg/kg	<0.05	<0.05	----	----	----
Heptachlor	76-44-8	0.05	mg/kg	<0.05	<0.05	----	----	----
Aldrin	309-00-2	0.05	mg/kg	<0.05	<0.05	----	----	----
Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	<0.05	----	----	----
^ Total Chlordane (sum)	----	0.05	mg/kg	<0.05	<0.05	----	----	----
trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	<0.05	----	----	----
alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	<0.05	----	----	----
cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	<0.05	----	----	----
Dieldrin	60-57-1	0.05	mg/kg	<0.05	<0.05	----	----	----
4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	----	----	----
Endrin	72-20-8	0.05	mg/kg	<0.05	<0.05	----	----	----
beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	<0.05	----	----	----
^ Endosulfan (sum)	115-29-7	0.05	mg/kg	<0.05	<0.05	----	----	----
4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	<0.05	----	----	----
Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	<0.05	----	----	----
Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	<0.05	----	----	----

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Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	SOP_BH119_3.0_220117	DUP01_220117	Trip Spike Control 1	Trip Spike Control 7	----
			Sampling date / time	17-Jan-2022 00:00	17-Jan-2022 00:00	14-Jan-2022 00:00	14-Jan-2022 00:00	----
Compound	CAS Number	LOR	Unit	ES2201683-032	ES2201683-033	ES2201683-036	ES2201683-037	----
				Result	Result	Result	Result	----
EP068A: Organochlorine Pesticides (OC) - Continued								
4.4`-DDT	50-29-3	0.2	mg/kg	<0.2	<0.2	----	----	----
Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	<0.05	----	----	----
Methoxychlor	72-43-5	0.2	mg/kg	<0.2	<0.2	----	----	----
^ Sum of Aldrin + Dieldrin	309-00-2/60-57-1	0.05	mg/kg	<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	----	----	----
EP068B: Organophosphorus Pesticides (OP)								
Dichlorvos	62-73-7	0.05	mg/kg	<0.05	<0.05	----	----	----
Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	<0.05	----	----	----
Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	<0.2	----	----	----
Dimethoate	60-51-5	0.05	mg/kg	<0.05	<0.05	----	----	----
Diazinon	333-41-5	0.05	mg/kg	<0.05	<0.05	----	----	----
Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	<0.05	----	----	----
Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	<0.2	----	----	----
Malathion	121-75-5	0.05	mg/kg	<0.05	<0.05	----	----	----
Fenthion	55-38-9	0.05	mg/kg	<0.05	<0.05	----	----	----
Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	<0.05	----	----	----
Parathion	56-38-2	0.2	mg/kg	<0.2	<0.2	----	----	----
Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	<0.05	----	----	----
Chlorfenvinphos	470-90-6	0.05	mg/kg	<0.05	<0.05	----	----	----
Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	<0.05	----	----	----
Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	<0.05	----	----	----
Prothiofos	34643-46-4	0.05	mg/kg	<0.05	<0.05	----	----	----
Ethion	563-12-2	0.05	mg/kg	<0.05	<0.05	----	----	----
Carbophenothion	786-19-6	0.05	mg/kg	<0.05	<0.05	----	----	----
Azinphos Methyl	86-50-0	0.05	mg/kg	<0.05	<0.05	----	----	----
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons								
Naphthalene	91-20-3	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	----	----	----

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Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	SOP_BH119_3.0_220117	DUP01_220117	Trip Spike Control 1	Trip Spike Control 7	----
			Sampling date / time	17-Jan-2022 00:00	17-Jan-2022 00:00	14-Jan-2022 00:00	14-Jan-2022 00:00	----
Compound	CAS Number	LOR	Unit	ES2201683-032	ES2201683-033	ES2201683-036	ES2201683-037	----
				Result	Result	Result	Result	----
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued								
Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	----	----	----
Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	----	----	----
Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	----	----	----
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg	<0.5	<0.5	----	----	----
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	<0.5	----	----	----
Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	<0.5	----	----	----
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	<0.5	----	----	----
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.5	----	----	----
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	<0.5	----	----	----
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg	<0.5	<0.5	----	----	----
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg	<0.5	<0.5	----	----	----
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg	**0.6**	**0.6**	----	----	----
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg	**1.2**	**1.2**	----	----	----
EP080/071: Total Petroleum Hydrocarbons								
C6 - C9 Fraction	----	10	mg/kg	<10	<10	----	----	----
C10 - C14 Fraction	----	50	mg/kg	<50	<50	----	----	----
C15 - C28 Fraction	----	100	mg/kg	<100	<100	----	----	----
C29 - C36 Fraction	----	100	mg/kg	<100	<100	----	----	----
^ C10 - C36 Fraction (sum)	----	50	mg/kg	<50	<50	----	----	----
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions								
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	<0.2	<0.2	----
Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	**17.5**	**14.5**	----
Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	**2.9**	**2.4**	----
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	**14.8**	**12.6**	----

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Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	SOP_BH119_3.0_220117	DUP01_220117	Trip Spike Control 1	Trip Spike Control 7	----
			Sampling date / time	17-Jan-2022 00:00	17-Jan-2022 00:00	14-Jan-2022 00:00	14-Jan-2022 00:00	----
Compound	CAS Number	LOR	Unit	ES2201683-032	ES2201683-033	ES2201683-036	ES2201683-037	----
				Result	Result	Result	Result	----
EP080: BTEXN - Continued								
ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	6.3	5.1	----
^ Sum of BTEX	----	0.2	mg/kg	<0.2	<0.2	41.5	34.6	----
^ Total Xylenes	----	0.5	mg/kg	<0.5	<0.5	21.1	17.7	----
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	----	----	----	----
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	----	----	----	----
EP066S: PCB Surrogate								
Decachlorobiphenyl	2051-24-3	0.1	%	121	128	----	----	----
EP068S: Organochlorine Pesticide Surrogate								
Dibromo-DDE	21655-73-2	0.05	%	63.3	75.1	----	----	----

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Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH119_3.0_220117	DUP01_220117	Trip Spike Control 1	Trip Spike Control 7	----
				Sampling date / time	17-Jan-2022 00:00	17-Jan-2022 00:00	14-Jan-2022 00:00	14-Jan-2022 00:00	---
					ES2201683-032	ES2201683-033	ES2201683-036	ES2201683-037	----------
					Result	Result	Result	Result	---
EP068T: Organophosphorus Pesticide Surrogate									
DEF	78-48-8	0.05	%		**82.3**	**62.6**	**----**	**---**	**---**
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	0.5	%		**90.6**	**94.0**	**----**	**---**	**---**
2-Chlorophenol-D4	93951-73-6	0.5	%		**94.6**	**102**	**----**	**---**	**---**
2.4.6-Tribromophenol	118-79-6	0.5	%		**86.8**	**90.7**	**----**	**---**	**---**
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	0.5	%		**106**	**111**	**----**	**---**	**---**
Anthracene-d10	1719-06-8	0.5	%		**103**	**105**	**----**	**---**	**---**
4-Terphenyl-d14	1718-51-0	0.5	%		**105**	**108**	**----**	**---**	**---**
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	0.2	%		**95.1**	**104**	**102**	**93.6**	**---**
Toluene-D8	2037-26-5	0.2	%		**96.4**	**107**	**106**	**95.4**	**---**
4-Bromofluorobenzene	460-00-4	0.2	%		**87.0**	**99.8**	**101**	**92.4**	**---**
EP231S: PFAS Surrogate									
13C4-PFOS	----	0.0002	%		**110**	**----**	**----**	**---**	**---**
13C8-PFOA	----	0.0002	%		**106**	**----**	**----**	**---**	**---**

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Analytical Results

Sub-Matrix: WATER (Matrix: WATER)			Sample ID	RIN01_220117	RIN02_220118	----	----	----
			Sampling date / time	17-Jan-2022 00:00	18-Jan-2022 00:00	----	---	---
Compound	CAS Number	LOR	Unit	ES2201683-020	ES2201683-035	--------	------	------
				Result	Result	----	---	---
EG020T: Total 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	<0.001	<0.001	----	---	---
Lead	7439-92-1	0.001	mg/L	<0.001	<0.001	----	---	---
Zinc	7440-66-6	0.005	mg/L	<0.005	<0.005	----	---	---
EG035T: Total Recoverable 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	----	---	---

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Analytical Results

Sub-Matrix: WATER (Matrix: WATER)			Sample ID	RIN01_220117	RIN02_220118	----	----	----
			Sampling date / time	17-Jan-2022 00:00	18-Jan-2022 00:00	----	---	---
Compound	CAS Number	LOR	Unit	ES2201683-020	ES2201683-035	--------	------	------
				Result	Result	----	---	---
EP068A: Organochlorine Pesticides (OC) - Continued								
^ Sum of DDD + DDE + DDT	72-54-8/72-55-9/50-2	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	----	---	---
EP074A: Monocyclic Aromatic Hydrocarbons								
Styrene	100-42-5	5	µg/L	<5	<5	----	---	---
Isopropylbenzene	98-82-8	5	µg/L	<5	<5	----	---	---
n-Propylbenzene	103-65-1	5	µg/L	<5	<5	----	---	---
1.3.5-Trimethylbenzene	108-67-8	5	µg/L	<5	<5	----	---	---
sec-Butylbenzene	135-98-8	5	µg/L	<5	<5	----	---	---
1.2.4-Trimethylbenzene	95-63-6	5	µg/L	<5	<5	----	---	---
tert-Butylbenzene	98-06-6	5	µg/L	<5	<5	----	---	---
p-Isopropyltoluene	99-87-6	5	µg/L	<5	<5	----	---	---
n-Butylbenzene	104-51-8	5	µg/L	<5	<5	----	---	---
EP074B: Oxygenated Compounds								

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Analytical Results

Sub-Matrix: WATER (Matrix: WATER)			Sample ID	RIN01_220117	RIN02_220118	----	----	----
			Sampling date / time	17-Jan-2022 00:00	18-Jan-2022 00:00	----	----	----
Compound	CAS Number	LOR	Unit	ES2201683-020	ES2201683-035	--------	--------	--------
				Result	Result	----	----	----
EP074B: Oxygenated Compounds - Continued								
Vinyl Acetate	108-05-4	50	µg/L	<50	<50	----	----	----
2-Butanone (MEK)	78-93-3	50	µg/L	<50	<50	----	----	----
4-Methyl-2-pentanone (MIBK)	108-10-1	50	µg/L	<50	<50	----	----	----
2-Hexanone (MBK)	591-78-6	50	µg/L	<50	<50	----	----	----
EP074C: Sulfonated Compounds								
Carbon disulfide	75-15-0	5	µg/L	<5	<5	----	----	----
EP074D: Fumigants								
2.2-Dichloropropane	594-20-7	5	µg/L	<5	<5	----	----	----
1.2-Dichloropropane	78-87-5	5	µg/L	<5	<5	----	----	----
cis-1.3-Dichloropropylene	10061-01-5	5	µg/L	<5	<5	----	----	----
trans-1.3-Dichloropropylene	10061-02-6	5	µg/L	<5	<5	----	----	----
1.2-Dibromoethane (EDB)	106-93-4	5	µg/L	<5	<5	----	----	----
EP074E: Halogenated Aliphatic Compounds								
Dichlorodifluoromethane	75-71-8	50	µg/L	<50	<50	----	----	----
Chloromethane	74-87-3	50	µg/L	<50	<50	----	----	----
Vinyl chloride	75-01-4	50	µg/L	<50	<50	----	----	----
Bromomethane	74-83-9	50	µg/L	<50	<50	----	----	----
Chloroethane	75-00-3	50	µg/L	<50	<50	----	----	----
Trichlorofluoromethane	75-69-4	50	µg/L	<50	<50	----	----	----
1.1-Dichloroethene	75-35-4	5	µg/L	<5	<5	----	----	----
Iodomethane	74-88-4	5	µg/L	<5	<5	----	----	----
trans-1.2-Dichloroethene	156-60-5	5	µg/L	<5	<5	----	----	----
1.1-Dichloroethane	75-34-3	5	µg/L	<5	<5	----	----	----
cis-1.2-Dichloroethene	156-59-2	5	µg/L	<5	<5	----	----	----
1.1.1-Trichloroethane	71-55-6	5	µg/L	<5	<5	----	----	----
1.1-Dichloropropylene	563-58-6	5	µg/L	<5	<5	----	----	----
Carbon Tetrachloride	56-23-5	5	µg/L	<5	<5	----	----	----
1.2-Dichloroethane	107-06-2	5	µg/L	<5	<5	----	----	----
Trichloroethene	79-01-6	5	µg/L	<5	<5	----	----	----
Dibromomethane	74-95-3	5	µg/L	<5	<5	----	----	----
1.1.2-Trichloroethane	79-00-5	5	µg/L	<5	<5	----	----	----
1.3-Dichloropropane	142-28-9	5	µg/L	<5	<5	----	----	----
Tetrachloroethene	127-18-4	5	µg/L	<5	<5	----	----	----
1.1.1.2-Tetrachloroethane	630-20-6	5	µg/L	<5	<5	----	----	----

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Analytical Results

Sub-Matrix: WATER (Matrix: WATER)			Sample ID	RIN01_220117	RIN02_220118	----	----	----
			Sampling date / time	17-Jan-2022 00:00	18-Jan-2022 00:00	----	---	---
Compound	CAS Number	LOR	Unit	ES2201683-020	ES2201683-035	--------	------	------
				Result	Result	----	---	---
EP074E: Halogenated Aliphatic Compounds - Continued								
trans-1.4-Dichloro-2-butene	110-57-6	5	µg/L	<5	<5	----	---	---
cis-1.4-Dichloro-2-butene	1476-11-5	5	µg/L	<5	<5	----	---	---
1.1.2.2-Tetrachloroethane	79-34-5	5	µg/L	<5	<5	----	---	---
1.2.3-Trichloropropane	96-18-4	5	µg/L	<5	<5	----	---	---
Pentachloroethane	76-01-7	5	µg/L	<5	<5	----	---	---
1.2-Dibromo-3-chloropropane	96-12-8	5	µg/L	<5	<5	----	---	---
EP074F: Halogenated Aromatic Compounds								
Chlorobenzene	108-90-7	5	µg/L	<5	<5	----	---	---
Bromobenzene	108-86-1	5	µg/L	<5	<5	----	---	---
2-Chlorotoluene	95-49-8	5	µg/L	<5	<5	----	---	---
4-Chlorotoluene	106-43-4	5	µg/L	<5	<5	----	---	---
1.2.3-Trichlorobenzene	87-61-6	5	µg/L	<5	<5	----	---	---
EP074G: Trihalomethanes								
Chloroform	67-66-3	5	µg/L	<5	<5	----	---	---
Bromodichloromethane	75-27-4	5	µg/L	<5	<5	----	---	---
Dibromochloromethane	124-48-1	5	µg/L	<5	<5	----	---	---
Bromoform	75-25-2	5	µg/L	<5	<5	----	---	---
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	----	---	---

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Analytical Results

Sub-Matrix: WATER (Matrix: WATER)			Sample ID	RIN01_220117	RIN02_220118	----	----	----
			Sampling date / time	17-Jan-2022 00:00	18-Jan-2022 00:00	----	----	----
Compound	CAS Number	LOR	Unit	ES2201683-020	ES2201683-035	--------	--------	--------
				Result	Result	----	----	----
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued								
^ 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	----	----	----
EP075A: Phenolic Compounds								
Phenol	108-95-2	2	µg/L	<2	<2	----	----	----
2-Chlorophenol	95-57-8	2	µg/L	<2	<2	----	----	----
2-Methylphenol	95-48-7	2	µg/L	<2	<2	----	----	----
3- & 4-Methylphenol	1319-77-3	4	µg/L	<4	<4	----	----	----
2-Nitrophenol	88-75-5	2	µg/L	<2	<2	----	----	----
2.4-Dimethylphenol	105-67-9	2	µg/L	<2	<2	----	----	----
2.4-Dichlorophenol	120-83-2	2	µg/L	<2	<2	----	----	----
2.6-Dichlorophenol	87-65-0	2	µg/L	<2	<2	----	----	----
4-Chloro-3-methylphenol	59-50-7	2	µg/L	<2	<2	----	----	----
2.4.6-Trichlorophenol	88-06-2	2	µg/L	<2	<2	----	----	----
2.4.5-Trichlorophenol	95-95-4	2	µg/L	<2	<2	----	----	----
Pentachlorophenol	87-86-5	4	µg/L	<4	<4	----	----	----
EP075B: Polynuclear Aromatic Hydrocarbons								
Naphthalene	91-20-3	2	µg/L	<2	<2	----	----	----
2-Methylnaphthalene	91-57-6	2	µg/L	<2	<2	----	----	----
2-Chloronaphthalene	91-58-7	2	µg/L	<2	<2	----	----	----
Acenaphthylene	208-96-8	2	µg/L	<2	<2	----	----	----
Acenaphthene	83-32-9	2	µg/L	<2	<2	----	----	----
Fluorene	86-73-7	2	µg/L	<2	<2	----	----	----
Phenanthrene	85-01-8	2	µg/L	<2	<2	----	----	----
Anthracene	120-12-7	2	µg/L	<2	<2	----	----	----
Fluoranthene	206-44-0	2	µg/L	<2	<2	----	----	----
Pyrene	129-00-0	2	µg/L	<2	<2	----	----	----
N-2-Fluorenyl Acetamide	53-96-3	2	µg/L	<2	<2	----	----	----
Benz(a)anthracene	56-55-3	2	µg/L	<2	<2	----	----	----
Chrysene	218-01-9	2	µg/L	<2	<2	----	----	----
Benzo(b+j) & Benzo(k)fluoranthene	205-99-2 207-08-9	4	µg/L	<4	<4	----	----	----
7.12-Dimethylbenz(a)anthracene	57-97-6	2	µg/L	<2	<2	----	----	----
Benzo(a)pyrene	50-32-8	2	µg/L	<2	<2	----	----	----
3-Methylcholanthrene	56-49-5	2	µg/L	<2	<2	----	----	----
Indeno(1.2.3.cd)pyrene	193-39-5	2	µg/L	<2	<2	----	----	----

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Analytical Results

Sub-Matrix: WATER (Matrix: WATER)			Sample ID	RIN01_220117	RIN02_220118	----	----	----
			Sampling date / time	17-Jan-2022 00:00	18-Jan-2022 00:00	----	----	----
Compound	CAS Number	LOR	Unit	ES2201683-020	ES2201683-035	--------	--------	--------
				Result	Result	----	----	----
EP075B: Polynuclear Aromatic Hydrocarbons - Continued								
Dibenz(a.h)anthracene	53-70-3	2	µg/L	<2	<2	----	----	----
Benzo(g.h.i)perylene	191-24-2	2	µg/L	<2	<2	----	----	----
^ Sum of PAHs	----	2	µg/L	<2	<2	----	----	----
^ Benzo(a)pyrene TEQ (zero)	----	2	µg/L	<2	<2	----	----	----
EP075C: Phthalate Esters								
Dimethyl phthalate	131-11-3	2	µg/L	<2	<2	----	----	----
Diethyl phthalate	84-66-2	2	µg/L	<2	<2	----	----	----
Di-n-butyl phthalate	84-74-2	2	µg/L	<2	<2	----	----	----
Butyl benzyl phthalate	85-68-7	2	µg/L	<2	<2	----	----	----
bis(2-ethylhexyl) phthalate	117-81-7	10	µg/L	<10	<10	----	----	----
Di-n-octylphthalate	117-84-0	2	µg/L	<2	<2	----	----	----
EP075D: Nitrosamines								
N-Nitrosomethylethylamine	10595-95-6	2	µg/L	<2	<2	----	----	----
N-Nitrosodiethylamine	55-18-5	2	µg/L	<2	<2	----	----	----
N-Nitrosopyrrolidine	930-55-2	4	µg/L	<4	<4	----	----	----
N-Nitrosomorpholine	59-89-2	2	µg/L	<2	<2	----	----	----
N-Nitrosodi-n-propylamine	621-64-7	2	µg/L	<2	<2	----	----	----
N-Nitrosopiperidine	100-75-4	2	µg/L	<2	<2	----	----	----
N-Nitrosodibutylamine	924-16-3	2	µg/L	<2	<2	----	----	----
N-Nitrosodiphenyl & Diphenylamine	86-30-6 122-39-4	4	µg/L	<4	<4	----	----	----
Methapyrilene	91-80-5	2	µg/L	<2	<2	----	----	----
EP075E: Nitroaromatics and Ketones								
2-Picoline	109-06-8	2	µg/L	<2	<2	----	----	----
Acetophenone	98-86-2	2	µg/L	<2	<2	----	----	----
Nitrobenzene	98-95-3	2	µg/L	<2	<2	----	----	----
Isophorone	78-59-1	2	µg/L	<2	<2	----	----	----
2.6-Dinitrotoluene	606-20-2	4	µg/L	<4	<4	----	----	----
2.4-Dinitrotoluene	121-14-2	4	µg/L	<4	<4	----	----	----
1-Naphthylamine	134-32-7	2	µg/L	<2	<2	----	----	----
4-Nitroquinoline-N-oxide	56-57-5	2	µg/L	<2	<2	----	----	----
5-Nitro-o-toluidine	99-55-8	2	µg/L	<2	<2	----	----	----
Azobenzene	103-33-3	2	µg/L	<2	<2	----	----	----
1.3.5-Trinitrobenzene	99-35-4	2	µg/L	<2	<2	----	----	----

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Analytical Results

Sub-Matrix: WATER (Matrix: WATER)			Sample ID	RIN01_220117	RIN02_220118	----	----	----
			Sampling date / time	17-Jan-2022 00:00	18-Jan-2022 00:00	----	----	----
Compound	CAS Number	LOR	Unit	ES2201683-020	ES2201683-035	--------	--------	--------
				Result	Result	----	----	----
EP075E: Nitroaromatics and Ketones - Continued								
Phenacetin	62-44-2	2	µg/L	<2	<2	----	----	----
4-Aminobiphenyl	92-67-1	2	µg/L	<2	<2	----	----	----
Pentachloronitrobenzene	82-68-8	2	µg/L	<2	<2	----	----	----
Pronamide	23950-58-5	2	µg/L	<2	<2	----	----	----
Dimethylaminoazobenzene	60-11-7	2	µg/L	<2	<2	----	----	----
Chlorobenzilate	510-15-6	2	µg/L	<2	<2	----	----	----
EP075F: Haloethers								
Bis(2-chloroethyl) ether	111-44-4	2	µg/L	<2	<2	----	----	----
Bis(2-chloroethoxy) methane	111-91-1	2	µg/L	<2	<2	----	----	----
4-Chlorophenyl phenyl ether	7005-72-3	2	µg/L	<2	<2	----	----	----
4-Bromophenyl phenyl ether	101-55-3	2	µg/L	<2	<2	----	----	----
EP075G: Chlorinated Hydrocarbons								
1.3-Dichlorobenzene	541-73-1	2	µg/L	<2	<2	----	----	----
1.4-Dichlorobenzene	106-46-7	2	µg/L	<2	<2	----	----	----
1.2-Dichlorobenzene	95-50-1	2	µg/L	<2	<2	----	----	----
Hexachloroethane	67-72-1	2	µg/L	<2	<2	----	----	----
1.2.4-Trichlorobenzene	120-82-1	2	µg/L	<2	<2	----	----	----
Hexachloropropylene	1888-71-7	2	µg/L	<2	<2	----	----	----
Hexachlorobutadiene	87-68-3	2	µg/L	<2	<2	----	----	----
Hexachlorocyclopentadiene	77-47-4	10	µg/L	<10	<10	----	----	----
Pentachlorobenzene	608-93-5	2	µg/L	<2	<2	----	----	----
Hexachlorobenzene (HCB)	118-74-1	4	µg/L	<4	<4	----	----	----
EP075H: Anilines and Benzidines								
Aniline	62-53-3	2	µg/L	<2	<2	----	----	----
4-Chloroaniline	106-47-8	2	µg/L	<2	<2	----	----	----
2-Nitroaniline	88-74-4	4	µg/L	<4	<4	----	----	----
3-Nitroaniline	99-09-2	4	µg/L	<4	<4	----	----	----
Dibenzofuran	132-64-9	2	µg/L	<2	<2	----	----	----
4-Nitroaniline	100-01-6	2	µg/L	<2	<2	----	----	----
Carbazole	86-74-8	2	µg/L	<2	<2	----	----	----
3.3`-Dichlorobenzidine	91-94-1	2	µg/L	<2	<2	----	----	----
EP075I: Organochlorine Pesticides								
alpha-BHC	319-84-6	2	µg/L	<2	<2	----	----	----
beta-BHC	319-85-7	2	µg/L	<2	<2	----	----	----

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Analytical Results

Sub-Matrix: WATER (Matrix: WATER)			Sample ID	RIN01_220117	RIN02_220118	----	----	----
			Sampling date / time	17-Jan-2022 00:00	18-Jan-2022 00:00	----	----	----
Compound	CAS Number	LOR	Unit	ES2201683-020	ES2201683-035	--------	--------	--------
				Result	Result	----	----	----
EP075I: Organochlorine Pesticides - Continued								
gamma-BHC	58-89-9	2	µg/L	<2	<2	----	----	----
delta-BHC	319-86-8	2	µg/L	<2	<2	----	----	----
Heptachlor	76-44-8	2	µg/L	<2	<2	----	----	----
Aldrin	309-00-2	2	µg/L	<2	<2	----	----	----
Heptachlor epoxide	1024-57-3	2	µg/L	<2	<2	----	----	----
alpha-Endosulfan	959-98-8	2	µg/L	<2	<2	----	----	----
4.4`-DDE	72-55-9	2	µg/L	<2	<2	----	----	----
Dieldrin	60-57-1	2	µg/L	<2	<2	----	----	----
Endrin	72-20-8	2	µg/L	<2	<2	----	----	----
beta-Endosulfan	33213-65-9	2	µg/L	<2	<2	----	----	----
4.4`-DDD	72-54-8	2	µg/L	<2	<2	----	----	----
Endosulfan sulfate	1031-07-8	2	µg/L	<2	<2	----	----	----
4.4`-DDT	50-29-3	4	µg/L	<4	<4	----	----	----
^ Sum of Aldrin + Dieldrin	309-00-2/60-57-1	4	µg/L	<4	<4	----	----	----
^ Sum of DDD + DDE + DDT	72-54-8/72-55-9/50-2	4	µg/L	<4	<4	----	----	----
EP075J: Organophosphorus Pesticides								
Dichlorvos	62-73-7	2	µg/L	<2	<2	----	----	----
Dimethoate	60-51-5	2	µg/L	<2	<2	----	----	----
Diazinon	333-41-5	2	µg/L	<2	<2	----	----	----
Chlorpyrifos-methyl	5598-13-0	2	µg/L	<2	<2	----	----	----
Malathion	121-75-5	2	µg/L	<2	<2	----	----	----
Fenthion	55-38-9	2	µg/L	<2	<2	----	----	----
Chlorpyrifos	2921-88-2	2	µg/L	<2	<2	----	----	----
Pirimphos-ethyl	23505-41-1	2	µg/L	<2	<2	----	----	----
Chlorfenvinphos	470-90-6	2	µg/L	<2	<2	----	----	----
Prothiofos	34643-46-4	2	µg/L	<2	<2	----	----	----
Ethion	563-12-2	2	µg/L	<2	<2	----	----	----
EP080/071: Total Petroleum Hydrocarbons								
C6 - C9 Fraction	----	20	µg/L	<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	----	----	----

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Analytical Results

Sub-Matrix: WATER (Matrix: WATER)			Sample ID	RIN01_220117	RIN02_220118	----	----	----
			Sampling date / time	17-Jan-2022 00:00	18-Jan-2022 00:00	----	----	----
Compound	CAS Number	LOR	Unit	ES2201683-020	ES2201683-035	--------	--------	--------
				Result	Result	----	----	----
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions								
C6 - C10 Fraction	C6_C10	20	µg/L	<20	<20	----	----	----
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	20	µg/L	<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	----	----	----
^ >C10 - C16 Fraction minus Naphthalene (F2)	----	100	µg/L	<100	<100	----	----	----
EP080: BTEXN								
Benzene	71-43-2	1	µg/L	<1	<1	----	----	----
Toluene	108-88-3	2	µg/L	<2	<2	----	----	----
Ethylbenzene	100-41-4	2	µg/L	<2	<2	----	----	----
meta- & para-Xylene	108-38-3 106-42-3	2	µg/L	<2	<2	----	----	----
ortho-Xylene	95-47-6	2	µg/L	<2	<2	----	----	----
^ Total Xylenes	----	2	µg/L	<2	<2	----	----	----
^ Sum of BTEX	----	1	µg/L	<1	<1	----	----	----
Naphthalene	91-20-3	5	µg/L	<5	<5	----	----	----
EP231A: Perfluoroalkyl Sulfonic Acids								
Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	<0.02	----	----	----
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	<0.01	<0.01	----	----	----
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	<0.01	<0.01	----	----	----
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	----	----	----
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	----	----	----

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Analytical Results

Sub-Matrix: WATER (Matrix: WATER)			Sample ID	RIN01_220117	RIN02_220118	----	----	----
			Sampling date / time	17-Jan-2022 00:00	18-Jan-2022 00:00	----	----	----
Compound	CAS Number	LOR	Unit	ES2201683-020	ES2201683-035	--------	--------	--------
				Result	Result	----	----	----
EP231D: (n:2) Fluorotelomer Sulfonic Acids - Continued								
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 PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L	<0.01	<0.01	----	----	----
Sum of PFAS (WA DER List)	----	0.01	µg/L	<0.01	<0.01	----	----	----
EP066S: PCB Surrogate								
Decachlorobiphenyl	2051-24-3	1	%	**76.6**	**78.0**	----	----	----
EP068S: Organochlorine Pesticide Surrogate								
Dibromo-DDE	21655-73-2	0.5	%	**75.8**	**70.4**	----	----	----
EP068T: Organophosphorus Pesticide Surrogate								
DEF	78-48-8	0.5	%	**83.3**	**81.2**	----	----	----
EP074S: VOC Surrogates								
1.2-Dichloroethane-D4	17060-07-0	5	%	**108**	**111**	----	----	----
Toluene-D8	2037-26-5	5	%	**104**	**108**	----	----	----
4-Bromofluorobenzene	460-00-4	5	%	**107**	**106**	----	----	----
EP075(SIM)S: Phenolic Compound Surrogates								
Phenol-d6	13127-88-3	1.0	%	**20.8**	**21.2**	----	----	----
2-Chlorophenol-D4	93951-73-6	1.0	%	**51.4**	**55.5**	----	----	----
2.4.6-Tribromophenol	118-79-6	1.0	%	**38.0**	**38.2**	----	----	----
EP075(SIM)T: PAH Surrogates								
2-Fluorobiphenyl	321-60-8	1.0	%	**72.6**	**73.2**	----	----	----
Anthracene-d10	1719-06-8	1.0	%	**95.7**	**91.2**	----	----	----
4-Terphenyl-d14	1718-51-0	1.0	%	**89.2**	**85.1**	----	----	----
EP075S: Acid Extractable Surrogates								
2-Fluorophenol	367-12-4	2	%	**40.7**	**45.2**	----	----	----
Phenol-d6	13127-88-3	2	%	**30.0**	**31.1**	----	----	----
2-Chlorophenol-D4	93951-73-6	2	%	**59.7**	**63.6**	----	----	----
2.4.6-Tribromophenol	118-79-6	2	%	**59.9**	**64.4**	----	----	----
EP075T: Base/Neutral Extractable Surrogates								

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Analytical Results

Sub-Matrix: WATER (Matrix: WATER)			Sample ID	RIN01_220117	RIN02_220118	----	----	----
			Sampling date / time	17-Jan-2022 00:00	18-Jan-2022 00:00	----	----	----
Compound	CAS Number	LOR	Unit	ES2201683-020	ES2201683-035	--------	--------	--------
				Result	Result	----	----	----
EP075T: Base/Neutral Extractable Surrogates - Continued								
Nitrobenzene-D5	4165-60-0	2	%	61.8	61.9	----	----	----
1.2-Dichlorobenzene-D4	2199-69-1	2	%	57.5	57.8	----	----	----
2-Fluorobiphenyl	321-60-8	2	%	63.3	65.6	----	----	----
Anthracene-d10	1719-06-8	2	%	97.7	89.1	----	----	----
4-Terphenyl-d14	1718-51-0	2	%	85.9	77.9	----	----	----
EP080S: TPH(V)/BTEX Surrogates								
1.2-Dichloroethane-D4	17060-07-0	2	%	108	110	----	----	----
Toluene-D8	2037-26-5	2	%	98.4	102	----	----	----
4-Bromofluorobenzene	460-00-4	2	%	105	104	----	----	----
EP231S: PFAS Surrogate								
13C4-PFOS	----	0.02	%	107	96.8	----	----	----
13C8-PFOA	----	0.02	%	98.2	93.3	----	----	----

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	SOP_BH103_0.2_220117 - 17-Jan-2022 00:00	Soil sample.
EA200: Description	SOP_BH104_1.0_220117 - 17-Jan-2022 00:00	Soil sample.
EA200: Description	SOP_BH105_0.2_220117 - 17-Jan-2022 00:00	Soil sample.
EA200: Description	SOP_BH106_0.2_220117 - 17-Jan-2022 00:00	Soil sample.
EA200: Description	SOP_BH110_0.2_220117 - 17-Jan-2022 00:00	Soil sample.
EA200: Description	SOP_BH111_1.0_220118 - 18-Jan-2022 00:00	Soil sample.
EA200: Description	SOP_BH112_1.0_220118 - 18-Jan-2022 00:00	Soil sample.
EA200: Description	SOP_BH113_0.1_220118 - 18-Jan-2022 00:00	Soil sample.
EA200: Description	SOP_BH113_0.3_220118 - 18-Jan-2022 00:00	Soil sample.
EA200: Description	SOP_BH114_0.3_220118 - 18-Jan-2022 00:00	Soil sample.
EA200: Description	SOP_BH115_0.1_220118 - 18-Jan-2022 00:00	Soil sample.
EA200: Description	SOP_BH116_0.2_220117 - 17-Jan-2022 00:00	Soil sample.
EA200: Description	SOP_BH117_0.2_220117 - 17-Jan-2022 00:00	Soil sample.
EA200: Description	SOP_BH119_0.2_220117 - 17-Jan-2022 00:00	Soil sample.

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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

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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

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

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CHAIN OF CUSTODY

ALS Laboratory: please tick →

☐ADELAIDE 21 Burma Road Pooraka SA 5095 Ph: 08 8359 0890 E: adelaide@alsglobal.com

☐BRISBANE 2 Byth Street Stafford QLD 4053 Ph: 07 3243 7222 E: samples.brisbane@alsglobal.com

☐GLADSTONE 46 Callemondah Drive Clinton QLD 4680 Ph: 07 7471 5600 E: gladstone@alsglobal.com

☐MACKAY 78 Harbour Road Mackay QLD 4740 Ph: 07 4944 0177 E: mackay@alsglobal.com

☐MELBOURNE 2-4 Westall Road Springvale VIC 3171 Ph: 03 8549 9600 E: samples.melbourne@alsglobal.com

☐MUDGEE 1/29 Sydney Road Mudgee NSW 2850 Ph: 02 6372 6735 E: mudgee.mail@alsglobal.com

☐NEWCASTLE 5/585 Maitland Road Mayfield West NSW 2304 Ph: 02 4014 2500 E: samples.newcastle@alsglobal.com

☐NOWRA 4/13 Geary Place North Nowra NSW 2541 Ph: 02 4423 2063 E: nowra@alsglobal.com

☐PERTH 10 Hod Way Malaga WA 6090 Ph: 08 9209 7655 E: samples.perth@alsglobal.com

☐SYDNEY 277-289 Woodpark Road Smithfield NSW 2164 Ph: 02 8784 8555 E: samples.sydney@alsglobal.com

☐TOWNSVILLE 14-15 Desma Court Bohle QLD 4818 Ph: 07 4796 0600 E: townsville.environmental@alsglobal.com

☐WOLLONGONG 99 Kenny Street Wollongong NSW 2500 Ph: 02 4225 3125 E: wollongong@alsglobal.com

CLIENT: ERM	TURNAROUND REQUIREMENTS: (Standard TAT may be longer for some tests e.g., Ultra Trace Organics)	FOR LABORATORY USE ONLY (Circle)
OFFICE: SYDNEY	X Standard TAT (List due date):	Custody Seal Intact? Yes No N/A
PROJECT: 0628507 SOP PROJECT NO.:	☐ Non Standard or urgent TAT (List due date):	Free ice / frozen ice bricks present upon receipt? Yes No N/A
ORDER NUMBER: PURCHASE ORDER NO.:	ALS QUOTE NO.:	Random Sample Temperature on Receipt: °C
PROJECT MANAGER: [redacted] Jess L / Nick G CONTACT PH: 0415 833 925	COUNTRY OF ORIGIN: Australia	Other comment:
SAMPLER: [redacted] Ant R SAMPLER MOBILE: 0427 199 735	COC SEQUENCE NUMBER (Circle): COC: 1 2 3 4 5 6 7; OF: 1 2 3 4 5 6 7	
COC Emailed to ALS? (YES (NO) EDD FORMAT (or default):	RELINQUISHED BY:	RECEIVED BY: Scott/Ho ERM
Email Reports to (will default to PM if no other addresses are listed): Nick Grbich + Jess Lawrence	DATE/TIME:	DATE/TIME: 19/11/22 1440
Email Invoice to (will default to PM if no other addresses are listed): Default erm	RELINQUISHED BY:	RECEIVED BY:
COMMENTS/SPECIAL HANDLING/STORAGE OR DISPOSAL: [redacted] Report.	DATE/TIME:	DATE/TIME:

ALS USE ONLY	SAMPLE DETAILS MATRIX: Solid(S) Water(W)			CONTAINER INFORMATION		ANALYSIS REQUIRED including SUITES (NB. Suite Codes must be listed to attract suite price) Where Metals are required, specify Total (unfiltered bottle required) or Dissolved (field filtered bottle required).							Additional Information
LAB ID	SAMPLE ID	DATE / TIME	MATRIX	TYPE & PRESERVATIVE (refer to codes below)	TOTAL JARS	S16	EA200	EP23	S-23	BTEX TRH			Comments on likely contaminant levels, dilutions, or samples requiring specific QC analysis etc.
	TS/TB	[redacted]	S	Jar	2					X			
	SOP_BH103_0.2_[redacted]17 (17-1)		S	Jar PFAS Bag	3	X	X	X	X				
	SOP_BH103_1.0_220117 (17-1)		S	Jar	1	X							
	SOP_BH104_1.0_220117 (17-1)		S	Jar PFAS Bag	3	X	X	X	X				
	SOP_BH104_2.0_220117 (17-1)		S	Jar	1	X							
	SOP_BH105_0.2_220117 (17-1)		S	Jar Bag	2	X	X		X				
	SOP_BH105_2.0_220117 (17-1)		S	Jar	1	X							
	SOP_BH106_0.2_220117 (17-1)		S	Jar PFAS Bag	3	X	X	X	X				
	SOP_BH106_1.0_220117 (17-1)		S	Jar	1	X							
	SOP_BH110_0.2_220117 (17-1)		S	Jar PFAS Bag	3	X	X	X	X				
	SOP_BH110_1.3_220118 (18-1)		S	[redacted]	1	X							
	SOP_BH111_1.0_220118 (18-1)		S	[redacted] PFAS Bag	3	X	X	X	X				
	SOP_BH111_3.0_220118 (18-1)		S	Jar PFAS	2	X		X					
	SOP_BH112_1.0_220118 (18-1)		S	Jar PFAS Bag	3	X	X	X	X				
	SOP_BH112_5.0_220118 (18-1)		S	Jar PFAS	2	X		X					
	SOP_BH113_0.1_220118 (18-1)		S	Jar Bag	2	X	X		[redacted]				
				TOTAL									

Environmental Division Sydney
Work Order Reference
ES2201683

Telephone : 61-2-8784 8555

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Water Container Codes: P = Unpreserved Plastic; N = Nitric Preserved Plastic; ORC = Nitric Preserved ORC; SH = Sodium Hydroxide/Cd Preserved; S = Sodium Hydroxide Preserved Plastic; AG = Amber Glass Unpreserved; AP - Airfreight Unpreserved Plastic
V = VOA Vial HCl Preserved; VB = VOA Vial Sodium Bisulphate Preserved; VS = VOA Vial Sulfuric Preserved; AV = Airfreight Unpreserved Vial SG = Sulfuric Preserved Amber Glass; H = HCl preserved Plastic; HS = HCl preserved Speciation bottle; SP = Sulfuric Preserved Plastic; F = Formaldehyde Preserved Glass;
Z = Zinc Acetate Preserved Bottle; E = EDTA Preserved Bottles; ST = Sterile Bottle; ASS = Plastic Bag for Acid Sulphate Soils; B = Unpreserved Bag; L = Lugols Iodine Preserved Bottles; STT = Sterile Sodium Thiosulfate Preserved Bottles.

CHAIN OF CUSTODY

ALS Laboratory: please tick →

ADELAIDE 21 Burma Road Pooraka SA 5095 Ph: 08 8359 0890 E: adelaide@alsglobal.com

BRISBANE 2 Byth Street Stafford QLD 4053 Ph: 07 3243 7222 E: samples.brisbane@alsglobal.com

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NEWCASTLE 5/585 Maitland Road Mayfield West NSW 2304 Ph: 02 4014 2500 E: samples.newcastle@alsglobal.com

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PERTH 10 Hod Way Malaga WA 6090 Ph: 08 9209 7655 E: samples.perth@alsglobal.com

SYDNEY 277-289 Woodpark Road Smithfield NSW 2164 Ph: 02 8784 8555 E: samples.sydney@alsglobal.com

TOWNSVILLE 14-15 Desma Court Bohle QLD 4818 Ph: 07 4796 0600 E: townsville.environmental@alsglobal.com

WOLLONGONG 99 Kenny Street Wollongong NSW 2500 Ph: 02 4225 3125 E: wollongong@alsglobal.com

CLIENT: ERM	TURNAROUND REQUIREMENTS: (Standard TAT may be longer for some tests e.g., Ultra Trace Organics)	☒ Standard TAT (List due date):	FOR LABORATORY USE ONLY (Circle)
OFFICE: Sydney		☐ Non Standard or urgent TAT (List due date):	Custody Seal Intact? Yes / No / N/A
PROJECT: SOP	PROJECT NO.: 062850	ALS QUOTE NO.:	Free ice / frozen ice bricks present upon receipt? Yes / No / N/A
ORDER NUMBER:	PURCHASE ORDER NO.:	COUNTRY OF ORIGIN: Australia	COC SEQUENCE NUMBER (Circle): COC: 1 2 3 4 5 6 7; OF: 1 2 3 4 5 6 7
PROJECT MANAGER: Nick G Jess C	CONTACT PH: See page 1		Random Sample Temperature on Receipt: 5.2 °C
SAMPLER: ~~Tristan Rodrigues~~ Ant P	SAMPLER MOBILE: See Page 1		Other comment:
COC Emailed to ALS? (YES / NO)	EDD FORMAT (or default):		
Email Reports to (will default to PM if no other addresses are listed):	SEE PAGE (1)		
Email Invoice to (will default to PM if no other addresses are listed):			

RELINQUISHED BY:	RECEIVED BY:	RELINQUISHED BY:	RECEIVED BY:
DATE/TIME:	DATE/TIME: 19/1/22 1440	DATE/TIME:	DATE/TIME:

COMMENTS/SPECIAL HANDLING/STORAGE OR DISPOSAL: Please issue Preliminary Report.

ALS USE ONLY	SAMPLE DETAILS (MATRIX: Solid(S) Water(W))			CONTAINER INFORMATION		ANALYSIS REQUIRED including SUITES (NB. Suite Codes must be listed to attract suite price). Where Metals are required, specify Total (unfiltered bottle required) or Dissolved (field filtered bottle required).								Additional Information
LAB ID	SAMPLE ID	DATE / TIME	MATRIX	TYPE & PRESERVATIVE (refer to codes below)	TOTAL JARS	S16	EA200G	EP231	S23	BTEX STRW				Comments on likely contaminant levels, dilutions, or samples requiring specific QC analysis etc.
	TS/TB	17-1	S	Jar	2	✓								
	RIN01_220117	17-1	W	Metal, Semi, Vol + PFAS	6	X		X	X					
	SOP_BH113_0.3_220118	(18-1)	S	Jar Bag PFAS	3	X	X	X	X					
	SOP_BH114_0.3_220118	(18-1)	S	Jar PFAS Bag	3	X	X	X	X					
	SOP_BH114_2.0_220118	(18-1)	S	Jar	1	X								
	SOP_BH115_0.1_220118	(18-1)	S	Jar Bag	2	X	X		X					
	SOP_BH115_2.0_220118	(18-1)	S	Jar	1	X								
	SOP_BH116_0.2_220117	(17-1)	S	Jar Bag	2	X	X		X					
	SOP_BH116_2.0_220117	(17-1)	S	Jar	1	X								
	SOP_BH117_0.2_220117	(17-1)	S	Jar Bag	2	X	X		X					
	SOP_BH117_3.0_220118	(18-1)	S	Jar	1	X								
	SOP_BH119_0.2_220117	(17-1)	S	Jar PFAS Bag	3	X	X	X						
	SOP_BH119_1.0_220117	(17-1)	S	Jar PFAS	2	X		X	X					
	SOP_BH119_3.0_220117	(17-1)	S	Jar PFAS	2	X		X						
	DUP01_220117	17-1	S	Jar	1	X								
	TRIP01_220117	17-1	S	Jar	1	X								
	RIN02_220118	18-1	W	Metal, Semi, Vol + PFAS	6	X		X	X					
				TOTAL										

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Water Container Codes: P = Unpreserved Plastic; N = Nitric Preserved Plastic; ORC = Nitric Preserved ORC; SH = Sodium Hydroxide/Cd Preserved; S = Sodium Hydroxide Preserved Plastic; AG = Amber Glass Unpreserved; AP - Airfreight Unpreserved Plastic; V = VOA Vial HCl Preserved; VB = VOA Vial Sodium Bisulphate Preserved; VS = VOA Vial Sulfuric Preserved; AV = Airfreight Unpreserved Vial SG = Sulfuric Preserved Amber Glass; H = HCl preserved Plastic; HS = HCl preserved Speciation bottle; SP = Sulfuric Preserved Plastic; F = Formaldehyde Preserved Glass; Z = Zinc Acetate Preserved Bottle; E = EDTA Preserved Bottles; ST = Sterile Bottle; ASS = Plastic Bag for Acid Sulphate Soils; B = Unpreserved Bag; LI = Lugols Iodine Preserved Bottles; STT = Sterile Sodium Thiosulfate Preserved Bottles.

ALS Environmental

CERTIFICATE OF ANALYSIS

Work Order	: **ES2201979**	Page	: 1 of 18
Client	: **ENVIRONMENTAL RESOURCES MANAGEMENT (ERM)**	Laboratory	: Environmental Division Sydney
Contact	: NICHOLAS GRBICH	Contact	: Customer Services ES
Address	: LEVEL 15 309 KENT STREET SYDNEY NSW AUSTRALIA 2000	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
Telephone	: ----	Telephone	: +61-2-8784 8555
Project	: 0628507	Date Samples Received	: 20-Jan-2022 19:00
Order number	: ----	Date Analysis Commenced	: 22-Jan-2022
C-O-C number	: ----	Issue Date	: 31-Jan-2022 18:28
Sampler	: TAJ MONDON		
Site	: ----		
Quote number	: EN/114		
No. of samples received	: 16		
No. of samples analysed	: 14		

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

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

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results
- Surrogate Control Limits

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

Signatories

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

Signatories	*Position*	*Accreditation Category*
Ankit Joshi	Inorganic Chemist	Sydney Inorganics, Smithfield, NSW
Edwandy Fadjar	Organic Coordinator	Sydney Organics, Smithfield, NSW
Ivan Taylor	Analyst	Sydney Inorganics, Smithfield, NSW

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General Comments

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

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

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

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

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.

- EK059G: LOR raised for NOx due to sample matrix.
- 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.
- 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.
- EK057G: LOR raised for Nitrite on a few samples due to sample matrix.
- EP080&74: ES2201979-08 has been confrimed by re-analysis.
- TDS by method EA-015 may bias high for various samples due to the presence of fine particulate matter, which may pass through the prescribed GF/C paper.
- Sodium Adsorption Ratio (where reported): Where results for Na, Ca or Mg are <LOR, a concentration at half the reported LOR is incorporated into the SAR calculation. This represents a conservative approach for Na relative to the assumption that <LOR = zero concentration and a conservative approach for Ca & Mg relative to the assumption that <LOR is equivalent to the LOR concentration.

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Analytical Results

Sub-Matrix: WATER (Matrix: WATER)			Sample ID	S51	S54	S02_d	S06	S40_s
			Sampling date / time	20-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00
Compound	CAS Number	LOR	Unit	ES2201979-001	ES2201979-002	ES2201979-003	ES2201979-004	ES2201979-005
				Result	Result	Result	Result	Result
EA015: Total Dissolved Solids dried at 180 ± 5 °C								
Total Dissolved Solids @180°C	----	10	mg/L	831	8360	2550	1280	446
ED037P: Alkalinity by PC Titrator								
Hydroxide Alkalinity as CaCO3	DMO-210-001	1	mg/L	<1	<1	<1	<1	<1
Carbonate Alkalinity as CaCO3	3812-32-6	1	mg/L	<1	<1	<1	<1	<1
Bicarbonate Alkalinity as CaCO3	71-52-3	1	mg/L	700	59	270	418	205
Total Alkalinity as CaCO3	----	1	mg/L	700	59	270	418	205
ED041G: Sulfate (Turbidimetric) as SO4 2- by DA								
Sulfate as SO4 - Turbidimetric	14808-79-8	1	mg/L	6	334	126	102	64
ED045G: Chloride by Discrete Analyser								
Chloride	16887-00-6	1	mg/L	44	4650	767	457	48
ED093F: Dissolved Major Cations								
Calcium	7440-70-2	1	mg/L	150	105	15	26	77
Magnesium	7439-95-4	1	mg/L	49	279	24	30	9
Sodium	7440-23-5	1	mg/L	67	2060	554	376	35
Potassium	7440-09-7	1	mg/L	23	90	28	33	12
EG020F: Dissolved Metals by ICP-MS								
Arsenic	7440-38-2	0.001	mg/L	0.065	0.002	0.001	0.002	<0.001
Cadmium	7440-43-9	0.0001	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	0.0003
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	0.006	0.002	0.002	0.011
Lead	7439-92-1	0.001	mg/L	<0.001	0.002	<0.001	<0.001	<0.001
Nickel	7440-02-0	0.001	mg/L	<0.001	0.002	0.002	0.002	0.007
Zinc	7440-66-6	0.005	mg/L	<0.005	0.006	<0.005	<0.005	0.287
Iron	7439-89-6	0.05	mg/L	19.1	51.5	0.44	13.4	0.32
EG035F: Dissolved Mercury by FIMS								
Mercury	7439-97-6	0.0001	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
EK055G: Ammonia as N by Discrete Analyser								
Ammonia as N	7664-41-7	0.01	mg/L	4.75	0.64	0.29	0.57	0.04
EK057G: Nitrite as N by Discrete Analyser								
Nitrite as N	14797-65-0	0.01	mg/L	<0.10	<0.10	<0.01	<0.01	0.03
EK058G: Nitrate as N by Discrete Analyser								
Nitrate as N	14797-55-8	0.01	mg/L	<0.10	<0.10	0.04	0.02	0.46
EK059G: Nitrite plus Nitrate as N (NOx) by Discrete Analyser								

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Analytical Results

Sub-Matrix: WATER (Matrix: WATER)			Sample ID	S51	S54	S02_d	S06	S40_s
			Sampling date / time	20-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00
Compound	CAS Number	LOR	Unit	ES2201979-001	ES2201979-002	ES2201979-003	ES2201979-004	ES2201979-005
				Result	Result	Result	Result	Result
EK059G: Nitrite plus Nitrate as N (NOx) by Discrete Analyser - Continued								
Nitrite + Nitrate as N	----	0.01	mg/L	<0.10	<0.10	0.04	0.02	0.49
EK061G: Total Kjeldahl Nitrogen By Discrete Analyser								
Total Kjeldahl Nitrogen as N	----	0.1	mg/L	6.8	3.9	4.6	1.0	0.3
EK062G: Total Nitrogen as N (TKN + NOx) by Discrete Analyser								
^ Total Nitrogen as N	----	0.1	mg/L	6.8	3.9	4.6	1.0	0.8
EK067G: Total Phosphorus as P by Discrete Analyser								
Total Phosphorus as P	----	0.01	mg/L	0.68	1.15	1.45	0.03	0.66
EN055: Ionic Balance								
ø Total Anions	----	0.01	meq/L	15.4	139	29.6	23.4	6.78
ø Total Cations	----	0.01	meq/L	15.0	120	27.5	21.0	6.41
ø Ionic Balance	----	0.01	%	1.09	7.40	3.70	5.42	2.80
EP074A: Monocyclic Aromatic Hydrocarbons								
Styrene	100-42-5	5	µg/L	<5	<5	<5	<5	<5
Isopropylbenzene	98-82-8	5	µg/L	<5	<5	<5	<5	<5
n-Propylbenzene	103-65-1	5	µg/L	<5	<5	<5	<5	<5
1.3.5-Trimethylbenzene	108-67-8	5	µg/L	<5	<5	<5	<5	<5
sec-Butylbenzene	135-98-8	5	µg/L	<5	<5	<5	<5	<5
1.2.4-Trimethylbenzene	95-63-6	5	µg/L	<5	<5	<5	<5	<5
tert-Butylbenzene	98-06-6	5	µg/L	<5	<5	<5	<5	<5
p-Isopropyltoluene	99-87-6	5	µg/L	<5	<5	<5	<5	<5
n-Butylbenzene	104-51-8	5	µg/L	<5	<5	<5	<5	<5
EP074B: Oxygenated Compounds								
Vinyl Acetate	108-05-4	50	µg/L	<50	<50	<50	<50	<50
2-Butanone (MEK)	78-93-3	50	µg/L	<50	<50	<50	<50	<50
4-Methyl-2-pentanone (MIBK)	108-10-1	50	µg/L	<50	<50	<50	<50	<50
2-Hexanone (MBK)	591-78-6	50	µg/L	<50	<50	<50	<50	<50
EP074C: Sulfonated Compounds								
Carbon disulfide	75-15-0	5	µg/L	<5	<5	<5	<5	<5
EP074D: Fumigants								
2.2-Dichloropropane	594-20-7	5	µg/L	<5	<5	<5	<5	<5
1.2-Dichloropropane	78-87-5	5	µg/L	<5	<5	<5	<5	<5
cis-1.3-Dichloropropylene	10061-01-5	5	µg/L	<5	<5	<5	<5	<5
trans-1.3-Dichloropropylene	10061-02-6	5	µg/L	<5	<5	<5	<5	<5
1.2-Dibromoethane (EDB)	106-93-4	5	µg/L	<5	<5	<5	<5	<5

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Analytical Results

Sub-Matrix: WATER (Matrix: WATER)			Sample ID	S51	S54	S02_d	S06	S40_s
			Sampling date / time	20-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00
Compound	CAS Number	LOR	Unit	ES2201979-001	ES2201979-002	ES2201979-003	ES2201979-004	ES2201979-005
				Result	Result	Result	Result	Result
EP074E: Halogenated Aliphatic Compounds								
Dichlorodifluoromethane	75-71-8	50	µg/L	<50	<50	<50	<50	<50
Chloromethane	74-87-3	50	µg/L	<50	<50	<50	<50	<50
Vinyl chloride	75-01-4	50	µg/L	<50	<50	<50	<50	<50
Bromomethane	74-83-9	50	µg/L	<50	<50	<50	<50	<50
Chloroethane	75-00-3	50	µg/L	<50	<50	<50	<50	<50
Trichlorofluoromethane	75-69-4	50	µg/L	<50	<50	<50	<50	<50
1.1-Dichloroethene	75-35-4	5	µg/L	<5	<5	<5	<5	<5
Iodomethane	74-88-4	5	µg/L	<5	<5	<5	<5	<5
trans-1.2-Dichloroethene	156-60-5	5	µg/L	<5	<5	<5	<5	<5
1.1-Dichloroethane	75-34-3	5	µg/L	<5	<5	<5	<5	<5
cis-1.2-Dichloroethene	156-59-2	5	µg/L	<5	<5	<5	<5	<5
1.1.1-Trichloroethane	71-55-6	5	µg/L	<5	<5	<5	<5	<5
1.1-Dichloropropylene	563-58-6	5	µg/L	<5	<5	<5	<5	<5
Carbon Tetrachloride	56-23-5	5	µg/L	<5	<5	<5	<5	<5
1.2-Dichloroethane	107-06-2	5	µg/L	<5	<5	<5	<5	<5
Trichloroethene	79-01-6	5	µg/L	<5	<5	<5	<5	<5
Dibromomethane	74-95-3	5	µg/L	<5	<5	<5	<5	<5
1.1.2-Trichloroethane	79-00-5	5	µg/L	<5	<5	<5	<5	<5
1.3-Dichloropropane	142-28-9	5	µg/L	<5	<5	<5	<5	<5
Tetrachloroethene	127-18-4	5	µg/L	<5	<5	<5	<5	<5
1.1.1.2-Tetrachloroethane	630-20-6	5	µg/L	<5	<5	<5	<5	<5
trans-1.4-Dichloro-2-butene	110-57-6	5	µg/L	<5	<5	<5	<5	<5
cis-1.4-Dichloro-2-butene	1476-11-5	5	µg/L	<5	<5	<5	<5	<5
1.1.2.2-Tetrachloroethane	79-34-5	5	µg/L	<5	<5	<5	<5	<5
1.2.3-Trichloropropane	96-18-4	5	µg/L	<5	<5	<5	<5	<5
Pentachloroethane	76-01-7	5	µg/L	<5	<5	<5	<5	<5
1.2-Dibromo-3-chloropropane	96-12-8	5	µg/L	<5	<5	<5	<5	<5
Hexachlorobutadiene	87-68-3	5	µg/L	<5	<5	<5	<5	<5
EP074F: Halogenated Aromatic Compounds								
Chlorobenzene	108-90-7	5	µg/L	<5	<5	<5	<5	<5
Bromobenzene	108-86-1	5	µg/L	<5	<5	<5	<5	<5
2-Chlorotoluene	95-49-8	5	µg/L	<5	<5	<5	<5	<5
4-Chlorotoluene	106-43-4	5	µg/L	<5	<5	<5	<5	<5
1.3-Dichlorobenzene	541-73-1	5	µg/L	<5	<5	<5	<5	<5
1.4-Dichlorobenzene	106-46-7	5	µg/L	<5	<5	<5	<5	<5

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Analytical Results

Sub-Matrix: WATER (Matrix: WATER)			Sample ID	S51	S54	S02_d	S06	S40_s
			Sampling date / time	20-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00
Compound	CAS Number	LOR	Unit	ES2201979-001	ES2201979-002	ES2201979-003	ES2201979-004	ES2201979-005
				Result	Result	Result	Result	Result
EP074F: Halogenated Aromatic Compounds - Continued								
1.2-Dichlorobenzene	95-50-1	5	µg/L	<5	<5	<5	<5	<5
1.2.4-Trichlorobenzene	120-82-1	5	µg/L	<5	<5	<5	<5	<5
1.2.3-Trichlorobenzene	87-61-6	5	µg/L	<5	<5	<5	<5	<5
EP074G: Trihalomethanes								
Chloroform	67-66-3	5	µg/L	<5	<5	<5	<5	<5
Bromodichloromethane	75-27-4	5	µg/L	<5	<5	<5	<5	<5
Dibromochloromethane	124-48-1	5	µg/L	<5	<5	<5	<5	<5
Bromoform	75-25-2	5	µg/L	<5	<5	<5	<5	<5
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
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								

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Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	S51	S54	S02_d	S06	S40_s
				Sampling date / time	20-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00
Compound	CAS Number	LOR	Unit		ES2201979-001	ES2201979-002	ES2201979-003	ES2201979-004	ES2201979-005
					Result	Result	Result	Result	Result
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions - Continued									
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
EP074S: VOC Surrogates									
1.2-Dichloroethane-D4	17060-07-0	5	%		96.0	98.2	101	99.9	99.6
Toluene-D8	2037-26-5	5	%		114	106	108	111	110
4-Bromofluorobenzene	460-00-4	5	%		104	98.7	102	94.4	89.6
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	1.0	%		20.9	23.4	25.1	25.1	22.9
2-Chlorophenol-D4	93951-73-6	1.0	%		57.6	60.1	62.2	61.3	61.1
2.4.6-Tribromophenol	118-79-6	1.0	%		68.5	68.9	79.5	90.0	65.6
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	1.0	%		72.4	79.8	75.2	78.4	77.0
Anthracene-d10	1719-06-8	1.0	%		92.5	98.3	93.2	90.4	96.6
4-Terphenyl-d14	1718-51-0	1.0	%		82.6	89.1	95.8	91.7	86.5
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	2	%		102	108	108	112	111
Toluene-D8	2037-26-5	2	%		114	115	107	115	115
4-Bromofluorobenzene	460-00-4	2	%		107	108	103	109	107

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Analytical Results

Sub-Matrix: WATER (Matrix: WATER)			Sample ID	S40_d	SMW_BH120	SMW_BH019	D01_220119	RO1-220119
			Sampling date / time	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00
Compound	CAS Number	LOR	Unit	ES2201979-006	ES2201979-007	ES2201979-008	ES2201979-009	ES2201979-011
				Result	Result	Result	Result	Result
EA015: Total Dissolved Solids dried at 180 ± 5 °C								
Total Dissolved Solids @180°C	----	10	mg/L	15000	12300	11800	11700	---
ED037P: Alkalinity by PC Titrator								
Hydroxide Alkalinity as CaCO3	DMO-210-001	1	mg/L	<1	<1	<1	<1	---
Carbonate Alkalinity as CaCO3	3812-32-6	1	mg/L	<1	<1	<1	<1	---
Bicarbonate Alkalinity as CaCO3	71-52-3	1	mg/L	70	673	856	855	---
Total Alkalinity as CaCO3	----	1	mg/L	70	673	856	855	---
ED041G: Sulfate (Turbidimetric) as SO4 2- by DA								
Sulfate as SO4 - Turbidimetric	14808-79-8	1	mg/L	680	501	2	1	---
ED045G: Chloride by Discrete Analyser								
Chloride	16887-00-6	1	mg/L	8110	6750	6580	6510	---
ED093F: Dissolved Major Cations								
Calcium	7440-70-2	1	mg/L	325	247	411	416	---
Magnesium	7439-95-4	1	mg/L	459	474	358	365	---
Sodium	7440-23-5	1	mg/L	3640	3360	2650	2700	---
Potassium	7440-09-7	1	mg/L	77	51	43	43	---
EG020F: Dissolved Metals by ICP-MS								
Arsenic	7440-38-2	0.001	mg/L	0.001	<0.001	<0.001	<0.001	<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	0.005	<0.001	0.002	0.002	<0.001
Lead	7439-92-1	0.001	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001
Nickel	7440-02-0	0.001	mg/L	0.080	<0.001	0.001	0.002	<0.001
Zinc	7440-66-6	0.005	mg/L	<0.005	<0.005	0.014	0.013	<0.005
Iron	7439-89-6	0.05	mg/L	330	1.99	5.77	5.78	<0.05
EG035F: Dissolved Mercury by FIMS								
Mercury	7439-97-6	0.0001	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
EK055G: Ammonia as N by Discrete Analyser								
Ammonia as N	7664-41-7	0.01	mg/L	1.07	1.66	4.76	4.61	0.02
EK057G: Nitrite as N by Discrete Analyser								
Nitrite as N	14797-65-0	0.01	mg/L	<0.10	<0.01	<0.01	<0.01	---
EK058G: Nitrate as N by Discrete Analyser								
Nitrate as N	14797-55-8	0.01	mg/L	<0.10	0.02	0.02	0.02	---
EK059G: Nitrite plus Nitrate as N (NOx) by Discrete Analyser								

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Analytical Results

Sub-Matrix: WATER (Matrix: WATER)			Sample ID	S40_d	SMW_BH120	SMW_BH019	D01_220119	RO1-220119
			Sampling date / time	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00
Compound	CAS Number	LOR	Unit	ES2201979-006	ES2201979-007	ES2201979-008	ES2201979-009	ES2201979-011
				Result	Result	Result	Result	Result
EK059G: Nitrite plus Nitrate as N (NOx) by Discrete Analyser - Continued								
Nitrite + Nitrate as N	----	0.01	mg/L	<0.10	0.02	0.02	0.02	<0.01
EK061G: Total Kjeldahl Nitrogen By Discrete Analyser								
Total Kjeldahl Nitrogen as N	----	0.1	mg/L	2.2	2.3	6.4	6.3	<0.1
EK062G: Total Nitrogen as N (TKN + NOx) by Discrete Analyser								
^ Total Nitrogen as N	----	0.1	mg/L	2.2	2.3	6.4	6.3	<0.1
EK067G: Total Phosphorus as P by Discrete Analyser								
Total Phosphorus as P	----	0.01	mg/L	0.27	0.15	0.27	0.27	<0.01
EN055: Ionic Balance								
ø Total Anions	----	0.01	meq/L	244	214	203	201	----
ø Total Cations	----	0.01	meq/L	214	199	166	169	----
ø Ionic Balance	----	0.01	%	6.55	3.75	9.87	8.48	----
EP074A: Monocyclic Aromatic Hydrocarbons								
Styrene	100-42-5	5	µg/L	<5	<5	<5	<5	<5
Isopropylbenzene	98-82-8	5	µg/L	<5	<5	<5	<5	<5
n-Propylbenzene	103-65-1	5	µg/L	<5	<5	<5	<5	<5
1.3.5-Trimethylbenzene	108-67-8	5	µg/L	<5	<5	<5	<5	<5
sec-Butylbenzene	135-98-8	5	µg/L	<5	<5	<5	<5	<5
1.2.4-Trimethylbenzene	95-63-6	5	µg/L	<5	<5	<5	<5	<5
tert-Butylbenzene	98-06-6	5	µg/L	<5	<5	<5	<5	<5
p-Isopropyltoluene	99-87-6	5	µg/L	<5	<5	<5	<5	<5
n-Butylbenzene	104-51-8	5	µg/L	<5	<5	<5	<5	<5
EP074B: Oxygenated Compounds								
Vinyl Acetate	108-05-4	50	µg/L	<50	<50	<50	<50	<50
2-Butanone (MEK)	78-93-3	50	µg/L	<50	<50	<50	<50	<50
4-Methyl-2-pentanone (MIBK)	108-10-1	50	µg/L	<50	<50	<50	<50	<50
2-Hexanone (MBK)	591-78-6	50	µg/L	<50	<50	<50	<50	<50
EP074C: Sulfonated Compounds								
Carbon disulfide	75-15-0	5	µg/L	<5	<5	<5	<5	<5
EP074D: Fumigants								
2.2-Dichloropropane	594-20-7	5	µg/L	<5	<5	<5	<5	<5
1.2-Dichloropropane	78-87-5	5	µg/L	<5	<5	<5	<5	<5
cis-1.3-Dichloropropylene	10061-01-5	5	µg/L	<5	<5	<5	<5	<5
trans-1.3-Dichloropropylene	10061-02-6	5	µg/L	<5	<5	<5	<5	<5
1.2-Dibromoethane (EDB)	106-93-4	5	µg/L	<5	<5	<5	<5	<5

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Analytical Results

Sub-Matrix: WATER (Matrix: WATER)			Sample ID	S40_d	SMW_BH120	SMW_BH019	D01_220119	RO1-220119
			Sampling date / time	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00
Compound	CAS Number	LOR	Unit	ES2201979-006	ES2201979-007	ES2201979-008	ES2201979-009	ES2201979-011
				Result	Result	Result	Result	Result
EP074E: Halogenated Aliphatic Compounds								
Dichlorodifluoromethane	75-71-8	50	µg/L	<50	<50	<50	<50	<50
Chloromethane	74-87-3	50	µg/L	<50	<50	<50	<50	<50
Vinyl chloride	75-01-4	50	µg/L	<50	<50	<50	<50	<50
Bromomethane	74-83-9	50	µg/L	<50	<50	<50	<50	<50
Chloroethane	75-00-3	50	µg/L	<50	<50	<50	<50	<50
Trichlorofluoromethane	75-69-4	50	µg/L	<50	<50	<50	<50	<50
1.1-Dichloroethene	75-35-4	5	µg/L	<5	<5	<5	<5	<5
Iodomethane	74-88-4	5	µg/L	<5	<5	<5	<5	<5
trans-1.2-Dichloroethene	156-60-5	5	µg/L	<5	<5	<5	<5	<5
1.1-Dichloroethane	75-34-3	5	µg/L	<5	<5	<5	<5	<5
cis-1.2-Dichloroethene	156-59-2	5	µg/L	<5	<5	<5	<5	<5
1.1.1-Trichloroethane	71-55-6	5	µg/L	<5	<5	<5	<5	<5
1.1-Dichloropropylene	563-58-6	5	µg/L	<5	<5	<5	<5	<5
Carbon Tetrachloride	56-23-5	5	µg/L	<5	<5	<5	<5	<5
1.2-Dichloroethane	107-06-2	5	µg/L	<5	<5	<5	<5	<5
Trichloroethene	79-01-6	5	µg/L	<5	<5	<5	<5	<5
Dibromomethane	74-95-3	5	µg/L	<5	<5	<5	<5	<5
1.1.2-Trichloroethane	79-00-5	5	µg/L	<5	<5	<5	<5	<5
1.3-Dichloropropane	142-28-9	5	µg/L	<5	<5	<5	<5	<5
Tetrachloroethene	127-18-4	5	µg/L	<5	<5	<5	<5	<5
1.1.1.2-Tetrachloroethane	630-20-6	5	µg/L	<5	<5	<5	<5	<5
trans-1.4-Dichloro-2-butene	110-57-6	5	µg/L	<5	<5	<5	<5	<5
cis-1.4-Dichloro-2-butene	1476-11-5	5	µg/L	<5	<5	<5	<5	<5
1.1.2.2-Tetrachloroethane	79-34-5	5	µg/L	<5	<5	<5	<5	<5
1.2.3-Trichloropropane	96-18-4	5	µg/L	<5	<5	<5	<5	<5
Pentachloroethane	76-01-7	5	µg/L	<5	<5	<5	<5	<5
1.2-Dibromo-3-chloropropane	96-12-8	5	µg/L	<5	<5	<5	<5	<5
Hexachlorobutadiene	87-68-3	5	µg/L	<5	<5	<5	<5	<5
EP074F: Halogenated Aromatic Compounds								
Chlorobenzene	108-90-7	5	µg/L	<5	<5	<5	<5	<5
Bromobenzene	108-86-1	5	µg/L	<5	<5	<5	<5	<5
2-Chlorotoluene	95-49-8	5	µg/L	<5	<5	<5	<5	<5
4-Chlorotoluene	106-43-4	5	µg/L	<5	<5	<5	<5	<5
1.3-Dichlorobenzene	541-73-1	5	µg/L	<5	<5	<5	<5	<5
1.4-Dichlorobenzene	106-46-7	5	µg/L	<5	<5	<5	<5	<5

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Analytical Results

Sub-Matrix: WATER (Matrix: WATER)			Sample ID	S40_d	SMW_BH120	SMW_BH019	D01_220119	RO1-220119
			Sampling date / time	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00
Compound	CAS Number	LOR	Unit	ES2201979-006	ES2201979-007	ES2201979-008	ES2201979-009	ES2201979-011
				Result	Result	Result	Result	Result
EP074F: Halogenated Aromatic Compounds - Continued								
1.2-Dichlorobenzene	95-50-1	5	µg/L	<5	<5	<5	<5	<5
1.2.4-Trichlorobenzene	120-82-1	5	µg/L	<5	<5	<5	<5	<5
1.2.3-Trichlorobenzene	87-61-6	5	µg/L	<5	<5	<5	<5	<5
EP074G: Trihalomethanes								
Chloroform	67-66-3	5	µg/L	<5	<5	<5	<5	<5
Bromodichloromethane	75-27-4	5	µg/L	<5	<5	<5	<5	<5
Dibromochloromethane	124-48-1	5	µg/L	<5	<5	<5	<5	<5
Bromoform	75-25-2	5	µg/L	<5	<5	<5	<5	<5
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
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								

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Analytical Results

Sub-Matrix: WATER (Matrix: WATER)			Sample ID	S40_d	SMW_BH120	SMW_BH019	D01_220119	RO1-220119
			Sampling date / time	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00
Compound	CAS Number	LOR	Unit	ES2201979-006	ES2201979-007	ES2201979-008	ES2201979-009	ES2201979-011
				Result	Result	Result	Result	Result
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions - Continued								
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
EP074S: VOC Surrogates								
1.2-Dichloroethane-D4	17060-07-0	5	%	102	101	88.2	101	99.4
Toluene-D8	2037-26-5	5	%	112	112	95.3	110	105
4-Bromofluorobenzene	460-00-4	5	%	93.5	94.0	80.0	93.1	87.1
EP075(SIM)S: Phenolic Compound Surrogates								
Phenol-d6	13127-88-3	1.0	%	18.5	19.3	18.0	22.3	17.9
2-Chlorophenol-D4	93951-73-6	1.0	%	52.0	52.7	51.1	59.0	49.5
2.4.6-Tribromophenol	118-79-6	1.0	%	69.5	63.5	55.7	67.0	48.4
EP075(SIM)T: PAH Surrogates								
2-Fluorobiphenyl	321-60-8	1.0	%	72.9	72.5	67.5	80.7	62.7
Anthracene-d10	1719-06-8	1.0	%	90.1	90.5	85.0	99.3	82.2
4-Terphenyl-d14	1718-51-0	1.0	%	81.5	81.6	79.1	90.5	84.8
EP080S: TPH(V)/BTEX Surrogates								
1.2-Dichloroethane-D4	17060-07-0	2	%	114	114	98.5	114	112
Toluene-D8	2037-26-5	2	%	116	116	98.8	114	109
4-Bromofluorobenzene	460-00-4	2	%	109	109	92.6	104	102

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Analytical Results

Sub-Matrix: WATER (Matrix: WATER)			Sample ID	RO1-20-01-22	Trip Spike	Trip blank	BUR-MW108	----
			Sampling date / time	20-Jan-2022 00:00	13-Jan-2022 00:00	13-Jan-2022 00:00	20-Jan-2022 00:00	---
Compound	CAS Number	LOR	Unit	ES2201979-012	ES2201979-013	ES2201979-014	ES2201979-015	------
				Result	Result	Result	Result	---
EA015: Total Dissolved Solids dried at 180 ± 5 °C								
Total Dissolved Solids @180°C	----	10	mg/L	----	----	----	4910	---
ED037P: Alkalinity by PC Titrator								
Hydroxide Alkalinity as CaCO3	DMO-210-001	1	mg/L	----	----	----	<1	---
Carbonate Alkalinity as CaCO3	3812-32-6	1	mg/L	----	----	----	<1	---
Bicarbonate Alkalinity as CaCO3	71-52-3	1	mg/L	----	----	----	695	---
Total Alkalinity as CaCO3	----	1	mg/L	----	----	----	695	---
ED041G: Sulfate (Turbidimetric) as SO4 2- by DA								
Sulfate as SO4 - Turbidimetric	14808-79-8	1	mg/L	----	----	----	518	---
ED045G: Chloride by Discrete Analyser								
Chloride	16887-00-6	1	mg/L	----	----	----	2310	---
ED093F: Dissolved Major Cations								
Calcium	7440-70-2	1	mg/L	----	----	----	87	---
Magnesium	7439-95-4	1	mg/L	----	----	----	125	---
Sodium	7440-23-5	1	mg/L	----	----	----	1510	---
Potassium	7440-09-7	1	mg/L	----	----	----	27	---
EG020F: Dissolved Metals by ICP-MS								
Arsenic	7440-38-2	0.001	mg/L	<0.001	----	----	0.013	---
Cadmium	7440-43-9	0.0001	mg/L	<0.0001	----	----	0.0004	---
Chromium	7440-47-3	0.001	mg/L	<0.001	----	----	<0.001	---
Copper	7440-50-8	0.001	mg/L	<0.001	----	----	0.004	---
Lead	7439-92-1	0.001	mg/L	<0.001	----	----	<0.001	---
Nickel	7440-02-0	0.001	mg/L	<0.001	----	----	0.028	---
Zinc	7440-66-6	0.005	mg/L	<0.005	----	----	0.015	---
Iron	7439-89-6	0.05	mg/L	<0.05	----	----	0.06	---
EG035F: Dissolved Mercury by FIMS								
Mercury	7439-97-6	0.0001	mg/L	<0.0001	----	----	<0.0001	---
EK055G: Ammonia as N by Discrete Analyser								
Ammonia as N	7664-41-7	0.01	mg/L	<0.01	----	----	0.41	---
EK057G: Nitrite as N by Discrete Analyser								
Nitrite as N	14797-65-0	0.01	mg/L	---	---	---	<0.01	---
EK058G: Nitrate as N by Discrete Analyser								
Nitrate as N	14797-55-8	0.01	mg/L	---	---	---	0.02	---
EK059G: Nitrite plus Nitrate as N (NOx) by Discrete Analyser								

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Analytical Results

Sub-Matrix: WATER (Matrix: WATER)			Sample ID	RO1-20-01-22	Trip Spike	Trip blank	BUR-MW108	----
			Sampling date / time	20-Jan-2022 00:00	13-Jan-2022 00:00	13-Jan-2022 00:00	20-Jan-2022 00:00	----
Compound	CAS Number	LOR	Unit	ES2201979-012	ES2201979-013	ES2201979-014	ES2201979-015	----
				Result	Result	Result	Result	----
EK059G: Nitrite plus Nitrate as N (NOx) by Discrete Analyser - Continued								
Nitrite + Nitrate as N	----	0.01	mg/L	<0.01	----	----	0.02	----
EK061G: Total Kjeldahl Nitrogen By Discrete Analyser								
Total Kjeldahl Nitrogen as N	----	0.1	mg/L	<0.1	----	----	2.6	----
EK062G: Total Nitrogen as N (TKN + NOx) by Discrete Analyser								
^ Total Nitrogen as N	----	0.1	mg/L	<0.1	----	----	2.6	----
EK067G: Total Phosphorus as P by Discrete Analyser								
Total Phosphorus as P	----	0.01	mg/L	<0.01	----	----	3.26	----
EN055: Ionic Balance								
ø Total Anions	----	0.01	meq/L	----	----	----	89.8	----
ø Total Cations	----	0.01	meq/L	----	----	----	81.0	----
ø Ionic Balance	----	0.01	%	----	----	----	5.17	----
EP074A: Monocyclic Aromatic Hydrocarbons								
Styrene	100-42-5	5	µg/L	<5	----	----	<5	----
Isopropylbenzene	98-82-8	5	µg/L	<5	----	----	<5	----
n-Propylbenzene	103-65-1	5	µg/L	<5	----	----	<5	----
1.3.5-Trimethylbenzene	108-67-8	5	µg/L	<5	----	----	<5	----
sec-Butylbenzene	135-98-8	5	µg/L	<5	----	----	<5	----
1.2.4-Trimethylbenzene	95-63-6	5	µg/L	<5	----	----	<5	----
tert-Butylbenzene	98-06-6	5	µg/L	<5	----	----	<5	----
p-Isopropyltoluene	99-87-6	5	µg/L	<5	----	----	<5	----
n-Butylbenzene	104-51-8	5	µg/L	<5	----	----	<5	----
EP074B: Oxygenated Compounds								
Vinyl Acetate	108-05-4	50	µg/L	<50	----	----	<50	----
2-Butanone (MEK)	78-93-3	50	µg/L	<50	----	----	<50	----
4-Methyl-2-pentanone (MIBK)	108-10-1	50	µg/L	<50	----	----	<50	----
2-Hexanone (MBK)	591-78-6	50	µg/L	<50	----	----	<50	----
EP074C: Sulfonated Compounds								
Carbon disulfide	75-15-0	5	µg/L	<5	----	----	<5	----
EP074D: Fumigants								
2.2-Dichloropropane	594-20-7	5	µg/L	<5	----	----	<5	----
1.2-Dichloropropane	78-87-5	5	µg/L	<5	----	----	<5	----
cis-1.3-Dichloropropylene	10061-01-5	5	µg/L	<5	----	----	<5	----
trans-1.3-Dichloropropylene	10061-02-6	5	µg/L	<5	----	----	<5	----
1.2-Dibromoethane (EDB)	106-93-4	5	µg/L	<5	----	----	<5	----

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Analytical Results

Sub-Matrix: WATER (Matrix: WATER)			Sample ID	RO1-20-01-22	Trip Spike	Trip blank	BUR-MW108	----
			Sampling date / time	20-Jan-2022 00:00	13-Jan-2022 00:00	13-Jan-2022 00:00	20-Jan-2022 00:00	---
Compound	CAS Number	LOR	Unit	ES2201979-012	ES2201979-013	ES2201979-014	ES2201979-015	------
				Result	Result	Result	Result	---
EP074E: Halogenated Aliphatic Compounds								
Dichlorodifluoromethane	75-71-8	50	µg/L	<50	----	----	<50	----
Chloromethane	74-87-3	50	µg/L	<50	----	----	<50	----
Vinyl chloride	75-01-4	50	µg/L	<50	----	----	<50	----
Bromomethane	74-83-9	50	µg/L	<50	----	----	<50	----
Chloroethane	75-00-3	50	µg/L	<50	----	----	<50	----
Trichlorofluoromethane	75-69-4	50	µg/L	<50	----	----	<50	----
1.1-Dichloroethene	75-35-4	5	µg/L	<5	----	----	<5	----
Iodomethane	74-88-4	5	µg/L	<5	----	----	<5	----
trans-1.2-Dichloroethene	156-60-5	5	µg/L	<5	----	----	<5	----
1.1-Dichloroethane	75-34-3	5	µg/L	<5	----	----	<5	----
cis-1.2-Dichloroethene	156-59-2	5	µg/L	<5	----	----	<5	----
1.1.1-Trichloroethane	71-55-6	5	µg/L	<5	----	----	<5	----
1.1-Dichloropropylene	563-58-6	5	µg/L	<5	----	----	<5	----
Carbon Tetrachloride	56-23-5	5	µg/L	<5	----	----	<5	----
1.2-Dichloroethane	107-06-2	5	µg/L	<5	----	----	<5	----
Trichloroethene	79-01-6	5	µg/L	<5	----	----	<5	----
Dibromomethane	74-95-3	5	µg/L	<5	----	----	<5	----
1.1.2-Trichloroethane	79-00-5	5	µg/L	<5	----	----	<5	----
1.3-Dichloropropane	142-28-9	5	µg/L	<5	----	----	<5	----
Tetrachloroethene	127-18-4	5	µg/L	<5	----	----	<5	----
1.1.1.2-Tetrachloroethane	630-20-6	5	µg/L	<5	----	----	<5	----
trans-1.4-Dichloro-2-butene	110-57-6	5	µg/L	<5	----	----	<5	----
cis-1.4-Dichloro-2-butene	1476-11-5	5	µg/L	<5	----	----	<5	----
1.1.2.2-Tetrachloroethane	79-34-5	5	µg/L	<5	----	----	<5	----
1.2.3-Trichloropropane	96-18-4	5	µg/L	<5	----	----	<5	----
Pentachloroethane	76-01-7	5	µg/L	<5	----	----	<5	----
1.2-Dibromo-3-chloropropane	96-12-8	5	µg/L	<5	----	----	<5	----
Hexachlorobutadiene	87-68-3	5	µg/L	<5	----	----	<5	----
EP074F: Halogenated Aromatic Compounds								
Chlorobenzene	108-90-7	5	µg/L	<5	----	----	<5	----
Bromobenzene	108-86-1	5	µg/L	<5	----	----	<5	----
2-Chlorotoluene	95-49-8	5	µg/L	<5	----	----	<5	----
4-Chlorotoluene	106-43-4	5	µg/L	<5	----	----	<5	----
1.3-Dichlorobenzene	541-73-1	5	µg/L	<5	----	----	<5	----
1.4-Dichlorobenzene	106-46-7	5	µg/L	<5	----	----	<5	----

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Analytical Results

Sub-Matrix: WATER (Matrix: WATER)			Sample ID	RO1-20-01-22	Trip Spike	Trip blank	BUR-MW108	----
			Sampling date / time	20-Jan-2022 00:00	13-Jan-2022 00:00	13-Jan-2022 00:00	20-Jan-2022 00:00	---
Compound	CAS Number	LOR	Unit	ES2201979-012	ES2201979-013	ES2201979-014	ES2201979-015	------
				Result	Result	Result	Result	---
EP074F: Halogenated Aromatic Compounds - Continued								
1.2-Dichlorobenzene	95-50-1	5	µg/L	<5	----	----	<5	----
1.2.4-Trichlorobenzene	120-82-1	5	µg/L	<5	----	----	<5	----
1.2.3-Trichlorobenzene	87-61-6	5	µg/L	<5	----	----	<5	----
EP074G: Trihalomethanes								
Chloroform	67-66-3	5	µg/L	<5	----	----	<5	----
Bromodichloromethane	75-27-4	5	µg/L	<5	----	----	<5	----
Dibromochloromethane	124-48-1	5	µg/L	<5	----	----	<5	----
Bromoform	75-25-2	5	µg/L	<5	----	----	<5	----
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								

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Analytical Results

Sub-Matrix: WATER (Matrix: WATER)			Sample ID	RO1-20-01-22	Trip Spike	Trip blank	BUR-MW108	----
			Sampling date / time	20-Jan-2022 00:00	13-Jan-2022 00:00	13-Jan-2022 00:00	20-Jan-2022 00:00	---
Compound	CAS Number	LOR	Unit	ES2201979-012	ES2201979-013	ES2201979-014	ES2201979-015	------
				Result	Result	Result	Result	---
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions - Continued								
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	----
^ >C10 - C16 Fraction minus Naphthalene (F2)	----	100	µg/L	<100	----	----	<100	----
EP080: BTEXN								
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	----
ortho-Xylene	95-47-6	2	µg/L	<2	<2	<2	<2	----
^ Total Xylenes	----	2	µg/L	<2	<2	<2	<2	----
^ Sum of BTEX	----	1	µg/L	<1	<1	<1	<1	----
Naphthalene	91-20-3	5	µg/L	<5	<5	<5	<5	----
EP074S: VOC Surrogates								
1.2-Dichloroethane-D4	17060-07-0	5	%	**96.8**	----	----	**100**	----
Toluene-D8	2037-26-5	5	%	**103**	----	----	**107**	----
4-Bromofluorobenzene	460-00-4	5	%	**87.8**	----	----	**98.7**	----
EP075(SIM)S: Phenolic Compound Surrogates								
Phenol-d6	13127-88-3	1.0	%	**18.8**	----	----	**19.6**	----
2-Chlorophenol-D4	93951-73-6	1.0	%	**51.6**	----	----	**51.4**	----
2.4.6-Tribromophenol	118-79-6	1.0	%	**51.6**	----	----	**54.8**	----
EP075(SIM)T: PAH Surrogates								
2-Fluorobiphenyl	321-60-8	1.0	%	**61.2**	----	----	**63.9**	----
Anthracene-d10	1719-06-8	1.0	%	**87.2**	----	----	**89.8**	----
4-Terphenyl-d14	1718-51-0	1.0	%	**91.4**	----	----	**84.5**	----
EP080S: TPH(V)/BTEX Surrogates								
1.2-Dichloroethane-D4	17060-07-0	2	%	**109**	**111**	**105**	**111**	----
Toluene-D8	2037-26-5	2	%	**107**	**111**	**110**	**116**	----
4-Bromofluorobenzene	460-00-4	2	%	**101**	**105**	**105**	**110**	----

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Surrogate Control Limits

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

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CHAIN OF CUSTODY

ALS Laboratory: please tick →

ADELAIDE 21 Burma Road Pooraka SA 5095 Ph: 08 8359 0690 E: adelaide@alsglobal.com

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MELBOURNE 2-4 Westall Road Springvale VIC 3171 Ph: 03 8549 9600 E: samples.melbourne@alsglobal.com

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NOWRA 4/13 Geary Place North Nowra NSW 2541 Ph: 02 4423 2063 E: nowra@alsglobal.com

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TOWNSVILLE 14-15 Desma Court Bohle QLD 4818 Ph: 07 4796 0600 E: townsville.environmental@alsglobal.com

WOLLONGONG 99 Kenny Street Wollongong NSW 2500 Ph: 02 4225 3125 E: portkembla@alsglobal.com

CLIENT: ERM	TURNAROUND REQUIREMENTS: ☑ Standard TAT (List due date):	FOR LABORATORY USE ONLY (Circle)	
OFFICE: Sydney	(Standard TAT may be longer for some tests e.g. Ultra Trace Organics) ☐ Non Standard or urgent TAT (List due date):	Custody Seal Intact?	Yes / No / N/A
PROJECT: 0628507	ALS QUOTE NO.:	Free ice / frozen ice bricks present upon receipt?	Yes / No / N/A
ORDER NUMBER:	COC SEQUENCE NUMBER (Circle) COC: 1 2 3 4 5 6 7 OF: 1 2 3 4 5 6 7	Random Sample Temperature on Receipt:	6.2 °C
PROJECT MANAGER: Dosa Nicholas Gubich	CONTACT PH: 0415 833 925	Other comment:	
SAMPLER: Taj Monsor	SAMPLER MOBILE: 0467 295 082	RELINQUISHED BY: Taj Monsor	RECEIVED BY: Scott/Ryko
COC emailed to ALS? (YES / NO)	EDD FORMAT (or default):	DATE/TIME: 20/01/22	DATE/TIME: 20/1/22 1900
Email Reports to (will default to PM if no other addresses are listed):		RELINQUISHED BY:	RECEIVED BY:
Email Invoice to (will default to PM if no other addresses are listed):		DATE/TIME:	DATE/TIME:

COMMENTS/SPECIAL HANDLING/STORAGE OR DISPOSAL:

ALS USE	SAMPLE DETAILS MATRIX: SOLID (S) WATER (W)			CONTAINER INFORMATION		ANALYSIS REQUIRED including SUITES (NB. Suite Codes must be listed to attract suite price) Where Metals are required, specify Total (unfiltered bottle required) or Dissolved (field filtered bottle required)							Additional Information
LAB ID	SAMPLE ID	DATE / TIME	MATRIX	TYPE & PRESERVATIVE (refer to codes below)	TOTAL CONTAINERS	TRH & BTEXN	PAHs	VOCs	Heavy metals plus iron	Ammonia, nitrate, Total nitrogen, Total phosphorus	Major anions & cations	PFAS TDS	
1	S51	20-01-22	W			X	X	X	X	X	X	X	
2	S54												
3	S02-D												
4	S06												
5	S40-S												
6	S40-D												
7	SMW_BH120	19-01-22											
8	SMW_BH019												
9	D01-220119												
10	T01-220119												
11	R01-220119												minus nitrate analysis
12	R01-220120	20-01-22											minus nitrate analysis
				TOTAL									

Environmental Division Sydney
Work Order Reference
ES2201979

Telephone : +61-2-8784 8555

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

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CHAIN OF CUSTODY

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WOLLONGONG 99 Kenny Street Wollongong NSW 2500 Ph: 02 4225 3125 E: portkembla@alsglobal.com

CLIENT: ERM	TURNAROUND REQUIREMENTS : ☑ Standard TAT (List due date):	FOR LABORATORY USE ONLY (Circle)	
OFFICE: Sydney	(Standard TAT may be longer for some tests e.g. Ultra Trace Organics) ☐ Non Standard or urgent TAT (List due date):	Custody Seal Intact?	Yes / No / N/A
PROJECT: 0628507	ALS QUOTE NO.:	Free ice / frozen ice bricks present upon receipt?	Yes / No / N/A
ORDER NUMBER:	COC SEQUENCE NUMBER (Circle) COC: 1 2 3 4 5 6 7 OF: 1 2 3 4 5 6 7	Random Sample Temperature on Receipt:	6.2 °C
PROJECT MANAGER: Nicholas Garrick	CONTACT PH: 0415 833 922	Other comment:	
SAMPLER: Tai, Marcus	SAMPLER MOBILE: 0467 295 882	RELINQUISHED BY: T. Marcus	RECEIVED BY: Scott Mees ALS
COC emailed to ALS? (YES / NO)	EDD FORMAT (or default):	DATE/TIME: 20/01/22	DATE/TIME: 20/1/22 1900
Email Reports to (will default to PM if no other addresses are listed):		RELINQUISHED BY:	RECEIVED BY:
Email Invoice to (will default to PM if no other addresses are listed):		DATE/TIME:	DATE/TIME:

COMMENTS/SPECIAL HANDLING/STORAGE OR DISPOSAL:

ALS USE	SAMPLE DETAILS MATRIX: SOLID (S) WATER (W)			CONTAINER INFORMATION		ANALYSIS REQUIRED Including SUITES (NB. Suite Codes must be listed to attract suite price) Where Metals are required, specify Total (unfiltered bottle required) or Dissolved (field filtered bottle required).								Additional Information
LAB ID	SAMPLE ID	DATE / TIME	MATRIX	TYPE & PRESERVATIVE (refer to codes below)	TOTAL CONTAINERS	TRH & BTEX N	PAHs	VOCs	Heavy metals plus Hg	Ammonia, nitrate, total nitrogen, total phosphorus	TDS	Major anions & cations		Comments on likely contaminant levels, dilutions, or samples requiring specific QC analysis etc.
13	Trip spike x 2	20-01-22	W			X	X	X	X	X	X	X		
14	Trip blank x 2					X	X	X	X	X	X	X		
15	BUR-MW108					X	X	X	X	X	X	X		
16	BUR-BH121					X	X	X	X	X	X	X		
	[redacted]					X	X	X	X	X	X	X		
					TOTAL									

Water Container Codes: P = Unpreserved Plastic; N = Nitric Preserved Plastic; ORC = Nitric Preserved ORC; SH = Sodium Hydroxide/Cd Preserved; S = Sodium Hydroxide Preserved Plastic; AG = Amber Glass Unpreserved; AP - Airfreight Unpreserved Plastic
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Z = Zinc Acetate Preserved Bottle; E = EDTA Preserved Bottles; ST = Sterile Bottle; ASS = Plastic Bag for Acid Sulphate Soils; B = Unpreserved Bag.

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ALS Environmental

CERTIFICATE OF ANALYSIS

Work Order	: **ES2202047**	Page	: 1 of 23
Client	: **ENVIRONMENTAL RESOURCES MANAGEMENT (ERM)**	Laboratory	: Environmental Division Sydney
Contact	: NICHOLAS GRBICH	Contact	: Customer Services ES
Address	: LEVEL 15 309 KENT STREET SYDNEY NSW AUSTRALIA 2000	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
Telephone	: ----	Telephone	: +61-2-8784 8555
Project	: 0628507	Date Samples Received	: 21-Jan-2022 13:15
Order number	: ----	Date Analysis Commenced	: 24-Jan-2022
C-O-C number	: ----	Issue Date	: 01-Feb-2022 15:29
Sampler	: TAJ MONDON		
Site	: ----		
Quote number	: EN/114		
No. of samples received	: 24		
No. of samples analysed	: 23		

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

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

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results
- Surrogate Control Limits

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

Signatories

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

Signatories	*Position*	*Accreditation Category*
Ankit Joshi	Inorganic Chemist	Sydney Inorganics, Smithfield, NSW
Edwandy Fadjar	Organic Coordinator	Sydney Organics, Smithfield, NSW
Franco Lentini	LCMS Coordinator	Sydney Organics, Smithfield, NSW
Ivan Taylor	Analyst	Sydney Inorganics, Smithfield, NSW

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General Comments

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

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

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

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

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.
- 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: Positive result for various analytes on sample ES2202047_001,004-005,007,009-011,017,019,021 has been confirmed by re-extraction and re-analysis.
- EG035: Poor matrix spike recovery was obtained for Mercury on sample ES2201942 # 1. Confirmed by re-analysis.
- EK059G, EK057G: NOx and Nitrite results for sample no: 12 confirmed via re-analysis.
- EP075: Poor surrogate recovery due to sample heterogeneity. Confirmed by re-extraction and re-analysis.
- EP075(SIM): Particular sample phenolic surrogate not determined due to sample matrix interferences.
- 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
- Sodium Adsorption Ratio (where reported): Where results for Na, Ca or Mg are <LOR, a concentration at half the reported LOR is incorporated into the SAR calculation. This represents a conservative approach for Na relative to the assumption that <LOR = zero concentration and a conservative approach for Ca & Mg relative to the assumption that <LOR is equivalent to the LOR concentration.
- 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.

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Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	SMW_BH051	S51	S54	S02_d	S06
				Sampling date / time	18-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00
Compound	CAS Number	LOR	Unit		ES2202047-001	ES2202047-003	ES2202047-004	ES2202047-005	ES2202047-006
					Result	Result	Result	Result	Result
EP231A: Perfluoroalkyl Sulfonic Acids									
Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	<0.02
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L		<0.01	<0.01	<0.01	**0.02**	**0.04**
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L		<0.01	<0.01	<0.01	<0.01	**0.07**
Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	<0.02
EP231B: Perfluoroalkyl Carboxylic Acids									
Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L		<0.1	<0.1	<0.1	<0.1	<0.1
Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	**0.09**
Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L		<0.01	<0.01	<0.01	<0.01	**0.06**
Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	<0.02
Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L		<0.05	<0.05	<0.05	<0.05	<0.05
EP231C: Perfluoroalkyl Sulfonamides									
Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	<0.02
N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L		<0.05	<0.05	<0.05	<0.05	<0.05
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	µg/L		<0.05	<0.05	<0.05	<0.05	<0.05

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Analytical Results

Sub-Matrix: WATER (Matrix: WATER)			Sample ID	SMW_BH051	S51	S54	S02_d	S06
			Sampling date / time	18-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00
Compound	CAS Number	LOR	Unit	ES2202047-001	ES2202047-003	ES2202047-004	ES2202047-005	ES2202047-006
				Result	Result	Result	Result	Result
EP231C: Perfluoroalkyl Sulfonamides - Continued								
N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05
N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05
N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
EP231D: (n:2) Fluorotelomer Sulfonic Acids								
4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.05	µg/L	**0.13**	<0.05	**0.12**	<0.05	**0.07**
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	**0.13**	<0.01	**0.12**	**0.02**	**0.33**
Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L	<0.01	<0.01	<0.01	**0.02**	**0.11**
Sum of PFAS (WA DER List)	----	0.01	µg/L	**0.13**	<0.01	**0.12**	**0.02**	**0.33**
EP231S: PFAS Surrogate								
13C4-PFOS	----	0.02	%	**114**	**113**	**110**	**111**	**100**
13C8-PFOA	----	0.02	%	**101**	**99.8**	**103**	**104**	**98.6**

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Analytical Results

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

Compound	CAS Number	LOR	Unit	Sample ID	S40_d	S40_S	BUR_MW108	D01_220119	T01_220119
				Sampling date / time	20-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00
					ES2202047-007	ES2202047-008	ES2202047-009	ES2202047-010	ES2202047-011
					Result	Result	Result	Result	Result
EP231A: Perfluoroalkyl Sulfonic Acids									
Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	<0.02
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L		**0.02**	<0.01	<0.01	<0.01	<0.01
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L		<0.01	<0.01	<0.01	**0.02**	**0.02**
Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	<0.02
EP231B: Perfluoroalkyl Carboxylic Acids									
Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L		<0.1	<0.1	<0.1	<0.1	<0.1
Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	<0.02
Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L		<0.01	<0.01	<0.01	<0.01	<0.01
Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	<0.02
Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L		<0.05	<0.05	<0.05	<0.05	<0.05
EP231C: Perfluoroalkyl Sulfonamides									
Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	<0.02
N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L		<0.05	<0.05	<0.05	<0.05	<0.05
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	µg/L		<0.05	<0.05	<0.05	<0.05	<0.05

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Analytical Results

Sub-Matrix: WATER (Matrix: WATER)			Sample ID	S40_d	S40_S	BUR_MW108	D01_220119	T01_220119
			Sampling date / time	20-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00
Compound	CAS Number	LOR	Unit	ES2202047-007	ES2202047-008	ES2202047-009	ES2202047-010	ES2202047-011
				Result	Result	Result	Result	Result
EP231C: Perfluoroalkyl Sulfonamides - Continued								
N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05
N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05
N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
EP231D: (n:2) Fluorotelomer Sulfonic Acids								
4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.05	µg/L	<0.05	<0.05	**0.07**	<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	**0.02**	<0.01	**0.07**	**0.02**	**0.02**
Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L	**0.02**	<0.01	<0.01	**0.02**	**0.02**
Sum of PFAS (WA DER List)	----	0.01	µg/L	**0.02**	<0.01	**0.07**	**0.02**	**0.02**
EP231S: PFAS Surrogate								
13C4-PFOS	----	0.02	%	**110**	**111**	**106**	**112**	**105**
13C8-PFOA	----	0.02	%	**108**	**102**	**101**	**104**	**99.7**

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Analytical Results

Sub-Matrix: WATER (Matrix: WATER)			Sample ID	BUR_BH125	R01_220121	TRIP SPIKE	TRIP BLANK	SMW_BH120
			Sampling date / time	21-Jan-2022 00:00	21-Jan-2022 00:00	13-Jan-2022 00:00	13-Jan-2022 00:00	19-Jan-2022 00:00
Compound	CAS Number	LOR	Unit	ES2202047-012	ES2202047-013	ES2202047-014	ES2202047-015	ES2202047-016
				Result	Result	Result	Result	Result
EA015: Total Dissolved Solids dried at 180 ± 5 °C								
Total Dissolved Solids @180°C	----	10	mg/L	1350	----	----	---	---
ED037P: Alkalinity by PC Titrator								
Hydroxide Alkalinity as CaCO3	DMO-210-001	1	mg/L	98	----	----	---	---
Carbonate Alkalinity as CaCO3	3812-32-6	1	mg/L	43	----	----	---	---
Bicarbonate Alkalinity as CaCO3	71-52-3	1	mg/L	<1	----	----	---	---
Total Alkalinity as CaCO3	----	1	mg/L	142	----	----	---	---
ED041G: Sulfate (Turbidimetric) as SO4 2- by DA								
Sulfate as SO4 - Turbidimetric	14808-79-8	1	mg/L	274	----	----	---	---
ED045G: Chloride by Discrete Analyser								
Chloride	16887-00-6	1	mg/L	566	----	----	---	---
ED093F: Dissolved Major Cations								
Calcium	7440-70-2	1	mg/L	4	----	----	---	---
Magnesium	7439-95-4	1	mg/L	2	----	----	---	---
Sodium	7440-23-5	1	mg/L	456	----	----	---	---
Potassium	7440-09-7	1	mg/L	13	----	----	---	---
EG020F: Dissolved Metals by ICP-MS								
Arsenic	7440-38-2	0.001	mg/L	0.017	----	----	---	---
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	0.002	----	----	---	---
Lead	7439-92-1	0.001	mg/L	<0.001	----	----	---	---
Nickel	7440-02-0	0.001	mg/L	0.004	----	----	---	---
Zinc	7440-66-6	0.005	mg/L	<0.005	----	----	---	---
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	----	---	---
Lead	7439-92-1	0.001	mg/L	----	<0.001	----	---	---
Nickel	7440-02-0	0.001	mg/L	---	<0.001	---	---	---
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	---	---	---	---
EG035T: Total Recoverable Mercury by FIMS								

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Analytical Results

Sub-Matrix: WATER (Matrix: WATER)			Sample ID	BUR_BH125	R01_220121	TRIP SPIKE	TRIP BLANK	SMW_BH120
			Sampling date / time	21-Jan-2022 00:00	21-Jan-2022 00:00	13-Jan-2022 00:00	13-Jan-2022 00:00	19-Jan-2022 00:00
Compound	CAS Number	LOR	Unit	ES2202047-012	ES2202047-013	ES2202047-014	ES2202047-015	ES2202047-016
				Result	Result	Result	Result	Result
EG035T: Total Recoverable Mercury by FIMS - Continued								
Mercury	7439-97-6	0.0001	mg/L	----	<0.0001	----	---	---
EK055G: Ammonia as N by Discrete Analyser								
Ammonia as N	7664-41-7	0.01	mg/L	**1.48**	<0.01	----	---	---
EK057G: Nitrite as N by Discrete Analyser								
Nitrite as N	14797-65-0	0.01	mg/L	**0.26**	----	----	---	---
EK058G: Nitrate as N by Discrete Analyser								
Nitrate as N	14797-55-8	0.01	mg/L	<0.01	----	----	---	---
EK059G: Nitrite plus Nitrate as N (NOx) by Discrete Analyser								
Nitrite + Nitrate as N	----	0.01	mg/L	**0.10**	<0.01	----	---	---
EK061G: Total Kjeldahl Nitrogen By Discrete Analyser								
Total Kjeldahl Nitrogen as N	----	0.1	mg/L	**3.8**	<0.1	----	---	---
EK062G: Total Nitrogen as N (TKN + NOx) by Discrete Analyser								
^ Total Nitrogen as N	----	0.1	mg/L	**3.9**	<0.1	----	---	---
EK067G: Total Phosphorus as P by Discrete Analyser								
Total Phosphorus as P	----	0.01	mg/L	**1.13**	<0.01	----	---	---
EK071G: Reactive Phosphorus as P by discrete analyser								
Reactive Phosphorus as P	14265-44-2	0.01	mg/L	<0.01	----	----	---	---
EN055: Ionic Balance								
ø Total Anions	----	0.01	meq/L	**24.5**	----	----	---	---
ø Total Cations	----	0.01	meq/L	**20.5**	----	----	---	---
ø Ionic Balance	----	0.01	%	**8.83**	----	----	---	---
EP074A: Monocyclic Aromatic Hydrocarbons								
Styrene	100-42-5	5	µg/L	<5	<5	----	---	---
Isopropylbenzene	98-82-8	5	µg/L	<5	<5	----	---	---
n-Propylbenzene	103-65-1	5	µg/L	<5	<5	----	---	---
1.3.5-Trimethylbenzene	108-67-8	5	µg/L	<5	<5	----	---	---
sec-Butylbenzene	135-98-8	5	µg/L	<5	<5	----	---	---
1.2.4-Trimethylbenzene	95-63-6	5	µg/L	<5	<5	----	---	---
tert-Butylbenzene	98-06-6	5	µg/L	<5	<5	----	---	---
p-Isopropyltoluene	99-87-6	5	µg/L	<5	<5	---	---	---
n-Butylbenzene	104-51-8	5	µg/L	<5	<5	---	---	---
EP074B: Oxygenated Compounds								
Vinyl Acetate	108-05-4	50	µg/L	<50	<50	---	---	---

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Analytical Results

Sub-Matrix: WATER (Matrix: WATER)			Sample ID	BUR_BH125	R01_220121	TRIP SPIKE	TRIP BLANK	SMW_BH120
			Sampling date / time	21-Jan-2022 00:00	21-Jan-2022 00:00	13-Jan-2022 00:00	13-Jan-2022 00:00	19-Jan-2022 00:00
Compound	CAS Number	LOR	Unit	ES2202047-012	ES2202047-013	ES2202047-014	ES2202047-015	ES2202047-016
				Result	Result	Result	Result	Result
EP074B: Oxygenated Compounds - Continued								
2-Butanone (MEK)	78-93-3	50	µg/L	<50	<50	----	---	---
4-Methyl-2-pentanone (MIBK)	108-10-1	50	µg/L	<50	<50	----	---	---
2-Hexanone (MBK)	591-78-6	50	µg/L	<50	<50	----	---	---
EP074C: Sulfonated Compounds								
Carbon disulfide	75-15-0	5	µg/L	<5	<5	----	---	---
EP074D: Fumigants								
2.2-Dichloropropane	594-20-7	5	µg/L	<5	<5	----	---	---
1.2-Dichloropropane	78-87-5	5	µg/L	<5	<5	----	---	---
cis-1.3-Dichloropropylene	10061-01-5	5	µg/L	<5	<5	----	---	---
trans-1.3-Dichloropropylene	10061-02-6	5	µg/L	<5	<5	----	---	---
1.2-Dibromoethane (EDB)	106-93-4	5	µg/L	<5	<5	----	---	---
EP074E: Halogenated Aliphatic Compounds								
Dichlorodifluoromethane	75-71-8	50	µg/L	<50	<50	----	---	---
Chloromethane	74-87-3	50	µg/L	<50	<50	----	---	---
Vinyl chloride	75-01-4	50	µg/L	<50	<50	----	---	---
Bromomethane	74-83-9	50	µg/L	<50	<50	----	---	---
Chloroethane	75-00-3	50	µg/L	<50	<50	----	---	---
Trichlorofluoromethane	75-69-4	50	µg/L	<50	<50	----	---	---
1.1-Dichloroethene	75-35-4	5	µg/L	<5	<5	----	---	---
Iodomethane	74-88-4	5	µg/L	<5	<5	----	---	---
trans-1.2-Dichloroethene	156-60-5	5	µg/L	<5	<5	----	---	---
1.1-Dichloroethane	75-34-3	5	µg/L	<5	<5	----	---	---
cis-1.2-Dichloroethene	156-59-2	5	µg/L	<5	<5	----	---	---
1.1.1-Trichloroethane	71-55-6	5	µg/L	<5	<5	----	---	---
1.1-Dichloropropylene	563-58-6	5	µg/L	<5	<5	----	---	---
Carbon Tetrachloride	56-23-5	5	µg/L	<5	<5	----	---	---
1.2-Dichloroethane	107-06-2	5	µg/L	<5	<5	----	---	---
Trichloroethene	79-01-6	5	µg/L	<5	<5	----	---	---
Dibromomethane	74-95-3	5	µg/L	<5	<5	----	---	---
1.1.2-Trichloroethane	79-00-5	5	µg/L	<5	<5	----	---	---
1.3-Dichloropropane	142-28-9	5	µg/L	<5	<5	----	---	---
Tetrachloroethene	127-18-4	5	µg/L	<5	<5	----	---	---
1.1.1.2-Tetrachloroethane	630-20-6	5	µg/L	<5	<5	----	---	---
trans-1.4-Dichloro-2-butene	110-57-6	5	µg/L	<5	<5	----	---	---

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Analytical Results

Sub-Matrix: WATER (Matrix: WATER)			Sample ID	BUR_BH125	R01_220121	TRIP SPIKE	TRIP BLANK	SMW_BH120
			Sampling date / time	21-Jan-2022 00:00	21-Jan-2022 00:00	13-Jan-2022 00:00	13-Jan-2022 00:00	19-Jan-2022 00:00
Compound	CAS Number	LOR	Unit	ES2202047-012	ES2202047-013	ES2202047-014	ES2202047-015	ES2202047-016
				Result	Result	Result	Result	Result
EP074E: Halogenated Aliphatic Compounds - Continued								
cis-1.4-Dichloro-2-butene	1476-11-5	5	µg/L	<5	<5	----	---	---
1.1.2.2-Tetrachloroethane	79-34-5	5	µg/L	<5	<5	----	---	---
1.2.3-Trichloropropane	96-18-4	5	µg/L	<5	<5	----	---	---
Pentachloroethane	76-01-7	5	µg/L	<5	<5	----	---	---
1.2-Dibromo-3-chloropropane	96-12-8	5	µg/L	<5	<5	----	---	---
EP074F: Halogenated Aromatic Compounds								
Chlorobenzene	108-90-7	5	µg/L	<5	<5	----	---	---
Bromobenzene	108-86-1	5	µg/L	<5	<5	----	---	---
2-Chlorotoluene	95-49-8	5	µg/L	<5	<5	----	---	---
4-Chlorotoluene	106-43-4	5	µg/L	<5	<5	----	---	---
1.2.3-Trichlorobenzene	87-61-6	5	µg/L	<5	<5	----	---	---
EP074G: Trihalomethanes								
Chloroform	67-66-3	5	µg/L	7	<5	----	---	---
Bromodichloromethane	75-27-4	5	µg/L	<5	<5	----	---	---
Dibromochloromethane	124-48-1	5	µg/L	<5	<5	----	---	---
Bromoform	75-25-2	5	µg/L	<5	<5	----	---	---
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	---	---	---

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Analytical Results

Sub-Matrix: WATER (Matrix: WATER)			Sample ID	BUR_BH125	R01_220121	TRIP SPIKE	TRIP BLANK	SMW_BH120
			Sampling date / time	21-Jan-2022 00:00	21-Jan-2022 00:00	13-Jan-2022 00:00	13-Jan-2022 00:00	19-Jan-2022 00:00
Compound	CAS Number	LOR	Unit	ES2202047-012	ES2202047-013	ES2202047-014	ES2202047-015	ES2202047-016
				Result	Result	Result	Result	Result
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued								
^ Benzo(a)pyrene TEQ (zero)	----	0.5	µg/L	<0.5	<0.5	----	---	---
EP075A: Phenolic Compounds								
Phenol	108-95-2	2	µg/L	<2	<2	----	---	---
2-Chlorophenol	95-57-8	2	µg/L	<2	<2	----	---	---
2-Methylphenol	95-48-7	2	µg/L	<2	<2	----	---	---
3- & 4-Methylphenol	1319-77-3	4	µg/L	<4	<4	----	---	---
2-Nitrophenol	88-75-5	2	µg/L	<2	<2	----	---	---
2.4-Dimethylphenol	105-67-9	2	µg/L	<2	<2	----	---	---
2.4-Dichlorophenol	120-83-2	2	µg/L	<2	<2	----	---	---
2.6-Dichlorophenol	87-65-0	2	µg/L	<2	<2	----	---	---
4-Chloro-3-methylphenol	59-50-7	2	µg/L	<2	<2	----	---	---
2.4.6-Trichlorophenol	88-06-2	2	µg/L	<2	<2	----	---	---
2.4.5-Trichlorophenol	95-95-4	2	µg/L	<2	<2	----	---	---
Pentachlorophenol	87-86-5	4	µg/L	<4	<4	----	---	---
EP075B: Polynuclear Aromatic Hydrocarbons								
Naphthalene	91-20-3	2	µg/L	<2	<2	----	---	---
2-Methylnaphthalene	91-57-6	2	µg/L	<2	<2	----	---	---
2-Chloronaphthalene	91-58-7	2	µg/L	<2	<2	----	---	---
Acenaphthylene	208-96-8	2	µg/L	<2	<2	----	---	---
Acenaphthene	83-32-9	2	µg/L	<2	<2	----	---	---
Fluorene	86-73-7	2	µg/L	<2	<2	----	---	---
Phenanthrene	85-01-8	2	µg/L	<2	<2	----	---	---
Anthracene	120-12-7	2	µg/L	<2	<2	----	---	---
Fluoranthene	206-44-0	2	µg/L	<2	<2	----	---	---
Pyrene	129-00-0	2	µg/L	<2	<2	----	---	---
N-2-Fluorenyl Acetamide	53-96-3	2	µg/L	<2	<2	----	---	---
Benz(a)anthracene	56-55-3	2	µg/L	<2	<2	----	---	---
Chrysene	218-01-9	2	µg/L	<2	<2	----	---	---
Benzo(b+j) & Benzo(k)fluoranthene	205-99-2 207-08-9	4	µg/L	<4	<4	----	---	---
7.12-Dimethylbenz(a)anthracene	57-97-6	2	µg/L	<2	<2	---	---	---
Benzo(a)pyrene	50-32-8	2	µg/L	<2	<2	---	---	---
3-Methylcholanthrene	56-49-5	2	µg/L	<2	<2	---	---	---
Indeno(1.2.3.cd)pyrene	193-39-5	2	µg/L	<2	<2	---	---	---
Dibenz(a.h)anthracene	53-70-3	2	µg/L	<2	<2	---	---	---

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Analytical Results

Sub-Matrix: WATER (Matrix: WATER)			Sample ID	BUR_BH125	R01_220121	TRIP SPIKE	TRIP BLANK	SMW_BH120
			Sampling date / time	21-Jan-2022 00:00	21-Jan-2022 00:00	13-Jan-2022 00:00	13-Jan-2022 00:00	19-Jan-2022 00:00
Compound	CAS Number	LOR	Unit	ES2202047-012	ES2202047-013	ES2202047-014	ES2202047-015	ES2202047-016
				Result	Result	Result	Result	Result
EP075B: Polynuclear Aromatic Hydrocarbons - Continued								
Benzo(g.h.i)perylene	191-24-2	2	µg/L	<2	<2	----	---	---
^ Sum of PAHs	----	2	µg/L	<2	<2	----	---	---
^ Benzo(a)pyrene TEQ (zero)	----	2	µg/L	<2	<2	----	---	---
EP075C: Phthalate Esters								
Dimethyl phthalate	131-11-3	2	µg/L	<2	<2	----	---	---
Diethyl phthalate	84-66-2	2	µg/L	<2	<2	----	---	---
Di-n-butyl phthalate	84-74-2	2	µg/L	<2	<2	----	---	---
Butyl benzyl phthalate	85-68-7	2	µg/L	<2	<2	----	---	---
bis(2-ethylhexyl) phthalate	117-81-7	10	µg/L	<10	<10	----	---	---
Di-n-octylphthalate	117-84-0	2	µg/L	<2	<2	----	---	---
EP075D: Nitrosamines								
N-Nitrosomethylethylamine	10595-95-6	2	µg/L	<2	<2	----	---	---
N-Nitrosodiethylamine	55-18-5	2	µg/L	<2	<2	----	---	---
N-Nitrosopyrrolidine	930-55-2	4	µg/L	<4	<4	----	---	---
N-Nitrosomorpholine	59-89-2	2	µg/L	<2	<2	----	---	---
N-Nitrosodi-n-propylamine	621-64-7	2	µg/L	<2	<2	----	---	---
N-Nitrosopiperidine	100-75-4	2	µg/L	<2	<2	----	---	---
N-Nitrosodibutylamine	924-16-3	2	µg/L	<2	<2	----	---	---
N-Nitrosodiphenyl & Diphenylamine	86-30-6 122-39-4	4	µg/L	<4	<4	----	---	---
Methapyrilene	91-80-5	2	µg/L	<2	<2	----	---	---
EP075E: Nitroaromatics and Ketones								
2-Picoline	109-06-8	2	µg/L	<2	<2	----	---	---
Acetophenone	98-86-2	2	µg/L	<2	<2	----	---	---
Nitrobenzene	98-95-3	2	µg/L	<2	<2	----	---	---
Isophorone	78-59-1	2	µg/L	<2	<2	----	---	---
2.6-Dinitrotoluene	606-20-2	4	µg/L	<4	<4	----	---	---
2.4-Dinitrotoluene	121-14-2	4	µg/L	<4	<4	----	---	---
1-Naphthylamine	134-32-7	2	µg/L	<2	<2	----	---	---
4-Nitroquinoline-N-oxide	56-57-5	2	µg/L	<2	<2	----	---	---
5-Nitro-o-toluidine	99-55-8	2	µg/L	<2	<2	----	---	---
Azobenzene	103-33-3	2	µg/L	<2	<2	----	---	---
1.3.5-Trinitrobenzene	99-35-4	2	µg/L	<2	<2	----	---	---
Phenacetin	62-44-2	2	µg/L	<2	<2	----	---	---

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Analytical Results

Sub-Matrix: WATER (Matrix: WATER)			Sample ID	BUR_BH125	R01_220121	TRIP SPIKE	TRIP BLANK	SMW_BH120
			Sampling date / time	21-Jan-2022 00:00	21-Jan-2022 00:00	13-Jan-2022 00:00	13-Jan-2022 00:00	19-Jan-2022 00:00
Compound	CAS Number	LOR	Unit	ES2202047-012	ES2202047-013	ES2202047-014	ES2202047-015	ES2202047-016
				Result	Result	Result	Result	Result
EP075E: Nitroaromatics and Ketones - Continued								
4-Aminobiphenyl	92-67-1	2	µg/L	<2	<2	----	---	---
Pentachloronitrobenzene	82-68-8	2	µg/L	<2	<2	----	---	---
Pronamide	23950-58-5	2	µg/L	<2	<2	----	---	---
Dimethylaminoazobenzene	60-11-7	2	µg/L	<2	<2	----	---	---
Chlorobenzilate	510-15-6	2	µg/L	<2	<2	----	---	---
EP075F: Haloethers								
Bis(2-chloroethyl) ether	111-44-4	2	µg/L	<2	<2	----	---	---
Bis(2-chloroethoxy) methane	111-91-1	2	µg/L	<2	<2	----	---	---
4-Chlorophenyl phenyl ether	7005-72-3	2	µg/L	<2	<2	----	---	---
4-Bromophenyl phenyl ether	101-55-3	2	µg/L	<2	<2	----	---	---
EP075G: Chlorinated Hydrocarbons								
1.3-Dichlorobenzene	541-73-1	2	µg/L	<2	<2	----	---	---
1.4-Dichlorobenzene	106-46-7	2	µg/L	<2	<2	----	---	---
1.2-Dichlorobenzene	95-50-1	2	µg/L	<2	<2	----	---	---
Hexachloroethane	67-72-1	2	µg/L	<2	<2	----	---	---
1.2.4-Trichlorobenzene	120-82-1	2	µg/L	<2	<2	----	---	---
Hexachloropropylene	1888-71-7	2	µg/L	<2	<2	----	---	---
Hexachlorobutadiene	87-68-3	2	µg/L	<2	<2	----	---	---
Hexachlorocyclopentadiene	77-47-4	10	µg/L	<10	<10	----	---	---
Pentachlorobenzene	608-93-5	2	µg/L	<2	<2	----	---	---
Hexachlorobenzene (HCB)	118-74-1	4	µg/L	<4	<4	----	---	---
EP075H: Anilines and Benzidines								
Aniline	62-53-3	2	µg/L	<2	<2	----	---	---
4-Chloroaniline	106-47-8	2	µg/L	<2	<2	----	---	---
2-Nitroaniline	88-74-4	4	µg/L	<4	<4	----	---	---
3-Nitroaniline	99-09-2	4	µg/L	<4	<4	----	---	---
Dibenzofuran	132-64-9	2	µg/L	<2	<2	----	---	---
4-Nitroaniline	100-01-6	2	µg/L	<2	<2	----	---	---
Carbazole	86-74-8	2	µg/L	<2	<2	----	---	---
3.3`-Dichlorobenzidine	91-94-1	2	µg/L	<2	<2	----	---	---
EP075I: Organochlorine Pesticides								
alpha-BHC	319-84-6	2	µg/L	<2	<2	---	---	---
beta-BHC	319-85-7	2	µg/L	<2	<2	---	---	---
gamma-BHC	58-89-9	2	µg/L	<2	<2	---	---	---

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Analytical Results

Sub-Matrix: WATER (Matrix: WATER)			Sample ID	BUR_BH125	R01_220121	TRIP SPIKE	TRIP BLANK	SMW_BH120
			Sampling date / time	21-Jan-2022 00:00	21-Jan-2022 00:00	13-Jan-2022 00:00	13-Jan-2022 00:00	19-Jan-2022 00:00
Compound	CAS Number	LOR	Unit	ES2202047-012	ES2202047-013	ES2202047-014	ES2202047-015	ES2202047-016
				Result	Result	Result	Result	Result
EP075I: Organochlorine Pesticides - Continued								
delta-BHC	319-86-8	2	µg/L	<2	<2	----	---	---
Heptachlor	76-44-8	2	µg/L	<2	<2	----	---	---
Aldrin	309-00-2	2	µg/L	<2	<2	----	---	---
Heptachlor epoxide	1024-57-3	2	µg/L	<2	<2	----	---	---
alpha-Endosulfan	959-98-8	2	µg/L	<2	<2	----	---	---
4.4`-DDE	72-55-9	2	µg/L	<2	<2	----	---	---
Dieldrin	60-57-1	2	µg/L	<2	<2	----	---	---
Endrin	72-20-8	2	µg/L	<2	<2	----	---	---
beta-Endosulfan	33213-65-9	2	µg/L	<2	<2	----	---	---
4.4`-DDD	72-54-8	2	µg/L	<2	<2	----	---	---
Endosulfan sulfate	1031-07-8	2	µg/L	<2	<2	----	---	---
4.4`-DDT	50-29-3	4	µg/L	<4	<4	----	---	---
^ Sum of Aldrin + Dieldrin	309-00-2/60-57-1	4	µg/L	<4	<4	----	---	---
^ Sum of DDD + DDE + DDT	72-54-8/72-55-9/50-2	4	µg/L	<4	<4	----	---	---
EP075J: Organophosphorus Pesticides								
Dichlorvos	62-73-7	2	µg/L	<2	<2	----	---	---
Dimethoate	60-51-5	2	µg/L	<2	<2	----	---	---
Diazinon	333-41-5	2	µg/L	<2	<2	----	---	---
Chlorpyrifos-methyl	5598-13-0	2	µg/L	<2	<2	----	---	---
Malathion	121-75-5	2	µg/L	<2	<2	----	---	---
Fenthion	55-38-9	2	µg/L	<2	<2	----	---	---
Chlorpyrifos	2921-88-2	2	µg/L	<2	<2	----	---	---
Pirimphos-ethyl	23505-41-1	2	µg/L	<2	<2	----	---	---
Chlorfenvinphos	470-90-6	2	µg/L	<2	<2	----	---	---
Prothiofos	34643-46-4	2	µg/L	<2	<2	----	---	---
Ethion	563-12-2	2	µg/L	<2	<2	----	---	---
EP080/071: Total Petroleum Hydrocarbons								
C6 - C9 Fraction	----	20	µg/L	<20	<20	----	<20	---
C10 - C14 Fraction	----	50	µg/L	**290**	<50	----	---	---
C15 - C28 Fraction	----	100	µg/L	**430**	<100	---	---	---
C29 - C36 Fraction	----	50	µg/L	<50	<50	---	---	---
^ C10 - C36 Fraction (sum)	----	50	µg/L	**720**	<50	---	---	---
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions								

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Analytical Results

Sub-Matrix: WATER (Matrix: WATER)			Sample ID	BUR_BH125	R01_220121	TRIP SPIKE	TRIP BLANK	SMW_BH120
			Sampling date / time	21-Jan-2022 00:00	21-Jan-2022 00:00	13-Jan-2022 00:00	13-Jan-2022 00:00	19-Jan-2022 00:00
Compound	CAS Number	LOR	Unit	ES2202047-012	ES2202047-013	ES2202047-014	ES2202047-015	ES2202047-016
				Result	Result	Result	Result	Result
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions - Continued								
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	**570**	<100	----	----	----
>C16 - C34 Fraction	----	100	µg/L	**190**	<100	----	----	----
>C34 - C40 Fraction	----	100	µg/L	<100	<100	----	----	----
^ >C10 - C40 Fraction (sum)	----	100	µg/L	**760**	<100	----	----	----
^ >C10 - C16 Fraction minus Naphthalene (F2)	----	100	µg/L	**570**	<100	----	----	----
EP080: BTEXN								
Benzene	71-43-2	1	µg/L	<1	<1	**16**	<1	----
Toluene	108-88-3	2	µg/L	<2	<2	**16**	<2	----
Ethylbenzene	100-41-4	2	µg/L	<2	<2	**15**	<2	----
meta- & para-Xylene	108-38-3 106-42-3	2	µg/L	<2	<2	**15**	<2	----
ortho-Xylene	95-47-6	2	µg/L	<2	<2	**16**	<2	----
^ Total Xylenes	----	2	µg/L	<2	<2	**31**	<2	----
^ Sum of BTEX	----	1	µg/L	<1	<1	**78**	<1	----
Naphthalene	91-20-3	5	µg/L	<5	<5	**18**	<5	----
EP231A: Perfluoroalkyl Sulfonic Acids								
Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	<0.02	----	----	<0.02
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	<0.02	<0.02	----	----	<0.02
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	<0.01	<0.01	----	----	<0.01
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	<0.02	<0.02	----	----	<0.02
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	<0.01	<0.01	----	----	<0.01
Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L	<0.02	<0.02	----	----	<0.02
EP231B: Perfluoroalkyl Carboxylic Acids								
Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L	<0.1	<0.1	----	----	<0.1
Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	<0.02	<0.02	----	----	<0.02
Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	<0.02	<0.02	----	----	<0.02

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Analytical Results

Sub-Matrix: WATER (Matrix: WATER)			Sample ID	BUR_BH125	R01_220121	TRIP SPIKE	TRIP BLANK	SMW_BH120
			Sampling date / time	21-Jan-2022 00:00	21-Jan-2022 00:00	13-Jan-2022 00:00	13-Jan-2022 00:00	19-Jan-2022 00:00
Compound	CAS Number	LOR	Unit	ES2202047-012	ES2202047-013	ES2202047-014	ES2202047-015	ES2202047-016
				Result	Result	Result	Result	Result
EP231B: Perfluoroalkyl Carboxylic Acids - Continued								
Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	<0.02	<0.02	----	---	<0.02
Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	<0.01	<0.01	----	---	<0.01
Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L	<0.02	<0.02	----	---	<0.02
Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L	<0.02	<0.02	----	---	<0.02
Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L	<0.02	<0.02	----	---	<0.02
Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L	<0.02	<0.02	----	---	<0.02
Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L	<0.02	<0.02	----	---	<0.02
Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L	<0.05	<0.05	----	---	<0.05
EP231C: Perfluoroalkyl Sulfonamides								
Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	µg/L	<0.02	<0.02	----	---	<0.02
N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L	<0.05	<0.05	----	---	<0.05
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	µg/L	<0.05	<0.05	----	---	<0.05
N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L	<0.05	<0.05	----	---	<0.05
N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L	<0.05	<0.05	----	---	<0.05
N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.02	µg/L	<0.02	<0.02	----	---	<0.02
N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.02	µg/L	<0.02	<0.02	----	---	<0.02
EP231D: (n:2) Fluorotelomer Sulfonic Acids								
4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L	<0.05	<0.05	----	---	<0.05
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.05	µg/L	<0.05	<0.05	---	---	<0.05
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.05	µg/L	<0.05	<0.05	---	---	<0.05

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Analytical Results

Sub-Matrix: WATER (Matrix: WATER)			Sample ID	BUR_BH125	R01_220121	TRIP SPIKE	TRIP BLANK	SMW_BH120
			Sampling date / time	21-Jan-2022 00:00	21-Jan-2022 00:00	13-Jan-2022 00:00	13-Jan-2022 00:00	19-Jan-2022 00:00
Compound	CAS Number	LOR	Unit	ES2202047-012	ES2202047-013	ES2202047-014	ES2202047-015	ES2202047-016
				Result	Result	Result	Result	Result
EP231D: (n:2) Fluorotelomer Sulfonic Acids - Continued								
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.05	µg/L	<0.05	<0.05	----	---	<0.05
EP231P: PFAS Sums								
Sum of PFAS	----	0.01	µg/L	<0.01	<0.01	----	---	<0.01
Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L	<0.01	<0.01	----	---	<0.01
Sum of PFAS (WA DER List)	----	0.01	µg/L	<0.01	<0.01	----	---	<0.01
EP074S: VOC Surrogates								
1.2-Dichloroethane-D4	17060-07-0	5	%	114	111	----	---	---
Toluene-D8	2037-26-5	5	%	128	110	----	---	---
4-Bromofluorobenzene	460-00-4	5	%	119	106	----	---	---
EP075(SIM)S: Phenolic Compound Surrogates								
Phenol-d6	13127-88-3	1.0	%	Not Determined	21.0	----	---	---
2-Chlorophenol-D4	93951-73-6	1.0	%	Not Determined	53.9	----	---	---
2.4.6-Tribromophenol	118-79-6	1.0	%	Not Determined	50.2	----	---	---
EP075(SIM)T: PAH Surrogates								
2-Fluorobiphenyl	321-60-8	1.0	%	66.1	71.4	----	---	---
Anthracene-d10	1719-06-8	1.0	%	89.0	94.5	----	---	---
4-Terphenyl-d14	1718-51-0	1.0	%	79.4	84.5	----	---	---
EP075S: Acid Extractable Surrogates								
2-Fluorophenol	367-12-4	2	%	Not Determined	44.2	----	---	---
Phenol-d6	13127-88-3	2	%	Not Determined	30.2	----	---	---
2-Chlorophenol-D4	93951-73-6	2	%	Not Determined	62.8	----	---	---
2.4.6-Tribromophenol	118-79-6	2	%	Not Determined	69.1	----	---	---
EP075T: Base/Neutral Extractable Surrogates								
Nitrobenzene-D5	4165-60-0	2	%	48.1	61.6	----	---	---
1.2-Dichlorobenzene-D4	2199-69-1	2	%	45.0	56.6	----	---	---
2-Fluorobiphenyl	321-60-8	2	%	55.5	64.9	----	---	---
Anthracene-d10	1719-06-8	2	%	89.7	99.5	----	---	---
4-Terphenyl-d14	1718-51-0	2	%	73.3	83.5	----	---	---
EP080S: TPH(V)/BTEX Surrogates								
1.2-Dichloroethane-D4	17060-07-0	2	%	114	111	119	102	---
Toluene-D8	2037-26-5	2	%	121	104	110	109	---
4-Bromofluorobenzene	460-00-4	2	%	119	106	110	109	---

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Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	BUR_BH125	R01_220121	TRIP SPIKE	TRIP BLANK	SMW_BH120
				Sampling date / time	21-Jan-2022 00:00	21-Jan-2022 00:00	13-Jan-2022 00:00	13-Jan-2022 00:00	19-Jan-2022 00:00
Compound	CAS Number	LOR	Unit		ES2202047-012	ES2202047-013	ES2202047-014	ES2202047-015	ES2202047-016
					Result	Result	Result	Result	Result
EP231S: PFAS Surrogate									
13C4-PFOS	----	0.02	%		104	108	----	---	109
13C8-PFOA	----	0.02	%		101	101	----	---	103

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Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	SMW_BH019	R01_220119	SMW_BH038	SMW_BH035	SMW_BH035_S
				Sampling date / time	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	18-Jan-2022 00:00	18-Jan-2022 00:00
Compound	CAS Number	LOR	Unit		ES2202047-017	ES2202047-018	ES2202047-019	ES2202047-020	ES2202047-021
					Result	Result	Result	Result	Result
EP231A: Perfluoroalkyl Sulfonic Acids									
Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	<0.02
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L		<0.01	<0.01	**0.01**	<0.01	**0.02**
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		**0.02**	<0.01	<0.01	<0.01	<0.01
Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	<0.02
EP231B: Perfluoroalkyl Carboxylic Acids									
Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L		<0.1	<0.1	<0.1	<0.1	<0.1
Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L		<0.02	<0.02	**0.03**	<0.02	<0.02
Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L		<0.02	<0.02	**0.10**	<0.02	<0.02
Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L		<0.01	<0.01	**0.02**	<0.01	<0.01
Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	<0.02
Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	<0.02
Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L		<0.05	<0.05	<0.05	<0.05	<0.05
EP231C: Perfluoroalkyl Sulfonamides									
Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	µg/L		<0.02	<0.02	<0.02	<0.02	<0.02
N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L		<0.05	<0.05	<0.05	<0.05	<0.05
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	µg/L		<0.05	<0.05	<0.05	<0.05	<0.05

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Analytical Results

Sub-Matrix: WATER (Matrix: WATER)			Sample ID	SMW_BH019	R01_220119	SMW_BH038	SMW_BH035	SMW_BH035_S
			Sampling date / time	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	18-Jan-2022 00:00	18-Jan-2022 00:00
Compound	CAS Number	LOR	Unit	ES2202047-017	ES2202047-018	ES2202047-019	ES2202047-020	ES2202047-021
				Result	Result	Result	Result	Result
EP231C: Perfluoroalkyl Sulfonamides - Continued								
N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05
N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05
N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.02	µg/L	<0.02	<0.02	<0.02	<0.02	<0.02
EP231D: (n:2) Fluorotelomer Sulfonic Acids								
4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.05	µg/L	<0.05	<0.05	**0.48**	<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	**0.02**	<0.01	**0.64**	<0.01	**0.02**
Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L	**0.02**	<0.01	**0.01**	<0.01	**0.02**
Sum of PFAS (WA DER List)	----	0.01	µg/L	**0.02**	<0.01	**0.64**	<0.01	**0.02**
EP231S: PFAS Surrogate								
13C4-PFOS	----	0.02	%	**117**	**104**	**110**	**105**	**108**
13C8-PFOA	----	0.02	%	**102**	**101**	**106**	**100**	**102**

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Analytical Results

Sub-Matrix: WATER (Matrix: WATER)			Sample ID	R01_220118	R01_220117	R01_220120	---	----
			Sampling date / time	18-Jan-2022 00:00	17-Jan-2022 00:00	20-Jan-2022 00:00	---	---
Compound	CAS Number	LOR	Unit	ES2202047-022	ES2202047-023	ES2202047-024	------	------
				Result	Result	Result	---	---
EP231A: Perfluoroalkyl Sulfonic Acids								
Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L	<0.02	<0.02	<0.02	---	---
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.02	µg/L	<0.02	<0.02	<0.02	---	---
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L	<0.01	<0.01	<0.01	---	---
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.02	µg/L	<0.02	<0.02	<0.02	---	---
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L	<0.01	<0.01	<0.01	---	---
Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.02	µg/L	<0.02	<0.02	<0.02	---	---
EP231B: Perfluoroalkyl Carboxylic Acids								
Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L	<0.1	<0.1	<0.1	---	---
Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L	<0.02	<0.02	<0.02	---	---
Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L	<0.02	<0.02	<0.02	---	---
Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L	<0.02	<0.02	<0.02	---	---
Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L	<0.01	<0.01	<0.01	---	---
Perfluorononanoic acid (PFNA)	375-95-1	0.02	µg/L	<0.02	<0.02	<0.02	---	---
Perfluorodecanoic acid (PFDA)	335-76-2	0.02	µg/L	<0.02	<0.02	<0.02	---	---
Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.02	µg/L	<0.02	<0.02	<0.02	---	---
Perfluorododecanoic acid (PFDoDA)	307-55-1	0.02	µg/L	<0.02	<0.02	<0.02	---	---
Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.02	µg/L	<0.02	<0.02	<0.02	---	---
Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.05	µg/L	<0.05	<0.05	<0.05	---	---
EP231C: Perfluoroalkyl Sulfonamides								
Perfluorooctane sulfonamide (FOSA)	754-91-6	0.02	µg/L	<0.02	<0.02	<0.02	---	---
N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.05	µg/L	<0.05	<0.05	<0.05	---	---
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.05	µg/L	<0.05	<0.05	<0.05	---	---

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Analytical Results

Sub-Matrix: WATER (Matrix: WATER)			Sample ID	R01_220118	R01_220117	R01_220120	----	----
			Sampling date / time	18-Jan-2022 00:00	17-Jan-2022 00:00	20-Jan-2022 00:00	---	---
Compound	CAS Number	LOR	Unit	ES2202047-022	ES2202047-023	ES2202047-024	------	------
				Result	Result	Result	---	---
EP231C: Perfluoroalkyl Sulfonamides - Continued								
N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.05	µg/L	<0.05	<0.05	<0.05	---	---
N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.05	µg/L	<0.05	<0.05	<0.05	---	---
N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.02	µg/L	<0.02	<0.02	<0.02	---	---
N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.02	µg/L	<0.02	<0.02	<0.02	---	---
EP231D: (n:2) Fluorotelomer Sulfonic Acids								
4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L	<0.05	<0.05	<0.05	---	---
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.05	µg/L	<0.05	<0.05	<0.05	---	---
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.05	µg/L	<0.05	<0.05	<0.05	---	---
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.05	µg/L	<0.05	<0.05	<0.05	---	---
EP231P: PFAS Sums								
Sum of PFAS	----	0.01	µg/L	<0.01	<0.01	<0.01	---	---
Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L	<0.01	<0.01	<0.01	---	---
Sum of PFAS (WA DER List)	----	0.01	µg/L	<0.01	<0.01	<0.01	---	---
EP231S: PFAS Surrogate								
13C4-PFOS	----	0.02	%	**107**	**98.2**	**107**	---	---
13C8-PFOA	----	0.02	%	**98.3**	**93.4**	**96.7**	---	---

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Surrogate Control Limits

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

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CHAIN OF CUSTODY

ALS Laboratory: please tick →

☐ADELAIDE 21 Burma Road Pooraka SA 5095 Ph: 08 8359 0890 E: adelaide@alsglobal.com

☐BRISBANE 32 Shand Street Stafford QLD 4053 Ph: 07 3243 7222 E: samples.brisbane@alsglobal.com

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☐MELBOURNE 2-4 Westall Road Springvale VIC 3171 Ph: 03 8549 9600 E: samples.melbourne@alsglobal.com

☐MUDGEE 27 Sydney Road Mudgee NSW 2850 Ph: 02 6372 6735 E: mudgee.mail@alsglobal.com

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☐TOWNSVILLE 14-15 Desma Court Bohle QLD 4818 Ph: 07 4796 0600 E: townsville.environmental@alsglobal.com

☐WOLLONGONG 99 Kenny Street Wollongong NSW 2500 Ph: 02 4225 3125 E: portkembla@alsglobal.com

CLIENT:	FRM	TURNAROUND REQUIREMENTS : (Standard TAT may be longer for some tests e.g. Ultra Trace Organics)	☑ Standard TAT (List due date):
OFFICE:	Sydney		☐ Non Standard or urgent TAT (List due date):
PROJECT:	60628507	ALS QUOTE NO.:	
ORDER NUMBER:			
PROJECT MANAGER:	Nicholas Arbon	CONTACT PH: 0415 833 925	
SAMPLER:	Taj Monsour	SAMPLER MOBILE: 0467 295 082	
COC emailed to ALS? (YES / (NO))		EDD FORMAT (or default):	
Email Reports to (will default to PM if no other addresses are listed):			
Email Invoice to (will default to PM if no other addresses are listed):			

COC SEQUENCE NUMBER (Circle)

COC: 1 2 3 4 5 6 7

OF: 1 2 3 4 5 6 7

FOR LABORATORY USE ONLY (Circle)

Custody Seal Intact? Yes No N/A

Free ice / frozen ice bricks present upon receipt? Yes No N/A

Random Sample Temperature on Receipt: °C

Other comment:

RELINQUISHED BY:	RECEIVED BY:	RELINQUISHED BY:	RECEIVED BY:
T. Monsour	Skyc		
DATE/TIME: 21/01/22	DATE/TIME: 21-1-22 1:15pm	DATE/TIME:	DATE/TIME:

COMMENTS/SPECIAL HANDLING/STORAGE OR DISPOSAL:

ALS USE	SAMPLE DETAILS MATRIX: SOLID (S) WATER (W)			CONTAINER INFORMATION		ANALYSIS REQUIRED including SUITES (NB. Suite Codes must be listed to attract suite price) Where Metals are required, specify Total (unfiltered bottle required) or Dissolved (field filtered bottle required).	Additional Information
LAB ID	SAMPLE ID	DATE / TIME	MATRIX	TYPE & PRESERVATIVE (refer to codes below)	TOTAL CONTAINERS	PFAS	Comments on likely contaminant levels, dilutions, or samples requiring specific QC analysis etc.
1	SMW-BH051	18-01-22	W				
2	SMW-BH051_S	18-01-22					
3	851	20-01-22					
4	S54						
5	S02-d						
6	S06						
7	S40-d						
8	S40-S						
9	BUR-MW108						
10	DQ1-220119	19-01-22					
11	TQ1-220119	19-01-22					
				TOTAL			

Environmental Division Sydney

Work Order Reference

ES2202047

Telephone - 61-2-8784 8555

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

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CHAIN OF CUSTODY

ALS Laboratory: please tick →

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☐WOLLONGONG 99 Kenny Street Wollongong NSW 2500 Ph: 02 4225 3125 E: portkembla@alsglobal.com

CLIENT: ERM	TURNAROUND REQUIREMENTS : ☑ Standard TAT (List due date):	FOR LABORATORY USE ONLY (Circle)	
OFFICE: Sydney	(Standard TAT may be longer for some tests e.g. Ultra Trace Organics) ☐ Non Standard or urgent TAT (List due date):	Custody Seal Intact?	Yes / No / N/A
PROJECT: 0628507	ALS QUOTE NO.:	Free ice / frozen ice bricks present upon receipt?	Yes / No / N/A
ORDER NUMBER:	COC SEQUENCE NUMBER (Circle) COC: 1 2 3 4 5 6 7 OF: 1 2 3 4 5 6 7	Random Sample Temperature on Receipt:	°C
PROJECT MANAGER: Nicholas Grbich	CONTACT PH: 0415 833 928	Other comment:	
SAMPLER: Taj Morgan	SAMPLER MOBILE: 0462 295 082	RELINQUISHED BY: Taj Morgan	RECEIVED BY:
COC emailed to ALS? (YES / (NO))	EDD FORMAT (or default):	DATE/TIME: 21/01/22	DATE/TIME:
Email Reports to (will default to PM if no other addresses are listed):		RELINQUISHED BY:	RECEIVED BY:
Email Invoice to (will default to PM if no other addresses are listed):		DATE/TIME:	DATE/TIME:

COMMENTS/SPECIAL HANDLING/STORAGE OR DISPOSAL:

ALS USE	SAMPLE DETAILS MATRIX: SOLID (S) WATER (W)			CONTAINER INFORMATION		ANALYSIS REQUIRED including SUITES (NB. Suite Codes must be listed to attract suite price) Where Metals are required, specify Total (unfiltered bottle required) or Dissolved (field filtered bottle required).									Additional Information
LAB ID	SAMPLE ID	DATE / TIME	MATRIX	TYPE & PRESERVATIVE (refer to codes below)	TOTAL CONTAINERS	TPH & BTEXN	PAHs	VOCs	Heavy metals plus NOM	PFAS	Ammonia, nitrate, total nitrogen, total phosphorus	Major anions & cations	TDS		Comments on likely contaminant levels, dilutions, or samples requiring specific QC analysis etc.
12	BUR_BH125	21-01-22	W			X	X	X	X	X	X	X	X		PFAS sample taken on 20/01/22
13	ROI-220121	↓	↓			X	X	X	X	X	X				No nitrate analysis
14	Trip spike + Trip blank					X	X	X	X						
15	SMW-BH120	19-01-22								X					
16	SMW-BH019	19-01-22													
17	ROI-220119	19-01-22													
18	SMW_BH038	18-01-22													
19	SMW_BH035	18-01-22													
20	SMW-BH035_S	18-01-22													
21	ROI-220118	18-01-22													
22	ROI-220117	17-01-22													
23	ROI-220120	20-01-22	↓							↓					
				TOTAL											

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

ALS Environmental

CERTIFICATE OF ANALYSIS

Work Order	: **ES2202264**	Page	: 1 of 119
Client	: **ENVIRONMENTAL RESOURCES MANAGEMENT (ERM)**	Laboratory	: Environmental Division Sydney
Contact	: NICHOLAS GRBICH	Contact	: Customer Services ES
Address	: LEVEL 15 309 KENT STREET SYDNEY NSW AUSTRALIA 2000	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
Telephone	: ----	Telephone	: +61-2-8784 8555
Project	: 0628507 SOP	Date Samples Received	: 24-Jan-2022 14:20
Order number	: ----	Date Analysis Commenced	: 27-Jan-2022
C-O-C number	: ----	Issue Date	: 03-Feb-2022 17:00
Sampler	: ANTHONY RICHARD		
Site	: ----		
Quote number	: EN/114		
No. of samples received	: 57		
No. of samples analysed	: 56		

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

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

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results
- 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.

Signatories	*Position*	*Accreditation Category*
Alana Smylie	Asbestos Identifier	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

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General Comments

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

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

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

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

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.
- 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-dichlorothene, trans-1,2-dichlorothene, 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: Positive results for sample ES2202264-033 was confirmed by re-analysis.
- EP080: The trip spike and its control have been analysed for volatile TPH and BTEXN only. The trip spike and control were prepared in the lab using reagent grade sand spiked with petrol. The spike was dispatched from the lab and the control retained.
- 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)

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- 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.

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Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	SOP_BH118_0.1_220119	SOP_BH118_1.0_220119	SOP_BH118_5.0_220119	SOP_BH118_10.0_220119	SOP_BH118_15.0_220119
			Sampling date / time	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00
Compound	CAS Number	LOR	Unit	ES2202264-001	ES2202264-002	ES2202264-003	ES2202264-004	ES2202264-005
				Result	Result	Result	Result	Result
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	----	1.0	%	7.9	13.4	6.4	7.3	13.6
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	534	----	----	----	----
APPROVED IDENTIFIER:	----	-	--	A. SMYLIE	----	----	----	----
EG005(ED093)T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	<5	<5	8	8	5
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	<1	<1
Chromium	7440-47-3	2	mg/kg	13	<2	7	10	13
Copper	7440-50-8	5	mg/kg	57	13	37	40	40
Lead	7439-92-1	5	mg/kg	<5	<5	15	18	19
Nickel	7440-02-0	2	mg/kg	109	<2	24	24	22
Zinc	7440-66-6	5	mg/kg	42	<5	178	92	84
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	<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	<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

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Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH118_0.1_220119	SOP_BH118_1.0_220119	SOP_BH118_5.0_220119	SOP_BH118_10.0_220119	SOP_BH118_15.0_220119
				Sampling date / time	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00
					ES2202264-001	ES2202264-002	ES2202264-003	ES2202264-004	ES2202264-005
					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**	72-54-8/72-55-9/50-29-3	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
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

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Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH118_0.1_220119	SOP_BH118_1.0_220119	SOP_BH118_5.0_220119	SOP_BH118_10.0_220119	SOP_BH118_15.0_220119
				Sampling date / time	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00
					ES2202264-001	ES2202264-002	ES2202264-003	ES2202264-004	ES2202264-005
					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

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Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH118_0.1_220119	SOP_BH118_1.0_220119	SOP_BH118_5.0_220119	SOP_BH118_10.0_220119	SOP_BH118_15.0_220119
				Sampling date / time	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00
					ES2202264-001	ES2202264-002	ES2202264-003	ES2202264-004	ES2202264-005
					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	---	<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)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		<0.5	<0.5	<0.5	**0.8**	<0.5
Anthracene	120-12-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5

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Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH118_0.1_220119	SOP_BH118_1.0_220119	SOP_BH118_5.0_220119	SOP_BH118_10.0_220119	SOP_BH118_15.0_220119
				Sampling date / time	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00
					ES2202264-001	ES2202264-002	ES2202264-003	ES2202264-004	ES2202264-005
					Result	Result	Result	Result	Result
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued									
Fluoranthene	206-44-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Pyrene	129-00-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benz(a)anthracene	56-55-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Chrysene	218-01-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg		<0.5	<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		<0.5	<0.5	<0.5	<0.5	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg		<0.5	<0.5	<0.5	**0.8**	<0.5
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg		**0.6**	**0.6**	**0.6**	**0.6**	**0.6**
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg		**1.2**	**1.2**	**1.2**	**1.2**	**1.2**
EP075A: 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	0.5	mg/kg		<0.5	----	<0.5	---	<0.5
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	1	mg/kg		<1	----	<1	---	<1
EP075B: Polynuclear Aromatic Hydrocarbons									
2-Methylnaphthalene	91-57-6	0.5	mg/kg		<0.5	----	**1.4**	---	**0.6**
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									

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Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH118_0.1_220119	SOP_BH118_1.0_220119	SOP_BH118_5.0_220119	SOP_BH118_10.0_220119	SOP_BH118_15.0_220119
				Sampling date / time	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00
					ES2202264-001	ES2202264-002	ES2202264-003	ES2202264-004	ES2202264-005
					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

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Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH118_0.1_220119	SOP_BH118_1.0_220119	SOP_BH118_5.0_220119	SOP_BH118_10.0_220119	SOP_BH118_15.0_220119
				Sampling date / time	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00
					ES2202264-001	ES2202264-002	ES2202264-003	ES2202264-004	ES2202264-005
					Result	Result	Result	Result	Result
EP075E: Nitroaromatics and Ketones - Continued									
Chlorobenzilate	510-15-6	0.5	mg/kg		<0.5	----	<0.5	---	<0.5
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	**19**	**31**	**15**
C10 - C14 Fraction	----	50	mg/kg		<50	<50	<50	<50	<50
C15 - C28 Fraction	----	100	mg/kg		<100	<100	<100	**110**	<100
C29 - C36 Fraction	----	100	mg/kg		**160**	<100	<100	<100	<100
^ **C10 - C36 Fraction (sum)**	----	50	mg/kg		**160**	<50	<50	**110**	<50
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
C6 - C10 Fraction	C6_C10	10	mg/kg		<10	<10	**24**	**39**	**20**

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Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	SOP_BH118_0.1_220119	SOP_BH118_1.0_220119	SOP_BH118_5.0_220119	SOP_BH118_10.0_220119	SOP_BH118_15.0_220119
			Sampling date / time	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00
Compound	CAS Number	LOR	Unit	ES2202264-001	ES2202264-002	ES2202264-003	ES2202264-004	ES2202264-005
				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	24	38	20
>C10 - C16 Fraction	----	50	mg/kg	<50	<50	<50	50	50
>C16 - C34 Fraction	----	100	mg/kg	160	<100	120	120	<100
>C34 - C40 Fraction	----	100	mg/kg	180	<100	<100	<100	<100
^ >C10 - C40 Fraction (sum)	----	50	mg/kg	340	<50	120	170	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	0.5	<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	----
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.0002	mg/kg	----	<0.0002	----	<0.0002	----
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.0002	mg/kg	----	<0.0002	----	<0.0002	----
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.0002	mg/kg	----	<0.0002	----	<0.0002	----
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.0002	mg/kg	----	<0.0002	----	<0.0002	----
Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.0002	mg/kg	----	<0.0002	----	<0.0002	----
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	----

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Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH118_0.1_220119	SOP_BH118_1.0_220119	SOP_BH118_5.0_220119	SOP_BH118_10.0_220119	SOP_BH118_15.0_220119
				Sampling date / time	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00
					ES2202264-001	ES2202264-002	ES2202264-003	ES2202264-004	ES2202264-005
					Result	Result	Result	Result	Result
EP231B: Perfluoroalkyl Carboxylic Acids - Continued									
Perfluorooctanoic acid (PFOA)	335-67-1	0.0002	mg/kg		----	<0.0002	----	<0.0002	----
Perfluorononanoic acid (PFNA)	375-95-1	0.0002	mg/kg		----	<0.0002	----	<0.0002	----
Perfluorodecanoic acid (PFDA)	335-76-2	0.0002	mg/kg		----	<0.0002	----	<0.0002	----
Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.0002	mg/kg		----	<0.0002	----	<0.0002	----
Perfluorododecanoic acid (PFDoDA)	307-55-1	0.0002	mg/kg		----	<0.0002	----	<0.0002	----
Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.0002	mg/kg		----	<0.0002	----	<0.0002	----
Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.0005	mg/kg		----	<0.0005	----	<0.0005	----
EP231C: Perfluoroalkyl Sulfonamides									
Perfluorooctane sulfonamide (FOSA)	754-91-6	0.0002	mg/kg		----	<0.0002	----	<0.0002	----
N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.0005	mg/kg		----	<0.0005	----	<0.0005	----
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.0005	mg/kg		----	<0.0005	----	<0.0005	----
N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.0005	mg/kg		----	<0.0005	----	<0.0005	----
N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.0005	mg/kg		----	<0.0005	----	<0.0005	----
N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.0002	mg/kg		----	<0.0002	----	<0.0002	----
N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.0002	mg/kg		----	<0.0002	----	<0.0002	----
EP231D: (n:2) Fluorotelomer Sulfonic Acids									
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	----

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Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	SOP_BH118_0.1_220119	SOP_BH118_1.0_220119	SOP_BH118_5.0_220119	SOP_BH118_10.0_220119	SOP_BH118_15.0_220119
			Sampling date / time	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00
Compound	CAS Number	LOR	Unit	ES2202264-001	ES2202264-002	ES2202264-003	ES2202264-004	ES2202264-005
				Result	Result	Result	Result	Result
EP231D: (n:2) Fluorotelomer Sulfonic Acids - Continued								
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.0005	mg/kg	----	<0.0005	----	<0.0005	----
EP231P: PFAS Sums								
Sum of PFAS	----	0.0002	mg/kg	----	<0.0002	----	<0.0002	----
Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.0002	mg/kg	----	<0.0002	----	<0.0002	----
Sum of PFAS (WA DER List)	----	0.0002	mg/kg	----	<0.0002	----	<0.0002	----
EP066S: PCB Surrogate								
Decachlorobiphenyl	2051-24-3	0.1	%	109	124	113	114	122
EP068S: Organochlorine Pesticide Surrogate								
Dibromo-DDE	21655-73-2	0.05	%	120	117	121	104	109
EP068T: Organophosphorus Pesticide Surrogate								
DEF	78-48-8	0.05	%	84.7	101	104	90.5	96.5
EP074S: VOC Surrogates								
1.2-Dichloroethane-D4	17060-07-0	0.5	%	88.0	----	86.7	----	89.3
Toluene-D8	2037-26-5	0.5	%	88.3	----	94.4	----	94.0
4-Bromofluorobenzene	460-00-4	0.5	%	83.5	----	91.6	----	94.2
EP075(SIM)S: Phenolic Compound Surrogates								
Phenol-d6	13127-88-3	0.5	%	91.2	97.4	92.9	95.0	90.5
2-Chlorophenol-D4	93951-73-6	0.5	%	91.6	96.2	92.2	96.6	91.4
2.4.6-Tribromophenol	118-79-6	0.5	%	75.5	83.9	79.2	81.3	77.8
EP075(SIM)T: PAH Surrogates								
2-Fluorobiphenyl	321-60-8	0.5	%	97.6	102	98.2	103	97.4
Anthracene-d10	1719-06-8	0.5	%	108	114	109	115	111
4-Terphenyl-d14	1718-51-0	0.5	%	92.6	99.4	94.4	99.1	95.3
EP075S: Acid Extractable Surrogates								
2-Fluorophenol	367-12-4	0.5	%	105	----	88.4	----	102
Phenol-d6	13127-88-3	0.5	%	98.8	----	91.3	----	98.9
2-Chlorophenol-D4	93951-73-6	0.5	%	104	----	90.6	----	102
2.4.6-Tribromophenol	118-79-6	0.5	%	99.9	----	49.1	----	75.2
EP075T: Base/Neutral Extractable Surrogates								
Nitrobenzene-D5	4165-60-0	0.5	%	89.0	----	83.6	----	88.8
1.2-Dichlorobenzene-D4	2199-69-1	0.5	%	93.0	----	87.8	----	90.2

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Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH118_0.1_220119	SOP_BH118_1.0_220119	SOP_BH118_5.0_220119	SOP_BH118_10.0_220119	SOP_BH118_15.0_220119
				Sampling date / time	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00
					ES2202264-001	ES2202264-002	ES2202264-003	ES2202264-004	ES2202264-005
					Result	Result	Result	Result	Result
EP075T: Base/Neutral Extractable Surrogates - Continued									
2-Fluorobiphenyl	321-60-8	0.5	%		109	----	93.2	---	98.7
Anthracene-d10	1719-06-8	0.5	%		119	----	120	---	118
4-Terphenyl-d14	1718-51-0	0.5	%		95.9	----	91.0	---	90.6
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	0.2	%		87.8	86.7	86.4	89.9	89.0
Toluene-D8	2037-26-5	0.2	%		83.3	78.6	88.7	99.9	88.5
4-Bromofluorobenzene	460-00-4	0.2	%		81.2	96.6	87.3	102	87.7
EP231S: PFAS Surrogate									
13C4-PFOS	----	0.0002	%		----	100	----	110	----
13C8-PFOA	----	0.0002	%		----	96.0	----	100	----

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Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH118_20.0_220119	SOP_BH118_25.0_220119	SOP_BH142_0.4_220119	SOP_BH142_4.0_220119	SOP_BH143_0.3_220119
				Sampling date / time	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00
					ES2202264-006	ES2202264-007	ES2202264-008	ES2202264-009	ES2202264-010
					Result	Result	Result	Result	Result
EA055: Moisture Content (Dried @ 105-110°C)									
Moisture Content	----	1.0	%		31.2	12.9	12.4	12.5	14.8
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	-	--		----	----	-	---	-
Synthetic Mineral Fibre	----	0.1	g/kg		----	----	No	---	No
Organic Fibre	----	0.1	g/kg		----	----	No	---	No
Sample weight (dry)	----	0.01	g		----	----	321	---	273
APPROVED IDENTIFIER:	----	-	--		----	----	A. SMYLIE	---	A. SMYLIE
EG005(ED093)T: Total Metals by ICP-AES									
Arsenic	7440-38-2	5	mg/kg		6	<5	<5	<5	6
Cadmium	7440-43-9	1	mg/kg		<1	<1	<1	<1	<1
Chromium	7440-47-3	2	mg/kg		15	10	3	4	13
Copper	7440-50-8	5	mg/kg		41	49	11	40	6
Lead	7439-92-1	5	mg/kg		20	26	8	11	15
Nickel	7440-02-0	2	mg/kg		22	24	<2	12	<2
Zinc	7440-66-6	5	mg/kg		87	88	<5	120	5
EG035T: Total Recoverable Mercury by FIMS									
Mercury	7439-97-6	0.1	mg/kg		<0.1	<0.1	<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	<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

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Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	SOP_BH118_20.0_220119	SOP_BH118_25.0_220119	SOP_BH142_0.4_220119	SOP_BH142_4.0_220119	SOP_BH143_0.3_220119
				Sampling date / time	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00
Compound	CAS Number	LOR	Unit		ES2202264-006	ES2202264-007	ES2202264-008	ES2202264-009	ES2202264-010
					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	72-54-8/72-55-9/50-29-3	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
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

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Analytical Results

Sub-Matrix: SOIL
(Matrix: SOIL)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH118_20.0_220119	SOP_BH118_25.0_220119	SOP_BH142_0.4_220119	SOP_BH142_4.0_220119	SOP_BH143_0.3_220119
				Sampling date / time	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00
					ES2202264-006	ES2202264-007	ES2202264-008	ES2202264-009	ES2202264-010
					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	---	---

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Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH118_20.0_220119	SOP_BH118_25.0_220119	SOP_BH142_0.4_220119	SOP_BH142_4.0_220119	SOP_BH143_0.3_220119
				Sampling date / time	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00
					ES2202264-006	ES2202264-007	ES2202264-008	ES2202264-009	ES2202264-010
					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)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		<0.5	<0.5	<0.5	<0.5	<0.5
Anthracene	120-12-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5

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Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH118_20.0_220119	SOP_BH118_25.0_220119	SOP_BH142_0.4_220119	SOP_BH142_4.0_220119	SOP_BH143_0.3_220119
				Sampling date / time	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00
					ES2202264-006	ES2202264-007	ES2202264-008	ES2202264-009	ES2202264-010
					Result	Result	Result	Result	Result
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued									
Fluoranthene	206-44-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Pyrene	129-00-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benz(a)anthracene	56-55-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Chrysene	218-01-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg		<0.5	<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		<0.5	<0.5	<0.5	<0.5	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg		**0.6**	**0.6**	**0.6**	**0.6**	**0.6**
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg		**1.2**	**1.2**	**1.2**	**1.2**	**1.2**
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									
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									

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Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH118_20.0_220119	SOP_BH118_25.0_220119	SOP_BH142_0.4_220119	SOP_BH142_4.0_220119	SOP_BH143_0.3_220119
				Sampling date / time	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00
					ES2202264-006	ES2202264-007	ES2202264-008	ES2202264-009	ES2202264-010
					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	---	---

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Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH118_20.0_220119	SOP_BH118_25.0_220119	SOP_BH142_0.4_220119	SOP_BH142_4.0_220119	SOP_BH143_0.3_220119
				Sampling date / time	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00
					ES2202264-006	ES2202264-007	ES2202264-008	ES2202264-009	ES2202264-010
					Result	Result	Result	Result	Result
EP075E: Nitroaromatics and Ketones - Continued									
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	---	---
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	----	10	mg/kg		**10**	**20**	<10	<10	<10
C10 - C14 Fraction	----	50	mg/kg		<50	**60**	<50	<50	<50
C15 - C28 Fraction	----	100	mg/kg		<100	**140**	<100	<100	<100
C29 - C36 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
^ C10 - C36 Fraction (sum)	----	50	mg/kg		<50	**200**	<50	<50	<50
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
C6 - C10 Fraction	C6_C10	10	mg/kg		**14**	**29**	<10	<10	<10

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Analytical Results

Sub-Matrix: SOIL
(Matrix: SOIL)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH118_20.0_220119	SOP_BH118_25.0_220119	SOP_BH142_0.4_220119	SOP_BH142_4.0_220119	SOP_BH143_0.3_220119
				Sampling date / time	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00
					ES2202264-006	ES2202264-007	ES2202264-008	ES2202264-009	ES2202264-010
					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		**14**	**29**	<10	<10	<10
>C10 - C16 Fraction	----	50	mg/kg		<50	**80**	<50	<50	<50
>C16 - C34 Fraction	----	100	mg/kg		<100	**130**	<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	**80**	<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	<0.0002
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.0002	mg/kg		----	<0.0002	<0.0002	<0.0002	<0.0002
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.0002	mg/kg		----	<0.0002	<0.0002	<0.0002	<0.0002
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.0002	mg/kg		----	<0.0002	<0.0002	<0.0002	<0.0002
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.0002	mg/kg		----	<0.0002	<0.0002	<0.0002	<0.0002
Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.0002	mg/kg		----	<0.0002	<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	<0.001
Perfluoropentanoic acid (PFPeA)	2706-90-3	0.0002	mg/kg		---	<0.0002	<0.0002	<0.0002	<0.0002
Perfluorohexanoic acid (PFHxA)	307-24-4	0.0002	mg/kg		---	<0.0002	<0.0002	<0.0002	<0.0002
Perfluoroheptanoic acid (PFHpA)	375-85-9	0.0002	mg/kg		---	<0.0002	<0.0002	<0.0002	<0.0002

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Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH118_20.0_220119	SOP_BH118_25.0_220119	SOP_BH142_0.4_220119	SOP_BH142_4.0_220119	SOP_BH143_0.3_220119
				Sampling date / time	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00
					ES2202264-006	ES2202264-007	ES2202264-008	ES2202264-009	ES2202264-010
					Result	Result	Result	Result	Result
EP231B: Perfluoroalkyl Carboxylic Acids - Continued									
Perfluorooctanoic acid (PFOA)	335-67-1	0.0002	mg/kg		----	<0.0002	<0.0002	<0.0002	<0.0002
Perfluorononanoic acid (PFNA)	375-95-1	0.0002	mg/kg		----	<0.0002	<0.0002	<0.0002	<0.0002
Perfluorodecanoic acid (PFDA)	335-76-2	0.0002	mg/kg		----	<0.0002	<0.0002	<0.0002	<0.0002
Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.0002	mg/kg		----	<0.0002	<0.0002	<0.0002	<0.0002
Perfluorododecanoic acid (PFDoDA)	307-55-1	0.0002	mg/kg		----	<0.0002	<0.0002	<0.0002	<0.0002
Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.0002	mg/kg		----	<0.0002	<0.0002	<0.0002	<0.0002
Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.0005	mg/kg		----	<0.0005	<0.0005	<0.0005	<0.0005
EP231C: Perfluoroalkyl Sulfonamides									
Perfluorooctane sulfonamide (FOSA)	754-91-6	0.0002	mg/kg		----	<0.0002	<0.0002	<0.0002	<0.0002
N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.0005	mg/kg		----	<0.0005	<0.0005	<0.0005	<0.0005
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.0005	mg/kg		----	<0.0005	<0.0005	<0.0005	<0.0005
N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.0005	mg/kg		----	<0.0005	<0.0005	<0.0005	<0.0005
N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.0005	mg/kg		----	<0.0005	<0.0005	<0.0005	<0.0005
N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.0002	mg/kg		----	<0.0002	<0.0002	<0.0002	<0.0002
N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.0002	mg/kg		----	<0.0002	<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	<0.0005
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.0005	mg/kg		----	<0.0005	<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	<0.0005

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Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	SOP_BH118_20.0_220119	SOP_BH118_25.0_220119	SOP_BH142_0.4_220119	SOP_BH142_4.0_220119	SOP_BH143_0.3_220119
			Sampling date / time	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00
Compound	CAS Number	LOR	Unit	ES2202264-006	ES2202264-007	ES2202264-008	ES2202264-009	ES2202264-010
				Result	Result	Result	Result	Result
EP231D: (n:2) Fluorotelomer Sulfonic Acids - Continued								
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.0005	mg/kg	----	<0.0005	<0.0005	<0.0005	<0.0005
EP231P: PFAS Sums								
Sum of PFAS	----	0.0002	mg/kg	----	<0.0002	<0.0002	<0.0002	<0.0002
Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.0002	mg/kg	----	<0.0002	<0.0002	<0.0002	<0.0002
Sum of PFAS (WA DER List)	----	0.0002	mg/kg	----	<0.0002	<0.0002	<0.0002	<0.0002
EP066S: PCB Surrogate								
Decachlorobiphenyl	2051-24-3	0.1	%	124	126	109	104	118
EP068S: Organochlorine Pesticide Surrogate								
Dibromo-DDE	21655-73-2	0.05	%	114	126	122	129	110
EP068T: Organophosphorus Pesticide Surrogate								
DEF	78-48-8	0.05	%	99.6	112	101	107	89.9
EP074S: VOC Surrogates								
1.2-Dichloroethane-D4	17060-07-0	0.5	%	----	85.5	84.7	---	---
Toluene-D8	2037-26-5	0.5	%	----	91.9	85.3	---	---
4-Bromofluorobenzene	460-00-4	0.5	%	----	87.7	85.8	---	---
EP075(SIM)S: Phenolic Compound Surrogates								
Phenol-d6	13127-88-3	0.5	%	98.5	87.2	96.1	91.8	94.7
2-Chlorophenol-D4	93951-73-6	0.5	%	97.2	87.1	95.5	90.0	93.4
2.4.6-Tribromophenol	118-79-6	0.5	%	79.8	68.3	77.2	71.4	70.8
EP075(SIM)T: PAH Surrogates								
2-Fluorobiphenyl	321-60-8	0.5	%	102	92.6	100	93.5	97.3
Anthracene-d10	1719-06-8	0.5	%	115	104	114	107	109
4-Terphenyl-d14	1718-51-0	0.5	%	98.4	90.5	97.6	92.1	93.4
EP075S: Acid Extractable Surrogates								
2-Fluorophenol	367-12-4	0.5	%	----	99.2	98.3	---	---
Phenol-d6	13127-88-3	0.5	%	----	96.2	94.6	---	---
2-Chlorophenol-D4	93951-73-6	0.5	%	----	99.1	93.8	---	---
2.4.6-Tribromophenol	118-79-6	0.5	%	---	64.9	65.0	---	---
EP075T: Base/Neutral Extractable Surrogates								
Nitrobenzene-D5	4165-60-0	0.5	%	---	85.3	97.8	---	---
1.2-Dichlorobenzene-D4	2199-69-1	0.5	%	---	89.1	89.9	---	---

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Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH118_20.0_22011919	SOP_BH118_25.0_22011919	SOP_BH142_0.4_220119	SOP_BH142_4.0_220119	SOP_BH143_0.3_220119
				Sampling date / time	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00
					ES2202264-006	ES2202264-007	ES2202264-008	ES2202264-009	ES2202264-010
					Result	Result	Result	Result	Result
EP075T: Base/Neutral Extractable Surrogates - Continued									
2-Fluorobiphenyl	321-60-8	0.5	%		----	96.1	90.3	---	---
Anthracene-d10	1719-06-8	0.5	%		----	121	122	---	---
4-Terphenyl-d14	1718-51-0	0.5	%		----	90.5	101	---	---
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	0.2	%		83.3	85.1	82.3	96.8	86.8
Toluene-D8	2037-26-5	0.2	%		90.4	86.2	86.1	104	80.2
4-Bromofluorobenzene	460-00-4	0.2	%		92.1	83.0	87.0	104	95.7
EP231S: PFAS Surrogate									
13C4-PFOS	----	0.0002	%		----	102	114	104	108
13C8-PFOA	----	0.0002	%		----	106	97.5	100	102

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Analytical Results

Sub-Matrix: SOIL
(Matrix: SOIL)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH143_1.0_220119	SOP_BH144_0.3_220119	SOP_BH144_0.6_220119	SOP_BH145_0.3_220119	SOP_BH145_1.0_220119
				Sampling date / time	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00
					ES2202264-011	ES2202264-012	ES2202264-013	ES2202264-014	ES2202264-015
					Result	Result	Result	Result	Result
EA055: Moisture Content (Dried @ 105-110°C)									
Moisture Content	----	1.0	%		19.5	8.5	21.7	21.9	22.8
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	-	--		----	-	----	-	----
Synthetic Mineral Fibre	----	0.1	g/kg		----	No	----	No	----
Organic Fibre	----	0.1	g/kg		----	No	----	No	----
Sample weight (dry)	----	0.01	g		----	472	----	124	----
APPROVED IDENTIFIER:	----	-	--		----	A. SMYLIE	----	A. SMYLIE	----
EG005(ED093)T: Total Metals by ICP-AES									
Arsenic	7440-38-2	5	mg/kg		8	<5	6	6	10
Cadmium	7440-43-9	1	mg/kg		<1	<1	<1	<1	<1
Chromium	7440-47-3	2	mg/kg		18	4	4	10	15
Copper	7440-50-8	5	mg/kg		16	<5	8	9	14
Lead	7439-92-1	5	mg/kg		17	6	9	12	15
Nickel	7440-02-0	2	mg/kg		3	<2	<2	<2	<2
Zinc	7440-66-6	5	mg/kg		9	<5	<5	<5	<5
EG035T: Total Recoverable Mercury by FIMS									
Mercury	7439-97-6	0.1	mg/kg		<0.1	<0.1	<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	<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	0.56	<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

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Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	SOP_BH143_1.0_220119	SOP_BH144_0.3_220119	SOP_BH144_0.6_220119	SOP_BH145_0.3_220119	SOP_BH145_1.0_220119
			Sampling date / time	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00
Compound	CAS Number	LOR	Unit	ES2202264-011	ES2202264-012	ES2202264-013	ES2202264-014	ES2202264-015
				Result	Result	Result	Result	Result
EP068A: Organochlorine Pesticides (OC) - Continued								
Dieldrin	60-57-1	0.05	mg/kg	<0.05	**0.16**	<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	**0.72**	<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

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Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH143_1.0_220119	SOP_BH144_0.3_220119	SOP_BH144_0.6_220119	SOP_BH145_0.3_220119	SOP_BH145_1.0_220119
				Sampling date / time	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00
					ES2202264-011	ES2202264-012	ES2202264-013	ES2202264-014	ES2202264-015
					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

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Analytical Results

Sub-Matrix: SOIL
(Matrix: SOIL)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH143_1.0_220119	SOP_BH144_0.3_220119	SOP_BH144_0.6_220119	SOP_BH145_0.3_220119	SOP_BH145_1.0_220119
				Sampling date / time	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00
					ES2202264-011	ES2202264-012	ES2202264-013	ES2202264-014	ES2202264-015
					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)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		<0.5	<0.5	<0.5	<0.5	<0.5
Anthracene	120-12-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5

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Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH143_1.0_220119	SOP_BH144_0.3_220119	SOP_BH144_0.6_220119	SOP_BH145_0.3_220119	SOP_BH145_1.0_220119
				Sampling date / time	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00
					ES2202264-011	ES2202264-012	ES2202264-013	ES2202264-014	ES2202264-015
					Result	Result	Result	Result	Result
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued									
Fluoranthene	206-44-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Pyrene	129-00-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benz(a)anthracene	56-55-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Chrysene	218-01-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg		<0.5	<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		<0.5	<0.5	<0.5	<0.5	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg		**0.6**	**0.6**	**0.6**	**0.6**	**0.6**
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg		**1.2**	**1.2**	**1.2**	**1.2**	**1.2**
EP075A: 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	0.5	mg/kg		<0.5	----	<0.5	---	<0.5
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	1	mg/kg		<1	----	<1	---	<1
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									

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Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	SOP_BH143_1.0_220119	SOP_BH144_0.3_220119	SOP_BH144_0.6_220119	SOP_BH145_0.3_220119	SOP_BH145_1.0_220119
				Sampling date / time	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00
Compound	CAS Number	LOR	Unit		ES2202264-011	ES2202264-012	ES2202264-013	ES2202264-014	ES2202264-015
					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

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Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	SOP_BH143_1.0_220119	SOP_BH144_0.3_220119	SOP_BH144_0.6_220119	SOP_BH145_0.3_220119	SOP_BH145_1.0_220119
				Sampling date / time	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00
Compound	CAS Number	LOR	Unit		ES2202264-011	ES2202264-012	ES2202264-013	ES2202264-014	ES2202264-015
					Result	Result	Result	Result	Result
EP075E: Nitroaromatics and Ketones - Continued									
Chlorobenzilate	510-15-6	0.5	mg/kg		<0.5	----	<0.5	---	<0.5
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	<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	<50	<50
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
C6 - C10 Fraction	C6_C10	10	mg/kg		<10	<10	<10	<10	<10

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Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	SOP_BH143_1.0_220119	SOP_BH144_0.3_220119	SOP_BH144_0.6_220119	SOP_BH145_0.3_220119	SOP_BH145_1.0_220119
			Sampling date / time	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00
Compound	CAS Number	LOR	Unit	ES2202264-011	ES2202264-012	ES2202264-013	ES2202264-014	ES2202264-015
				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	<100	<100	<100	<100
>C34 - C40 Fraction	----	100	mg/kg	<100	<100	<100	<100	<100
^ >C10 - C40 Fraction (sum)	----	50	mg/kg	<50	<50	<50	<50	<50
^ >C10 - C16 Fraction minus Naphthalene (F2)	----	50	mg/kg	<50	<50	<50	<50	<50
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	<0.0002	----
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.0002	mg/kg	<0.0002	<0.0002	<0.0002	<0.0002	----
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.0002	mg/kg	<0.0002	<0.0002	<0.0002	<0.0002	----
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.0002	mg/kg	<0.0002	<0.0002	<0.0002	<0.0002	----
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.0002	mg/kg	<0.0002	<0.0002	<0.0002	<0.0002	----
Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.0002	mg/kg	<0.0002	<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	<0.001	----
Perfluoropentanoic acid (PFPeA)	2706-90-3	0.0002	mg/kg	<0.0002	<0.0002	<0.0002	<0.0002	----
Perfluorohexanoic acid (PFHxA)	307-24-4	0.0002	mg/kg	<0.0002	<0.0002	<0.0002	<0.0002	----
Perfluoroheptanoic acid (PFHpA)	375-85-9	0.0002	mg/kg	<0.0002	<0.0002	<0.0002	<0.0002	----

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Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH143_1.0_220119	SOP_BH144_0.3_220119	SOP_BH144_0.6_220119	SOP_BH145_0.3_220119	SOP_BH145_1.0_220119
				Sampling date / time	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00
					ES2202264-011	ES2202264-012	ES2202264-013	ES2202264-014	ES2202264-015
					Result	Result	Result	Result	Result
EP231B: Perfluoroalkyl Carboxylic Acids - Continued									
Perfluorooctanoic acid (PFOA)	335-67-1	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	<0.0002	----
Perfluorononanoic acid (PFNA)	375-95-1	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	<0.0002	----
Perfluorodecanoic acid (PFDA)	335-76-2	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	<0.0002	----
Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	<0.0002	----
Perfluorododecanoic acid (PFDoDA)	307-55-1	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	<0.0002	----
Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	<0.0002	----
Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.0005	mg/kg		<0.0005	<0.0005	<0.0005	<0.0005	----
EP231C: Perfluoroalkyl Sulfonamides									
Perfluorooctane sulfonamide (FOSA)	754-91-6	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	<0.0002	----
N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.0005	mg/kg		<0.0005	<0.0005	<0.0005	<0.0005	----
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.0005	mg/kg		<0.0005	<0.0005	<0.0005	<0.0005	----
N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.0005	mg/kg		<0.0005	<0.0005	<0.0005	<0.0005	----
N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.0005	mg/kg		<0.0005	<0.0005	<0.0005	<0.0005	----
N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	<0.0002	----
N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.0002	mg/kg		<0.0002	<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	<0.0005	----
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.0005	mg/kg		<0.0005	<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	<0.0005	----

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Analytical Results

Sub-Matrix: SOIL
(Matrix: SOIL)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH143_1.0_220119	SOP_BH144_0.3_220119	SOP_BH144_0.6_220119	SOP_BH145_0.3_220119	SOP_BH145_1.0_220119
				Sampling date / time	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00
					ES2202264-011	ES2202264-012	ES2202264-013	ES2202264-014	ES2202264-015
					Result	Result	Result	Result	Result
EP231D: (n:2) Fluorotelomer Sulfonic Acids - Continued									
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.0005	mg/kg		<0.0005	<0.0005	<0.0005	<0.0005	---
EP231P: PFAS Sums									
Sum of PFAS	---	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	<0.0002	---
Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	<0.0002	---
Sum of PFAS (WA DER List)	---	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	<0.0002	---
EP066S: PCB Surrogate									
Decachlorobiphenyl	2051-24-3	0.1	%		106	115	117	116	116
EP068S: Organochlorine Pesticide Surrogate									
Dibromo-DDE	21655-73-2	0.05	%		100	113	117	121	116
EP068T: Organophosphorus Pesticide Surrogate									
DEF	78-48-8	0.05	%		77.1	76.4	77.6	91.8	84.4
EP074S: VOC Surrogates									
1.2-Dichloroethane-D4	17060-07-0	0.5	%		85.9	---	81.1	---	87.4
Toluene-D8	2037-26-5	0.5	%		85.2	---	80.9	---	87.7
4-Bromofluorobenzene	460-00-4	0.5	%		83.5	---	81.3	---	88.0
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	0.5	%		92.2	92.4	96.3	91.2	95.0
2-Chlorophenol-D4	93951-73-6	0.5	%		90.2	91.3	94.0	89.6	91.2
2.4.6-Tribromophenol	118-79-6	0.5	%		69.0	63.1	69.0	65.4	69.1
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	0.5	%		95.0	95.8	100	94.6	100
Anthracene-d10	1719-06-8	0.5	%		106	105	111	106	111
4-Terphenyl-d14	1718-51-0	0.5	%		91.4	92.2	98.5	93.2	98.4
EP075S: Acid Extractable Surrogates									
2-Fluorophenol	367-12-4	0.5	%		103	---	113	---	97.3
Phenol-d6	13127-88-3	0.5	%		99.3	---	111	---	93.1
2-Chlorophenol-D4	93951-73-6	0.5	%		103	---	109	---	95.1
2.4.6-Tribromophenol	118-79-6	0.5	%		80.6	---	75.9	---	82.0
EP075T: Base/Neutral Extractable Surrogates									
Nitrobenzene-D5	4165-60-0	0.5	%		88.7	---	105	---	81.3
1.2-Dichlorobenzene-D4	2199-69-1	0.5	%		87.3	---	93.4	---	84.7

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Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH143_1.0_220119	SOP_BH144_0.3_220119	SOP_BH144_0.6_220119	SOP_BH145_0.3_220119	SOP_BH145_1.0_220119
				Sampling date / time	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00
					ES2202264-011	ES2202264-012	ES2202264-013	ES2202264-014	ES2202264-015
					Result	Result	Result	Result	Result
EP075T: Base/Neutral Extractable Surrogates - Continued									
2-Fluorobiphenyl	321-60-8	0.5	%		98.8	----	94.0	---	96.1
Anthracene-d10	1719-06-8	0.5	%		112	----	119	---	114
4-Terphenyl-d14	1718-51-0	0.5	%		92.0	----	92.6	---	85.4
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	0.2	%		83.5	94.1	78.7	100	84.9
Toluene-D8	2037-26-5	0.2	%		86.0	83.8	82.0	92.4	88.6
4-Bromofluorobenzene	460-00-4	0.2	%		85.0	89.0	82.7	111	89.6
EP231S: PFAS Surrogate									
13C4-PFOS	----	0.0002	%		106	104	106	104	---
13C8-PFOA	----	0.0002	%		101	102	100	102	---

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Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	SOP_BH145_5.0_220119	DUP02_220119	DUP03_220119	TRIP03_220119	DUP04_220119
			Sampling date / time	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00
Compound	CAS Number	LOR	Unit	ES2202264-016	ES2202264-017	ES2202264-018	ES2202264-019	ES2202264-020
				Result	Result	Result	Result	Result
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	----	0.1	%	8.3	9.2	10.3	11.0	8.4
EG005(ED093)T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	9	8	----	---	8
Cadmium	7440-43-9	1	mg/kg	<1	<1	----	---	<1
Chromium	7440-47-3	2	mg/kg	8	8	----	---	7
Copper	7440-50-8	5	mg/kg	46	39	----	---	48
Lead	7439-92-1	5	mg/kg	16	16	----	---	16
Nickel	7440-02-0	2	mg/kg	46	25	----	---	42
Zinc	7440-66-6	5	mg/kg	280	176	----	---	270
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
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

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Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	SOP_BH145_5.0_220119	DUP02_220119	DUP03_220119	TRIP03_220119	DUP04_220119
			Sampling date / time	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00
Compound	CAS Number	LOR	Unit	ES2202264-016	ES2202264-017	ES2202264-018	ES2202264-019	ES2202264-020
				Result	Result	Result	Result	Result
EP068A: Organochlorine Pesticides (OC) - Continued								
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
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	----	---	---
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	---	**0.6**	---	---	---
tert-Butylbenzene	98-06-6	0.5	mg/kg	---	<0.5	---	---	---

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Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	SOP_BH145_5.0_220119	DUP02_220119	DUP03_220119	TRIP03_220119	DUP04_220119
				Sampling date / time	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00
Compound	CAS Number	LOR	Unit		ES2202264-016	ES2202264-017	ES2202264-018	ES2202264-019	ES2202264-020
					Result	Result	Result	Result	Result
EP074A: Monocyclic Aromatic Hydrocarbons - Continued									
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	----	---	---	
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	---	---	---	

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Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	SOP_BH145_5.0_220119	DUP02_220119	DUP03_220119	TRIP03_220119	DUP04_220119
				Sampling date / time	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00
Compound	CAS Number	LOR	Unit		ES2202264-016	ES2202264-017	ES2202264-018	ES2202264-019	ES2202264-020
					Result	Result	Result	Result	Result
EP074E: Halogenated Aliphatic Compounds - Continued									
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)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

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Analytical Results

Sub-Matrix: SOIL
(Matrix: SOIL)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH145_5.0_220119	DUP02_220119	DUP03_220119	TRIP03_220119	DUP04_220119
				Sampling date / time	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00
					ES2202264-016	ES2202264-017	ES2202264-018	ES2202264-019	ES2202264-020
					Result	Result	Result	Result	Result
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued									
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg		<0.5	<0.5	----	---	<0.5
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg		<0.5	<0.5	----	---	<0.5
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg		<0.5	<0.5	----	---	<0.5
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg		<0.5	0.5	----	---	<0.5
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg		<0.5	<0.5	----	---	<0.5
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg		0.6	0.6	----	---	0.6
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg		1.2	1.2	----	---	1.2
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	----	---	---
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									
2-Methylnaphthalene	91-57-6	0.5	mg/kg		----	1.4	----	---	---
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									

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Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	SOP_BH145_5.0_220119	DUP02_220119	DUP03_220119	TRIP03_220119	DUP04_220119
				Sampling date / time	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00
Compound	CAS Number	LOR	Unit		ES2202264-016	ES2202264-017	ES2202264-018	ES2202264-019	ES2202264-020
					Result	Result	Result	Result	Result
EP075D: Nitrosamines - Continued									
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									
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									

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Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	SOP_BH145_5.0_220119	DUP02_220119	DUP03_220119	TRIP03_220119	DUP04_220119
			Sampling date / time	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00
Compound	CAS Number	LOR	Unit	ES2202264-016	ES2202264-017	ES2202264-018	ES2202264-019	ES2202264-020
				Result	Result	Result	Result	Result
EP075G: Chlorinated Hydrocarbons - Continued								
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	25	----	---	<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	31	----	---	<10
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg	<10	31	----	---	<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

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Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	SOP_BH145_5.0_220119	DUP02_220119	DUP03_220119	TRIP03_220119	DUP04_220119
			Sampling date / time	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00
Compound	CAS Number	LOR	Unit	ES2202264-016	ES2202264-017	ES2202264-018	ES2202264-019	ES2202264-020
				Result	Result	Result	Result	Result
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions - Continued								
^ >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	<0.0002	<0.0002
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.0002	mg/kg	<0.0002	----	<0.0002	<0.0002	<0.0002
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.0002	mg/kg	<0.0002	----	<0.0002	<0.0002	<0.0002
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.0002	mg/kg	<0.0002	----	<0.0002	<0.0002	<0.0002
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.0002	mg/kg	<0.0002	----	<0.0002	<0.0002	<0.0002
Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.0002	mg/kg	<0.0002	----	<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	<0.001
Perfluoropentanoic acid (PFPeA)	2706-90-3	0.0002	mg/kg	<0.0002	----	<0.0002	<0.0002	<0.0002
Perfluorohexanoic acid (PFHxA)	307-24-4	0.0002	mg/kg	<0.0002	----	<0.0002	<0.0002	<0.0002
Perfluoroheptanoic acid (PFHpA)	375-85-9	0.0002	mg/kg	<0.0002	----	<0.0002	<0.0002	<0.0002
Perfluorooctanoic acid (PFOA)	335-67-1	0.0002	mg/kg	<0.0002	----	<0.0002	<0.0002	<0.0002
Perfluorononanoic acid (PFNA)	375-95-1	0.0002	mg/kg	<0.0002	----	<0.0002	<0.0002	<0.0002
Perfluorodecanoic acid (PFDA)	335-76-2	0.0002	mg/kg	<0.0002	----	<0.0002	<0.0002	<0.0002
Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.0002	mg/kg	<0.0002	----	<0.0002	<0.0002	<0.0002

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Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	SOP_BH145_5.0_220119	DUP02_220119	DUP03_220119	TRIP03_220119	DUP04_220119
				Sampling date / time	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00
Compound	CAS Number	LOR	Unit		ES2202264-016	ES2202264-017	ES2202264-018	ES2202264-019	ES2202264-020
					Result	Result	Result	Result	Result
EP231B: Perfluoroalkyl Carboxylic Acids - Continued									
Perfluorododecanoic acid (PFDoDA)	307-55-1	0.0002	mg/kg		<0.0002	----	<0.0002	<0.0002	<0.0002
Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.0002	mg/kg		<0.0002	----	<0.0002	<0.0002	<0.0002
Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.0005	mg/kg		<0.0005	----	<0.0005	<0.0005	<0.0005
EP231C: Perfluoroalkyl Sulfonamides									
Perfluorooctane sulfonamide (FOSA)	754-91-6	0.0002	mg/kg		<0.0002	----	<0.0002	<0.0002	<0.0002
N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.0005	mg/kg		<0.0005	----	<0.0005	<0.0005	<0.0005
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.0005	mg/kg		<0.0005	----	<0.0005	<0.0005	<0.0005
N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.0005	mg/kg		<0.0005	----	<0.0005	<0.0005	<0.0005
N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.0005	mg/kg		<0.0005	----	<0.0005	<0.0005	<0.0005
N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.0002	mg/kg		<0.0002	----	<0.0002	<0.0002	<0.0002
N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.0002	mg/kg		<0.0002	----	<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	<0.0005
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.0005	mg/kg		<0.0005	----	<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	<0.0005
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.0005	mg/kg		<0.0005	----	<0.0005	<0.0005	<0.0005
EP231P: PFAS Sums									
Sum of PFAS	---	0.0002	mg/kg		<0.0002	----	<0.0002	<0.0002	<0.0002
Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.0002	mg/kg		<0.0002	----	<0.0002	<0.0002	<0.0002

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Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	SOP_BH145_5.0_220119	DUP02_220119	DUP03_220119	TRIP03_220119	DUP04_220119
			Sampling date / time	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00
Compound	CAS Number	LOR	Unit	ES2202264-016	ES2202264-017	ES2202264-018	ES2202264-019	ES2202264-020
				Result	Result	Result	Result	Result
EP231P: PFAS Sums - Continued								
Sum of PFAS (WA DER List)	----	0.0002	mg/kg	<0.0002	----	<0.0002	<0.0002	<0.0002
EP066S: PCB Surrogate								
Decachlorobiphenyl	2051-24-3	0.1	%	103	116	----	---	114
EP068S: Organochlorine Pesticide Surrogate								
Dibromo-DDE	21655-73-2	0.05	%	124	126	----	---	132
EP068T: Organophosphorus Pesticide Surrogate								
DEF	78-48-8	0.05	%	84.9	85.8	----	---	85.2
EP074S: VOC Surrogates								
1.2-Dichloroethane-D4	17060-07-0	0.5	%	----	108	----	---	----
Toluene-D8	2037-26-5	0.5	%	----	108	----	---	----
4-Bromofluorobenzene	460-00-4	0.5	%	----	108	----	---	----
EP075(SIM)S: Phenolic Compound Surrogates								
Phenol-d6	13127-88-3	0.5	%	102	94.9	----	---	91.7
2-Chlorophenol-D4	93951-73-6	0.5	%	101	93.8	----	---	92.2
2.4.6-Tribromophenol	118-79-6	0.5	%	77.0	68.4	----	---	64.4
EP075(SIM)T: PAH Surrogates								
2-Fluorobiphenyl	321-60-8	0.5	%	108	99.1	----	---	95.8
Anthracene-d10	1719-06-8	0.5	%	119	109	----	---	104
4-Terphenyl-d14	1718-51-0	0.5	%	105	97.4	----	---	93.7
EP075S: Acid Extractable Surrogates								
2-Fluorophenol	367-12-4	0.5	%	----	89.5	----	---	----
Phenol-d6	13127-88-3	0.5	%	----	89.4	----	---	----
2-Chlorophenol-D4	93951-73-6	0.5	%	----	91.3	----	---	----
2.4.6-Tribromophenol	118-79-6	0.5	%	----	51.4	----	---	----
EP075T: Base/Neutral Extractable Surrogates								
Nitrobenzene-D5	4165-60-0	0.5	%	----	78.8	----	---	----
1.2-Dichlorobenzene-D4	2199-69-1	0.5	%	----	89.9	----	---	----
2-Fluorobiphenyl	321-60-8	0.5	%	----	99.6	----	---	----
Anthracene-d10	1719-06-8	0.5	%	----	117	----	---	----
4-Terphenyl-d14	1718-51-0	0.5	%	---	83.8	---	---	---
EP080S: TPH(V)/BTEX Surrogates								
1.2-Dichloroethane-D4	17060-07-0	0.2	%	91.1	105	---	---	98.8
Toluene-D8	2037-26-5	0.2	%	93.0	110	---	---	93.4

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Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	SOP_BH145_5.0_220119	DUP02_220119	DUP03_220119	TRIP03_220119	DUP04_220119
				Sampling date / time	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00	19-Jan-2022 00:00
Compound	CAS Number	LOR	Unit		ES2202264-016	ES2202264-017	ES2202264-018	ES2202264-019	ES2202264-020
					Result	Result	Result	Result	Result
EP080S: TPH(V)/BTEX Surrogates - Continued									
4-Bromofluorobenzene	460-00-4	0.2	%		98.8	110	----	---	105
EP231S: PFAS Surrogate									
13C4-PFOS	----	0.0002	%		106	----	112	106	108
13C8-PFOA	----	0.0002	%		104	----	101	99.0	106

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Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	SOP_BH102_0.7_220120	SOP_BH102_3.0_220120	SOP_BH107_1.0_220120	SOP_BH107_2.0_220120	SOP_BH108_0.4_220120
			Sampling date / time	20-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00	19-Jan-2022 00:00
Compound	CAS Number	LOR	Unit	ES2202264-022	ES2202264-023	ES2202264-024	ES2202264-025	ES2202264-026
				Result	Result	Result	Result	Result
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	----	1.0	%	10.9	9.9	11.2	11.2	19.9
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	480	----	234	---	151
APPROVED IDENTIFIER:	----	-	--	A. SMYLIE	----	A. SMYLIE	---	A. SMYLIE
EG005(ED093)T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	<5	6	<5	7	<5
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	<1	<1
Chromium	7440-47-3	2	mg/kg	12	5	4	5	5
Copper	7440-50-8	5	mg/kg	<5	24	24	41	50
Lead	7439-92-1	5	mg/kg	15	10	14	14	<5
Nickel	7440-02-0	2	mg/kg	2	3	4	14	68
Zinc	7440-66-6	5	mg/kg	9	28	36	98	27
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	<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	<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

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Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	SOP_BH102_0.7_220120	SOP_BH102_3.0_220120	SOP_BH107_1.0_220120	SOP_BH107_2.0_220120	SOP_BH108_0.4_220120
			Sampling date / time	20-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00	19-Jan-2022 00:00
Compound	CAS Number	LOR	Unit	ES2202264-022	ES2202264-023	ES2202264-024	ES2202264-025	ES2202264-026
				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

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Analytical Results

Sub-Matrix: SOIL
(Matrix: SOIL)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH102_0.7_220120	SOP_BH102_3.0_220120	SOP_BH107_1.0_220120	SOP_BH107_2.0_220120	SOP_BH108_0.4_220120
				Sampling date / time	20-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00	19-Jan-2022 00:00
					ES2202264-022	ES2202264-023	ES2202264-024	ES2202264-025	ES2202264-026
					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

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Analytical Results

Sub-Matrix: SOIL
(Matrix: SOIL)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH102_0.7_220120	SOP_BH102_3.0_220120	SOP_BH107_1.0_220120	SOP_BH107_2.0_220120	SOP_BH108_0.4_220120
				Sampling date / time	20-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00	19-Jan-2022 00:00
					ES2202264-022	ES2202264-023	ES2202264-024	ES2202264-025	ES2202264-026
					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)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		<0.5	<0.5	<0.5	<0.5	<0.5
Anthracene	120-12-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5

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Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH102_0.7_220120	SOP_BH102_3.0_220120	SOP_BH107_1.0_220120	SOP_BH107_2.0_220120	SOP_BH108_0.4_220120
				Sampling date / time	20-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00	19-Jan-2022 00:00
					ES2202264-022	ES2202264-023	ES2202264-024	ES2202264-025	ES2202264-026
					Result	Result	Result	Result	Result
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued									
Fluoranthene	206-44-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Pyrene	129-00-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benz(a)anthracene	56-55-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Chrysene	218-01-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg		<0.5	<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		<0.5	<0.5	<0.5	<0.5	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg		**0.6**	**0.6**	**0.6**	**0.6**	**0.6**
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg		**1.2**	**1.2**	**1.2**	**1.2**	**1.2**
EP075A: 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	0.5	mg/kg		<0.5	----	<0.5	---	<0.5
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	1	mg/kg		<1	----	<1	---	<1
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									

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Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	SOP_BH102_0.7_220120	SOP_BH102_3.0_220120	SOP_BH107_1.0_220120	SOP_BH107_2.0_220120	SOP_BH108_0.4_220120
			Sampling date / time	20-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00	19-Jan-2022 00:00
Compound	CAS Number	LOR	Unit	ES2202264-022	ES2202264-023	ES2202264-024	ES2202264-025	ES2202264-026
				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

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Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH102_0.7_220120	SOP_BH102_3.0_220120	SOP_BH107_1.0_220120	SOP_BH107_2.0_220120	SOP_BH108_0.4_220120
				Sampling date / time	20-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00	19-Jan-2022 00:00
					ES2202264-022	ES2202264-023	ES2202264-024	ES2202264-025	ES2202264-026
					Result	Result	Result	Result	Result
EP075E: Nitroaromatics and Ketones - Continued									
Chlorobenzilate	510-15-6	0.5	mg/kg		<0.5	----	<0.5	---	<0.5
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	<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	<50	<50
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
C6 - C10 Fraction	C6_C10	10	mg/kg		<10	<10	<10	<10	<10

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Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	SOP_BH102_0.7_220120	SOP_BH102_3.0_220120	SOP_BH107_1.0_220120	SOP_BH107_2.0_220120	SOP_BH108_0.4_220120
			Sampling date / time	20-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00	19-Jan-2022 00:00
Compound	CAS Number	LOR	Unit	ES2202264-022	ES2202264-023	ES2202264-024	ES2202264-025	ES2202264-026
				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	<100	<100	<100	<100
>C34 - C40 Fraction	----	100	mg/kg	<100	<100	<100	<100	<100
^ >C10 - C40 Fraction (sum)	----	50	mg/kg	<50	<50	<50	<50	<50
^ >C10 - C16 Fraction minus Naphthalene (F2)	----	50	mg/kg	<50	<50	<50	<50	<50
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
EP066S: PCB Surrogate								
Decachlorobiphenyl	2051-24-3	0.1	%	**126**	**101**	**114**	**117**	**108**
EP068S: Organochlorine Pesticide Surrogate								
Dibromo-DDE	21655-73-2	0.05	%	**130**	**124**	**108**	**114**	**106**
EP068T: Organophosphorus Pesticide Surrogate								
DEF	78-48-8	0.05	%	**79.3**	**59.9**	**94.9**	**91.6**	**92.8**
EP074S: VOC Surrogates								
1.2-Dichloroethane-D4	17060-07-0	0.5	%	**97.7**	**----**	**115**	**---**	**92.1**
Toluene-D8	2037-26-5	0.5	%	**94.9**	**----**	**114**	**---**	**90.8**
4-Bromofluorobenzene	460-00-4	0.5	%	**97.8**	**----**	**112**	**---**	**86.3**
EP075(SIM)S: Phenolic Compound Surrogates								
Phenol-d6	13127-88-3	0.5	%	**96.7**	**91.0**	**80.2**	**83.9**	**84.4**
2-Chlorophenol-D4	93951-73-6	0.5	%	**95.2**	**89.3**	**81.7**	**85.8**	**84.7**
2.4.6-Tribromophenol	118-79-6	0.5	%	**66.8**	**62.2**	**58.8**	**59.7**	**57.2**
EP075(SIM)T: PAH Surrogates								
2-Fluorobiphenyl	321-60-8	0.5	%	**98.7**	**94.4**	**101**	**99.4**	**103**
Anthracene-d10	1719-06-8	0.5	%	**107**	**96.9**	**102**	**108**	**109**

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Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH102_0.7_220120	SOP_BH102_3.0_220120	SOP_BH107_1.0_220120	SOP_BH107_2.0_220120	SOP_BH108_0.4_220120
				Sampling date / time	20-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00	19-Jan-2022 00:00
					ES2202264-022	ES2202264-023	ES2202264-024	ES2202264-025	ES2202264-026
					Result	Result	Result	Result	Result
EP075(SIM)T: PAH Surrogates - Continued									
4-Terphenyl-d14	1718-51-0	0.5	%		95.5	94.7	94.1	99.9	102
EP075S: Acid Extractable Surrogates									
2-Fluorophenol	367-12-4	0.5	%		105	----	101	---	109
Phenol-d6	13127-88-3	0.5	%		103	----	93.0	---	97.7
2-Chlorophenol-D4	93951-73-6	0.5	%		107	----	96.0	---	105
2.4.6-Tribromophenol	118-79-6	0.5	%		77.4	----	70.9	---	80.1
EP075T: Base/Neutral Extractable Surrogates									
Nitrobenzene-D5	4165-60-0	0.5	%		98.2	----	103	---	100
1.2-Dichlorobenzene-D4	2199-69-1	0.5	%		95.2	----	86.0	---	91.5
2-Fluorobiphenyl	321-60-8	0.5	%		95.0	----	89.1	---	97.8
Anthracene-d10	1719-06-8	0.5	%		115	----	116	---	116
4-Terphenyl-d14	1718-51-0	0.5	%		78.2	----	97.4	---	97.4
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	0.2	%		95.6	122	113	120	90.0
Toluene-D8	2037-26-5	0.2	%		89.8	120	108	117	86.1
4-Bromofluorobenzene	460-00-4	0.2	%		97.6	124	111	108	84.8

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Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	SOP_BH108_3.0_220120	SOP_BH109_0.3_220120	SOP_BH109_1.0_220120	SOP_BH120_0.5_220120	SOP_BH120_3.0_220120
			Sampling date / time	19-Jan-2022 00:00	19-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00
Compound	CAS Number	LOR	Unit	ES2202264-027	ES2202264-028	ES2202264-029	ES2202264-030	ES2202264-031
				Result	Result	Result	Result	Result
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	----	1.0	%	9.0	18.3	22.3	11.8	7.0
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	----	458	----	159	----
APPROVED IDENTIFIER:	----	-	--	----	A. SMYLIE	----	A. SMYLIE	----
EG005(ED093)T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	7	9	7	<5	5
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	<1	<1
Chromium	7440-47-3	2	mg/kg	5	12	14	6	5
Copper	7440-50-8	5	mg/kg	44	19	14	43	39
Lead	7439-92-1	5	mg/kg	16	12	15	9	18
Nickel	7440-02-0	2	mg/kg	15	14	<2	5	32
Zinc	7440-66-6	5	mg/kg	115	7	<5	9	117
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	<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	<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

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Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	SOP_BH108_3.0_220120	SOP_BH109_0.3_220120	SOP_BH109_1.0_220120	SOP_BH120_0.5_220120	SOP_BH120_3.0_220120
				Sampling date / time	19-Jan-2022 00:00	19-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00
Compound	CAS Number	LOR	Unit		ES2202264-027	ES2202264-028	ES2202264-029	ES2202264-030	ES2202264-031
					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	72-54-8/72-55-9/50-29-3	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
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

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Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH108_3.0_220120	SOP_BH109_0.3_220120	SOP_BH109_1.0_220120	SOP_BH120_0.5_220120	SOP_BH120_3.0_220120
				Sampling date / time	19-Jan-2022 00:00	19-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00
					ES2202264-027	ES2202264-028	ES2202264-029	ES2202264-030	ES2202264-031
					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

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Analytical Results

Sub-Matrix: SOIL
(Matrix: SOIL)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH108_3.0_220120	SOP_BH109_0.3_220120	SOP_BH109_1.0_220120	SOP_BH120_0.5_220120	SOP_BH120_3.0_220120
				Sampling date / time	19-Jan-2022 00:00	19-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00
					ES2202264-027	ES2202264-028	ES2202264-029	ES2202264-030	ES2202264-031
					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)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		<0.5	<0.5	<0.5	<0.5	<0.5
Anthracene	120-12-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5

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Analytical Results

Sub-Matrix: SOIL
(Matrix: SOIL)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH108_3.0_220120	SOP_BH109_0.3_220120	SOP_BH109_1.0_220120	SOP_BH120_0.5_220120	SOP_BH120_3.0_220120
				Sampling date / time	19-Jan-2022 00:00	19-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00
					ES2202264-027	ES2202264-028	ES2202264-029	ES2202264-030	ES2202264-031
					Result	Result	Result	Result	Result
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued									
Fluoranthene	206-44-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Pyrene	129-00-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benz(a)anthracene	56-55-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Chrysene	218-01-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg		<0.5	<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		<0.5	<0.5	<0.5	<0.5	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg		**0.6**	**0.6**	**0.6**	**0.6**	**0.6**
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg		**1.2**	**1.2**	**1.2**	**1.2**	**1.2**
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									
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									

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Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	SOP_BH108_3.0_220120	SOP_BH109_0.3_220120	SOP_BH109_1.0_220120	SOP_BH120_0.5_220120	SOP_BH120_3.0_220120
				Sampling date / time	19-Jan-2022 00:00	19-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00
Compound	CAS Number	LOR	Unit		ES2202264-027	ES2202264-028	ES2202264-029	ES2202264-030	ES2202264-031
					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

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Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH108_3.0_220120	SOP_BH109_0.3_220120	SOP_BH109_1.0_220120	SOP_BH120_0.5_220120	SOP_BH120_3.0_220120
				Sampling date / time	19-Jan-2022 00:00	19-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00
					ES2202264-027	ES2202264-028	ES2202264-029	ES2202264-030	ES2202264-031
					Result	Result	Result	Result	Result
EP075E: Nitroaromatics and Ketones - Continued									
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
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	<50	<50
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
C6 - C10 Fraction	C6_C10	10	mg/kg		<10	<10	<10	<10	<10

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Analytical Results

Sub-Matrix: SOIL
(Matrix: SOIL)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH108_3.0_220120	SOP_BH109_0.3_220120	SOP_BH109_1.0_220120	SOP_BH120_0.5_220120	SOP_BH120_3.0_220120
				Sampling date / time	19-Jan-2022 00:00	19-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00
					ES2202264-027	ES2202264-028	ES2202264-029	ES2202264-030	ES2202264-031
					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	<100	<100	<100	<100
>C34 - C40 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
^ >C10 - C40 Fraction (sum)	----	50	mg/kg		<50	<50	<50	<50	<50
^ >C10 - C16 Fraction minus Naphthalene (F2)	----	50	mg/kg		<50	<50	<50	<50	<50
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
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.0002	mg/kg		----	----	----	<0.0002	<0.0002
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.0002	mg/kg		----	----	----	<0.0002	<0.0002
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.0002	mg/kg		----	----	----	<0.0002	<0.0002
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.0002	mg/kg		----	----	----	<0.0002	<0.0002
Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.0002	mg/kg		----	----	----	<0.0002	<0.0002
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

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Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH108_3.0_220120	SOP_BH109_0.3_220120	SOP_BH109_1.0_220120	SOP_BH120_0.5_220120	SOP_BH120_3.0_220120
				Sampling date / time	19-Jan-2022 00:00	19-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00
					ES2202264-027	ES2202264-028	ES2202264-029	ES2202264-030	ES2202264-031
					Result	Result	Result	Result	Result
EP231B: Perfluoroalkyl Carboxylic Acids - Continued									
Perfluorooctanoic acid (PFOA)	335-67-1	0.0002	mg/kg		----	----	----	<0.0002	<0.0002
Perfluorononanoic acid (PFNA)	375-95-1	0.0002	mg/kg		----	----	----	<0.0002	<0.0002
Perfluorodecanoic acid (PFDA)	335-76-2	0.0002	mg/kg		----	----	----	<0.0002	<0.0002
Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.0002	mg/kg		----	----	----	<0.0002	<0.0002
Perfluorododecanoic acid (PFDoDA)	307-55-1	0.0002	mg/kg		----	----	----	<0.0002	<0.0002
Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.0002	mg/kg		----	----	----	<0.0002	<0.0002
Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.0005	mg/kg		----	----	----	<0.0005	<0.0005
EP231C: Perfluoroalkyl Sulfonamides									
Perfluorooctane sulfonamide (FOSA)	754-91-6	0.0002	mg/kg		----	----	----	<0.0002	<0.0002
N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.0005	mg/kg		----	----	----	<0.0005	<0.0005
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.0005	mg/kg		----	----	----	<0.0005	<0.0005
N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.0005	mg/kg		----	----	----	<0.0005	<0.0005
N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.0005	mg/kg		----	----	----	<0.0005	<0.0005
N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.0002	mg/kg		----	----	----	<0.0002	<0.0002
N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.0002	mg/kg		----	----	----	<0.0002	<0.0002
EP231D: (n:2) Fluorotelomer Sulfonic Acids									
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

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Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	SOP_BH108_3.0_220120	SOP_BH109_0.3_220120	SOP_BH109_1.0_220120	SOP_BH120_0.5_220120	SOP_BH120_3.0_220120
			Sampling date / time	19-Jan-2022 00:00	19-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00
Compound	CAS Number	LOR	Unit	ES2202264-027	ES2202264-028	ES2202264-029	ES2202264-030	ES2202264-031
				Result	Result	Result	Result	Result
EP231D: (n:2) Fluorotelomer Sulfonic Acids - Continued								
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.0005	mg/kg	----	----	----	<0.0005	<0.0005
EP231P: PFAS Sums								
Sum of PFAS	----	0.0002	mg/kg	----	----	----	<0.0002	<0.0002
Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.0002	mg/kg	----	----	----	<0.0002	<0.0002
Sum of PFAS (WA DER List)	----	0.0002	mg/kg	----	----	----	<0.0002	<0.0002
EP066S: PCB Surrogate								
Decachlorobiphenyl	2051-24-3	0.1	%	120	122	103	121	116
EP068S: Organochlorine Pesticide Surrogate								
Dibromo-DDE	21655-73-2	0.05	%	110	111	114	126	114
EP068T: Organophosphorus Pesticide Surrogate								
DEF	78-48-8	0.05	%	95.6	99.6	103	102	99.3
EP074S: VOC Surrogates								
1.2-Dichloroethane-D4	17060-07-0	0.5	%	----	----	88.2	---	100
Toluene-D8	2037-26-5	0.5	%	----	----	86.6	---	92.6
4-Bromofluorobenzene	460-00-4	0.5	%	----	----	83.7	---	91.9
EP075(SIM)S: Phenolic Compound Surrogates								
Phenol-d6	13127-88-3	0.5	%	84.1	80.3	80.9	81.7	80.8
2-Chlorophenol-D4	93951-73-6	0.5	%	85.9	79.3	80.6	81.9	82.1
2.4.6-Tribromophenol	118-79-6	0.5	%	55.6	53.6	52.7	53.1	52.9
EP075(SIM)T: PAH Surrogates								
2-Fluorobiphenyl	321-60-8	0.5	%	97.9	102	102	101	102
Anthracene-d10	1719-06-8	0.5	%	106	101	101	107	105
4-Terphenyl-d14	1718-51-0	0.5	%	99.2	95.4	95.8	99.6	98.9
EP075S: Acid Extractable Surrogates								
2-Fluorophenol	367-12-4	0.5	%	----	----	107	---	112
Phenol-d6	13127-88-3	0.5	%	----	----	93.9	---	105
2-Chlorophenol-D4	93951-73-6	0.5	%	----	----	103	---	107
2.4.6-Tribromophenol	118-79-6	0.5	%	---	---	88.3	---	82.6
EP075T: Base/Neutral Extractable Surrogates								
Nitrobenzene-D5	4165-60-0	0.5	%	---	---	96.5	---	106
1.2-Dichlorobenzene-D4	2199-69-1	0.5	%	---	---	88.6	---	94.4

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Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH108_3.0_220120	SOP_BH109_0.3_220120	SOP_BH109_1.0_220120	SOP_BH120_0.5_220120	SOP_BH120_3.0_220120
				Sampling date / time	19-Jan-2022 00:00	19-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00
					ES2202264-027	ES2202264-028	ES2202264-029	ES2202264-030	ES2202264-031
					Result	Result	Result	Result	Result
EP075T: Base/Neutral Extractable Surrogates - Continued									
2-Fluorobiphenyl	321-60-8	0.5	%		----	----	91.8	---	92.0
Anthracene-d10	1719-06-8	0.5	%		----	----	116	---	117
4-Terphenyl-d14	1718-51-0	0.5	%		----	----	101	---	106
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	0.2	%		102	90.6	86.3	98.1	97.8
Toluene-D8	2037-26-5	0.2	%		98.7	86.2	82.1	93.2	87.7
4-Bromofluorobenzene	460-00-4	0.2	%		97.8	88.5	83.4	93.1	91.4
EP231S: PFAS Surrogate									
13C4-PFOS	----	0.0002	%		----	----	----	100	112
13C8-PFOA	----	0.0002	%		----	----	----	98.5	98.5

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Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	SOP_BH121_1.0_220120	SOP_BH121_5.0_220120	SOP_BH101_0.5_220120	SOP_BH101_1.3_220120	SOP_BH101_2.0_220120
			Sampling date / time	20-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00
Compound	CAS Number	LOR	Unit	ES2202264-032	ES2202264-033	ES2202264-034	ES2202264-035	ES2202264-036
				Result	Result	Result	Result	Result
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	----	1.0	%	9.8	5.3	20.6	8.1	20.6
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	133	----	340	---	---
APPROVED IDENTIFIER:	----	-	--	A. SMYLIE	----	A. SMYLIE	---	---
EG005(ED093)T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	6	<5	6	<5	6
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	<1	<1
Chromium	7440-47-3	2	mg/kg	4	6	10	2	11
Copper	7440-50-8	5	mg/kg	21	37	19	<5	12
Lead	7439-92-1	5	mg/kg	6	17	14	<5	15
Nickel	7440-02-0	2	mg/kg	<2	25	8	2	<2
Zinc	7440-66-6	5	mg/kg	15	100	16	6	<5
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	<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	<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

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Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	SOP_BH121_1.0_220120	SOP_BH121_5.0_220120	SOP_BH101_0.5_220120	SOP_BH101_1.3_220120	SOP_BH101_2.0_220120
			Sampling date / time	20-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00
Compound	CAS Number	LOR	Unit	ES2202264-032	ES2202264-033	ES2202264-034	ES2202264-035	ES2202264-036
				Result	Result	Result	Result	Result
EP068A: Organochlorine Pesticides (OC) - Continued								
Dieldrin	60-57-1	0.05	mg/kg	<0.05	<0.05	**0.08**	**0.67**	**0.06**
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	**0.08**	**0.67**	**0.06**
^ 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
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

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Analytical Results

Sub-Matrix: SOIL
(Matrix: SOIL)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH121_1.0_220120	SOP_BH121_5.0_220120	SOP_BH101_0.5_220120	SOP_BH101_1.3_220120	SOP_BH101_2.0_220120
				Sampling date / time	20-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00
					ES2202264-032	ES2202264-033	ES2202264-034	ES2202264-035	ES2202264-036
					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	---	---

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Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH121_1.0_220120	SOP_BH121_5.0_220120	SOP_BH101_0.5_220120	SOP_BH101_1.3_220120	SOP_BH101_2.0_220120
				Sampling date / time	20-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00
					ES2202264-032	ES2202264-033	ES2202264-034	ES2202264-035	ES2202264-036
					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)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		<0.5	<0.5	<0.5	<0.5	<0.5
Anthracene	120-12-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5

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Analytical Results

Sub-Matrix: SOIL
(Matrix: SOIL)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH121_1.0_220120	SOP_BH121_5.0_220120	SOP_BH101_0.5_220120	SOP_BH101_1.3_220120	SOP_BH101_2.0_220120
				Sampling date / time	20-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00
					ES2202264-032	ES2202264-033	ES2202264-034	ES2202264-035	ES2202264-036
					Result	Result	Result	Result	Result
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued									
Fluoranthene	206-44-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Pyrene	129-00-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benz(a)anthracene	56-55-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Chrysene	218-01-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg		<0.5	<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		<0.5	<0.5	<0.5	<0.5	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg		**0.6**	**0.6**	**0.6**	**0.6**	**0.6**
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg		**1.2**	**1.2**	**1.2**	**1.2**	**1.2**
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									
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									

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Analytical Results

Sub-Matrix: SOIL
(Matrix: SOIL)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH121_1.0_220120	SOP_BH121_5.0_220120	SOP_BH101_0.5_220120	SOP_BH101_1.3_220120	SOP_BH101_2.0_220120
				Sampling date / time	20-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00
					ES2202264-032	ES2202264-033	ES2202264-034	ES2202264-035	ES2202264-036
					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	---	---

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Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	SOP_BH121_1.0_220120	SOP_BH121_5.0_220120	SOP_BH101_0.5_220120	SOP_BH101_1.3_220120	SOP_BH101_2.0_220120
				Sampling date / time	20-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00
Compound	CAS Number	LOR	Unit		ES2202264-032	ES2202264-033	ES2202264-034	ES2202264-035	ES2202264-036
					Result	Result	Result	Result	Result
EP075E: Nitroaromatics and Ketones - Continued									
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	---	---
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	----	10	mg/kg		<10	11	<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	<50	<50
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
C6 - C10 Fraction	C6_C10	10	mg/kg		<10	14	<10	<10	<10

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Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	SOP_BH121_1.0_220120	SOP_BH121_5.0_220120	SOP_BH101_0.5_220120	SOP_BH101_1.3_220120	SOP_BH101_2.0_220120
			Sampling date / time	20-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00
Compound	CAS Number	LOR	Unit	ES2202264-032	ES2202264-033	ES2202264-034	ES2202264-035	ES2202264-036
				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	14	<10	<10	<10
>C10 - C16 Fraction	----	50	mg/kg	<50	<50	<50	<50	<50
>C16 - C34 Fraction	----	100	mg/kg	<100	<100	<100	<100	<100
>C34 - C40 Fraction	----	100	mg/kg	<100	<100	<100	<100	<100
^ >C10 - C40 Fraction (sum)	----	50	mg/kg	<50	<50	<50	<50	<50
^ >C10 - C16 Fraction minus Naphthalene (F2)	----	50	mg/kg	<50	<50	<50	<50	<50
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	---	---
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	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	---	---
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	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	---	---
Perfluorodecane sulfonic acid (PFDS)	335-77-3	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	---	---

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Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH121_1.0_220120	SOP_BH121_5.0_220120	SOP_BH101_0.5_220120	SOP_BH101_1.3_220120	SOP_BH101_2.0_220120
				Sampling date / time	20-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00
					ES2202264-032	ES2202264-033	ES2202264-034	ES2202264-035	ES2202264-036
					Result	Result	Result	Result	Result
EP231B: Perfluoroalkyl Carboxylic Acids - Continued									
Perfluorooctanoic acid (PFOA)	335-67-1	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	---	---
Perfluorononanoic acid (PFNA)	375-95-1	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	---	---
Perfluorodecanoic acid (PFDA)	335-76-2	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	---	---
Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	---	---
Perfluorododecanoic acid (PFDoDA)	307-55-1	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	---	---
Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	---	---
Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.0005	mg/kg		<0.0005	<0.0005	<0.0005	---	---
EP231C: Perfluoroalkyl Sulfonamides									
Perfluorooctane sulfonamide (FOSA)	754-91-6	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	---	---
N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.0005	mg/kg		<0.0005	<0.0005	<0.0005	---	---
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.0005	mg/kg		<0.0005	<0.0005	<0.0005	---	---
N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.0005	mg/kg		<0.0005	<0.0005	<0.0005	---	---
N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.0005	mg/kg		<0.0005	<0.0005	<0.0005	---	---
N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	---	---
N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	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	---	---

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Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	SOP_BH121_1.0_220120	SOP_BH121_5.0_220120	SOP_BH101_0.5_220120	SOP_BH101_1.3_220120	SOP_BH101_2.0_220120
			Sampling date / time	20-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00
Compound	CAS Number	LOR	Unit	ES2202264-032	ES2202264-033	ES2202264-034	ES2202264-035	ES2202264-036
				Result	Result	Result	Result	Result
EP231D: (n:2) Fluorotelomer Sulfonic Acids - Continued								
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 PFAS	----	0.0002	mg/kg	<0.0002	<0.0002	<0.0002	---	---
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	%	108	103	116	106	111
EP068S: Organochlorine Pesticide Surrogate								
Dibromo-DDE	21655-73-2	0.05	%	102	95.6	126	119	124
EP068T: Organophosphorus Pesticide Surrogate								
DEF	78-48-8	0.05	%	89.0	86.2	113	97.5	102
EP074S: VOC Surrogates								
1.2-Dichloroethane-D4	17060-07-0	0.5	%	96.5	----	89.2	---	---
Toluene-D8	2037-26-5	0.5	%	95.9	----	82.2	---	---
4-Bromofluorobenzene	460-00-4	0.5	%	90.9	----	83.0	---	---
EP075(SIM)S: Phenolic Compound Surrogates								
Phenol-d6	13127-88-3	0.5	%	80.4	79.9	79.7	84.4	79.8
2-Chlorophenol-D4	93951-73-6	0.5	%	81.1	79.4	80.8	84.2	79.9
2.4.6-Tribromophenol	118-79-6	0.5	%	48.0	48.2	48.9	58.4	51.7
EP075(SIM)T: PAH Surrogates								
2-Fluorobiphenyl	321-60-8	0.5	%	104	104	95.4	102	105
Anthracene-d10	1719-06-8	0.5	%	102	104	106	108	103
4-Terphenyl-d14	1718-51-0	0.5	%	96.7	96.6	98.1	101	97.6
EP075S: Acid Extractable Surrogates								
2-Fluorophenol	367-12-4	0.5	%	101	----	112	---	---
Phenol-d6	13127-88-3	0.5	%	97.0	----	102	---	---
2-Chlorophenol-D4	93951-73-6	0.5	%	106	----	111	---	---
2.4.6-Tribromophenol	118-79-6	0.5	%	70.8	----	90.0	---	---
EP075T: Base/Neutral Extractable Surrogates								
Nitrobenzene-D5	4165-60-0	0.5	%	96.8	----	105	---	---
1.2-Dichlorobenzene-D4	2199-69-1	0.5	%	96.9	----	95.0	---	---

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Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH121_1.0_220120	SOP_BH121_5.0_220120	SOP_BH101_0.5_220120	SOP_BH101_1.3_220120	SOP_BH101_2.0_220120
				Sampling date / time	20-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00	20-Jan-2022 00:00
					ES2202264-032	ES2202264-033	ES2202264-034	ES2202264-035	ES2202264-036
					Result	Result	Result	Result	Result
EP075T: Base/Neutral Extractable Surrogates - Continued									
2-Fluorobiphenyl	321-60-8	0.5	%		**92.2**	**----**	**92.1**	**---**	**----**
Anthracene-d10	1719-06-8	0.5	%		**119**	**----**	**120**	**---**	**----**
4-Terphenyl-d14	1718-51-0	0.5	%		**106**	**----**	**103**	**---**	**----**
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	0.2	%		**94.4**	**89.6**	**87.2**	**94.0**	**95.6**
Toluene-D8	2037-26-5	0.2	%		**90.7**	**86.1**	**77.7**	**88.8**	**91.0**
4-Bromofluorobenzene	460-00-4	0.2	%		**90.3**	**87.1**	**81.2**	**88.7**	**91.1**
EP231S: PFAS Surrogate									
13C4-PFOS	----	0.0002	%		**98.0**	**101**	**106**	**---**	**----**
13C8-PFOA	----	0.0002	%		**102**	**100**	**104**	**---**	**----**

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Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	DUP05_220120	SOP_BH124_0.5_220120	SOP_BH124_3.0_220120	DUP06_220121	SOP_BH125_0.5_220121
			Sampling date / time	20-Jan-2022 00:00	21-Jan-2022 00:00	21-Jan-2022 00:00	21-Jan-2022 00:00	21-Jan-2022 00:00
Compound	CAS Number	LOR	Unit	ES2202264-037	ES2202264-039	ES2202264-040	ES2202264-041	ES2202264-042
				Result	Result	Result	Result	Result
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	----	1.0	%	9.0	20.5	7.9	8.0	11.9
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	----	377	----	---	343
APPROVED IDENTIFIER:	----	-	--	----	A. SMYLIE	----	---	A. SMYLIE
EG005(ED093)T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	7	<5	6	7	<5
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	<1	<1
Chromium	7440-47-3	2	mg/kg	6	4	4	4	4
Copper	7440-50-8	5	mg/kg	46	8	47	44	17
Lead	7439-92-1	5	mg/kg	18	14	16	17	7
Nickel	7440-02-0	2	mg/kg	30	<2	26	21	<2
Zinc	7440-66-6	5	mg/kg	140	<5	261	197	<5
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	<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	<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

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Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	DUP05_220120	SOP_BH124_0.5_220120	SOP_BH124_3.0_220120	DUP06_220121	SOP_BH125_0.5_220121
				Sampling date / time	20-Jan-2022 00:00	21-Jan-2022 00:00	21-Jan-2022 00:00	21-Jan-2022 00:00	21-Jan-2022 00:00
Compound	CAS Number	LOR	Unit		ES2202264-037	ES2202264-039	ES2202264-040	ES2202264-041	ES2202264-042
					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

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Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

Compound	CAS Number	LOR	Unit	Sample ID	DUP05_220120	SOP_BH124_0.5_220120	SOP_BH124_3.0_220120	DUP06_220121	SOP_BH125_0.5_220121
				Sampling date / time	20-Jan-2022 00:00	21-Jan-2022 00:00	21-Jan-2022 00:00	21-Jan-2022 00:00	21-Jan-2022 00:00
					ES2202264-037	ES2202264-039	ES2202264-040	ES2202264-041	ES2202264-042
					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	---	---	---

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Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

Compound	CAS Number	LOR	Unit	Sample ID	DUP05_220120	SOP_BH124_0.5_220120	SOP_BH124_3.0_220120	DUP06_220121	SOP_BH125_0.5_220121
				Sampling date / time	20-Jan-2022 00:00	21-Jan-2022 00:00	21-Jan-2022 00:00	21-Jan-2022 00:00	21-Jan-2022 00:00
					ES2202264-037	ES2202264-039	ES2202264-040	ES2202264-041	ES2202264-042
					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)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		<0.5	<0.5	<0.5	<0.5	<0.5
Anthracene	120-12-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5

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Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	DUP05_220120	SOP_BH124_0.5_220120	SOP_BH124_3.0_220120	DUP06_220121	SOP_BH125_0.5_220121
				Sampling date / time	20-Jan-2022 00:00	21-Jan-2022 00:00	21-Jan-2022 00:00	21-Jan-2022 00:00	21-Jan-2022 00:00
Compound	CAS Number	LOR	Unit		ES2202264-037	ES2202264-039	ES2202264-040	ES2202264-041	ES2202264-042
					Result	Result	Result	Result	Result
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued									
Fluoranthene	206-44-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Pyrene	129-00-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benz(a)anthracene	56-55-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Chrysene	218-01-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg		<0.5	<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		<0.5	<0.5	<0.5	<0.5	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg		**0.6**	**0.6**	**0.6**	**0.6**	**0.6**
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg		**1.2**	**1.2**	**1.2**	**1.2**	**1.2**
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									
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									

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Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	DUP05_220120	SOP_BH124_0.5_220120	SOP_BH124_3.0_220120	DUP06_220121	SOP_BH125_0.5_220121
				Sampling date / time	20-Jan-2022 00:00	21-Jan-2022 00:00	21-Jan-2022 00:00	21-Jan-2022 00:00	21-Jan-2022 00:00
Compound	CAS Number	LOR	Unit		ES2202264-037	ES2202264-039	ES2202264-040	ES2202264-041	ES2202264-042
					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	----	---	---

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Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	DUP05_220120	SOP_BH124_0.5_220120	SOP_BH124_3.0_220120	DUP06_220121	SOP_BH125_0.5_220121
				Sampling date / time	20-Jan-2022 00:00	21-Jan-2022 00:00	21-Jan-2022 00:00	21-Jan-2022 00:00	21-Jan-2022 00:00
Compound	CAS Number	LOR	Unit		ES2202264-037	ES2202264-039	ES2202264-040	ES2202264-041	ES2202264-042
					Result	Result	Result	Result	Result
EP075E: Nitroaromatics and Ketones - Continued									
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	----	---	---
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	<50	<50
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
C6 - C10 Fraction	C6_C10	10	mg/kg		<10	<10	<10	<10	<10

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Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	DUP05_220120	SOP_BH124_0.5_220120	SOP_BH124_3.0_220120	DUP06_220121	SOP_BH125_0.5_220121
			Sampling date / time	20-Jan-2022 00:00	21-Jan-2022 00:00	21-Jan-2022 00:00	21-Jan-2022 00:00	21-Jan-2022 00:00
Compound	CAS Number	LOR	Unit	ES2202264-037	ES2202264-039	ES2202264-040	ES2202264-041	ES2202264-042
				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	<100	<100	<100	<100
>C34 - C40 Fraction	----	100	mg/kg	<100	<100	<100	<100	<100
^ >C10 - C40 Fraction (sum)	----	50	mg/kg	<50	<50	<50	<50	<50
^ >C10 - C16 Fraction minus Naphthalene (F2)	----	50	mg/kg	<50	<50	<50	<50	<50
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	<0.0002	<0.0002
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.0002	mg/kg	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.0002	mg/kg	<0.0002	<0.0002	<0.0002	<0.0002	**0.0012**
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.0002	mg/kg	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.0002	mg/kg	<0.0002	<0.0002	<0.0002	<0.0002	**0.0002**
Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.0002	mg/kg	<0.0002	<0.0002	<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	<0.001	<0.001
Perfluoropentanoic acid (PFPeA)	2706-90-3	0.0002	mg/kg	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Perfluorohexanoic acid (PFHxA)	307-24-4	0.0002	mg/kg	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Perfluoroheptanoic acid (PFHpA)	375-85-9	0.0002	mg/kg	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002

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Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

Compound	CAS Number	LOR	Unit	Sample ID	DUP05_220120	SOP_BH124_0.5_220120	SOP_BH124_3.0_220120	DUP06_220121	SOP_BH125_0.5_220121
				Sampling date / time	20-Jan-2022 00:00	21-Jan-2022 00:00	21-Jan-2022 00:00	21-Jan-2022 00:00	21-Jan-2022 00:00
					ES2202264-037	ES2202264-039	ES2202264-040	ES2202264-041	ES2202264-042
					Result	Result	Result	Result	Result
EP231B: Perfluoroalkyl Carboxylic Acids - Continued									
Perfluorooctanoic acid (PFOA)	335-67-1	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Perfluorononanoic acid (PFNA)	375-95-1	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Perfluorodecanoic acid (PFDA)	335-76-2	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Perfluorododecanoic acid (PFDoDA)	307-55-1	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.0005	mg/kg		<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
EP231C: Perfluoroalkyl Sulfonamides									
Perfluorooctane sulfonamide (FOSA)	754-91-6	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.0005	mg/kg		<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.0005	mg/kg		<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.0005	mg/kg		<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.0005	mg/kg		<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.0002	mg/kg		<0.0002	<0.0002	<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	<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	<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	<0.0005	<0.0005

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Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	DUP05_220120	SOP_BH124_0.5_220120	SOP_BH124_3.0_220120	DUP06_220121	SOP_BH125_0.5_220121
				Sampling date / time	20-Jan-2022 00:00	21-Jan-2022 00:00	21-Jan-2022 00:00	21-Jan-2022 00:00	21-Jan-2022 00:00
Compound	CAS Number	LOR	Unit		ES2202264-037	ES2202264-039	ES2202264-040	ES2202264-041	ES2202264-042
					Result	Result	Result	Result	Result
EP231D: (n:2) Fluorotelomer Sulfonic Acids - Continued									
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.0005	mg/kg		<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
EP231P: PFAS Sums									
Sum of PFAS	----	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	<0.0002	0.0014
Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	<0.0002	0.0014
Sum of PFAS (WA DER List)	----	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	<0.0002	0.0014
EP066S: PCB Surrogate									
Decachlorobiphenyl	2051-24-3	0.1	%		115	110	119	116	122
EP068S: Organochlorine Pesticide Surrogate									
Dibromo-DDE	21655-73-2	0.05	%		121	133	140	127	112
EP068T: Organophosphorus Pesticide Surrogate									
DEF	78-48-8	0.05	%		98.2	101	88.2	79.6	73.2
EP074S: VOC Surrogates									
1.2-Dichloroethane-D4	17060-07-0	0.5	%		97.4	93.3	----	---	---
Toluene-D8	2037-26-5	0.5	%		94.2	92.7	----	---	---
4-Bromofluorobenzene	460-00-4	0.5	%		91.4	90.1	----	---	---
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	0.5	%		81.2	81.4	101	97.4	96.6
2-Chlorophenol-D4	93951-73-6	0.5	%		78.1	81.4	102	98.3	96.0
2.4.6-Tribromophenol	118-79-6	0.5	%		56.7	52.3	74.0	67.7	67.3
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	0.5	%		97.3	101	106	102	102
Anthracene-d10	1719-06-8	0.5	%		99.6	106	105	99.5	101
4-Terphenyl-d14	1718-51-0	0.5	%		96.0	101	97.5	94.3	94.7
EP075S: Acid Extractable Surrogates									
2-Fluorophenol	367-12-4	0.5	%		110	106	----	---	---
Phenol-d6	13127-88-3	0.5	%		100	100	----	---	---
2-Chlorophenol-D4	93951-73-6	0.5	%		96.9	109	----	---	---
2.4.6-Tribromophenol	118-79-6	0.5	%		95.6	90.6	---	---	---
EP075T: Base/Neutral Extractable Surrogates									
Nitrobenzene-D5	4165-60-0	0.5	%		89.5	100	---	---	---
1.2-Dichlorobenzene-D4	2199-69-1	0.5	%		81.9	90.5	---	---	---
2-Fluorobiphenyl	321-60-8	0.5	%		92.0	93.7	---	---	---

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Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	DUP05_220120	SOP_BH124_0.5_220120	SOP_BH124_3.0_220120	DUP06_220121	SOP_BH125_0.5_220121
				Sampling date / time	20-Jan-2022 00:00	21-Jan-2022 00:00	21-Jan-2022 00:00	21-Jan-2022 00:00	21-Jan-2022 00:00
Compound	CAS Number	LOR	Unit		ES2202264-037	ES2202264-039	ES2202264-040	ES2202264-041	ES2202264-042
					Result	Result	Result	Result	Result
EP075T: Base/Neutral Extractable Surrogates - Continued									
Anthracene-d10	1719-06-8	0.5	%		112	119	----	---	---
4-Terphenyl-d14	1718-51-0	0.5	%		96.6	104	----	---	---
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	0.2	%		95.3	91.3	98.5	97.1	92.8
Toluene-D8	2037-26-5	0.2	%		89.2	88.0	95.6	90.0	89.0
4-Bromofluorobenzene	460-00-4	0.2	%		90.3	89.0	93.3	89.5	89.8
EP231S: PFAS Surrogate									
13C4-PFOS	----	0.0002	%		106	100	102	104	107
13C8-PFOA	----	0.0002	%		102	112	112	108	114

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Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	SOP_BH125_5.0_220121	SOP_BH125_10.0_220121	SOP_BH125_15.0_220121	SOP_BH125_20.0_220121	SOP_BH125_25.0_220121
			Sampling date / time	21-Jan-2022 00:00	21-Jan-2022 00:00	21-Jan-2022 00:00	21-Jan-2022 00:00	21-Jan-2022 00:00
Compound	CAS Number	LOR	Unit	ES2202264-043	ES2202264-044	ES2202264-045	ES2202264-046	ES2202264-047
				Result	Result	Result	Result	Result
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	----	1.0	%	6.1	3.8	2.8	3.2	2.4
EG005(ED093)T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	6	9	5	6	<5
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	<1	<1
Chromium	7440-47-3	2	mg/kg	7	14	15	14	10
Copper	7440-50-8	5	mg/kg	40	37	40	35	47
Lead	7439-92-1	5	mg/kg	16	18	18	17	22
Nickel	7440-02-0	2	mg/kg	23	21	21	20	22
Zinc	7440-66-6	5	mg/kg	83	81	80	78	84
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	<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	<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
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

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Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	SOP_BH125_5.0_220121	SOP_BH125_10.0_220121	SOP_BH125_15.0_220121	SOP_BH125_20.0_220121	SOP_BH125_25.0_220121
				Sampling date / time	21-Jan-2022 00:00	21-Jan-2022 00:00	21-Jan-2022 00:00	21-Jan-2022 00:00	21-Jan-2022 00:00
Compound	CAS Number	LOR	Unit		ES2202264-043	ES2202264-044	ES2202264-045	ES2202264-046	ES2202264-047
					Result	Result	Result	Result	Result
EP068A: Organochlorine Pesticides (OC) - Continued									
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									
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		0.6	----	<0.5	---	<0.5
tert-Butylbenzene	98-06-6	0.5	mg/kg		<0.5	----	<0.5	---	<0.5

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Analytical Results

Sub-Matrix: SOIL
(Matrix: SOIL)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH125_5.0_220121	SOP_BH125_10.0_220121	SOP_BH125_15.0_220121	SOP_BH125_20.0_220121	SOP_BH125_25.0_220121
				Sampling date / time	21-Jan-2022 00:00	21-Jan-2022 00:00	21-Jan-2022 00:00	21-Jan-2022 00:00	21-Jan-2022 00:00
					ES2202264-043	ES2202264-044	ES2202264-045	ES2202264-046	ES2202264-047
					Result	Result	Result	Result	Result
EP074A: Monocyclic Aromatic Hydrocarbons - Continued									
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
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

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Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH125_5.0_220121	SOP_BH125_10.0_220121	SOP_BH125_15.0_220121	SOP_BH125_20.0_220121	SOP_BH125_25.0_220121
				Sampling date / time	21-Jan-2022 00:00	21-Jan-2022 00:00	21-Jan-2022 00:00	21-Jan-2022 00:00	21-Jan-2022 00:00
					ES2202264-043	ES2202264-044	ES2202264-045	ES2202264-046	ES2202264-047
					Result	Result	Result	Result	Result
EP074E: Halogenated Aliphatic Compounds - Continued									
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)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		**0.8**	**1.0**	**0.8**	**0.8**	**0.6**
Anthracene	120-12-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Fluoranthene	206-44-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Pyrene	129-00-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benz(a)anthracene	56-55-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Chrysene	218-01-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg		<0.5	<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		<0.5	<0.5	<0.5	<0.5	<0.5

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Analytical Results

Sub-Matrix: SOIL
(Matrix: SOIL)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH125_5.0_220121	SOP_BH125_10.0_220121	SOP_BH125_15.0_220121	SOP_BH125_20.0_220121	SOP_BH125_25.0_220121
				Sampling date / time	21-Jan-2022 00:00	21-Jan-2022 00:00	21-Jan-2022 00:00	21-Jan-2022 00:00	21-Jan-2022 00:00
					ES2202264-043	ES2202264-044	ES2202264-045	ES2202264-046	ES2202264-047
					Result	Result	Result	Result	Result
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued									
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg		**0.8**	**1.0**	**0.8**	**0.8**	**0.6**
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg		**0.6**	**0.6**	**0.6**	**0.6**	**0.6**
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg		**1.2**	**1.2**	**1.2**	**1.2**	**1.2**
EP075A: 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	0.5	mg/kg		<0.5	----	<0.5	---	<0.5
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	1	mg/kg		<1	----	<1	---	<1
EP075B: Polynuclear Aromatic Hydrocarbons									
2-Methylnaphthalene	91-57-6	0.5	mg/kg		**2.0**	----	**1.7**	---	<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									
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									

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Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	SOP_BH125_5.0_220121	SOP_BH125_10.0_220121	SOP_BH125_15.0_220121	SOP_BH125_20.0_220121	SOP_BH125_25.0_220121
				Sampling date / time	21-Jan-2022 00:00	21-Jan-2022 00:00	21-Jan-2022 00:00	21-Jan-2022 00:00	21-Jan-2022 00:00
Compound	CAS Number	LOR	Unit		ES2202264-043	ES2202264-044	ES2202264-045	ES2202264-046	ES2202264-047
					Result	Result	Result	Result	Result
EP075D: Nitrosamines - Continued									
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
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									

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Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH125_5.0_220121	SOP_BH125_10.0_220121	SOP_BH125_15.0_220121	SOP_BH125_20.0_220121	SOP_BH125_25.0_220121
				Sampling date / time	21-Jan-2022 00:00	21-Jan-2022 00:00	21-Jan-2022 00:00	21-Jan-2022 00:00	21-Jan-2022 00:00
					ES2202264-043	ES2202264-044	ES2202264-045	ES2202264-046	ES2202264-047
					Result	Result	Result	Result	Result
EP075G: Chlorinated Hydrocarbons - Continued									
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		**21**	**24**	<10	**19**	<10
C10 - C14 Fraction	----	50	mg/kg		<50	<50	**60**	<50	**50**
C15 - C28 Fraction	----	100	mg/kg		<100	**140**	**170**	**120**	**150**
C29 - C36 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
^ C10 - C36 Fraction (sum)	----	50	mg/kg		<50	**140**	**230**	**120**	**200**
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
C6 - C10 Fraction	C6_C10	10	mg/kg		**26**	**33**	<10	**26**	<10
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg		**26**	**33**	<10	**26**	<10
>C10 - C16 Fraction	---	50	mg/kg		<50	**70**	**80**	**60**	**70**
>C16 - C34 Fraction	---	100	mg/kg		<100	**140**	**170**	**110**	**150**
>C34 - C40 Fraction	---	100	mg/kg		<100	<100	<100	<100	<100
^ >C10 - C40 Fraction (sum)	---	50	mg/kg		<50	**210**	**250**	**170**	**220**

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Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	SOP_BH125_5.0_220121	SOP_BH125_10.0_220121	SOP_BH125_15.0_220121	SOP_BH125_20.0_220121	SOP_BH125_25.0_220121
				Sampling date / time	21-Jan-2022 00:00	21-Jan-2022 00:00	21-Jan-2022 00:00	21-Jan-2022 00:00	21-Jan-2022 00:00
Compound	CAS Number	LOR	Unit		ES2202264-043	ES2202264-044	ES2202264-045	ES2202264-046	ES2202264-047
					Result	Result	Result	Result	Result
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions - Continued									
^ >C10 - C16 Fraction minus Naphthalene (F2)	----	50	mg/kg		<50	70	80	60	70
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	---	---
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	---	---

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Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	SOP_BH125_5.0_220121	SOP_BH125_10.0_220121	SOP_BH125_15.0_220121	SOP_BH125_20.0_220121	SOP_BH125_25.0_220121
			Sampling date / time	21-Jan-2022 00:00	21-Jan-2022 00:00	21-Jan-2022 00:00	21-Jan-2022 00:00	21-Jan-2022 00:00
Compound	CAS Number	LOR	Unit	ES2202264-043	ES2202264-044	ES2202264-045	ES2202264-046	ES2202264-047
				Result	Result	Result	Result	Result
EP231B: Perfluoroalkyl Carboxylic Acids - Continued								
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	---	---
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	---	---

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Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	SOP_BH125_5.0_220121	SOP_BH125_10.0_220121	SOP_BH125_15.0_220121	SOP_BH125_20.0_220121	SOP_BH125_25.0_220121
			Sampling date / time	21-Jan-2022 00:00	21-Jan-2022 00:00	21-Jan-2022 00:00	21-Jan-2022 00:00	21-Jan-2022 00:00
Compound	CAS Number	LOR	Unit	ES2202264-043	ES2202264-044	ES2202264-045	ES2202264-046	ES2202264-047
				Result	Result	Result	Result	Result
EP231P: PFAS Sums - Continued								
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	%	100.0	108	92.6	106	94.4
EP068S: Organochlorine Pesticide Surrogate								
Dibromo-DDE	21655-73-2	0.05	%	113	138	107	131	112
EP068T: Organophosphorus Pesticide Surrogate								
DEF	78-48-8	0.05	%	95.0	90.7	99.1	91.9	96.6
EP074S: VOC Surrogates								
1.2-Dichloroethane-D4	17060-07-0	0.5	%	95.9	----	78.2	---	81.8
Toluene-D8	2037-26-5	0.5	%	94.5	----	74.6	---	79.9
4-Bromofluorobenzene	460-00-4	0.5	%	92.9	----	71.6	---	80.3
EP075(SIM)S: Phenolic Compound Surrogates								
Phenol-d6	13127-88-3	0.5	%	80.8	102	81.9	89.1	81.1
2-Chlorophenol-D4	93951-73-6	0.5	%	81.8	102	81.2	90.7	81.2
2.4.6-Tribromophenol	118-79-6	0.5	%	54.1	70.9	49.6	62.6	51.6
EP075(SIM)T: PAH Surrogates								
2-Fluorobiphenyl	321-60-8	0.5	%	97.2	106	103	91.7	103
Anthracene-d10	1719-06-8	0.5	%	105	108	101	91.8	105
4-Terphenyl-d14	1718-51-0	0.5	%	97.6	99.6	93.7	85.8	95.9
EP075S: Acid Extractable Surrogates								
2-Fluorophenol	367-12-4	0.5	%	120	----	117	---	114
Phenol-d6	13127-88-3	0.5	%	104	----	101	---	99.3
2-Chlorophenol-D4	93951-73-6	0.5	%	116	----	109	---	112
2.4.6-Tribromophenol	118-79-6	0.5	%	83.5	----	75.9	---	85.8
EP075T: Base/Neutral Extractable Surrogates								
Nitrobenzene-D5	4165-60-0	0.5	%	107	----	101	---	98.5
1.2-Dichlorobenzene-D4	2199-69-1	0.5	%	101	----	97.2	---	95.9
2-Fluorobiphenyl	321-60-8	0.5	%	88.4	----	95.6	---	96.6
Anthracene-d10	1719-06-8	0.5	%	119	----	115	---	115
4-Terphenyl-d14	1718-51-0	0.5	%	100	----	106	---	96.1
EP080S: TPH(V)/BTEX Surrogates								

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Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH125_5.0_220121	SOP_BH125_10.0_220121	SOP_BH125_15.0_220121	SOP_BH125_20.0_220121	SOP_BH125_25.0_220121
				Sampling date / time	21-Jan-2022 00:00	21-Jan-2022 00:00	21-Jan-2022 00:00	21-Jan-2022 00:00	21-Jan-2022 00:00
					ES2202264-043	ES2202264-044	ES2202264-045	ES2202264-046	ES2202264-047
					Result	Result	Result	Result	Result
EP080S: TPH(V)/BTEX Surrogates - Continued									
1.2-Dichloroethane-D4	17060-07-0	0.2	%		93.1	102	75.9	92.9	79.4
Toluene-D8	2037-26-5	0.2	%		95.2	112	75.3	106	80.8
4-Bromofluorobenzene	460-00-4	0.2	%		93.2	112	72.0	101	81.0
EP231S: PFAS Surrogate									
13C4-PFOS	----	0.0002	%		----	----	96.0	---	----
13C8-PFOA	----	0.0002	%		----	----	113	---	----

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Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	SOP_BH126_0.5_220121	SOP_BH126_2.0_220121	SOP_BH127_1.2_220121	SOP_BH127_4.0_220121	TS14
			Sampling date / time	21-Jan-2022 00:00	21-Jan-2022 00:00	21-Jan-2022 00:00	21-Jan-2022 00:00	17-Jan-2022 00:00
Compound	CAS Number	LOR	Unit	ES2202264-048	ES2202264-049	ES2202264-050	ES2202264-051	ES2202264-053
				Result	Result	Result	Result	Result
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	----	1.0	%	16.5	7.6	16.0	5.8	----
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	-	--	-	----	-	----	----
Synthetic Mineral Fibre	----	0.1	g/kg	No	----	No	----	----
Organic Fibre	----	0.1	g/kg	No	----	No	----	----
Sample weight (dry)	----	0.01	g	183	----	207	----	----
APPROVED IDENTIFIER:	----	-	--	A. SMYLIE	----	A. SMYLIE	----	----
EG005(ED093)T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	5	<5	21	9	----
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	<1	----
Chromium	7440-47-3	2	mg/kg	14	7	5	8	----
Copper	7440-50-8	5	mg/kg	20	44	17	38	----
Lead	7439-92-1	5	mg/kg	28	13	8	14	----
Nickel	7440-02-0	2	mg/kg	14	42	<2	22	----
Zinc	7440-66-6	5	mg/kg	8	130	8	77	----
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	<0.1	<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	----
cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	----

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Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH126_0.5_220121	SOP_BH126_2.0_220121	SOP_BH127_1.2_220121	SOP_BH127_4.0_220121	TS14
				Sampling date / time	21-Jan-2022 00:00	21-Jan-2022 00:00	21-Jan-2022 00:00	21-Jan-2022 00:00	17-Jan-2022 00:00
					ES2202264-048	ES2202264-049	ES2202264-050	ES2202264-051	ES2202264-053
					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	----
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	----

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Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	SOP_BH126_0.5_220121	SOP_BH126_2.0_220121	SOP_BH127_1.2_220121	SOP_BH127_4.0_220121	TS14
			Sampling date / time	21-Jan-2022 00:00	21-Jan-2022 00:00	21-Jan-2022 00:00	21-Jan-2022 00:00	17-Jan-2022 00:00
Compound	CAS Number	LOR	Unit	ES2202264-048	ES2202264-049	ES2202264-050	ES2202264-051	ES2202264-053
				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	---	---

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Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	SOP_BH126_0.5_220121	SOP_BH126_2.0_220121	SOP_BH127_1.2_220121	SOP_BH127_4.0_220121	TS14
			Sampling date / time	21-Jan-2022 00:00	21-Jan-2022 00:00	21-Jan-2022 00:00	21-Jan-2022 00:00	17-Jan-2022 00:00
Compound	CAS Number	LOR	Unit	ES2202264-048	ES2202264-049	ES2202264-050	ES2202264-051	ES2202264-053
				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)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	**0.7**	<0.5	**0.6**	---
Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	---

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Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	SOP_BH126_0.5_220121	SOP_BH126_2.0_220121	SOP_BH127_1.2_220121	SOP_BH127_4.0_220121	TS14
			Sampling date / time	21-Jan-2022 00:00	21-Jan-2022 00:00	21-Jan-2022 00:00	21-Jan-2022 00:00	17-Jan-2022 00:00
Compound	CAS Number	LOR	Unit	ES2202264-048	ES2202264-049	ES2202264-050	ES2202264-051	ES2202264-053
				Result	Result	Result	Result	Result
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued								
Fluoranthene	206-44-0	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	---
Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	---
Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	---
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	<0.5	<0.5	<0.5	<0.5	---
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	---
Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	---
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	---
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	---
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	---
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg	<0.5	**0.7**	<0.5	**0.6**	---
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	---
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg	**0.6**	**0.6**	**0.6**	**0.6**	---
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg	**1.2**	**1.2**	**1.2**	**1.2**	---
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								
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								

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Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	SOP_BH126_0.5_220121	SOP_BH126_2.0_220121	SOP_BH127_1.2_220121	SOP_BH127_4.0_220121	TS14
				Sampling date / time	21-Jan-2022 00:00	21-Jan-2022 00:00	21-Jan-2022 00:00	21-Jan-2022 00:00	17-Jan-2022 00:00
Compound	CAS Number	LOR	Unit		ES2202264-048	ES2202264-049	ES2202264-050	ES2202264-051	ES2202264-053
					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	---	---

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Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	SOP_BH126_0.5_220121	SOP_BH126_2.0_220121	SOP_BH127_1.2_220121	SOP_BH127_4.0_220121	TS14
			Sampling date / time	21-Jan-2022 00:00	21-Jan-2022 00:00	21-Jan-2022 00:00	21-Jan-2022 00:00	17-Jan-2022 00:00
Compound	CAS Number	LOR	Unit	ES2202264-048	ES2202264-049	ES2202264-050	ES2202264-051	ES2202264-053
				Result	Result	Result	Result	Result
EP075E: Nitroaromatics and Ketones - Continued								
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	---	---
EP080/071: Total Petroleum Hydrocarbons								
C6 - C9 Fraction	----	10	mg/kg	<10	<10	<10	<10	70
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	86

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Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	SOP_BH126_0.5_220121	SOP_BH126_2.0_220121	SOP_BH127_1.2_220121	SOP_BH127_4.0_220121	TS14
			Sampling date / time	21-Jan-2022 00:00	21-Jan-2022 00:00	21-Jan-2022 00:00	21-Jan-2022 00:00	17-Jan-2022 00:00
Compound	CAS Number	LOR	Unit	ES2202264-048	ES2202264-049	ES2202264-050	ES2202264-051	ES2202264-053
				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	39
>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	----
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	18.6
Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	3.2
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	17.7
ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	7.2
^ Sum of BTEX	----	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	46.7
^ Total Xylenes	----	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	24.9
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	<0.0002	----
Perfluoropentane sulfonic acid (PFPeS)	2706-91-4	0.0002	mg/kg	<0.0002	<0.0002	<0.0002	<0.0002	----
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.0002	mg/kg	<0.0002	<0.0002	<0.0002	<0.0002	----
Perfluoroheptane sulfonic acid (PFHpS)	375-92-8	0.0002	mg/kg	<0.0002	<0.0002	<0.0002	<0.0002	----
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.0002	mg/kg	<0.0002	<0.0002	<0.0002	<0.0002	----
Perfluorodecane sulfonic acid (PFDS)	335-77-3	0.0002	mg/kg	<0.0002	<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	<0.001	----
Perfluoropentanoic acid (PFPeA)	2706-90-3	0.0002	mg/kg	<0.0002	<0.0002	<0.0002	<0.0002	----
Perfluorohexanoic acid (PFHxA)	307-24-4	0.0002	mg/kg	<0.0002	<0.0002	<0.0002	<0.0002	----
Perfluoroheptanoic acid (PFHpA)	375-85-9	0.0002	mg/kg	<0.0002	<0.0002	<0.0002	<0.0002	----

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Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH126_0.5_220121	SOP_BH126_2.0_220121	SOP_BH127_1.2_220121	SOP_BH127_4.0_220121	TS14
				Sampling date / time	21-Jan-2022 00:00	21-Jan-2022 00:00	21-Jan-2022 00:00	21-Jan-2022 00:00	17-Jan-2022 00:00
					ES2202264-048	ES2202264-049	ES2202264-050	ES2202264-051	ES2202264-053
					Result	Result	Result	Result	Result
EP231B: Perfluoroalkyl Carboxylic Acids - Continued									
Perfluorooctanoic acid (PFOA)	335-67-1	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	<0.0002	----
Perfluorononanoic acid (PFNA)	375-95-1	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	<0.0002	----
Perfluorodecanoic acid (PFDA)	335-76-2	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	<0.0002	----
Perfluoroundecanoic acid (PFUnDA)	2058-94-8	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	<0.0002	----
Perfluorododecanoic acid (PFDoDA)	307-55-1	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	<0.0002	----
Perfluorotridecanoic acid (PFTrDA)	72629-94-8	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	<0.0002	----
Perfluorotetradecanoic acid (PFTeDA)	376-06-7	0.0005	mg/kg		<0.0005	<0.0005	<0.0005	<0.0005	----
EP231C: Perfluoroalkyl Sulfonamides									
Perfluorooctane sulfonamide (FOSA)	754-91-6	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	<0.0002	----
N-Methyl perfluorooctane sulfonamide (MeFOSA)	31506-32-8	0.0005	mg/kg		<0.0005	<0.0005	<0.0005	<0.0005	----
N-Ethyl perfluorooctane sulfonamide (EtFOSA)	4151-50-2	0.0005	mg/kg		<0.0005	<0.0005	<0.0005	<0.0005	----
N-Methyl perfluorooctane sulfonamidoethanol (MeFOSE)	24448-09-7	0.0005	mg/kg		<0.0005	<0.0005	<0.0005	<0.0005	----
N-Ethyl perfluorooctane sulfonamidoethanol (EtFOSE)	1691-99-2	0.0005	mg/kg		<0.0005	<0.0005	<0.0005	<0.0005	----
N-Methyl perfluorooctane sulfonamidoacetic acid (MeFOSAA)	2355-31-9	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	<0.0002	----
N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	2991-50-6	0.0002	mg/kg		<0.0002	<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	<0.0005	----
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.0005	mg/kg		<0.0005	<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	<0.0005	----

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Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	SOP_BH126_0.5_220121	SOP_BH126_2.0_220121	SOP_BH127_1.2_220121	SOP_BH127_4.0_220121	TS14
			Sampling date / time	21-Jan-2022 00:00	21-Jan-2022 00:00	21-Jan-2022 00:00	21-Jan-2022 00:00	17-Jan-2022 00:00
Compound	CAS Number	LOR	Unit	ES2202264-048	ES2202264-049	ES2202264-050	ES2202264-051	ES2202264-053
				Result	Result	Result	Result	Result
EP231D: (n:2) Fluorotelomer Sulfonic Acids - Continued								
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.0005	mg/kg	<0.0005	<0.0005	<0.0005	<0.0005	---
EP231P: PFAS Sums								
Sum of PFAS	---	0.0002	mg/kg	<0.0002	<0.0002	<0.0002	<0.0002	---
Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.0002	mg/kg	<0.0002	<0.0002	<0.0002	<0.0002	---
Sum of PFAS (WA DER List)	---	0.0002	mg/kg	<0.0002	<0.0002	<0.0002	<0.0002	---
EP066S: PCB Surrogate								
Decachlorobiphenyl	2051-24-3	0.1	%	109	129	117	106	---
EP068S: Organochlorine Pesticide Surrogate								
Dibromo-DDE	21655-73-2	0.05	%	117	122	114	125	---
EP068T: Organophosphorus Pesticide Surrogate								
DEF	78-48-8	0.05	%	97.2	77.5	84.4	80.9	---
EP074S: VOC Surrogates								
1.2-Dichloroethane-D4	17060-07-0	0.5	%	102	---	95.1	---	---
Toluene-D8	2037-26-5	0.5	%	102	---	93.1	---	---
4-Bromofluorobenzene	460-00-4	0.5	%	95.6	---	94.1	---	---
EP075(SIM)S: Phenolic Compound Surrogates								
Phenol-d6	13127-88-3	0.5	%	82.3	95.7	80.4	98.3	---
2-Chlorophenol-D4	93951-73-6	0.5	%	81.7	95.3	81.2	96.1	---
2.4.6-Tribromophenol	118-79-6	0.5	%	54.5	69.0	55.9	61.8	---
EP075(SIM)T: PAH Surrogates								
2-Fluorobiphenyl	321-60-8	0.5	%	102	99.1	105	108	---
Anthracene-d10	1719-06-8	0.5	%	106	95.6	103	110	---
4-Terphenyl-d14	1718-51-0	0.5	%	98.3	87.7	98.1	103	---
EP075S: Acid Extractable Surrogates								
2-Fluorophenol	367-12-4	0.5	%	110	---	106	---	---
Phenol-d6	13127-88-3	0.5	%	97.9	---	98.7	---	---
2-Chlorophenol-D4	93951-73-6	0.5	%	110	---	108	---	---
2.4.6-Tribromophenol	118-79-6	0.5	%	86.3	---	82.7	---	---
EP075T: Base/Neutral Extractable Surrogates								
Nitrobenzene-D5	4165-60-0	0.5	%	95.1	---	98.6	---	---
1.2-Dichlorobenzene-D4	2199-69-1	0.5	%	89.4	---	92.6	---	---

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Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH126_0.5_220121	SOP_BH126_2.0_220121	SOP_BH127_1.2_220121	SOP_BH127_4.0_220121	TS14
				Sampling date / time	21-Jan-2022 00:00	21-Jan-2022 00:00	21-Jan-2022 00:00	21-Jan-2022 00:00	17-Jan-2022 00:00
					ES2202264-048	ES2202264-049	ES2202264-050	ES2202264-051	ES2202264-053
					Result	Result	Result	Result	Result
EP075T: Base/Neutral Extractable Surrogates - Continued									
2-Fluorobiphenyl	321-60-8	0.5	%		90.0	----	89.8	---	---
Anthracene-d10	1719-06-8	0.5	%		111	----	114	---	---
4-Terphenyl-d14	1718-51-0	0.5	%		99.3	----	106	---	---
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	0.2	%		98.8	86.9	92.2	105	97.6
Toluene-D8	2037-26-5	0.2	%		103	96.7	94.1	102	110
4-Bromofluorobenzene	460-00-4	0.2	%		97.6	99.1	94.1	112	113
EP231S: PFAS Surrogate									
13C4-PFOS	----	0.0002	%		99.0	106	98.5	97.0	---
13C8-PFOA	----	0.0002	%		102	118	110	113	---

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Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	TSC14	TS15	TSC15	---	----
			Sampling date / time	17-Jan-2022 00:00	17-Jan-2022 00:00	17-Jan-2022 00:00	---	---
Compound	CAS Number	LOR	Unit	ES2202264-055	ES2202264-058	ES2202264-059	------	------
				Result	Result	Result	---	---
EP080/071: Total Petroleum Hydrocarbons								
C6 - C9 Fraction	----	10	mg/kg	80	47	55	---	---
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions								
C6 - C10 Fraction	C6_C10	10	mg/kg	98	55	64	---	---
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg	45	17	21	---	---
EP080: BTEXN								
Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	<0.2	---	---
Toluene	108-88-3	0.5	mg/kg	21.0	14.1	17.0	---	---
Ethylbenzene	100-41-4	0.5	mg/kg	3.7	2.7	3.1	---	---
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	20.3	14.7	16.2	---	---
ortho-Xylene	95-47-6	0.5	mg/kg	8.2	6.5	6.9	---	---
^ Sum of BTEX	----	0.2	mg/kg	53.2	38.0	43.2	---	---
^ Total Xylenes	----	0.5	mg/kg	28.5	21.2	23.1	---	---
Naphthalene	91-20-3	1	mg/kg	1	<1	<1	---	---
EP080S: TPH(V)/BTEX Surrogates								
1.2-Dichloroethane-D4	17060-07-0	0.2	%	103	81.7	80.9	---	---
Toluene-D8	2037-26-5	0.2	%	125	102	105	---	---
4-Bromofluorobenzene	460-00-4	0.2	%	125	100	102	---	---

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Analytical Results

Sub-Matrix: WATER (Matrix: WATER)			Sample ID	RIN03_220119	RIN03_220120	RIN05_220121	----	----
			Sampling date / time	19-Jan-2022 00:00	20-Jan-2022 00:00	21-Jan-2022 00:00	---	---
Compound	CAS Number	LOR	Unit	ES2202264-021	ES2202264-038	ES2202264-052	------	------
				Result	Result	Result	---	---
EG020T: Total Metals by ICP-MS								
Arsenic	7440-38-2	0.001	mg/L	<0.001	<0.001	<0.001	---	---
Cadmium	7440-43-9	0.0001	mg/L	<0.0001	<0.0001	<0.0001	---	---
Chromium	7440-47-3	0.001	mg/L	<0.001	<0.001	<0.001	---	---
Copper	7440-50-8	0.001	mg/L	<0.001	<0.001	<0.001	---	---
Nickel	7440-02-0	0.001	mg/L	<0.001	<0.001	<0.001	---	---
Lead	7439-92-1	0.001	mg/L	<0.001	<0.001	<0.001	---	---
Zinc	7440-66-6	0.005	mg/L	<0.005	<0.005	<0.005	---	---
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.0001	mg/L	<0.0001	<0.0001	<0.0001	---	---
EP066: Polychlorinated Biphenyls (PCB)								
^ Total Polychlorinated biphenyls	----	1	µg/L	<1	<1	<1	---	---
EP068A: Organochlorine Pesticides (OC)								
alpha-BHC	319-84-6	0.5	µg/L	<0.5	<0.5	<0.5	---	---
Hexachlorobenzene (HCB)	118-74-1	0.5	µg/L	<0.5	<0.5	<0.5	---	---
beta-BHC	319-85-7	0.5	µg/L	<0.5	<0.5	<0.5	---	---
gamma-BHC	58-89-9	0.5	µg/L	<0.5	<0.5	<0.5	---	---
delta-BHC	319-86-8	0.5	µg/L	<0.5	<0.5	<0.5	---	---
Heptachlor	76-44-8	0.5	µg/L	<0.5	<0.5	<0.5	---	---
Aldrin	309-00-2	0.5	µg/L	<0.5	<0.5	<0.5	---	---
Heptachlor epoxide	1024-57-3	0.5	µg/L	<0.5	<0.5	<0.5	---	---
trans-Chlordane	5103-74-2	0.5	µg/L	<0.5	<0.5	<0.5	---	---
alpha-Endosulfan	959-98-8	0.5	µg/L	<0.5	<0.5	<0.5	---	---
cis-Chlordane	5103-71-9	0.5	µg/L	<0.5	<0.5	<0.5	---	---
Dieldrin	60-57-1	0.5	µg/L	<0.5	<0.5	<0.5	---	---
4.4`-DDE	72-55-9	0.5	µg/L	<0.5	<0.5	<0.5	---	---
Endrin	72-20-8	0.5	µg/L	<0.5	<0.5	<0.5	---	---
beta-Endosulfan	33213-65-9	0.5	µg/L	<0.5	<0.5	<0.5	---	---
4.4`-DDD	72-54-8	0.5	µg/L	<0.5	<0.5	<0.5	---	---
Endrin aldehyde	7421-93-4	0.5	µg/L	<0.5	<0.5	<0.5	---	---
Endosulfan sulfate	1031-07-8	0.5	µg/L	<0.5	<0.5	<0.5	---	---
4.4`-DDT	50-29-3	2.0	µg/L	<2.0	<2.0	<2.0	---	---
Endrin ketone	53494-70-5	0.5	µg/L	<0.5	<0.5	<0.5	---	---
Methoxychlor	72-43-5	2.0	µg/L	<2.0	<2.0	<2.0	---	---
^ Total Chlordane (sum)	----	0.5	µg/L	<0.5	<0.5	<0.5	---	---

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Analytical Results

Sub-Matrix: WATER (Matrix: WATER)			Sample ID	RIN03_220119	RIN03_220120	RIN05_220121	---	----
			Sampling date / time	19-Jan-2022 00:00	20-Jan-2022 00:00	21-Jan-2022 00:00	---	---
Compound	CAS Number	LOR	Unit	ES2202264-021	ES2202264-038	ES2202264-052	------	------
				Result	Result	Result	---	---
EP068A: Organochlorine Pesticides (OC) - Continued								
^ Sum of DDD + DDE + DDT	72-54-8/72-55-9/50-2	0.5	µg/L	<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	---	---
EP068B: Organophosphorus Pesticides (OP)								
Dichlorvos	62-73-7	0.5	µg/L	<0.5	<0.5	<0.5	---	---
Demeton-S-methyl	919-86-8	0.5	µg/L	<0.5	<0.5	<0.5	---	---
Monocrotophos	6923-22-4	2.0	µg/L	<2.0	<2.0	<2.0	---	---
Dimethoate	60-51-5	0.5	µg/L	<0.5	<0.5	<0.5	---	---
Diazinon	333-41-5	0.5	µg/L	<0.5	<0.5	<0.5	---	---
Chlorpyrifos-methyl	5598-13-0	0.5	µg/L	<0.5	<0.5	<0.5	---	---
Parathion-methyl	298-00-0	2.0	µg/L	<2.0	<2.0	<2.0	---	---
Malathion	121-75-5	0.5	µg/L	<0.5	<0.5	<0.5	---	---
Fenthion	55-38-9	0.5	µg/L	<0.5	<0.5	<0.5	---	---
Chlorpyrifos	2921-88-2	0.5	µg/L	<0.5	<0.5	<0.5	---	---
Parathion	56-38-2	2.0	µg/L	<2.0	<2.0	<2.0	---	---
Pirimphos-ethyl	23505-41-1	0.5	µg/L	<0.5	<0.5	<0.5	---	---
Chlorfenvinphos	470-90-6	0.5	µg/L	<0.5	<0.5	<0.5	---	---
Bromophos-ethyl	4824-78-6	0.5	µg/L	<0.5	<0.5	<0.5	---	---
Fenamiphos	22224-92-6	0.5	µg/L	<0.5	<0.5	<0.5	---	---
Prothiofos	34643-46-4	0.5	µg/L	<0.5	<0.5	<0.5	---	---
Ethion	563-12-2	0.5	µg/L	<0.5	<0.5	<0.5	---	---
Carbophenothion	786-19-6	0.5	µg/L	<0.5	<0.5	<0.5	---	---
Azinphos Methyl	86-50-0	0.5	µg/L	<0.5	<0.5	<0.5	---	---
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons								
Naphthalene	91-20-3	1.0	µg/L	<1.0	<1.0	<1.0	---	---
Acenaphthylene	208-96-8	1.0	µg/L	<1.0	<1.0	<1.0	---	---
Acenaphthene	83-32-9	1.0	µg/L	<1.0	<1.0	<1.0	---	---
Fluorene	86-73-7	1.0	µg/L	<1.0	<1.0	<1.0	---	---
Phenanthrene	85-01-8	1.0	µg/L	<1.0	<1.0	<1.0	---	---
Anthracene	120-12-7	1.0	µg/L	<1.0	<1.0	<1.0	---	---
Fluoranthene	206-44-0	1.0	µg/L	<1.0	<1.0	<1.0	---	---
Pyrene	129-00-0	1.0	µg/L	<1.0	<1.0	<1.0	---	---
Benz(a)anthracene	56-55-3	1.0	µg/L	<1.0	<1.0	<1.0	---	---
Chrysene	218-01-9	1.0	µg/L	<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	---	---

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Analytical Results

Sub-Matrix: WATER (Matrix: WATER)			Sample ID	RIN03_220119	RIN03_220120	RIN05_220121	----	----
			Sampling date / time	19-Jan-2022 00:00	20-Jan-2022 00:00	21-Jan-2022 00:00	---	---
Compound	CAS Number	LOR	Unit	ES2202264-021	ES2202264-038	ES2202264-052	------	------
				Result	Result	Result	---	---
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued								
Benzo(k)fluoranthene	207-08-9	1.0	µg/L	<1.0	<1.0	<1.0	---	---
Benzo(a)pyrene	50-32-8	0.5	µg/L	<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	---	---
Dibenz(a.h)anthracene	53-70-3	1.0	µg/L	<1.0	<1.0	<1.0	---	---
Benzo(g.h.i)perylene	191-24-2	1.0	µg/L	<1.0	<1.0	<1.0	---	---
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	µg/L	<0.5	<0.5	<0.5	---	---
^ Benzo(a)pyrene TEQ (zero)	----	0.5	µg/L	<0.5	<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	<50	---	---
C15 - C28 Fraction	----	100	µg/L	<100	<100	<100	---	---
C29 - C36 Fraction	----	50	µg/L	<50	<50	<50	---	---
^ C10 - C36 Fraction (sum)	----	50	µg/L	<50	<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	<100	---	---
>C16 - C34 Fraction	----	100	µg/L	<100	<100	<100	---	---
>C34 - C40 Fraction	----	100	µg/L	<100	<100	<100	---	---
^ >C10 - C40 Fraction (sum)	----	100	µg/L	<100	<100	<100	---	---
^ >C10 - C16 Fraction minus Naphthalene (F2)	----	100	µg/L	<100	<100	<100	---	---
EP080: BTEXN								
Benzene	71-43-2	1	µg/L	<1	<1	<1	---	---
Toluene	108-88-3	2	µg/L	<2	<2	<2	---	---
Ethylbenzene	100-41-4	2	µg/L	<2	<2	<2	---	---
meta- & para-Xylene	108-38-3 106-42-3	2	µg/L	<2	<2	<2	---	---
ortho-Xylene	95-47-6	2	µg/L	<2	<2	<2	---	---
^ Total Xylenes	----	2	µg/L	<2	<2	<2	---	---
^ Sum of BTEX	----	1	µg/L	<1	<1	<1	---	---
Naphthalene	91-20-3	5	µg/L	<5	<5	<5	---	---
EP066S: PCB Surrogate								
Decachlorobiphenyl	2051-24-3	1	%	**79.2**	**75.2**	**74.6**	---	---

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Analytical Results

Sub-Matrix: WATER (Matrix: WATER)			Sample ID	RIN03_220119	RIN03_220120	RIN05_220121	---	----
			Sampling date / time	19-Jan-2022 00:00	20-Jan-2022 00:00	21-Jan-2022 00:00	---	---
Compound	CAS Number	LOR	Unit	ES2202264-021	ES2202264-038	ES2202264-052	------	------
				Result	Result	Result	---	---
EP068S: Organochlorine Pesticide Surrogate								
Dibromo-DDE	21655-73-2	0.5	%	68.2	70.6	73.0	---	---
EP068T: Organophosphorus Pesticide Surrogate								
DEF	78-48-8	0.5	%	78.7	67.2	70.4	---	---
EP075(SIM)S: Phenolic Compound Surrogates								
Phenol-d6	13127-88-3	1.0	%	20.0	19.1	20.0	---	---
2-Chlorophenol-D4	93951-73-6	1.0	%	56.2	54.5	54.9	---	---
2.4.6-Tribromophenol	118-79-6	1.0	%	48.0	47.6	42.6	---	---
EP075(SIM)T: PAH Surrogates								
2-Fluorobiphenyl	321-60-8	1.0	%	72.8	68.4	70.7	---	---
Anthracene-d10	1719-06-8	1.0	%	83.6	81.5	79.4	---	---
4-Terphenyl-d14	1718-51-0	1.0	%	81.7	80.6	80.1	---	---
EP080S: TPH(V)/BTEX Surrogates								
1.2-Dichloroethane-D4	17060-07-0	2	%	107	89.9	105	---	---
Toluene-D8	2037-26-5	2	%	110	81.7	102	---	---
4-Bromofluorobenzene	460-00-4	2	%	105	84.9	100	---	---

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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	SOP_BH118_0.1_220119 - 19-Jan-2022 00:00	Soil sample.
EA200: Description	SOP_BH142_0.4_220119 - 19-Jan-2022 00:00	Soil sample.
EA200: Description	SOP_BH143_0.3_220119 - 19-Jan-2022 00:00	Soil sample.
EA200: Description	SOP_BH144_0.3_220119 - 19-Jan-2022 00:00	Soil sample.
EA200: Description	SOP_BH145_0.3_220119 - 19-Jan-2022 00:00	Soil sample.
EA200: Description	SOP_BH102_0.7_220120 - 20-Jan-2022 00:00	Soil sample.
EA200: Description	SOP_BH107_1.0_220120 - 20-Jan-2022 00:00	Soil sample.
EA200: Description	SOP_BH108_0.4_220120 - 19-Jan-2022 00:00	Soil sample.
EA200: Description	SOP_BH109_0.3_220120 - 19-Jan-2022 00:00	Soil sample.
EA200: Description	SOP_BH120_0.5_220120 - 20-Jan-2022 00:00	Soil sample.
EA200: Description	SOP_BH121_1.0_220120 - 20-Jan-2022 00:00	Soil sample.
EA200: Description	SOP_BH101_0.5_220120 - 20-Jan-2022 00:00	Soil sample.
EA200: Description	SOP_BH124_0.5_220120 - 21-Jan-2022 00:00	Soil sample.
EA200: Description	SOP_BH125_0.5_220121 - 21-Jan-2022 00:00	Soil sample.
EA200: Description	SOP_BH126_0.5_220121 - 21-Jan-2022 00:00	Soil sample.
EA200: Description	SOP_BH127_1.2_220121 - 21-Jan-2022 00:00	Soil sample.

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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

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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

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

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CHAIN OF CUSTODY

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CLIENT: ERM	TURNAROUND REQUIREMENTS: (Standard TAT may be longer for some tests e.g. Ultra Trace Organics)	FOR LABORATORY USE ONLY (Circle)	
OFFICE: Sydney SOP	☒ Standard TAT (List due date):	Custody Seal Intact?	Yes / No / N/A
PROJECT: PROJECT NO.: 062550	☐ Non Standard or urgent TAT (List due date):	Free ice / frozen ice bricks present upon receipt?	Yes / No / N/A
ORDER NUMBER: PURCHASE ORDER NO.:	ALS QUOTE NO.:	Random Sample Temperature on Receipt:	8.5 °C
PROJECT MANAGER: Nick G / Jess L	COUNTRY OF ORIGIN: Australia	Other comment:	
SAMPLER: ~~Tristen Rodrigues~~ Ant R	CONTACT PH: 0415 833925	COC SEQUENCE NUMBER (Circle) COC: 1 2 3 4 5 6 7 OF: 1 2 3 4 5 6 7	
COC Emailed to ALS? (YES / NO)	SAMPLER MOBILE: 0427 159 735		
Email Reports to (will default to PM if no other addresses are listed): Nick G + Jess L	EDD FORMAT (or default): EsDAT		
Email Invoice to (will default to PM if no other addresses are listed): Default			

RELINQUISHED BY:	RECEIVED BY:	RELINQUISHED BY:	RECEIVED BY:
DATE/TIME:	DATE/TIME: 24/11/22 14:30	DATE/TIME:	DATE/TIME:

COMMENTS/SPECIAL HANDLING/STORAGE OR DISPOSAL: Please issue Preliminary Report.

ALS USE ONLY	SAMPLE DETAILS (MATRIX: Solid(S) Water(W))			CONTAINER INFORMATION		ANALYSIS REQUIRED including SUITES (NB. Suite Codes must be listed to attract suite price). Where Metals are required, specify Total (unfiltered bottle required) or Dissolved (field filtered bottle required).								Additional Information
LAB ID	SAMPLE ID	DATE / TIME	MATRIX	TYPE & PRESERVATIVE (refer to codes below)	TOTAL JARS	S16	S23	EA200 G	EP231	BTEX/TRH				Comments on likely contaminant levels, dilutions, or samples requiring specific QC analysis etc.
1	SOP_BH118_0.1_220119	19/1	S	JJA	3	X	X	X						
2	SOP_BH118_1.0_220119			JJP	3	X			X					
3	SOP_BH118_5.0_220119			JJ	2	X	X							
4	SOP_BH118_10.0_220119			JJP	3	X			X					
5	SOP_BH118_15.0_220119			JJ	2	X	X							
6	SOP_BH118_20.0_220119			JJ	2	X								
7	SOP_BH118_25.0_220119			JP	2	X	X		X					
8	SOP_BH142_0.4_220119			JPA	3	X	X	X	X					
9	SOP_BH142_4.0_220119			JP	2	X			X					
10	SOP_BH143_0.3_220119			JPA	3	X		X	X					
11	SOP_BH143_1.0_220119			JPA	3	X	X		X					
12	SOP_BH144_0.3_220119			JPA	3	X		X	X					
13	SOP_BH144_0.6_220119			JP	2	X	X		X					
14	SOP_BH145_0.3_220119			JPA	3	X		X	X					
15	SOP_BH145_1.0_220119			JPA	3	X	X							
				TOTAL										

Environmental Division Sydney
Work Order Reference
ES2202264

Telephone : +61-2-8784 8555

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Water Container Codes: P = Unpreserved Plastic; N = Nitric Preserved Plastic; ORC = Nitric Preserved ORC; SH = Sodium Hydroxide/Cd Preserved; S = Sodium Hydroxide Preserved Plastic; AG = Amber Glass Unpreserved; AP - Airfreight Unpreserved Plastic
V = VOA Vial HCl Preserved; VB = VOA Vial Sodium Bisulphate Preserved; VS = VOA Vial Sulfuric Preserved; AV = Airfreight Unpreserved Vial SG = Sulfuric Preserved Amber Glass; H = HCl preserved Plastic; HS = HCl preserved Speciation bottle; SP = Sulfuric Preserved Plastic; F = Formaldehyde Preserved Glass;
Z = Zinc Acetate Preserved Bottle; E = EDTA Preserved Bottles; ST = Sterile Bottle; ASS = Plastic Bag for Acid Sulphate Soils; B = Unpreserved Bag; LI = Lugols Iodine Preserved Bottles; STT = Sterile Sodium Thiosulfate Preserved Bottles.

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☐TOWNSVILLE 14-15 Desma Court Bohle QLD 4818 Ph: 07 4796 0600 E: townsville.environmental@alsglobal.com

☐WOLLONGONG 99 Kenny Street Wollongong NSW 2500 Ph: 02 4225 3125 E: wollongong@alsglobal.com

CLIENT:	TURNAROUND REQUIREMENTS : (Standard TAT may be longer for some tests e.g., Ultra Trace Organics)	☐ Standard TAT (List due date):	FOR LABORATORY USE ONLY (Circle)
OFFICE:		☐ Non Standard or urgent TAT (List due date):	Custody Seal Intact? Yes / No / N/A
PROJECT: PROJECT NO.:	ALS QUOTE NO.:	COC SEQUENCE NUMBER (Circle)	Free ice / frozen ice bricks present upon receipt? Yes / No / N/A
ORDER NUMBER: PURCHASE ORDER NO.:	COUNTRY OF ORIGIN: Australia	COC: 1 (2) 3 4 5 6 7	Random Sample Temperature on Receipt: 8.5 °C
PROJECT MANAGER: CONTACT PH:	SEE PAGE (1)	OF: 1 2 3 (4) 5 6 7	Other comment:
SAMPLER: Tristan Rodrigues	SAMPLER MOBILE:	RELINQUISHED BY:	RECEIVED BY:
COC Emailed to ALS? (YES / NO)	EDD FORMAT (or default):	DATE/TIME:	DATE/TIME: 24/11/22 1430
Email Reports to (will default to PM if no other addresses are listed):		RELINQUISHED BY:	RECEIVED BY:
Email Invoice to (will default to PM if no other addresses are listed):		DATE/TIME:	DATE/TIME:

COMMENTS/SPECIAL HANDLING/STORAGE OR DISPOSAL: **Please issue Preliminary Report.**

ALS USE ONLY	SAMPLE DETAILS (MATRIX: Solid(S) Water(W))			CONTAINER INFORMATION		ANALYSIS REQUIRED including SUITES (NB. Suite Codes must be listed to attract suite price). Where Metals are required, specify Total (unfiltered bottle required) or Dissolved (field filtered bottle required).								Additional Information
LAB ID	SAMPLE ID	DATE / TIME	MATRIX	TYPE & PRESERVATIVE (refer to codes below)	TOTAL JARS	S16	S23	EA200G	EP231	BTEX/TRIHA				Comments on likely contaminant levels, dilutions, or samples requiring specific QC analysis etc.
16	SOP_BH145_5.0_220119	19-1	S	JPA	3	X			X					
17	DUP02_220119			J	2	X	X							
—	TRIP02_220119			J	2	X	X							Please forward to Eurofins
18	DUP03_220119			P	1				X					
19	TRIP03_220119			P	1				X					
20	DUP04_220119			JP	2	X			X					
—	TRIP04_220119			JP	2	X			X					Please forward to Eurofins
21	RIN03_220119		WATER		6	X								
22	SOP_BH102_0.7_220120	20/1	SOIL	JPA	3	X	X	X						
23	SOP_BH102_3.0_220120			J	1	X								
24	SOP_BH107_1.0_220120			JPA	3	X	X	X						
25	SOP_BH107_2.0_220120			J	1	X								
26	SOP_BH108_0.4_220120			JPA	3	X	X	X						
27	SOP_BH108_3.0_220120			J	1	X								
28	SOP_BH109_0.3_220120			JPA	3	X		X						
				TOTAL										

Water Container Codes: P = Unpreserved Plastic; N = Nitric Preserved Plastic; ORC = Nitric Preserved ORC; SH = Sodium Hydroxide/Cd Preserved; S = Sodium Hydroxide Preserved Plastic; AG = Amber Glass Unpreserved; AP - Airfreight Unpreserved Plastic
V = VOA Vial HCl Preserved; VB = VOA Vial Sodium Bisulphate Preserved; VS = VOA Vial Sulfuric Preserved; AV = Airfreight Unpreserved Vial SG = Sulfuric Preserved Amber Glass; H = HCl preserved Plastic; HS = HCl preserved Speciation bottle; SP = Sulfuric Preserved Plastic; F = Formaldehyde Preserved Glass;
Z = Zinc Acetate Preserved Bottle, E = EDTA Preserved Bottles; ST = Sterile Bottle; ASS = Plastic Bag for Acid Sulphate Soils; B = Unpreserved Bag; LI = Lugols Iodine Preserved Bottles; STT = Sterile Sodium Thiosulfate Preserved Bottles.

DRAFT

CHAIN OF CUSTODY

ALS Laboratory: please tick →

☐ADELAIDE 21 Burma Road Pooraka SA 5095 Ph: 08 8359 0890 E: adelaide@alsglobal.com

☐BRISBANE 2 Byth Street Stafford QLD 4053 Ph: 07 3243 7222 E: samples.brisbane@alsglobal.com

☐GLADSTONE 46 Callemondah Drive Clinton QLD 4680 Ph: 07 7471 5600 E: gladstone@alsglobal.com

☐MACKAY 78 Harbour Road Mackay QLD 4740 Ph: 07 4944 0177 E: mackay@alsglobal.com

☐MELBOURNE 2-4 Westall Road Springvale VIC 3171 Ph: 03 8549 9600 E: samples.melbourne@alsglobal.com

☐MUDGEE 1/29 Sydney Road Mudgee NSW 2850 Ph: 02 6372 6735 E: mudgee.mail@alsglobal.com

☐NEWCASTLE 5/585 Maitland Road Mayfield West NSW 2304 Ph: 02 4014 2500 E: samples.newcastle@alsglobal.com

☐NOWRA 4/13 Geary Place North Nowra NSW 2541 Ph: 02 4423 2063 E: nowra@alsglobal.com

☐PERTH 10 Hod Way Malaga WA 6090 Ph: 08 9209 7655 E: samples.perth@alsglobal.com

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CLIENT:	TURNAROUND REQUIREMENTS: ☐ Standard TAT (List due date):			FOR LABORATORY USE ONLY (Circle)	
OFFICE:	(Standard TAT may be longer for some tests e.g., Ultra Trace Organics) ☐ Non Standard or urgent TAT (List due date):			Custody Seal Intact?	Yes / No / N/A
PROJECT: PROJECT NO.:	ALS QUOTE NO.:	COC SEQUENCE NUMBER (Circle)		Free ice / frozen ice bricks present upon receipt?	Yes / No / N/A
ORDER NUMBER: PURCHASE ORDER NO.:	COUNTRY OF ORIGIN: Australia	COC: 1 2 3 4 5 6 7		Random Sample Temperature on Receipt:	°C
PROJECT MANAGER: CONTACT PH:		OF: 1 2 3 4 5 6 7		Other comment:	8.5
SAMPLER: Tristan Rodrigues SAMPLER MOBILE:	RELINQUISHED BY:	RECEIVED BY:	RELINQUISHED BY:	RECEIVED BY:	
COC Emailed to ALS? (YES / NO) EDD FORMAT (or default):	DATE/TIME:	DATE/TIME: 24/1/22 14:30	DATE/TIME:	DATE/TIME:	
Email Reports to (will default to PM if no other addresses are listed):					
Email Invoice to (will default to PM if no other addresses are listed):					

COMMENTS/SPECIAL HANDLING/STORAGE OR DISPOSAL: Please issue Preliminary Report.

ALS USE ONLY	SAMPLE DETAILS MATRIX: Solid(S) Water(W)			CONTAINER INFORMATION		ANALYSIS REQUIRED including SUITES (NB. Suite Codes must be listed to attract suite price) Where Metals are required, specify Total (unfiltered bottle required) or Dissolved (field filtered bottle required).								Additional Information
LAB ID	SAMPLE ID	DATE / TIME	MATRIX	TYPE & PRESERVATIVE (refer to codes below)	TOTAL JARS	S16	S23	EA200 G	EP231	BTEX/TRH				Comments on likely contaminant levels, dilutions, or samples requiring specific QC analysis etc.
29	SOP_BH109_1.0_220120	20/1	S	JPA	3	X	X							
30	SOP_BH120_0.5_220120			JPA	3	X		X	X					
31	SOP_BH120_3.0_220120			JP	2	X	X		X					
32	SOP_BH121_1.0_220120			JPA	3	X	X	X	X					
33	SOP_BH121_5.0_220120			JP	2	X			X					
34	SOP_BH101_0.5_220120			JPA	3	X	X	X	X					
35	SOP_BH101_1.3_220120			JPA	3	X								
36	SOP_BH101_2.0_220120			JPA	3	X								
37	DUP05_220120			JP	2	X	X		X					
—	TRIP05_220120			JP	2	X	X		X					Please forward to Eurofins
38	RINSE_220120		W		6	X								
39	SOP_BH124_0.5_220120	21/1	S	JPA	3	X	X	X	X					
40	SOP_BH124_3.0_220120			JP	2	X			X					
41	DUP06_220121			JP	2	X			X					
—	TRIP06_220121			JP	2	X			X					Please forward to Eurofins
				TOTAL										

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CHAIN OF CUSTODY

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WOLLONGONG 99 Kenny Street Wollongong NSW 2500 Ph: 02 4225 3125 E: wollongong@alsglobal.com

CLIENT:	**TURNAROUND REQUIREMENTS :** (Standard TAT may be longer for some tests e.g., Ultra Trace Organics)	☐ Standard TAT (List due date):	**FOR LABORATORY USE ONLY (Circle)**
OFFICE:		☐ Non Standard or urgent TAT (List due date):	Custody Seal Intact? Yes / No / N/A
PROJECT: **PROJECT NO.:**	**ALS QUOTE NO.:**	**COC SEQUENCE NUMBER (Circle)**	Free Ice / frozen ice bricks present upon receipt? Yes / No / N/A
ORDER NUMBER: **PURCHASE ORDER NO.:**	**COUNTRY OF ORIGIN:** Australia	COC: 1 2 3 4 5 6 7	Random Sample Temperature on Receipt: °C
PROJECT MANAGER: **CONTACT PH:**		OF: 1 2 3 4 5 6 7	Other comment: 8.5
SAMPLER: **SAMPLER MOBILE:**			
COC Emailed to ALS? (YES / NO) **EDD FORMAT (or default):**			
Email Reports to (will default to PM if no other addresses are listed):			
Email Invoice to (will default to PM if no other addresses are listed):			

SEE PAGE 1

RELINQUISHED BY:	**RECEIVED BY:**	**RELINQUISHED BY:**	**RECEIVED BY:**
DATE/TIME:	DATE/TIME: 24/1/22 1480	DATE/TIME:	DATE/TIME:

COMMENTS/SPECIAL HANDLING/STORAGE OR DISPOSAL: Please issue Preliminary Report.

ALS USE ONLY	SAMPLE DETAILS MATRIX: Solid(S) Water(W)			CONTAINER INFORMATION		ANALYSIS REQUIRED including SUITES (NB. Suite Codes must be listed to attract suite price) Where Metals are required, specify Total (unfiltered bottle required) or Dissolved (field filtered bottle required).								Additional Information
LAB ID	SAMPLE ID	DATE / TIME	MATRIX	TYPE & PRESERVATIVE *(refer to codes below)*	TOTAL JARS	S16	S23	EA200 G	EP231	BTEX/TRH				Comments on likely contaminant levels, dilutions, or samples requiring specific QC analysis etc.
42	SOP_BH125_0.5_220121	21/1	S	JPA	3	X		X	X					
43	SOP_BH125_5.0_220121			JP	2	X	X							
44	SOP_BH125_10.0_220121			JP	2	X								
45	SOP_BH125_15.0_220121			JP	2	X	X		X					
46	SOP_BH125_20.0_220121			JP	2	X								
47	SOP_BH125_25.0_220121			JP	2	X	X							
48	SOP_BH126_0.2_220121			JPA	3	X	X	X	X					
49	SOP_BH126_2.0_220121			JP	2	X			X					
50	SOP_BH127_1.2_220121			JPA	3	X	X	X	X					
51	SOP_BH127_4.0_220121			JP	2	X			X					
-	~~SOP_BH12~~													
52	RINSE_220121		W		6	X								
53	TS		S		1					X				
54	TB		S		1					X				
55	TSC													
				TOTAL										

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ALS Environmental

CERTIFICATE OF ANALYSIS

Work Order	: **ES2202692**	Page	: 1 of 79
Client	: **ENVIRONMENTAL RESOURCES MANAGEMENT (ERM)**	Laboratory	: Environmental Division Sydney
Contact	: MS JESSICA LAWRENCE	Contact	: Customer Services ES
Address	: LEVEL 15 309 KENT STREET SYDNEY NSW AUSTRALIA 2000	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
Telephone	: +61 02 8584 8888	Telephone	: +61-2-8784 8555
Project	: 0628507 SOP	Date Samples Received	: 27-Jan-2022 15:25
Order number	: ----	Date Analysis Commenced	: 31-Jan-2022
C-O-C number	: ----	Issue Date	: 04-Feb-2022 17:15
Sampler	: ANTHONY RICHARD		
Site	: ----		
Quote number	: EN/114		
No. of samples received	: 32		
No. of samples analysed	: 32		

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

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

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results
- 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.

Signatories	*Position*	*Accreditation Category*
Alana Smylie	Asbestos Identifier	Newcastle - Asbestos, Mayfield West, NSW
Alex Rossi	Organic Chemist	Sydney Organics, Smithfield, NSW
Ankit Joshi	Inorganic Chemist	Sydney Inorganics, Smithfield, NSW
Dian Dao	Senior Chemist - Inorganics	Sydney Inorganics, Smithfield, NSW
Edwandy Fadjar	Organic Coordinator	Sydney Organics, Smithfield, NSW
Franco Lentini	LCMS Coordinator	Sydney Inorganics, Smithfield, NSW
Ivan Taylor	Analyst	Sydney Inorganics, Smithfield, NSW

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General Comments

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

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

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

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

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.
- 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-dichlorothene, trans-1,2-dichlorothene, 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 EP2200832 # 001. Confirmed by redigestion and reanalysis.
- 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.

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- 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
- ED007 and ED008: When Exchangeable Al is reported from these methods, it should be noted that Rayment & Lyons (2011) suggests Exchange Acidity by 1M KCl - Method 15G1 (ED005) is a more suitable method for the determination of exchange acidity (H+ + Al3+).
- 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.

DRAFT

Analytical Results

Sub-Matrix: SOIL
(Matrix: SOIL)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH128_0.9_220124	SOP_BH128_5.0_220124	SOP_BH129_0.5_220124	SOP_BH129_1.0_220124	SOP_BH130_0.4_220124
				Sampling date / time	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00
					ES2202692-001	ES2202692-002	ES2202692-003	ES2202692-004	ES2202692-005
					Result	Result	Result	Result	Result
EA055: Moisture Content (Dried @ 105-110°C)									
Moisture Content	----	1.0	%		16.5	4.9	11.6	10.2	18.0
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		437	----	271	---	395
APPROVED IDENTIFIER:	----	-	--		A. SMYLIE	----	A. SMYLIE	---	A. SMYLIE
EG005(ED093)T: Total Metals by ICP-AES									
Arsenic	7440-38-2	5	mg/kg		<5	7	12	9	14
Cadmium	7440-43-9	1	mg/kg		<1	<1	<1	<1	<1
Chromium	7440-47-3	2	mg/kg		4	6	29	7	15
Copper	7440-50-8	5	mg/kg		16	41	16	27	29
Lead	7439-92-1	5	mg/kg		16	17	31	17	21
Nickel	7440-02-0	2	mg/kg		2	20	7	3	8
Zinc	7440-66-6	5	mg/kg		17	84	31	20	29
EG035T: Total Recoverable Mercury by FIMS									
Mercury	7439-97-6	0.1	mg/kg		<0.1	<0.1	<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	<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	0.13	<0.05	<0.05
trans-Chlordane	5103-74-2	0.05	mg/kg		<0.05	<0.05	0.06	<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	0.07	<0.05	<0.05

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Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH128_0.9_220124	SOP_BH128_5.0_220124	SOP_BH129_0.5_220124	SOP_BH129_1.0_220124	SOP_BH130_0.4_220124
				Sampling date / time	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00
					ES2202692-001	ES2202692-002	ES2202692-003	ES2202692-004	ES2202692-005
					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**	72-54-8/72-55-9/50-29-3	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
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

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Analytical Results

Sub-Matrix: SOIL
(Matrix: SOIL)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH128_0.9_220124	SOP_BH128_5.0_220124	SOP_BH129_0.5_220124	SOP_BH129_1.0_220124	SOP_BH130_0.4_220124
				Sampling date / time	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00
					ES2202692-001	ES2202692-002	ES2202692-003	ES2202692-004	ES2202692-005
					Result	Result	Result	Result	Result
EP074A: Monocyclic Aromatic Hydrocarbons									
Benzene	71-43-2	0.2	mg/kg		<0.2	----	----	<0.2	----
Toluene	108-88-3	0.5	mg/kg		<0.5	----	----	<0.5	----
Ethylbenzene	100-41-4	0.5	mg/kg		<0.5	----	----	<0.5	----
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg		<0.5	----	----	<0.5	----
Styrene	100-42-5	0.5	mg/kg		<0.5	----	----	<0.5	----
ortho-Xylene	95-47-6	0.5	mg/kg		<0.5	----	----	<0.5	----
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	----

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Analytical Results

Sub-Matrix: SOIL
(Matrix: SOIL)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH128_0.9_220124	SOP_BH128_5.0_220124	SOP_BH129_0.5_220124	SOP_BH129_1.0_220124	SOP_BH130_0.4_220124
				Sampling date / time	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00
					ES2202692-001	ES2202692-002	ES2202692-003	ES2202692-004	ES2202692-005
					Result	Result	Result	Result	Result
EP074E: Halogenated Aliphatic Compounds - Continued									
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	----
Bromoform	75-25-2	0.5	mg/kg		<0.5	----	----	<0.5	----
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons									
Naphthalene	91-20-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5

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Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH128_0.9_220124	SOP_BH128_5.0_220124	SOP_BH129_0.5_220124	SOP_BH129_1.0_220124	SOP_BH130_0.4_220124
				Sampling date / time	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00
					ES2202692-001	ES2202692-002	ES2202692-003	ES2202692-004	ES2202692-005
					Result	Result	Result	Result	Result
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued									
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		<0.5	<0.5	<0.5	<0.5	<0.5
Anthracene	120-12-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Fluoranthene	206-44-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Pyrene	129-00-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benz(a)anthracene	56-55-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Chrysene	218-01-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg		<0.5	<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		<0.5	<0.5	<0.5	<0.5	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg		**0.6**	**0.6**	**0.6**	**0.6**	**0.6**
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg		**1.2**	**1.2**	**1.2**	**1.2**	**1.2**
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	----

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Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	SOP_BH128_0.9_220124	SOP_BH128_5.0_220124	SOP_BH129_0.5_220124	SOP_BH129_1.0_220124	SOP_BH130_0.4_220124
			Sampling date / time	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00
Compound	CAS Number	LOR	Unit	ES2202692-001	ES2202692-002	ES2202692-003	ES2202692-004	ES2202692-005
				Result	Result	Result	Result	Result
EP075B: Polynuclear Aromatic Hydrocarbons - Continued								
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	----
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	----

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Analytical Results

Sub-Matrix: SOIL
(Matrix: SOIL)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH128_0.9_220124	SOP_BH128_5.0_220124	SOP_BH129_0.5_220124	SOP_BH129_1.0_220124	SOP_BH130_0.4_220124
				Sampling date / time	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00
					ES2202692-001	ES2202692-002	ES2202692-003	ES2202692-004	ES2202692-005
					Result	Result	Result	Result	Result
EP075D: Nitrosamines - Continued									
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									
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	----

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Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH128_0.9_220124	SOP_BH128_5.0_220124	SOP_BH129_0.5_220124	SOP_BH129_1.0_220124	SOP_BH130_0.4_220124
				Sampling date / time	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00
					ES2202692-001	ES2202692-002	ES2202692-003	ES2202692-004	ES2202692-005
					Result	Result	Result	Result	Result
EP075G: Chlorinated Hydrocarbons - Continued									
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	----
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									

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Analytical Results

Sub-Matrix: SOIL
(Matrix: SOIL)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH128_0.9_220124	SOP_BH128_5.0_220124	SOP_BH129_0.5_220124	SOP_BH129_1.0_220124	SOP_BH130_0.4_220124
				Sampling date / time	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00
					ES2202692-001	ES2202692-002	ES2202692-003	ES2202692-004	ES2202692-005
					Result	Result	Result	Result	Result
EP075J: Organophosphorus Pesticides - Continued									
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	<100	<100	<100	<100
C29 - C36 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
^ C10 - C36 Fraction (sum)	----	50	mg/kg		<50	<50	<50	<50	<50
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
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		<100	<100	<100	<100	<100
>C34 - C40 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
^ >C10 - C40 Fraction (sum)	----	50	mg/kg		<50	<50	<50	<50	<50
^ >C10 - C16 Fraction minus Naphthalene (F2)	----	50	mg/kg		<50	<50	<50	<50	<50
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

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Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	SOP_BH128_0.9_220124	SOP_BH128_5.0_220124	SOP_BH129_0.5_220124	SOP_BH129_1.0_220124	SOP_BH130_0.4_220124
				Sampling date / time	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00
Compound	CAS Number	LOR	Unit		ES2202692-001	ES2202692-002	ES2202692-003	ES2202692-004	ES2202692-005
					Result	Result	Result	Result	Result
EP080: BTEXN - Continued									
^ 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	<0.0002	----
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	<0.0002	----
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.0002	mg/kg		<0.0002	<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	<0.001	----
Perfluoropentanoic acid (PFPeA)	2706-90-3	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	<0.0002	----
Perfluorohexanoic acid (PFHxA)	307-24-4	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	<0.0002	----
Perfluoroheptanoic acid (PFHpA)	375-85-9	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	<0.0002	----
Perfluorooctanoic acid (PFOA)	335-67-1	0.0002	mg/kg		<0.0002	<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	<0.0005	----
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.0005	mg/kg		<0.0005	<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	<0.0005	----
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.0005	mg/kg		<0.0005	<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	<0.0002	----
Sum of PFAS (WA DER List)	----	0.0002	mg/kg		<0.0002	<0.0002	<0.0002	<0.0002	----
EP066S: PCB Surrogate									
Decachlorobiphenyl	2051-24-3	0.1	%		**104**	**120**	**127**	**122**	**105**
EP068S: Organochlorine Pesticide Surrogate									
Dibromo-DDE	21655-73-2	0.05	%		**105**	**99.3**	**92.8**	**102**	**82.2**
EP068T: Organophosphorus Pesticide Surrogate									
DEF	78-48-8	0.05	%		**124**	**120**	**108**	**50.9**	**91.0**

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Analytical Results

Sub-Matrix: SOIL
(Matrix: SOIL)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH128_0.9_220124	SOP_BH128_5.0_220124	SOP_BH129_0.5_220124	SOP_BH129_1.0_220124	SOP_BH130_0.4_220124
				Sampling date / time	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00
					ES2202692-001	ES2202692-002	ES2202692-003	ES2202692-004	ES2202692-005
					Result	Result	Result	Result	Result
EP074S: VOC Surrogates									
1.2-Dichloroethane-D4	17060-07-0	0.5	%		87.9	----	----	83.6	----
Toluene-D8	2037-26-5	0.5	%		86.1	----	----	85.8	----
4-Bromofluorobenzene	460-00-4	0.5	%		93.2	----	----	92.3	----
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	0.5	%		100	96.7	97.6	96.8	93.5
2-Chlorophenol-D4	93951-73-6	0.5	%		98.9	97.2	96.9	94.6	91.2
2.4.6-Tribromophenol	118-79-6	0.5	%		88.8	82.3	84.6	81.3	80.7
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	0.5	%		104	101	101	99.5	97.8
Anthracene-d10	1719-06-8	0.5	%		105	103	101	99.9	99.6
4-Terphenyl-d14	1718-51-0	0.5	%		95.5	94.0	92.6	92.1	91.3
EP075S: Acid Extractable Surrogates									
2-Fluorophenol	367-12-4	0.5	%		109	----	----	103	----
Phenol-d6	13127-88-3	0.5	%		108	----	----	104	----
2-Chlorophenol-D4	93951-73-6	0.5	%		105	----	----	99.2	----
2.4.6-Tribromophenol	118-79-6	0.5	%		70.6	----	----	82.8	----
EP075T: Base/Neutral Extractable Surrogates									
Nitrobenzene-D5	4165-60-0	0.5	%		116	----	----	104	----
1.2-Dichlorobenzene-D4	2199-69-1	0.5	%		91.9	----	----	91.5	----
2-Fluorobiphenyl	321-60-8	0.5	%		109	----	----	106	----
Anthracene-d10	1719-06-8	0.5	%		130	----	----	116	----
4-Terphenyl-d14	1718-51-0	0.5	%		109	----	----	88.4	----
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	0.2	%		89.4	77.1	81.7	85.5	84.9
Toluene-D8	2037-26-5	0.2	%		90.4	99.6	87.7	90.0	90.6
4-Bromofluorobenzene	460-00-4	0.2	%		98.8	107	91.2	98.8	83.2
EP231S: PFAS Surrogate									
13C4-PFOS	----	0.0002	%		106	110	106	98.0	----
13C8-PFOA	----	0.0002	%		101	103	108	99.5	----

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Analytical Results

Sub-Matrix: SOIL
(Matrix: SOIL)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH130_2.0_2201 24	SOP_BH131_1.0_2201 24	SOP_BH131_2.0_2201 24	DUP07_220124	SOP_BH122_1.0_2201 24
				Sampling date / time	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00
					ES2202692-006	ES2202692-007	ES2202692-008	ES2202692-009	ES2202692-010
					Result	Result	Result	Result	Result
EA055: Moisture Content (Dried @ 105-110°C)									
Moisture Content	----	1.0	%		7.8	11.8	8.6	7.7	8.2
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		----	279	----	---	185
APPROVED IDENTIFIER:	----	-	--		----	A. SMYLIE	----	---	A. SMYLIE
EG005(ED093)T: Total Metals by ICP-AES									
Arsenic	7440-38-2	5	mg/kg		8	6	6	8	9
Cadmium	7440-43-9	1	mg/kg		<1	<1	<1	<1	<1
Chromium	7440-47-3	2	mg/kg		10	5	6	6	10
Copper	7440-50-8	5	mg/kg		59	12	28	36	32
Lead	7439-92-1	5	mg/kg		16	12	17	17	12
Nickel	7440-02-0	2	mg/kg		10	<2	4	6	<2
Zinc	7440-66-6	5	mg/kg		66	<5	28	42	9
EG035T: Total Recoverable Mercury by FIMS									
Mercury	7439-97-6	0.1	mg/kg		<0.1	<0.1	<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	<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

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Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH130_2.0_220124	SOP_BH131_1.0_220124	SOP_BH131_2.0_220124	DUP07_220124	SOP_BH122_1.0_220124
				Sampling date / time	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00
					ES2202692-006	ES2202692-007	ES2202692-008	ES2202692-009	ES2202692-010
					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

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Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH130_2.0_220124	SOP_BH131_1.0_220124	SOP_BH131_2.0_220124	DUP07_220124	SOP_BH122_1.0_220124
				Sampling date / time	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00
					ES2202692-006	ES2202692-007	ES2202692-008	ES2202692-009	ES2202692-010
					Result	Result	Result	Result	Result
EP074A: Monocyclic Aromatic Hydrocarbons									
Benzene	71-43-2	0.2	mg/kg		<0.2	<0.2	----	---	---
Toluene	108-88-3	0.5	mg/kg		<0.5	<0.5	----	---	---
Ethylbenzene	100-41-4	0.5	mg/kg		<0.5	<0.5	----	---	---
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg		<0.5	<0.5	----	---	---
Styrene	100-42-5	0.5	mg/kg		<0.5	<0.5	----	---	---
ortho-Xylene	95-47-6	0.5	mg/kg		<0.5	<0.5	----	---	---
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	----	---	---

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Analytical Results

Sub-Matrix: SOIL
(Matrix: SOIL)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH130_2.0_220124	SOP_BH131_1.0_220124	SOP_BH131_2.0_220124	DUP07_220124	SOP_BH122_1.0_220124
				Sampling date / time	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00
					ES2202692-006	ES2202692-007	ES2202692-008	ES2202692-009	ES2202692-010
					Result	Result	Result	Result	Result
EP074E: Halogenated Aliphatic Compounds - Continued									
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	----	---	---
Bromoform	75-25-2	0.5	mg/kg		<0.5	<0.5	----	---	---
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons									
Naphthalene	91-20-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5

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Analytical Results

Sub-Matrix: SOIL
(Matrix: SOIL)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH130_2.0_220124	SOP_BH131_1.0_220124	SOP_BH131_2.0_220124	DUP07_220124	SOP_BH122_1.0_220124
				Sampling date / time	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00
					ES2202692-006	ES2202692-007	ES2202692-008	ES2202692-009	ES2202692-010
					Result	Result	Result	Result	Result
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued									
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		<0.5	<0.5	<0.5	<0.5	<0.5
Anthracene	120-12-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Fluoranthene	206-44-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Pyrene	129-00-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benz(a)anthracene	56-55-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Chrysene	218-01-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg		<0.5	<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		<0.5	<0.5	<0.5	<0.5	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg		**0.6**	**0.6**	**0.6**	**0.6**	**0.6**
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg		**1.2**	**1.2**	**1.2**	**1.2**	**1.2**
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	----	----	----

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Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH130_2.0_220124	SOP_BH131_1.0_220124	SOP_BH131_2.0_220124	DUP07_220124	SOP_BH122_1.0_220124
				Sampling date / time	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00
					ES2202692-006	ES2202692-007	ES2202692-008	ES2202692-009	ES2202692-010
					Result	Result	Result	Result	Result
EP075B: Polynuclear Aromatic Hydrocarbons - Continued									
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	----	---	---
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	----	---	---

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Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH130_2.0_220124	SOP_BH131_1.0_220124	SOP_BH131_2.0_220124	DUP07_220124	SOP_BH122_1.0_220124
				Sampling date / time	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00
					ES2202692-006	ES2202692-007	ES2202692-008	ES2202692-009	ES2202692-010
					Result	Result	Result	Result	Result
EP075D: Nitrosamines - Continued									
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									
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	----	---	---

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Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH130_2.0_220124	SOP_BH131_1.0_220124	SOP_BH131_2.0_220124	DUP07_220124	SOP_BH122_1.0_220124
				Sampling date / time	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00
					ES2202692-006	ES2202692-007	ES2202692-008	ES2202692-009	ES2202692-010
					Result	Result	Result	Result	Result
EP075G: Chlorinated Hydrocarbons - Continued									
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	----	---	---
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									

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Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	SOP_BH130_2.0_2201 24	SOP_BH131_1.0_2201 24	SOP_BH131_2.0_2201 24	DUP07_220124	SOP_BH122_1.0_2201 24
				Sampling date / time	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00
Compound	CAS Number	LOR	Unit		ES2202692-006	ES2202692-007	ES2202692-008	ES2202692-009	ES2202692-010
					Result	Result	Result	Result	Result
EP075J: Organophosphorus Pesticides - Continued									
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	<100	<100	<100	<100
C29 - C36 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
^ C10 - C36 Fraction (sum)	----	50	mg/kg		<50	<50	<50	<50	<50
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
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		<100	<100	<100	<100	<100
>C34 - C40 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
^ >C10 - C40 Fraction (sum)	----	50	mg/kg		<50	<50	<50	<50	<50
^ >C10 - C16 Fraction minus Naphthalene (F2)	----	50	mg/kg		<50	<50	<50	<50	<50
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

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Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH130_2.0_220124	SOP_BH131_1.0_220124	SOP_BH131_2.0_220124	DUP07_220124	SOP_BH122_1.0_220124
				Sampling date / time	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00
					ES2202692-006	ES2202692-007	ES2202692-008	ES2202692-009	ES2202692-010
					Result	Result	Result	Result	Result
EP080: BTEXN - Continued									
^ 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		----	----	<0.0002	<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	----
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	%		120	116	122	115	129
EP068S: Organochlorine Pesticide Surrogate									
Dibromo-DDE	21655-73-2	0.05	%		89.1	92.6	98.4	105	94.6
EP068T: Organophosphorus Pesticide Surrogate									
DEF	78-48-8	0.05	%		46.5	64.7	116	116	90.9

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Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	SOP_BH130_2.0_220124	SOP_BH131_1.0_220124	SOP_BH131_2.0_220124	DUP07_220124	SOP_BH122_1.0_220124
				Sampling date / time	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00
Compound	CAS Number	LOR	Unit		ES2202692-006	ES2202692-007	ES2202692-008	ES2202692-009	ES2202692-010
					Result	Result	Result	Result	Result
EP074S: VOC Surrogates									
1.2-Dichloroethane-D4	17060-07-0	0.5	%		92.4	83.1	----	---	---
Toluene-D8	2037-26-5	0.5	%		90.9	90.0	----	---	---
4-Bromofluorobenzene	460-00-4	0.5	%		99.0	92.8	----	---	---
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	0.5	%		100	95.8	96.2	96.4	97.9
2-Chlorophenol-D4	93951-73-6	0.5	%		99.1	94.3	95.0	94.6	96.2
2.4.6-Tribromophenol	118-79-6	0.5	%		84.9	80.4	77.7	79.9	78.4
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	0.5	%		104	99.9	99.8	99.6	102
Anthracene-d10	1719-06-8	0.5	%		101	99.6	98.0	97.7	100
4-Terphenyl-d14	1718-51-0	0.5	%		98.8	92.8	92.4	94.0	94.4
EP075S: Acid Extractable Surrogates									
2-Fluorophenol	367-12-4	0.5	%		94.2	112	----	---	---
Phenol-d6	13127-88-3	0.5	%		98.3	104	----	---	---
2-Chlorophenol-D4	93951-73-6	0.5	%		93.8	105	----	---	---
2.4.6-Tribromophenol	118-79-6	0.5	%		80.1	103	----	---	---
EP075T: Base/Neutral Extractable Surrogates									
Nitrobenzene-D5	4165-60-0	0.5	%		103	98.7	----	---	---
1.2-Dichlorobenzene-D4	2199-69-1	0.5	%		91.2	90.3	----	---	---
2-Fluorobiphenyl	321-60-8	0.5	%		122	105	----	---	---
Anthracene-d10	1719-06-8	0.5	%		118	122	----	---	---
4-Terphenyl-d14	1718-51-0	0.5	%		104	100	----	---	---
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	0.2	%		94.3	84.9	88.6	81.2	86.2
Toluene-D8	2037-26-5	0.2	%		95.3	94.5	93.8	84.6	91.6
4-Bromofluorobenzene	460-00-4	0.2	%		106	98.2	86.0	80.3	84.9
EP231S: PFAS Surrogate									
13C4-PFOS	----	0.0002	%		----	----	102	99.5	---
13C8-PFOA	----	0.0002	%		----	----	103	106	---

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Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	SOP_BH122_2.0_220124	SOP_BH123_1.0_220124	SOP_BH123_3.0_220124	SOP_BH140_1.0_220124	SOP_BH140_2.0_220124
			Sampling date / time	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00
Compound	CAS Number	LOR	Unit	ES2202692-011	ES2202692-012	ES2202692-013	ES2202692-014	ES2202692-015
				Result	Result	Result	Result	Result
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	----	1.0	%	10.0	9.1	8.9	14.2	16.1
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	----	131	----	326	----
APPROVED IDENTIFIER:	----	-	--	----	A. SMYLIE	----	A. SMYLIE	----
EG005(ED093)T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	<5	11	8	13	14
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	<1	<1
Chromium	7440-47-3	2	mg/kg	7	7	7	15	8
Copper	7440-50-8	5	mg/kg	32	25	61	35	32
Lead	7439-92-1	5	mg/kg	25	9	15	24	46
Nickel	7440-02-0	2	mg/kg	<2	2	38	10	4
Zinc	7440-66-6	5	mg/kg	9	15	242	52	18
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	<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	<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

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Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH122_2.0_220124	SOP_BH123_1.0_220124	SOP_BH123_3.0_220124	SOP_BH140_1.0_220124	SOP_BH140_2.0_220124
				Sampling date / time	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00
					ES2202692-011	ES2202692-012	ES2202692-013	ES2202692-014	ES2202692-015
					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**	72-54-8/72-55-9/50-29-3	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
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

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Analytical Results

Sub-Matrix: SOIL
(Matrix: SOIL)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH122_2.0_220124	SOP_BH123_1.0_220124	SOP_BH123_3.0_220124	SOP_BH140_1.0_220124	SOP_BH140_2.0_220124
				Sampling date / time	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00
					ES2202692-011	ES2202692-012	ES2202692-013	ES2202692-014	ES2202692-015
					Result	Result	Result	Result	Result
EP074A: Monocyclic Aromatic Hydrocarbons									
Benzene	71-43-2	0.2	mg/kg		<0.2	<0.2	----	---	<0.2
Toluene	108-88-3	0.5	mg/kg		<0.5	<0.5	----	---	<0.5
Ethylbenzene	100-41-4	0.5	mg/kg		<0.5	<0.5	----	---	<0.5
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg		<0.5	<0.5	----	---	<0.5
Styrene	100-42-5	0.5	mg/kg		<0.5	<0.5	----	---	<0.5
ortho-Xylene	95-47-6	0.5	mg/kg		<0.5	<0.5	----	---	<0.5
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

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Analytical Results

Sub-Matrix: SOIL
(Matrix: SOIL)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH122_2.0_220124	SOP_BH123_1.0_220124	SOP_BH123_3.0_220124	SOP_BH140_1.0_220124	SOP_BH140_2.0_220124
				Sampling date / time	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00
					ES2202692-011	ES2202692-012	ES2202692-013	ES2202692-014	ES2202692-015
					Result	Result	Result	Result	Result
EP074E: Halogenated Aliphatic Compounds - Continued									
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
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)B: Polynuclear Aromatic Hydrocarbons									
Naphthalene	91-20-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5

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Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH122_2.0_220124	SOP_BH123_1.0_220124	SOP_BH123_3.0_220124	SOP_BH140_1.0_220124	SOP_BH140_2.0_220124
				Sampling date / time	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00
					ES2202692-011	ES2202692-012	ES2202692-013	ES2202692-014	ES2202692-015
					Result	Result	Result	Result	Result
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued									
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		<0.5	<0.5	<0.5	<0.5	<0.5
Anthracene	120-12-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Fluoranthene	206-44-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Pyrene	129-00-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benz(a)anthracene	56-55-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Chrysene	218-01-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg		<0.5	<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		<0.5	<0.5	<0.5	<0.5	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg		**0.6**	**0.6**	**0.6**	**0.6**	**0.6**
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg		**1.2**	**1.2**	**1.2**	**1.2**	**1.2**
EP075A: 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	0.5	mg/kg		<0.5	<0.5	----	---	<0.5
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	1	mg/kg		<1	<1	---	---	<1
EP075B: Polynuclear Aromatic Hydrocarbons									
Naphthalene	91-20-3	0.5	mg/kg		<0.5	<0.5	---	---	<0.5

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Analytical Results

Sub-Matrix: SOIL
(Matrix: SOIL)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH122_2.0_220124	SOP_BH123_1.0_220124	SOP_BH123_3.0_220124	SOP_BH140_1.0_220124	SOP_BH140_2.0_220124
				Sampling date / time	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00
					ES2202692-011	ES2202692-012	ES2202692-013	ES2202692-014	ES2202692-015
					Result	Result	Result	Result	Result
EP075B: Polynuclear Aromatic Hydrocarbons - Continued									
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
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
N-2-Fluorenyl Acetamide	53-96-3	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) & Benzo(k)fluoranthene	205-99-2 207-08-9	1	mg/kg		<1	<1	----	---	<1
7.12-Dimethylbenz(a)anthracene	57-97-6	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
3-Methylcholanthrene	56-49-5	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 PAHs	----	0.5	mg/kg		<0.5	<0.5	----	---	<0.5
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg		<0.5	<0.5	----	---	<0.5
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg		**0.6**	**0.6**	----	---	**0.6**
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg		**1.2**	**1.2**	----	---	**1.2**
EP075C: Phthalate Esters									
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

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Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH122_2.0_220124	SOP_BH123_1.0_220124	SOP_BH123_3.0_220124	SOP_BH140_1.0_220124	SOP_BH140_2.0_220124
				Sampling date / time	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00
					ES2202692-011	ES2202692-012	ES2202692-013	ES2202692-014	ES2202692-015
					Result	Result	Result	Result	Result
EP075D: Nitrosamines - Continued									
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
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

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Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH122_2.0_220124	SOP_BH123_1.0_220124	SOP_BH123_3.0_220124	SOP_BH140_1.0_220124	SOP_BH140_2.0_220124
				Sampling date / time	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00
					ES2202692-011	ES2202692-012	ES2202692-013	ES2202692-014	ES2202692-015
					Result	Result	Result	Result	Result
EP075G: Chlorinated Hydrocarbons - Continued									
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
EP075I: Organochlorine Pesticides									
alpha-BHC	319-84-6	0.5	mg/kg		<0.5	<0.5	----	---	<0.5
beta-BHC	319-85-7	0.5	mg/kg		<0.5	<0.5	----	---	<0.5
gamma-BHC	58-89-9	0.5	mg/kg		<0.5	<0.5	----	---	<0.5
delta-BHC	319-86-8	0.5	mg/kg		<0.5	<0.5	----	---	<0.5
Heptachlor	76-44-8	0.5	mg/kg		<0.5	<0.5	----	---	<0.5
Aldrin	309-00-2	0.5	mg/kg		<0.5	<0.5	----	---	<0.5
Heptachlor epoxide	1024-57-3	0.5	mg/kg		<0.5	<0.5	----	---	<0.5
alpha-Endosulfan	959-98-8	0.5	mg/kg		<0.5	<0.5	----	---	<0.5
4.4`-DDE	72-55-9	0.5	mg/kg		<0.5	<0.5	----	---	<0.5
Dieldrin	60-57-1	0.5	mg/kg		<0.5	<0.5	----	---	<0.5
Endrin	72-20-8	0.5	mg/kg		<0.5	<0.5	----	---	<0.5
beta-Endosulfan	33213-65-9	0.5	mg/kg		<0.5	<0.5	---	---	<0.5
4.4`-DDD	72-54-8	0.5	mg/kg		<0.5	<0.5	---	---	<0.5
Endosulfan sulfate	1031-07-8	0.5	mg/kg		<0.5	<0.5	---	---	<0.5
4.4`-DDT	50-29-3	1.0	mg/kg		<1.0	<1.0	---	---	<1.0
EP075J: Organophosphorus Pesticides									

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Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	SOP_BH122_2.0_220124	SOP_BH123_1.0_220124	SOP_BH123_3.0_220124	SOP_BH140_1.0_220124	SOP_BH140_2.0_220124
			Sampling date / time	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00
Compound	CAS Number	LOR	Unit	ES2202692-011	ES2202692-012	ES2202692-013	ES2202692-014	ES2202692-015
				Result	Result	Result	Result	Result
EP075J: Organophosphorus Pesticides - Continued								
Dichlorvos	62-73-7	0.5	mg/kg	<0.5	<0.5	----	---	<0.5
Dimethoate	60-51-5	0.5	mg/kg	<0.5	<0.5	----	---	<0.5
Diazinon	333-41-5	0.5	mg/kg	<0.5	<0.5	----	---	<0.5
Chlorpyrifos-methyl	5598-13-0	0.5	mg/kg	<0.5	<0.5	----	---	<0.5
Malathion	121-75-5	0.5	mg/kg	<0.5	<0.5	----	---	<0.5
Fenthion	55-38-9	0.5	mg/kg	<0.5	<0.5	----	---	<0.5
Chlorpyrifos	2921-88-2	0.5	mg/kg	<0.5	<0.5	----	---	<0.5
Pirimphos-ethyl	23505-41-1	0.5	mg/kg	<0.5	<0.5	----	---	<0.5
Chlorfenvinphos	470-90-6	0.5	mg/kg	<0.5	<0.5	----	---	<0.5
Prothiofos	34643-46-4	0.5	mg/kg	<0.5	<0.5	----	---	<0.5
Ethion	563-12-2	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	<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	<50	<50
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	<100	<100	<100	<100	<100
>C34 - C40 Fraction	----	100	mg/kg	<100	<100	<100	<100	<100
^ >C10 - C40 Fraction (sum)	----	50	mg/kg	<50	<50	<50	<50	<50
^ >C10 - C16 Fraction minus Naphthalene (F2)	----	50	mg/kg	<50	<50	<50	<50	<50
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

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Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	SOP_BH122_2.0_220124	SOP_BH123_1.0_220124	SOP_BH123_3.0_220124	SOP_BH140_1.0_220124	SOP_BH140_2.0_220124
				Sampling date / time	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00
Compound	CAS Number	LOR	Unit		ES2202692-011	ES2202692-012	ES2202692-013	ES2202692-014	ES2202692-015
					Result	Result	Result	Result	Result
EP080: BTEXN - Continued									
^ 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		----	<0.0002	----	---	<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
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	%		**116**	**124**	**125**	**95.7**	**113**
EP068S: Organochlorine Pesticide Surrogate									
Dibromo-DDE	21655-73-2	0.05	%		**92.2**	**87.8**	**89.4**	**81.1**	**102**
EP068T: Organophosphorus Pesticide Surrogate									
DEF	78-48-8	0.05	%		**79.9**	**70.6**	**75.6**	**83.4**	**79.1**

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Analytical Results

Sub-Matrix: SOIL
(Matrix: SOIL)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH122_2.0_220124	SOP_BH123_1.0_220124	SOP_BH123_3.0_220124	SOP_BH140_1.0_220124	SOP_BH140_2.0_220124
				Sampling date / time	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00	24-Jan-2022 00:00
					ES2202692-011	ES2202692-012	ES2202692-013	ES2202692-014	ES2202692-015
					Result	Result	Result	Result	Result
EP074S: VOC Surrogates									
1.2-Dichloroethane-D4	17060-07-0	0.5	%		76.3	84.0	----	---	77.9
Toluene-D8	2037-26-5	0.5	%		86.3	89.5	----	---	86.6
4-Bromofluorobenzene	460-00-4	0.5	%		86.2	93.9	----	---	86.8
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	0.5	%		98.0	94.6	98.0	98.0	96.5
2-Chlorophenol-D4	93951-73-6	0.5	%		96.5	92.7	96.5	97.0	94.5
2.4.6-Tribromophenol	118-79-6	0.5	%		77.3	73.5	74.9	82.9	78.9
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	0.5	%		102	98.1	102	102	101
Anthracene-d10	1719-06-8	0.5	%		101	96.5	99.5	103	98.1
4-Terphenyl-d14	1718-51-0	0.5	%		95.9	91.2	94.9	96.0	95.0
EP075S: Acid Extractable Surrogates									
2-Fluorophenol	367-12-4	0.5	%		99.3	111	----	---	99.4
Phenol-d6	13127-88-3	0.5	%		104	102	----	---	98.8
2-Chlorophenol-D4	93951-73-6	0.5	%		97.5	101	----	---	92.7
2.4.6-Tribromophenol	118-79-6	0.5	%		62.6	77.5	----	---	93.0
EP075T: Base/Neutral Extractable Surrogates									
Nitrobenzene-D5	4165-60-0	0.5	%		110	108	----	---	103
1.2-Dichlorobenzene-D4	2199-69-1	0.5	%		96.3	94.0	----	---	87.8
2-Fluorobiphenyl	321-60-8	0.5	%		104	103	----	---	104
Anthracene-d10	1719-06-8	0.5	%		122	118	----	---	116
4-Terphenyl-d14	1718-51-0	0.5	%		114	100	----	---	101
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	0.2	%		78.1	85.9	84.1	78.0	79.6
Toluene-D8	2037-26-5	0.2	%		90.7	93.9	89.0	79.5	90.9
4-Bromofluorobenzene	460-00-4	0.2	%		92.3	100	82.9	75.2	92.8
EP231S: PFAS Surrogate									
13C4-PFOS	----	0.0002	%		----	106	----	---	103
13C8-PFOA	----	0.0002	%		----	103	----	---	108

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Analytical Results

Sub-Matrix: SOIL
(Matrix: SOIL)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH141_0.3_220124	SOP_BH141_0.4_220124	SOP_BH132_1.0_220125	SOP_BH132_3.0_220125	SOP_BH133_0.3_220125
				Sampling date / time	24-Jan-2022 00:00	24-Jan-2022 00:00	25-Jan-2022 00:00	25-Jan-2022 00:00	25-Jan-2022 00:00
					ES2202692-016	ES2202692-017	ES2202692-018	ES2202692-019	ES2202692-020
					Result	Result	Result	Result	Result
EA002: pH 1:5 (Soils)									
pH Value	----	0.1	pH Unit		----	----	5.2	---	---
EA055: Moisture Content (Dried @ 105-110°C)									
Moisture Content	----	1.0	%		5.1	8.3	20.0	8.9	9.1
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		----	310	271	---	410
APPROVED IDENTIFIER:	----	-	--		----	A. SMYLIE	A. SMYLIE	---	A. SMYLIE
ED007: Exchangeable Cations									
Exchangeable Calcium	----	0.1	meq/100g		----	----	0.3	---	---
Exchangeable Magnesium	----	0.1	meq/100g		----	----	2.3	---	---
Exchangeable Potassium	----	0.1	meq/100g		----	----	0.1	---	---
Exchangeable Sodium	----	0.1	meq/100g		----	----	0.9	---	---
Cation Exchange Capacity	----	0.1	meq/100g		----	----	5.1	---	---
Exchangeable Sodium Percent	----	0.1	%		----	----	24.0	---	---
EG005(ED093)T: Total Metals by ICP-AES									
Arsenic	7440-38-2	5	mg/kg		<5	7	<5	11	<5
Cadmium	7440-43-9	1	mg/kg		<1	<1	<1	<1	<1
Chromium	7440-47-3	2	mg/kg		15	13	5	8	16
Copper	7440-50-8	5	mg/kg		101	38	11	73	48
Lead	7439-92-1	5	mg/kg		<5	17	13	18	<5
Nickel	7440-02-0	2	mg/kg		98	28	<2	4	91
Zinc	7440-66-6	5	mg/kg		43	60	5	38	45
EG035T: Total Recoverable Mercury by FIMS									
Mercury	7439-97-6	0.1	mg/kg		<0.1	<0.1	<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	<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

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(Matrix: **SOIL**)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH141_0.3_220124	SOP_BH141_0.4_220124	SOP_BH132_1.0_220125	SOP_BH132_3.0_220125	SOP_BH133_0.3_220125
				Sampling date / time	24-Jan-2022 00:00	24-Jan-2022 00:00	25-Jan-2022 00:00	25-Jan-2022 00:00	25-Jan-2022 00:00
					ES2202692-016	ES2202692-017	ES2202692-018	ES2202692-019	ES2202692-020
					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	<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		**0.62**	**0.16**	<0.05	<0.05	**0.09**
Aldrin	309-00-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	**0.19**
Heptachlor epoxide	1024-57-3	0.05	mg/kg		**0.55**	**0.15**	<0.05	<0.05	<0.05
^ Total Chlordane (sum)	----	0.05	mg/kg		**3.09**	**0.70**	<0.05	<0.05	**0.95**
trans-Chlordane	5103-74-2	0.05	mg/kg		**2.74**	**0.60**	<0.05	<0.05	**0.84**
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		**0.35**	**0.10**	<0.05	<0.05	**0.11**
Dieldrin	60-57-1	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	**0.17**
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	**0.36**
^ 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

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(Matrix: **SOIL**)

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				Sampling date / time	24-Jan-2022 00:00	24-Jan-2022 00:00	25-Jan-2022 00:00	25-Jan-2022 00:00	25-Jan-2022 00:00
					ES2202692-016	ES2202692-017	ES2202692-018	ES2202692-019	ES2202692-020
					Result	Result	Result	Result	Result
EP068B: Organophosphorus Pesticides (OP) - Continued									
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									
Benzene	71-43-2	0.2	mg/kg		----	<0.2	----	<0.2	<0.2
Toluene	108-88-3	0.5	mg/kg		----	<0.5	----	<0.5	<0.5
Ethylbenzene	100-41-4	0.5	mg/kg		----	<0.5	----	<0.5	<0.5
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg		----	<0.5	----	<0.5	<0.5
Styrene	100-42-5	0.5	mg/kg		----	<0.5	----	<0.5	<0.5
ortho-Xylene	95-47-6	0.5	mg/kg		----	<0.5	----	<0.5	<0.5
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

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Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH141_0.3_220124	SOP_BH141_0.4_220124	SOP_BH132_1.0_220125	SOP_BH132_3.0_220125	SOP_BH133_0.3_220125
				Sampling date / time	24-Jan-2022 00:00	24-Jan-2022 00:00	25-Jan-2022 00:00	25-Jan-2022 00:00	25-Jan-2022 00:00
					ES2202692-016	ES2202692-017	ES2202692-018	ES2202692-019	ES2202692-020
					Result	Result	Result	Result	Result
EP074D: Fumigants - Continued									
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
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

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Sub-Matrix: SOIL
(Matrix: SOIL)

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				Sampling date / time	24-Jan-2022 00:00	24-Jan-2022 00:00	25-Jan-2022 00:00	25-Jan-2022 00:00	25-Jan-2022 00:00
					ES2202692-016	ES2202692-017	ES2202692-018	ES2202692-019	ES2202692-020
					Result	Result	Result	Result	Result
EP074F: Halogenated Aromatic Compounds - Continued									
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)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		<0.5	<0.5	<0.5	<0.5	<0.5
Anthracene	120-12-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Fluoranthene	206-44-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Pyrene	129-00-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benz(a)anthracene	56-55-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Chrysene	218-01-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg		<0.5	<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		<0.5	<0.5	<0.5	<0.5	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg		**0.6**	**0.6**	**0.6**	**0.6**	**0.6**
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg		**1.2**	**1.2**	**1.2**	**1.2**	**1.2**
EP075A: 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	0.5	mg/kg		---	<0.5	---	<0.5	<0.5

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Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH141_0.3_220124	SOP_BH141_0.4_220124	SOP_BH132_1.0_220125	SOP_BH132_3.0_220125	SOP_BH133_0.3_220125
				Sampling date / time	24-Jan-2022 00:00	24-Jan-2022 00:00	25-Jan-2022 00:00	25-Jan-2022 00:00	25-Jan-2022 00:00
					ES2202692-016	ES2202692-017	ES2202692-018	ES2202692-019	ES2202692-020
					Result	Result	Result	Result	Result
EP075A: Phenolic Compounds - Continued									
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	1	mg/kg		----	<1	----	<1	<1
EP075B: Polynuclear Aromatic Hydrocarbons									
Naphthalene	91-20-3	0.5	mg/kg		----	<0.5	----	<0.5	<0.5
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
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
N-2-Fluorenyl Acetamide	53-96-3	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) & Benzo(k)fluoranthene	205-99-2 207-08-9	1	mg/kg		----	<1	----	<1	<1
7.12-Dimethylbenz(a)anthracene	57-97-6	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
3-Methylcholanthrene	56-49-5	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 PAHs	----	0.5	mg/kg		----	<0.5	----	<0.5	<0.5
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg		----	<0.5	----	<0.5	<0.5
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg		----	0.6	----	0.6	0.6
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg		----	1.2	----	1.2	1.2

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Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH141_0.3_220124	SOP_BH141_0.4_220124	SOP_BH132_1.0_220125	SOP_BH132_3.0_220125	SOP_BH133_0.3_220125
				Sampling date / time	24-Jan-2022 00:00	24-Jan-2022 00:00	25-Jan-2022 00:00	25-Jan-2022 00:00	25-Jan-2022 00:00
					ES2202692-016	ES2202692-017	ES2202692-018	ES2202692-019	ES2202692-020
					Result	Result	Result	Result	Result
EP075C: Phthalate Esters									
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		----	**8.7**	----	<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

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Analytical Results

Sub-Matrix: SOIL
(Matrix: SOIL)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH141_0.3_220124	SOP_BH141_0.4_220124	SOP_BH132_1.0_220125	SOP_BH132_3.0_220125	SOP_BH133_0.3_220125
				Sampling date / time	24-Jan-2022 00:00	24-Jan-2022 00:00	25-Jan-2022 00:00	25-Jan-2022 00:00	25-Jan-2022 00:00
					ES2202692-016	ES2202692-017	ES2202692-018	ES2202692-019	ES2202692-020
					Result	Result	Result	Result	Result
EP075E: Nitroaromatics and Ketones - Continued									
Chlorobenzilate	510-15-6	0.5	mg/kg		----	<0.5	----	<0.5	<0.5
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
EP075I: Organochlorine Pesticides									
alpha-BHC	319-84-6	0.5	mg/kg		----	<0.5	----	<0.5	<0.5
beta-BHC	319-85-7	0.5	mg/kg		----	<0.5	----	<0.5	<0.5
gamma-BHC	58-89-9	0.5	mg/kg		----	<0.5	----	<0.5	<0.5
delta-BHC	319-86-8	0.5	mg/kg		----	<0.5	----	<0.5	<0.5
Heptachlor	76-44-8	0.5	mg/kg		----	<0.5	----	<0.5	<0.5
Aldrin	309-00-2	0.5	mg/kg		----	<0.5	----	<0.5	<0.5
Heptachlor epoxide	1024-57-3	0.5	mg/kg		----	<0.5	----	<0.5	<0.5

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Analytical Results

Sub-Matrix: SOIL
(Matrix: SOIL)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH141_0.3_220124	SOP_BH141_0.4_220124	SOP_BH132_1.0_220125	SOP_BH132_3.0_220125	SOP_BH133_0.3_220125
				Sampling date / time	24-Jan-2022 00:00	24-Jan-2022 00:00	25-Jan-2022 00:00	25-Jan-2022 00:00	25-Jan-2022 00:00
					ES2202692-016	ES2202692-017	ES2202692-018	ES2202692-019	ES2202692-020
					Result	Result	Result	Result	Result
EP075I: Organochlorine Pesticides - Continued									
alpha-Endosulfan	959-98-8	0.5	mg/kg		----	<0.5	----	<0.5	<0.5
4.4`-DDE	72-55-9	0.5	mg/kg		----	<0.5	----	<0.5	<0.5
Dieldrin	60-57-1	0.5	mg/kg		----	<0.5	----	<0.5	<0.5
Endrin	72-20-8	0.5	mg/kg		----	<0.5	----	<0.5	<0.5
beta-Endosulfan	33213-65-9	0.5	mg/kg		----	<0.5	----	<0.5	<0.5
4.4`-DDD	72-54-8	0.5	mg/kg		----	<0.5	----	<0.5	<0.5
Endosulfan sulfate	1031-07-8	0.5	mg/kg		----	<0.5	----	<0.5	<0.5
4.4`-DDT	50-29-3	1.0	mg/kg		----	<1.0	----	<1.0	<1.0
EP075J: Organophosphorus Pesticides									
Dichlorvos	62-73-7	0.5	mg/kg		----	<0.5	----	<0.5	<0.5
Dimethoate	60-51-5	0.5	mg/kg		----	<0.5	----	<0.5	<0.5
Diazinon	333-41-5	0.5	mg/kg		----	<0.5	----	<0.5	<0.5
Chlorpyrifos-methyl	5598-13-0	0.5	mg/kg		----	<0.5	----	<0.5	<0.5
Malathion	121-75-5	0.5	mg/kg		----	<0.5	----	<0.5	<0.5
Fenthion	55-38-9	0.5	mg/kg		----	<0.5	----	<0.5	<0.5
Chlorpyrifos	2921-88-2	0.5	mg/kg		----	<0.5	----	<0.5	<0.5
Pirimphos-ethyl	23505-41-1	0.5	mg/kg		----	<0.5	----	<0.5	<0.5
Chlorfenvinphos	470-90-6	0.5	mg/kg		----	<0.5	----	<0.5	<0.5
Prothiofos	34643-46-4	0.5	mg/kg		----	<0.5	----	<0.5	<0.5
Ethion	563-12-2	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	<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	<50	<50
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		<100	<100	<100	<100	<100
>C34 - C40 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
^ >C10 - C40 Fraction (sum)	----	50	mg/kg		<50	<50	<50	<50	<50

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Analytical Results

Sub-Matrix: SOIL
(Matrix: SOIL)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH141_0.3_220124	SOP_BH141_0.4_220124	SOP_BH132_1.0_220125	SOP_BH132_3.0_220125	SOP_BH133_0.3_220125
				Sampling date / time	24-Jan-2022 00:00	24-Jan-2022 00:00	25-Jan-2022 00:00	25-Jan-2022 00:00	25-Jan-2022 00:00
					ES2202692-016	ES2202692-017	ES2202692-018	ES2202692-019	ES2202692-020
					Result	Result	Result	Result	Result
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions - Continued									
^ >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	---	----
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									

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Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	SOP_BH141_0.3_220124	SOP_BH141_0.4_220124	SOP_BH132_1.0_220125	SOP_BH132_3.0_220125	SOP_BH133_0.3_220125
			Sampling date / time	24-Jan-2022 00:00	24-Jan-2022 00:00	25-Jan-2022 00:00	25-Jan-2022 00:00	25-Jan-2022 00:00
Compound	CAS Number	LOR	Unit	ES2202692-016	ES2202692-017	ES2202692-018	ES2202692-019	ES2202692-020
				Result	Result	Result	Result	Result
EP231P: PFAS Sums - Continued								
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	%	127	105	129	113	105
EP068S: Organochlorine Pesticide Surrogate								
Dibromo-DDE	21655-73-2	0.05	%	108	79.5	96.3	97.7	98.3
EP068T: Organophosphorus Pesticide Surrogate								
DEF	78-48-8	0.05	%	87.2	71.3	73.2	115	107
EP074S: VOC Surrogates								
1.2-Dichloroethane-D4	17060-07-0	0.5	%	----	88.5	----	84.3	97.6
Toluene-D8	2037-26-5	0.5	%	----	100	----	88.8	86.8
4-Bromofluorobenzene	460-00-4	0.5	%	----	97.3	----	85.4	94.9
EP075(SIM)S: Phenolic Compound Surrogates								
Phenol-d6	13127-88-3	0.5	%	95.8	97.1	95.2	93.5	94.3
2-Chlorophenol-D4	93951-73-6	0.5	%	95.1	95.8	93.5	93.6	93.1
2.4.6-Tribromophenol	118-79-6	0.5	%	72.6	73.1	74.7	74.1	70.7
EP075(SIM)T: PAH Surrogates								
2-Fluorobiphenyl	321-60-8	0.5	%	102	102	98.7	99.6	100
Anthracene-d10	1719-06-8	0.5	%	99.6	100	98.2	98.6	99.7
4-Terphenyl-d14	1718-51-0	0.5	%	95.0	91.4	92.1	94.0	93.0
EP075S: Acid Extractable Surrogates								
2-Fluorophenol	367-12-4	0.5	%	----	104	----	103	92.4
Phenol-d6	13127-88-3	0.5	%	----	99.1	----	99.5	98.2
2-Chlorophenol-D4	93951-73-6	0.5	%	----	96.1	----	97.2	92.3
2.4.6-Tribromophenol	118-79-6	0.5	%	----	97.2	----	90.4	47.5
EP075T: Base/Neutral Extractable Surrogates								
Nitrobenzene-D5	4165-60-0	0.5	%	----	90.9	----	92.0	102
1.2-Dichlorobenzene-D4	2199-69-1	0.5	%	----	88.7	----	84.5	89.4
2-Fluorobiphenyl	321-60-8	0.5	%	---	98.2	---	92.7	106
Anthracene-d10	1719-06-8	0.5	%	---	115	---	113	119
4-Terphenyl-d14	1718-51-0	0.5	%	---	98.2	---	99.6	95.2
EP080S: TPH(V)/BTEX Surrogates								

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Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH141_0.3_220124	SOP_BH141_0.4_220124	SOP_BH132_1.0_220125	SOP_BH132_3.0_220125	SOP_BH133_0.3_220125
				Sampling date / time	24-Jan-2022 00:00	24-Jan-2022 00:00	25-Jan-2022 00:00	25-Jan-2022 00:00	25-Jan-2022 00:00
					ES2202692-016	ES2202692-017	ES2202692-018	ES2202692-019	ES2202692-020
					Result	Result	Result	Result	Result
EP080S: TPH(V)/BTEX Surrogates - Continued									
1.2-Dichloroethane-D4	17060-07-0	0.2	%		94.8	90.5	78.2	82.4	95.6
Toluene-D8	2037-26-5	0.2	%		87.1	105	78.8	80.4	82.1
4-Bromofluorobenzene	460-00-4	0.2	%		84.6	103	77.8	80.0	90.8
EP231S: PFAS Surrogate									
13C4-PFOS	----	0.0002	%		----	----	97.0	---	---
13C8-PFOA	----	0.0002	%		----	----	102	---	---

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Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	SOP_BH133_0.8_220125	SOP_BH134_0.5_220125	SOP_BH134_2.0_220125	SOP_BH135_0.5_220125	SOP_BH135_0.8_220125
			Sampling date / time	25-Jan-2022 00:00	25-Jan-2022 00:00	25-Jan-2022 00:00	25-Jan-2022 00:00	25-Jan-2022 00:00
Compound	CAS Number	LOR	Unit	ES2202692-021	ES2202692-022	ES2202692-023	ES2202692-024	ES2202692-025
				Result	Result	Result	Result	Result
EA002: pH 1:5 (Soils)								
pH Value	----	0.1	pH Unit	----	----	----	---	4.9
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	----	1.0	%	14.2	19.8	13.1	4.9	8.8
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	-	--	----	-	----	-	---
Synthetic Mineral Fibre	----	0.1	g/kg	----	No	----	No	---
Organic Fibre	----	0.1	g/kg	----	No	----	No	---
Sample weight (dry)	----	0.01	g	----	422	----	320	---
APPROVED IDENTIFIER:	----	-	--	----	A. SMYLIE	----	A. SMYLIE	---
ED007: Exchangeable Cations								
Exchangeable Calcium	----	0.1	meq/100g	----	----	----	---	0.3
Exchangeable Magnesium	----	0.1	meq/100g	----	----	----	---	2.4
Exchangeable Potassium	----	0.1	meq/100g	----	----	----	---	0.2
Exchangeable Sodium	----	0.1	meq/100g	----	----	----	---	0.9
Cation Exchange Capacity	----	0.1	meq/100g	----	----	----	---	8.4
Exchangeable Sodium Percent	----	0.1	%	----	----	----	---	23.9
EG005(ED093)T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	32	9	13	<5	<5
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	<1	<1
Chromium	7440-47-3	2	mg/kg	8	13	8	6	7
Copper	7440-50-8	5	mg/kg	44	27	112	7	14
Lead	7439-92-1	5	mg/kg	69	29	20	8	8
Nickel	7440-02-0	2	mg/kg	10	8	99	2	<2
Zinc	7440-66-6	5	mg/kg	86	43	79	10	<5
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	<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	<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

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Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH133_0.8_220125	SOP_BH134_0.5_220125	SOP_BH134_2.0_220125	SOP_BH135_0.5_220125	SOP_BH135_0.8_220125
				Sampling date / time	25-Jan-2022 00:00	25-Jan-2022 00:00	25-Jan-2022 00:00	25-Jan-2022 00:00	25-Jan-2022 00:00
					ES2202692-021	ES2202692-022	ES2202692-023	ES2202692-024	ES2202692-025
					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	<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	**0.06**	<0.05	<0.05	<0.05
trans-Chlordane	5103-74-2	0.05	mg/kg		<0.05	**0.06**	<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	72-54-8/72-55-9/50-2	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

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Analytical Results

Sub-Matrix: SOIL
(Matrix: SOIL)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH133_0.8_220125	SOP_BH134_0.5_220125	SOP_BH134_2.0_220125	SOP_BH135_0.5_220125	SOP_BH135_0.8_220125
				Sampling date / time	25-Jan-2022 00:00	25-Jan-2022 00:00	25-Jan-2022 00:00	25-Jan-2022 00:00	25-Jan-2022 00:00
					ES2202692-021	ES2202692-022	ES2202692-023	ES2202692-024	ES2202692-025
					Result	Result	Result	Result	Result
EP068B: Organophosphorus Pesticides (OP) - Continued									
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									
Benzene	71-43-2	0.2	mg/kg		----	<0.2	----	<0.2	----
Toluene	108-88-3	0.5	mg/kg		----	<0.5	----	<0.5	----
Ethylbenzene	100-41-4	0.5	mg/kg		----	<0.5	----	<0.5	----
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg		----	<0.5	----	<0.5	----
Styrene	100-42-5	0.5	mg/kg		----	<0.5	----	<0.5	----
ortho-Xylene	95-47-6	0.5	mg/kg		----	<0.5	----	<0.5	----
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	---

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Analytical Results

Sub-Matrix: SOIL
(Matrix: SOIL)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH133_0.8_220125	SOP_BH134_0.5_220125	SOP_BH134_2.0_220125	SOP_BH135_0.5_220125	SOP_BH135_0.8_220125
				Sampling date / time	25-Jan-2022 00:00	25-Jan-2022 00:00	25-Jan-2022 00:00	25-Jan-2022 00:00	25-Jan-2022 00:00
					ES2202692-021	ES2202692-022	ES2202692-023	ES2202692-024	ES2202692-025
					Result	Result	Result	Result	Result
EP074D: Fumigants - Continued									
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	----
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	----

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Analytical Results

Sub-Matrix: SOIL
(Matrix: SOIL)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH133_0.8_220125	SOP_BH134_0.5_220125	SOP_BH134_2.0_220125	SOP_BH135_0.5_220125	SOP_BH135_0.8_220125
				Sampling date / time	25-Jan-2022 00:00	25-Jan-2022 00:00	25-Jan-2022 00:00	25-Jan-2022 00:00	25-Jan-2022 00:00
					ES2202692-021	ES2202692-022	ES2202692-023	ES2202692-024	ES2202692-025
					Result	Result	Result	Result	Result
EP074F: Halogenated Aromatic Compounds - Continued									
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)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		<0.5	<0.5	<0.5	<0.5	<0.5
Anthracene	120-12-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Fluoranthene	206-44-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Pyrene	129-00-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benz(a)anthracene	56-55-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Chrysene	218-01-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg		<0.5	<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		<0.5	<0.5	<0.5	<0.5	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg		**0.6**	**0.6**	**0.6**	**0.6**	**0.6**
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg		**1.2**	**1.2**	**1.2**	**1.2**	**1.2**
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	----

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Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH133_0.8_220125	SOP_BH134_0.5_220125	SOP_BH134_2.0_220125	SOP_BH135_0.5_220125	SOP_BH135_0.8_220125
				Sampling date / time	25-Jan-2022 00:00	25-Jan-2022 00:00	25-Jan-2022 00:00	25-Jan-2022 00:00	25-Jan-2022 00:00
					ES2202692-021	ES2202692-022	ES2202692-023	ES2202692-024	ES2202692-025
					Result	Result	Result	Result	Result
EP075A: Phenolic Compounds - Continued									
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	----	<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	----

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Analytical Results

Sub-Matrix: SOIL
(Matrix: SOIL)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH133_0.8_220125	SOP_BH134_0.5_220125	SOP_BH134_2.0_220125	SOP_BH135_0.5_220125	SOP_BH135_0.8_220125
				Sampling date / time	25-Jan-2022 00:00	25-Jan-2022 00:00	25-Jan-2022 00:00	25-Jan-2022 00:00	25-Jan-2022 00:00
					ES2202692-021	ES2202692-022	ES2202692-023	ES2202692-024	ES2202692-025
					Result	Result	Result	Result	Result
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	----
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	----

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Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	SOP_BH133_0.8_220125	SOP_BH134_0.5_220125	SOP_BH134_2.0_220125	SOP_BH135_0.5_220125	SOP_BH135_0.8_220125
				Sampling date / time	25-Jan-2022 00:00	25-Jan-2022 00:00	25-Jan-2022 00:00	25-Jan-2022 00:00	25-Jan-2022 00:00
Compound	CAS Number	LOR	Unit		ES2202692-021	ES2202692-022	ES2202692-023	ES2202692-024	ES2202692-025
					Result	Result	Result	Result	Result
EP075E: Nitroaromatics and Ketones - Continued									
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	----	
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	----	

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Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	SOP_BH133_0.8_220125	SOP_BH134_0.5_220125	SOP_BH134_2.0_220125	SOP_BH135_0.5_220125	SOP_BH135_0.8_220125
				Sampling date / time	25-Jan-2022 00:00	25-Jan-2022 00:00	25-Jan-2022 00:00	25-Jan-2022 00:00	25-Jan-2022 00:00
Compound	CAS Number	LOR	Unit		ES2202692-021	ES2202692-022	ES2202692-023	ES2202692-024	ES2202692-025
					Result	Result	Result	Result	Result
EP075I: Organochlorine Pesticides - Continued									
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	<100	<100	<100	<100	
C29 - C36 Fraction	----	100	mg/kg	<100	<100	<100	<100	<100	
^ C10 - C36 Fraction (sum)	----	50	mg/kg	<50	<50	<50	<50	<50	
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
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	<100	<100	<100	<100	<100	
>C34 - C40 Fraction	----	100	mg/kg	<100	<100	<100	<100	<100	
^ >C10 - C40 Fraction (sum)	----	50	mg/kg	<50	<50	<50	<50	<50	

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Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	SOP_BH133_0.8_220125	SOP_BH134_0.5_220125	SOP_BH134_2.0_220125	SOP_BH135_0.5_220125	SOP_BH135_0.8_220125
				Sampling date / time	25-Jan-2022 00:00	25-Jan-2022 00:00	25-Jan-2022 00:00	25-Jan-2022 00:00	25-Jan-2022 00:00
Compound	CAS Number	LOR	Unit		ES2202692-021	ES2202692-022	ES2202692-023	ES2202692-024	ES2202692-025
					Result	Result	Result	Result	Result
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions - Continued									
^ >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	----	---	---
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									

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Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Sample ID	SOP_BH133_0.8_220125	SOP_BH134_0.5_220125	SOP_BH134_2.0_220125	SOP_BH135_0.5_220125	SOP_BH135_0.8_220125
				Sampling date / time	25-Jan-2022 00:00	25-Jan-2022 00:00	25-Jan-2022 00:00	25-Jan-2022 00:00	25-Jan-2022 00:00
Compound	CAS Number	LOR	Unit		ES2202692-021	ES2202692-022	ES2202692-023	ES2202692-024	ES2202692-025
					Result	Result	Result	Result	Result
EP231P: PFAS Sums - Continued									
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	%		91.1	91.2	84.4	114	94.7
EP068S: Organochlorine Pesticide Surrogate									
Dibromo-DDE	21655-73-2	0.05	%		87.9	90.5	87.8	113	90.6
EP068T: Organophosphorus Pesticide Surrogate									
DEF	78-48-8	0.05	%		102	99.0	80.6	61.8	55.6
EP074S: VOC Surrogates									
1.2-Dichloroethane-D4	17060-07-0	0.5	%		----	80.1	----	105	----
Toluene-D8	2037-26-5	0.5	%		----	81.5	----	92.4	----
4-Bromofluorobenzene	460-00-4	0.5	%		----	81.2	----	96.9	----
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	0.5	%		82.1	83.5	84.0	85.2	84.5
2-Chlorophenol-D4	93951-73-6	0.5	%		84.3	85.8	86.0	87.6	86.3
2.4.6-Tribromophenol	118-79-6	0.5	%		79.4	79.2	76.1	75.8	75.4
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	0.5	%		84.7	85.6	86.0	88.6	87.4
Anthracene-d10	1719-06-8	0.5	%		94.0	98.4	97.7	99.8	97.7
4-Terphenyl-d14	1718-51-0	0.5	%		86.8	89.2	89.0	91.0	89.9
EP075S: Acid Extractable Surrogates									
2-Fluorophenol	367-12-4	0.5	%		----	103	----	107	----
Phenol-d6	13127-88-3	0.5	%		----	94.8	----	101	----
2-Chlorophenol-D4	93951-73-6	0.5	%		----	94.8	----	96.4	----
2.4.6-Tribromophenol	118-79-6	0.5	%		----	96.3	----	100.0	----
EP075T: Base/Neutral Extractable Surrogates									
Nitrobenzene-D5	4165-60-0	0.5	%		----	99.1	----	103	----
1.2-Dichlorobenzene-D4	2199-69-1	0.5	%		----	79.2	----	81.5	----
2-Fluorobiphenyl	321-60-8	0.5	%		---	91.3	---	104	---
Anthracene-d10	1719-06-8	0.5	%		---	111	---	110	---
4-Terphenyl-d14	1718-51-0	0.5	%		---	94.3	---	99.3	---
EP080S: TPH(V)/BTEX Surrogates									

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Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH133_0.8_220125	SOP_BH134_0.5_220125	SOP_BH134_2.0_220125	SOP_BH135_0.5_220125	SOP_BH135_0.8_220125
				Sampling date / time	25-Jan-2022 00:00	25-Jan-2022 00:00	25-Jan-2022 00:00	25-Jan-2022 00:00	25-Jan-2022 00:00
					ES2202692-021	ES2202692-022	ES2202692-023	ES2202692-024	ES2202692-025
					Result	Result	Result	Result	Result
EP080S: TPH(V)/BTEX Surrogates - Continued									
1.2-Dichloroethane-D4	17060-07-0	0.2	%		80.0	78.3	96.0	103	81.8
Toluene-D8	2037-26-5	0.2	%		85.8	77.7	89.7	87.2	98.6
4-Bromofluorobenzene	460-00-4	0.2	%		80.4	76.2	85.5	91.7	97.0
EP231S: PFAS Surrogate									
13C4-PFOS	----	0.0002	%		----	81.0	----	---	---
13C8-PFOA	----	0.0002	%		----	108	----	---	---

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Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	SOP_BH136_0.2_220125	SOP_BH137_0.2_220125	SOP_BH138_0.2_220125	SOP_BH139_1.2_220125	SOP_BH139_2.0_220125
			Sampling date / time	25-Jan-2022 00:00	25-Jan-2022 00:00	25-Jan-2022 00:00	24-Jan-2022 00:00	25-Jan-2022 00:00
Compound	CAS Number	LOR	Unit	ES2202692-026	ES2202692-027	ES2202692-028	ES2202692-029	ES2202692-030
				Result	Result	Result	Result	Result
EA002: pH 1:5 (Soils)								
pH Value	----	0.1	pH Unit	----	----	----	5.1	----
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	----	1.0	%	18.1	18.1	19.2	23.6	8.4
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	396	459	515	377	----
APPROVED IDENTIFIER:	----	-	--	A. SMYLIE	A. SMYLIE	A. SMYLIE	A. SMYLIE	----
ED007: Exchangeable Cations								
Exchangeable Calcium	----	0.1	meq/100g	----	----	----	3.9	----
Exchangeable Magnesium	----	0.1	meq/100g	----	----	----	4.1	----
Exchangeable Potassium	----	0.1	meq/100g	----	----	----	0.3	----
Exchangeable Sodium	----	0.1	meq/100g	----	----	----	1.3	----
Cation Exchange Capacity	----	0.1	meq/100g	----	----	----	11.0	----
Exchangeable Sodium Percent	----	0.1	%	----	----	----	13.6	----
EG005(ED093)T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	5	6	6	10	10
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	<1	<1
Chromium	7440-47-3	2	mg/kg	9	10	12	16	10
Copper	7440-50-8	5	mg/kg	31	36	32	26	44
Lead	7439-92-1	5	mg/kg	18	17	23	17	17
Nickel	7440-02-0	2	mg/kg	18	15	26	4	8
Zinc	7440-66-6	5	mg/kg	51	63	111	20	37
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	<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	<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

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Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH136_0.2_220125	SOP_BH137_0.2_220125	SOP_BH138_0.2_220125	SOP_BH139_1.2_220125	SOP_BH139_2.0_220125
				Sampling date / time	25-Jan-2022 00:00	25-Jan-2022 00:00	25-Jan-2022 00:00	24-Jan-2022 00:00	25-Jan-2022 00:00
					ES2202692-026	ES2202692-027	ES2202692-028	ES2202692-029	ES2202692-030
					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	<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		**0.10**	<0.05	**0.06**	<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		**0.06**	<0.05	**0.13**	<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		**0.16**	<0.05	**0.19**	<0.05	<0.05
^ Sum of DDD + DDE + DDT	72-54-8/72-55-9/50-29-2	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

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Analytical Results

Sub-Matrix: SOIL
(Matrix: SOIL)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH136_0.2_220125	SOP_BH137_0.2_220125	SOP_BH138_0.2_220125	SOP_BH139_1.2_220125	SOP_BH139_2.0_220125
				Sampling date / time	25-Jan-2022 00:00	25-Jan-2022 00:00	25-Jan-2022 00:00	24-Jan-2022 00:00	25-Jan-2022 00:00
					ES2202692-026	ES2202692-027	ES2202692-028	ES2202692-029	ES2202692-030
					Result	Result	Result	Result	Result
EP068B: Organophosphorus Pesticides (OP) - Continued									
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									
Benzene	71-43-2	0.2	mg/kg		<0.2	<0.2	<0.2	---	<0.2
Toluene	108-88-3	0.5	mg/kg		<0.5	<0.5	<0.5	---	<0.5
Ethylbenzene	100-41-4	0.5	mg/kg		<0.5	<0.5	<0.5	---	<0.5
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg		<0.5	<0.5	<0.5	---	<0.5
Styrene	100-42-5	0.5	mg/kg		<0.5	<0.5	<0.5	---	<0.5
ortho-Xylene	95-47-6	0.5	mg/kg		<0.5	<0.5	<0.5	---	<0.5
Isopropylbenzene	98-82-8	0.5	mg/kg		<0.5	<0.5	<0.5	---	<0.5
n-Propylbenzene	103-65-1	0.5	mg/kg		<0.5	<0.5	<0.5	---	<0.5
1.3.5-Trimethylbenzene	108-67-8	0.5	mg/kg		<0.5	<0.5	<0.5	---	<0.5
sec-Butylbenzene	135-98-8	0.5	mg/kg		<0.5	<0.5	<0.5	---	<0.5
1.2.4-Trimethylbenzene	95-63-6	0.5	mg/kg		<0.5	<0.5	<0.5	---	<0.5
tert-Butylbenzene	98-06-6	0.5	mg/kg		<0.5	<0.5	<0.5	---	<0.5
p-Isopropyltoluene	99-87-6	0.5	mg/kg		<0.5	<0.5	<0.5	---	<0.5
n-Butylbenzene	104-51-8	0.5	mg/kg		<0.5	<0.5	<0.5	---	<0.5
EP074B: Oxygenated Compounds									
Vinyl Acetate	108-05-4	5	mg/kg		<5	<5	<5	---	<5
2-Butanone (MEK)	78-93-3	5	mg/kg		<5	<5	<5	---	<5
4-Methyl-2-pentanone (MIBK)	108-10-1	5	mg/kg		<5	<5	<5	---	<5
2-Hexanone (MBK)	591-78-6	5	mg/kg		<5	<5	<5	---	<5
EP074C: Sulfonated Compounds									
Carbon disulfide	75-15-0	0.5	mg/kg		<0.5	<0.5	<0.5	---	<0.5
EP074D: Fumigants									
2.2-Dichloropropane	594-20-7	0.5	mg/kg		<0.5	<0.5	<0.5	---	<0.5
1.2-Dichloropropane	78-87-5	0.5	mg/kg		<0.5	<0.5	<0.5	---	<0.5

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Analytical Results

Sub-Matrix: SOIL
(Matrix: SOIL)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH136_0.2_220125	SOP_BH137_0.2_220125	SOP_BH138_0.2_220125	SOP_BH139_1.2_220125	SOP_BH139_2.0_220125
				Sampling date / time	25-Jan-2022 00:00	25-Jan-2022 00:00	25-Jan-2022 00:00	24-Jan-2022 00:00	25-Jan-2022 00:00
					ES2202692-026	ES2202692-027	ES2202692-028	ES2202692-029	ES2202692-030
					Result	Result	Result	Result	Result
EP074D: Fumigants - Continued									
cis-1.3-Dichloropropylene	10061-01-5	0.5	mg/kg		<0.5	<0.5	<0.5	---	<0.5
trans-1.3-Dichloropropylene	10061-02-6	0.5	mg/kg		<0.5	<0.5	<0.5	---	<0.5
1.2-Dibromoethane (EDB)	106-93-4	0.5	mg/kg		<0.5	<0.5	<0.5	---	<0.5
EP074E: Halogenated Aliphatic Compounds									
Dichlorodifluoromethane	75-71-8	5	mg/kg		<5	<5	<5	---	<5
Chloromethane	74-87-3	5	mg/kg		<5	<5	<5	---	<5
Vinyl chloride	75-01-4	5	mg/kg		<5	<5	<5	---	<5
Bromomethane	74-83-9	5	mg/kg		<5	<5	<5	---	<5
Chloroethane	75-00-3	5	mg/kg		<5	<5	<5	---	<5
Trichlorofluoromethane	75-69-4	5	mg/kg		<5	<5	<5	---	<5
1.1-Dichloroethene	75-35-4	0.5	mg/kg		<0.5	<0.5	<0.5	---	<0.5
Iodomethane	74-88-4	0.5	mg/kg		<0.5	<0.5	<0.5	---	<0.5
trans-1.2-Dichloroethene	156-60-5	0.5	mg/kg		<0.5	<0.5	<0.5	---	<0.5
1.1-Dichloroethane	75-34-3	0.5	mg/kg		<0.5	<0.5	<0.5	---	<0.5
cis-1.2-Dichloroethene	156-59-2	0.5	mg/kg		<0.5	<0.5	<0.5	---	<0.5
1.1.1-Trichloroethane	71-55-6	0.5	mg/kg		<0.5	<0.5	<0.5	---	<0.5
1.1-Dichloropropylene	563-58-6	0.5	mg/kg		<0.5	<0.5	<0.5	---	<0.5
Carbon Tetrachloride	56-23-5	0.5	mg/kg		<0.5	<0.5	<0.5	---	<0.5
1.2-Dichloroethane	107-06-2	0.5	mg/kg		<0.5	<0.5	<0.5	---	<0.5
Trichloroethene	79-01-6	0.5	mg/kg		<0.5	<0.5	<0.5	---	<0.5
Dibromomethane	74-95-3	0.5	mg/kg		<0.5	<0.5	<0.5	---	<0.5
1.1.2-Trichloroethane	79-00-5	0.5	mg/kg		<0.5	<0.5	<0.5	---	<0.5
1.3-Dichloropropane	142-28-9	0.5	mg/kg		<0.5	<0.5	<0.5	---	<0.5
Tetrachloroethene	127-18-4	0.5	mg/kg		<0.5	<0.5	<0.5	---	<0.5
1.1.1.2-Tetrachloroethane	630-20-6	0.5	mg/kg		<0.5	<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	---	<0.5
cis-1.4-Dichloro-2-butene	1476-11-5	0.5	mg/kg		<0.5	<0.5	<0.5	---	<0.5
1.1.2.2-Tetrachloroethane	79-34-5	0.5	mg/kg		<0.5	<0.5	<0.5	---	<0.5
1.2.3-Trichloropropane	96-18-4	0.5	mg/kg		<0.5	<0.5	<0.5	---	<0.5
Pentachloroethane	76-01-7	0.5	mg/kg		<0.5	<0.5	<0.5	---	<0.5
1.2-Dibromo-3-chloropropane	96-12-8	0.5	mg/kg		<0.5	<0.5	<0.5	---	<0.5
EP074F: Halogenated Aromatic Compounds									
Chlorobenzene	108-90-7	0.5	mg/kg		<0.5	<0.5	<0.5	---	<0.5
Bromobenzene	108-86-1	0.5	mg/kg		<0.5	<0.5	<0.5	---	<0.5

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Analytical Results

Sub-Matrix: SOIL
(Matrix: SOIL)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH136_0.2_220125	SOP_BH137_0.2_220125	SOP_BH138_0.2_220125	SOP_BH139_1.2_220125	SOP_BH139_2.0_220125
				Sampling date / time	25-Jan-2022 00:00	25-Jan-2022 00:00	25-Jan-2022 00:00	24-Jan-2022 00:00	25-Jan-2022 00:00
					ES2202692-026	ES2202692-027	ES2202692-028	ES2202692-029	ES2202692-030
					Result	Result	Result	Result	Result
EP074F: Halogenated Aromatic Compounds - Continued									
2-Chlorotoluene	95-49-8	0.5	mg/kg		<0.5	<0.5	<0.5	---	<0.5
4-Chlorotoluene	106-43-4	0.5	mg/kg		<0.5	<0.5	<0.5	---	<0.5
1.2.3-Trichlorobenzene	87-61-6	0.5	mg/kg		<0.5	<0.5	<0.5	---	<0.5
EP074G: Trihalomethanes									
Chloroform	67-66-3	0.5	mg/kg		<0.5	<0.5	<0.5	---	<0.5
Bromodichloromethane	75-27-4	0.5	mg/kg		<0.5	<0.5	<0.5	---	<0.5
Dibromochloromethane	124-48-1	0.5	mg/kg		<0.5	<0.5	<0.5	---	<0.5
Bromoform	75-25-2	0.5	mg/kg		<0.5	<0.5	<0.5	---	<0.5
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		<0.5	<0.5	<0.5	<0.5	<0.5
Anthracene	120-12-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Fluoranthene	206-44-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Pyrene	129-00-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benz(a)anthracene	56-55-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Chrysene	218-01-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(b+j)fluoranthene	205-99-2 205-82-3	0.5	mg/kg		<0.5	<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		<0.5	<0.5	<0.5	<0.5	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg		**0.6**	**0.6**	**0.6**	**0.6**	**0.6**
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg		**1.2**	**1.2**	**1.2**	**1.2**	**1.2**
EP075A: 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	0.5	mg/kg		<0.5	<0.5	<0.5	---	<0.5

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Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH136_0.2_220125	SOP_BH137_0.2_220125	SOP_BH138_0.2_220125	SOP_BH139_1.2_220125	SOP_BH139_2.0_220125
				Sampling date / time	25-Jan-2022 00:00	25-Jan-2022 00:00	25-Jan-2022 00:00	24-Jan-2022 00:00	25-Jan-2022 00:00
					ES2202692-026	ES2202692-027	ES2202692-028	ES2202692-029	ES2202692-030
					Result	Result	Result	Result	Result
EP075A: Phenolic Compounds - Continued									
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
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	1	mg/kg		<1	<1	<1	---	<1
EP075B: Polynuclear Aromatic Hydrocarbons									
Naphthalene	91-20-3	0.5	mg/kg		<0.5	<0.5	<0.5	---	<0.5
2-Methylnaphthalene	91-57-6	0.5	mg/kg		<0.5	<0.5	<0.5	---	<0.5
2-Chloronaphthalene	91-58-7	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		<0.5	<0.5	<0.5	---	<0.5
N-2-Fluorenyl Acetamide	53-96-3	0.5	mg/kg		<0.5	<0.5	<0.5	---	<0.5
Benz(a)anthracene	56-55-3	0.5	mg/kg		<0.5	<0.5	<0.5	---	<0.5
Chrysene	218-01-9	0.5	mg/kg		<0.5	<0.5	<0.5	---	<0.5
Benzo(b+j) & Benzo(k)fluoranthene	205-99-2 207-08-9	1	mg/kg		<1	<1	<1	---	<1
7.12-Dimethylbenz(a)anthracene	57-97-6	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
3-Methylcholanthrene	56-49-5	0.5	mg/kg		<0.5	<0.5	<0.5	---	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg		<0.5	<0.5	<0.5	---	<0.5
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg		<0.5	<0.5	<0.5	---	<0.5
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg		<0.5	<0.5	<0.5	---	<0.5
^ Sum of PAHs	---	0.5	mg/kg		<0.5	<0.5	<0.5	---	<0.5
^ Benzo(a)pyrene TEQ (zero)	---	0.5	mg/kg		<0.5	<0.5	<0.5	---	<0.5
^ Benzo(a)pyrene TEQ (half LOR)	---	0.5	mg/kg		0.6	0.6	0.6	---	0.6
^ Benzo(a)pyrene TEQ (LOR)	---	0.5	mg/kg		1.2	1.2	1.2	---	1.2

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Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH136_0.2_220125	SOP_BH137_0.2_220125	SOP_BH138_0.2_220125	SOP_BH139_1.2_220125	SOP_BH139_2.0_220125
				Sampling date / time	25-Jan-2022 00:00	25-Jan-2022 00:00	25-Jan-2022 00:00	24-Jan-2022 00:00	25-Jan-2022 00:00
					ES2202692-026	ES2202692-027	ES2202692-028	ES2202692-029	ES2202692-030
					Result	Result	Result	Result	Result
EP075C: Phthalate Esters									
Dimethyl phthalate	131-11-3	0.5	mg/kg		<0.5	<0.5	<0.5	---	<0.5
Diethyl phthalate	84-66-2	0.5	mg/kg		<0.5	<0.5	<0.5	---	<0.5
Di-n-butyl phthalate	84-74-2	0.5	mg/kg		<0.5	<0.5	<0.5	---	<0.5
Butyl benzyl phthalate	85-68-7	0.5	mg/kg		<0.5	<0.5	<0.5	---	<0.5
bis(2-ethylhexyl) phthalate	117-81-7	5.0	mg/kg		<5.0	<5.0	<5.0	---	<5.0
Di-n-octylphthalate	117-84-0	0.5	mg/kg		<0.5	<0.5	<0.5	---	<0.5
EP075D: Nitrosamines									
N-Nitrosomethylethylamine	10595-95-6	0.5	mg/kg		<0.5	<0.5	<0.5	---	<0.5
N-Nitrosodiethylamine	55-18-5	0.5	mg/kg		<0.5	<0.5	<0.5	---	<0.5
N-Nitrosopyrrolidine	930-55-2	1.0	mg/kg		<1.0	<1.0	<1.0	---	<1.0
N-Nitrosomorpholine	59-89-2	0.5	mg/kg		<0.5	<0.5	<0.5	---	<0.5
N-Nitrosodi-n-propylamine	621-64-7	0.5	mg/kg		<0.5	<0.5	<0.5	---	<0.5
N-Nitrosopiperidine	100-75-4	0.5	mg/kg		<0.5	<0.5	<0.5	---	<0.5
N-Nitrosodibutylamine	924-16-3	0.5	mg/kg		<0.5	<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	---	<1.0
Methapyrilene	91-80-5	0.5	mg/kg		<0.5	<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	---	<0.5
Acetophenone	98-86-2	0.5	mg/kg		<0.5	<0.5	<0.5	---	<0.5
Nitrobenzene	98-95-3	0.5	mg/kg		<0.5	<0.5	<0.5	---	<0.5
Isophorone	78-59-1	0.5	mg/kg		<0.5	<0.5	<0.5	---	<0.5
2.6-Dinitrotoluene	606-20-2	1.0	mg/kg		<1.0	<1.0	<1.0	---	<1.0
2.4-Dinitrotoluene	121-14-2	1.0	mg/kg		<1.0	<1.0	<1.0	---	<1.0
1-Naphthylamine	134-32-7	0.5	mg/kg		<0.5	<0.5	<0.5	---	<0.5
4-Nitroquinoline-N-oxide	56-57-5	0.5	mg/kg		<0.5	<0.5	<0.5	---	<0.5
5-Nitro-o-toluidine	99-55-8	0.5	mg/kg		<0.5	<0.5	<0.5	---	<0.5
Azobenzene	103-33-3	1	mg/kg		<1	<1	<1	---	<1
1.3.5-Trinitrobenzene	99-35-4	0.5	mg/kg		<0.5	<0.5	<0.5	---	<0.5
Phenacetin	62-44-2	0.5	mg/kg		<0.5	<0.5	<0.5	---	<0.5
4-Aminobiphenyl	92-67-1	0.5	mg/kg		<0.5	<0.5	<0.5	---	<0.5
Pentachloronitrobenzene	82-68-8	0.5	mg/kg		<0.5	<0.5	<0.5	---	<0.5
Pronamide	23950-58-5	0.5	mg/kg		<0.5	<0.5	<0.5	---	<0.5
Dimethylaminoazobenzene	60-11-7	0.5	mg/kg		<0.5	<0.5	<0.5	---	<0.5

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Analytical Results

Sub-Matrix: SOIL
(Matrix: SOIL)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH136_0.2_220125	SOP_BH137_0.2_220125	SOP_BH138_0.2_220125	SOP_BH139_1.2_220125	SOP_BH139_2.0_220125
				Sampling date / time	25-Jan-2022 00:00	25-Jan-2022 00:00	25-Jan-2022 00:00	24-Jan-2022 00:00	25-Jan-2022 00:00
					ES2202692-026	ES2202692-027	ES2202692-028	ES2202692-029	ES2202692-030
					Result	Result	Result	Result	Result
EP075E: Nitroaromatics and Ketones - Continued									
Chlorobenzilate	510-15-6	0.5	mg/kg		<0.5	<0.5	<0.5	---	<0.5
EP075F: Haloethers									
Bis(2-chloroethyl) ether	111-44-4	0.5	mg/kg		<0.5	<0.5	<0.5	---	<0.5
Bis(2-chloroethoxy) methane	111-91-1	0.5	mg/kg		<0.5	<0.5	<0.5	---	<0.5
4-Chlorophenyl phenyl ether	7005-72-3	0.5	mg/kg		<0.5	<0.5	<0.5	---	<0.5
4-Bromophenyl phenyl ether	101-55-3	0.5	mg/kg		<0.5	<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	---	<0.5
1.4-Dichlorobenzene	106-46-7	0.5	mg/kg		<0.5	<0.5	<0.5	---	<0.5
1.2-Dichlorobenzene	95-50-1	0.5	mg/kg		<0.5	<0.5	<0.5	---	<0.5
Hexachloroethane	67-72-1	0.5	mg/kg		<0.5	<0.5	<0.5	---	<0.5
1.2.4-Trichlorobenzene	120-82-1	0.5	mg/kg		<0.5	<0.5	<0.5	---	<0.5
Hexachloropropylene	1888-71-7	0.5	mg/kg		<0.5	<0.5	<0.5	---	<0.5
Hexachlorobutadiene	87-68-3	0.5	mg/kg		<0.5	<0.5	<0.5	---	<0.5
Hexachlorocyclopentadiene	77-47-4	2.5	mg/kg		<2.5	<2.5	<2.5	---	<2.5
Pentachlorobenzene	608-93-5	0.5	mg/kg		<0.5	<0.5	<0.5	---	<0.5
Hexachlorobenzene (HCB)	118-74-1	1.0	mg/kg		<1.0	<1.0	<1.0	---	<1.0
EP075H: Anilines and Benzidines									
Aniline	62-53-3	0.5	mg/kg		<0.5	<0.5	<0.5	---	<0.5
4-Chloroaniline	106-47-8	0.5	mg/kg		<0.5	<0.5	<0.5	---	<0.5
2-Nitroaniline	88-74-4	1.0	mg/kg		<1.0	<1.0	<1.0	---	<1.0
3-Nitroaniline	99-09-2	1.0	mg/kg		<1.0	<1.0	<1.0	---	<1.0
Dibenzofuran	132-64-9	0.5	mg/kg		<0.5	<0.5	<0.5	---	<0.5
4-Nitroaniline	100-01-6	0.5	mg/kg		<0.5	<0.5	<0.5	---	<0.5
Carbazole	86-74-8	0.5	mg/kg		<0.5	<0.5	<0.5	---	<0.5
3.3`-Dichlorobenzidine	91-94-1	0.5	mg/kg		<0.5	<0.5	<0.5	---	<0.5
EP075I: Organochlorine Pesticides									
alpha-BHC	319-84-6	0.5	mg/kg		<0.5	<0.5	<0.5	---	<0.5
beta-BHC	319-85-7	0.5	mg/kg		<0.5	<0.5	<0.5	---	<0.5
gamma-BHC	58-89-9	0.5	mg/kg		<0.5	<0.5	<0.5	---	<0.5
delta-BHC	319-86-8	0.5	mg/kg		<0.5	<0.5	<0.5	---	<0.5
Heptachlor	76-44-8	0.5	mg/kg		<0.5	<0.5	<0.5	---	<0.5
Aldrin	309-00-2	0.5	mg/kg		<0.5	<0.5	<0.5	---	<0.5
Heptachlor epoxide	1024-57-3	0.5	mg/kg		<0.5	<0.5	<0.5	---	<0.5

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Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	SOP_BH136_0.2_220125	SOP_BH137_0.2_220125	SOP_BH138_0.2_220125	SOP_BH139_1.2_220125	SOP_BH139_2.0_220125
			Sampling date / time	25-Jan-2022 00:00	25-Jan-2022 00:00	25-Jan-2022 00:00	24-Jan-2022 00:00	25-Jan-2022 00:00
Compound	CAS Number	LOR	Unit	ES2202692-026	ES2202692-027	ES2202692-028	ES2202692-029	ES2202692-030
				Result	Result	Result	Result	Result
EP075I: Organochlorine Pesticides - Continued								
alpha-Endosulfan	959-98-8	0.5	mg/kg	<0.5	<0.5	<0.5	---	<0.5
4.4`-DDE	72-55-9	0.5	mg/kg	<0.5	<0.5	<0.5	---	<0.5
Dieldrin	60-57-1	0.5	mg/kg	<0.5	<0.5	<0.5	---	<0.5
Endrin	72-20-8	0.5	mg/kg	<0.5	<0.5	<0.5	---	<0.5
beta-Endosulfan	33213-65-9	0.5	mg/kg	<0.5	<0.5	<0.5	---	<0.5
4.4`-DDD	72-54-8	0.5	mg/kg	<0.5	<0.5	<0.5	---	<0.5
Endosulfan sulfate	1031-07-8	0.5	mg/kg	<0.5	<0.5	<0.5	---	<0.5
4.4`-DDT	50-29-3	1.0	mg/kg	<1.0	<1.0	<1.0	---	<1.0
EP075J: Organophosphorus Pesticides								
Dichlorvos	62-73-7	0.5	mg/kg	<0.5	<0.5	<0.5	---	<0.5
Dimethoate	60-51-5	0.5	mg/kg	<0.5	<0.5	<0.5	---	<0.5
Diazinon	333-41-5	0.5	mg/kg	<0.5	<0.5	<0.5	---	<0.5
Chlorpyrifos-methyl	5598-13-0	0.5	mg/kg	<0.5	<0.5	<0.5	---	<0.5
Malathion	121-75-5	0.5	mg/kg	<0.5	<0.5	<0.5	---	<0.5
Fenthion	55-38-9	0.5	mg/kg	<0.5	<0.5	<0.5	---	<0.5
Chlorpyrifos	2921-88-2	0.5	mg/kg	<0.5	<0.5	<0.5	---	<0.5
Pirimphos-ethyl	23505-41-1	0.5	mg/kg	<0.5	<0.5	<0.5	---	<0.5
Chlorfenvinphos	470-90-6	0.5	mg/kg	<0.5	<0.5	<0.5	---	<0.5
Prothiofos	34643-46-4	0.5	mg/kg	<0.5	<0.5	<0.5	---	<0.5
Ethion	563-12-2	0.5	mg/kg	<0.5	<0.5	<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	<50	<50
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	<100	<100	<100	<100	<100
>C34 - C40 Fraction	----	100	mg/kg	<100	<100	<100	<100	<100
^ >C10 - C40 Fraction (sum)	----	50	mg/kg	<50	<50	<50	<50	<50

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Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	SOP_BH136_0.2_220125	SOP_BH137_0.2_220125	SOP_BH138_0.2_220125	SOP_BH139_1.2_220125	SOP_BH139_2.0_220125
			Sampling date / time	25-Jan-2022 00:00	25-Jan-2022 00:00	25-Jan-2022 00:00	24-Jan-2022 00:00	25-Jan-2022 00:00
Compound	CAS Number	LOR	Unit	ES2202692-026	ES2202692-027	ES2202692-028	ES2202692-029	ES2202692-030
				Result	Result	Result	Result	Result
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions - Continued								
^ >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	----
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								

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Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	SOP_BH136_0.2_220125	SOP_BH137_0.2_220125	SOP_BH138_0.2_220125	SOP_BH139_1.2_220125	SOP_BH139_2.0_220125
			Sampling date / time	25-Jan-2022 00:00	25-Jan-2022 00:00	25-Jan-2022 00:00	24-Jan-2022 00:00	25-Jan-2022 00:00
Compound	CAS Number	LOR	Unit	ES2202692-026	ES2202692-027	ES2202692-028	ES2202692-029	ES2202692-030
				Result	Result	Result	Result	Result
EP231P: PFAS Sums - Continued								
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	%	125	114	110	83.4	112
EP068S: Organochlorine Pesticide Surrogate								
Dibromo-DDE	21655-73-2	0.05	%	104	111	97.9	80.0	109
EP068T: Organophosphorus Pesticide Surrogate								
DEF	78-48-8	0.05	%	87.4	104	95.7	72.3	71.0
EP074S: VOC Surrogates								
1.2-Dichloroethane-D4	17060-07-0	0.5	%	89.4	89.9	93.2	---	91.0
Toluene-D8	2037-26-5	0.5	%	82.2	82.3	85.7	---	82.7
4-Bromofluorobenzene	460-00-4	0.5	%	90.4	89.5	87.6	---	84.3
EP075(SIM)S: Phenolic Compound Surrogates								
Phenol-d6	13127-88-3	0.5	%	81.2	84.0	84.4	84.2	90.2
2-Chlorophenol-D4	93951-73-6	0.5	%	83.5	85.8	86.7	86.4	93.0
2.4.6-Tribromophenol	118-79-6	0.5	%	69.6	69.6	75.1	74.4	80.7
EP075(SIM)T: PAH Surrogates								
2-Fluorobiphenyl	321-60-8	0.5	%	84.6	86.6	88.0	86.1	93.5
Anthracene-d10	1719-06-8	0.5	%	95.9	98.0	98.1	98.1	106
4-Terphenyl-d14	1718-51-0	0.5	%	88.2	88.9	91.4	90.1	96.3
EP075S: Acid Extractable Surrogates								
2-Fluorophenol	367-12-4	0.5	%	109	99.8	102	---	108
Phenol-d6	13127-88-3	0.5	%	102	92.8	96.0	---	102
2-Chlorophenol-D4	93951-73-6	0.5	%	98.7	94.5	88.9	---	98.4
2.4.6-Tribromophenol	118-79-6	0.5	%	80.6	85.8	87.4	---	80.7
EP075T: Base/Neutral Extractable Surrogates								
Nitrobenzene-D5	4165-60-0	0.5	%	98.0	100	97.0	---	108
1.2-Dichlorobenzene-D4	2199-69-1	0.5	%	89.2	87.9	83.8	---	87.2
2-Fluorobiphenyl	321-60-8	0.5	%	103	97.6	106	---	105
Anthracene-d10	1719-06-8	0.5	%	116	113	112	---	109
4-Terphenyl-d14	1718-51-0	0.5	%	101	93.3	94.4	---	96.6
EP080S: TPH(V)/BTEX Surrogates								

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Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH136_0.2_220125	SOP_BH137_0.2_220125	SOP_BH138_0.2_220125	SOP_BH139_1.2_220125	SOP_BH139_2.0_220125
				Sampling date / time	25-Jan-2022 00:00	25-Jan-2022 00:00	25-Jan-2022 00:00	24-Jan-2022 00:00	25-Jan-2022 00:00
					ES2202692-026	ES2202692-027	ES2202692-028	ES2202692-029	ES2202692-030
					Result	Result	Result	Result	Result
EP080S: TPH(V)/BTEX Surrogates - Continued									
1.2-Dichloroethane-D4	17060-07-0	0.2	%		79.0	77.4	91.2	74.0	89.1
Toluene-D8	2037-26-5	0.2	%		76.1	78.1	81.2	76.2	78.3
4-Bromofluorobenzene	460-00-4	0.2	%		75.2	75.5	84.0	83.7	80.9
EP231S: PFAS Surrogate									
13C4-PFOS	----	0.0002	%		----	----	----	100	----
13C8-PFOA	----	0.0002	%		----	----	----	102	----

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Analytical Results

Sub-Matrix: WATER (Matrix: WATER)			Sample ID	RIN06_220124	RIN07_220125	----	----	----
			Sampling date / time	22-Jan-2022 00:00	22-Jan-2022 00:00	----	----	----
Compound	CAS Number	LOR	Unit	ES2202692-031	ES2202692-032	--------	--------	--------
				Result	Result	----	----	----
EG020T: Total 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	<0.001	<0.001	----	----	----
Lead	7439-92-1	0.001	mg/L	<0.001	<0.001	----	----	----
Zinc	7440-66-6	0.005	mg/L	<0.005	<0.005	----	----	----
EG035T: Total Recoverable 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	----	----	----

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Analytical Results

Sub-Matrix: WATER (Matrix: WATER)			Sample ID	RIN06_220124	RIN07_220125	----	----	----
			Sampling date / time	22-Jan-2022 00:00	22-Jan-2022 00:00	----	----	----
Compound	CAS Number	LOR	Unit	ES2202692-031	ES2202692-032	--------	--------	--------
				Result	Result	----	----	----
EP068A: Organochlorine Pesticides (OC) - Continued								
^ Sum of DDD + DDE + DDT	72-54-8/72-55-9/50-2	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)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	----	----	----

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Analytical Results

Sub-Matrix: WATER (Matrix: WATER)			Sample ID	RIN06_220124	RIN07_220125	----	----	----
			Sampling date / time	22-Jan-2022 00:00	22-Jan-2022 00:00	----	----	----
Compound	CAS Number	LOR	Unit	ES2202692-031	ES2202692-032	--------	--------	--------
				Result	Result	----	----	----
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons - Continued								
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	----	----	----
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	----	----	----
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	20	µg/L	<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	----	----	----
^ >C10 - C16 Fraction minus Naphthalene (F2)	----	100	µg/L	<100	<100	----	----	----
EP080: BTEXN								
Benzene	71-43-2	1	µg/L	<1	<1	----	----	----
Toluene	108-88-3	2	µg/L	<2	<2	----	----	----
Ethylbenzene	100-41-4	2	µg/L	<2	<2	----	----	----
meta- & para-Xylene	108-38-3 106-42-3	2	µg/L	<2	<2	----	----	----
ortho-Xylene	95-47-6	2	µg/L	<2	<2	----	----	----
^ Total Xylenes	----	2	µg/L	<2	<2	----	----	----
^ Sum of BTEX	----	1	µg/L	<1	<1	----	----	----
Naphthalene	91-20-3	5	µg/L	<5	<5	----	----	----
EP066S: PCB Surrogate								
Decachlorobiphenyl	2051-24-3	1	%	**89.4**	**91.4**	----	----	----

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Analytical Results

Sub-Matrix: WATER (Matrix: WATER)			Sample ID	RIN06_220124	RIN07_220125	----	----	----
			Sampling date / time	22-Jan-2022 00:00	22-Jan-2022 00:00	----	----	----
Compound	CAS Number	LOR	Unit	ES2202692-031	ES2202692-032	--------	--------	--------
				Result	Result	----	----	----
EP068S: Organochlorine Pesticide Surrogate								
Dibromo-DDE	21655-73-2	0.5	%	91.0	90.0	----	----	----
EP068T: Organophosphorus Pesticide Surrogate								
DEF	78-48-8	0.5	%	83.3	92.8	----	----	----
EP075(SIM)S: Phenolic Compound Surrogates								
Phenol-d6	13127-88-3	1.0	%	18.1	16.6	----	----	----
2-Chlorophenol-D4	93951-73-6	1.0	%	41.6	45.0	----	----	----
2.4.6-Tribromophenol	118-79-6	1.0	%	59.3	54.1	----	----	----
EP075(SIM)T: PAH Surrogates								
2-Fluorobiphenyl	321-60-8	1.0	%	84.9	53.7	----	----	----
Anthracene-d10	1719-06-8	1.0	%	99.2	98.1	----	----	----
4-Terphenyl-d14	1718-51-0	1.0	%	92.9	99.4	----	----	----
EP080S: TPH(V)/BTEX Surrogates								
1.2-Dichloroethane-D4	17060-07-0	2	%	99.7	97.1	----	----	----
Toluene-D8	2037-26-5	2	%	107	107	----	----	----
4-Bromofluorobenzene	460-00-4	2	%	96.2	96.3	----	----	----

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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	SOP_BH128_0.9_220124 - 24-Jan-2022 00:00	Soil sample.
EA200: Description	SOP_BH129_0.5_220124 - 24-Jan-2022 00:00	Soil sample.
EA200: Description	SOP_BH130_0.4_220124 - 24-Jan-2022 00:00	Soil sample.
EA200: Description	SOP_BH131_1.0_220124 - 24-Jan-2022 00:00	Soil sample.
EA200: Description	SOP_BH122_1.0_220124 - 24-Jan-2022 00:00	Soil sample.
EA200: Description	SOP_BH123_1.0_220124 - 24-Jan-2022 00:00	Soil sample.
EA200: Description	SOP_BH140_1.0_220124 - 24-Jan-2022 00:00	Soil sample.
EA200: Description	SOP_BH141_0.4_220124 - 24-Jan-2022 00:00	Soil sample.
EA200: Description	SOP_BH132_1.0_220125 - 25-Jan-2022 00:00	Soil sample.
EA200: Description	SOP_BH133_0.3_220125 - 25-Jan-2022 00:00	Soil sample.
EA200: Description	SOP_BH134_0.5_220125 - 25-Jan-2022 00:00	Soil sample.
EA200: Description	SOP_BH135_0.5_220125 - 25-Jan-2022 00:00	Soil sample.
EA200: Description	SOP_BH136_0.2_220125 - 25-Jan-2022 00:00	Soil sample.
EA200: Description	SOP_BH137_0.2_220125 - 25-Jan-2022 00:00	Soil sample.
EA200: Description	SOP_BH138_0.2_220125 - 25-Jan-2022 00:00	Soil sample.
EA200: Description	SOP_BH139_1.2_220125 - 24-Jan-2022 00:00	Soil sample.

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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

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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

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

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CHAIN OF CUSTODY

ALS Laboratory: please tick →

ADELAIDE 21 Burma Road Pooraka SA 5095 Ph: 08 8359 0890 E: adelaide@alsglobal.com

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TOWNSVILLE 14-15 Desma Court Bohle QLD 4818 Ph: 07 4796 0600 E: townsville.environmental@alsglobal.com

WOLLONGONG 99 Kenny Street Wollongong NSW 2500 Ph: 02 4225 3125 E: wollongong@alsglobal.com

CLIENT: ERM	TURNAROUND REQUIREMENTS: (Standard TAT may be longer for some tests e.g., Ultra Trace Organics)	☒ Standard TAT (List due date):	FOR LABORATORY USE ONLY (Circle)
OFFICE: SYDNEY		☐ Non Standard or urgent TAT (List due date):	Custody Seal Intact? Yes / No / N/A
PROJECT: SOP	PROJECT NO.: 0626507	ALS QUOTE NO.:	Free ice / frozen ice bricks present upon receipt? Yes / No / N/A
ORDER NUMBER: —	PURCHASE ORDER NO.: —	COUNTRY OF ORIGIN: Australia	COC SEQUENCE NUMBER (Circle) COC: (1) 2 3 4 5 6 7 OF: 1 2 (3) 4 5 6 7
PROJECT MANAGER: NICK G / JESS L	CONTACT PH: 0415 833925		Random Sample Temperature on Receipt: 18.6 °C
SAMPLER: ~~Tristen Rodrigues~~ Anthony Richard	SAMPLER MOBILE: 0427159735	RELINQUISHED BY:	RECEIVED BY: SOPHIE/Sas
COC Emailed to ALS? (YES / (NO)	EDD FORMAT (or default):		RELINQUISHED BY:
Email Reports to (will default to PM if no other addresses are listed): NICK G, Jess L		DATE/TIME:	DATE/TIME: 27/1/22 1535
Email Invoice to (will default to PM if no other addresses are listed): Default			DATE/TIME:

Other comment: 18.6

COMMENTS/SPECIAL HANDLING/STORAGE OR DISPOSAL: Please issue Preliminary Report.

ALS USE ONLY	SAMPLE DETAILS (MATRIX: Solid(S) Water(W))			CONTAINER INFORMATION		ANALYSIS REQUIRED including SUITES (NB. Suite Codes must be listed to attract suite price) Where Metals are required, specify Total (unfiltered bottle required) or Dissolved (field filtered bottle required).								Additional Information
LAB ID	SAMPLE ID	DATE / TIME	MATRIX	TYPE & PRESERVATIVE (refer to codes below)	TOTAL JARS	S16	S23	EA 200 G	EP231	BTEX/TRH				Comments on likely contaminant levels, dilutions, or samples requiring specific QC analysis etc.
1	SOP_BH128_0.9_220124		S	JPA	3	X	X	X	X					
2	SOP_BH128_5.0_220124			JPA	3	X			X					
3	SOP_BH129_0.5_220124			JPA	3	X		X	X					
4	SOP_BH129_1.0_220124			JPA	3	X	X		X					
5	SOP_BH130_0.4_220124			JA	2	X		X						
6	SOP_BH130_2.0_220124			JP	2	X	X							
7	SOP_BH131_1.0_220124			JA	2	X	X	X						
8	SOP_BH131_2.0_220124			JP	2	X			X					
9	DUP07_220124	24-1-22		JP	2	X			X					
—	TRIP07_220124	24-1-22		JP	2	X			X					Please fwd to Eurofins
10	SOP_BH122_1.0_220124			JA	2	X		X						
11	SOP_BH122_2.0_220124			J	1	X	X							
12	SOP_BH123_1.0_220124			JPA	3	X	X	X	X					
13	SOP_BH123_3.0_220124			J	1	X								
₹														
				TOTAL										

Environmental Division Sydney
Work Order Reference
ES2202692

Telephone : +61-2-8784 8555

Water Container Codes: P = Unpreserved Plastic; N = Nitric Preserved Plastic; ORC = Nitric Preserved ORC; SH = Sodium Hydroxide/Cd Preserved; S = Sodium Hydroxide Preserved Plastic; AG = Amber Glass Unpreserved; AP - Airfreight Unpreserved Plastic V = VOA Vial HCl Preserved; VB = VOA Vial Sodium Bisulphate Preserved; VS = VOA Vial Sulfuric Preserved; AV = Airfreight Unpreserved Vial SG = Sulfuric Preserved Amber Glass; H = HCl preserved Plastic; HS = HCl preserved Speciation bottle; SP = Sulfuric Preserved Plastic; F = Formaldehyde Preserved Glass; Z = Zinc Acetate Preserved Bottle; E = EDTA Preserved Bottles; ST = Sterile Bottle; ASS = Plastic Bag for Acid Sulphate Soils; B = Unpreserved Bag; LI = Lugols Iodine Preserved Bottles; STT = Sterile Sodium Thiosulfate Preserved Bottles.

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CHAIN OF CUSTODY

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CLIENT:	TURNAROUND REQUIREMENTS : (Standard TAT may be longer for some tests e.g. Ultra Trace Organics)	☐ Standard TAT (List due date):	FOR LABORATORY USE ONLY (Circle)
OFFICE:		☐ Non Standard or urgent TAT (List due date):	Custody Seal Intact? Yes No N/A
PROJECT: PROJECT NO.:	ALS QUOTE NO.:	COC SEQUENCE NUMBER (Circle)	Free ice / frozen ice bricks present upon receipt? Yes No N/A
ORDER NUMBER: PURCHASE ORDER NO.:	COUNTRY OF ORIGIN: Australia	COC: 1 2 3 4 5 6 7	Random Sample Temperature on Receipt: °C
PROJECT MANAGER:	CONTACT PH:	OF: 1 2 3 4 5 6 7	Other comment: 18.6
SAMPLER: Tristan Rodrigues	SAMPLER MOBILE:	RELINQUISHED BY:	RECEIVED BY:
COC Emailed to ALS? (YES / NO)	EDD FORMAT (or default):	DATE/TIME:	DATE/TIME: 27/11/22 1525
Email Reports to (will default to PM if no other addresses are listed):		RELINQUISHED BY:	RECEIVED BY:
Email Invoice to (will default to PM if no other addresses are listed):		DATE/TIME:	DATE/TIME:

SEE PAGE 2

COMMENTS/SPECIAL HANDLING/STORAGE OR DISPOSAL: Please issue Preliminary Report.

ALS USE ONLY	SAMPLE DETAILS MATRIX: Solid(S) Water(W)			CONTAINER INFORMATION		ANALYSIS REQUIRED including SUITES (NB. Suite Codes must be listed to attract suite price) Where Metals are required, specify Total (unfiltered bottle required) or Dissolved (field filtered bottle required).								Additional Information
LAB ID	SAMPLE ID	DATE / TIME	MATRIX	TYPE & PRESERVATIVE (refer to codes below)	TOTAL JARS	S16	S23	EA200 G	EP231	BTEX/TRH				Comments on likely contaminant levels, dilutions, or samples requiring specific QC analysis etc.
14	SOP_BH140_1.0_220124		S	JA	2	X		X						
15	SOP_BH140_2.0_220124			JP	2	X	X		X					
16	SOP_BH141_0.3_220124			JA	2	X		X						
17	SOP_BH141_04_220124			JA	2	X	X	X						
18	SOP_BH132_1.0_220125			JPA	3	X		X	X					
19	SOP_BH132_3.0_220125			JA	2	X	X							
20	SOP_BH133_0.3_220125			JA	2	X	X	X						
21	SOP_BH133_0.8_220125			JA	2	X								
22	SOP_BH134_0.5_220125			JPA	3	X	X	X	X					
23	SOP_BH134_2.0_220125			JA	2	X								
24	SOP_BH135_0.5_220125			JA	2	X	X	X						
25	SOP_BH135_0.8_220125			JA	2	X								
26	SOP_BH136_0.2_220125			JA	2	X	X	X						
27	SOP_BH137_0.2_220125			JA	2	X	X	X						
28	SOP_BH138_0.2_220125		↓	JA	2	X	X	X						
				TOTAL										

Water Container Codes: P = Unpreserved Plastic; N = Nitric Preserved Plastic; ORC = Nitric Preserved ORC; SH = Sodium Hydroxide/Cd Preserved; S = Sodium Hydroxide Preserved Plastic; AG = Amber Glass Unpreserved; AP - Airfreight Unpreserved Plastic
V = VOA Vial HCl Preserved; VB = VOA Vial Sodium Bisulphate Preserved; VS = VOA Vial Sulfuric Preserved; AV = Airfreight Unpreserved Vial SG = Sulfuric Preserved Amber Glass; H = HCl preserved Plastic; HS = HCl preserved Speciation bottle; SP = Sulfuric Preserved Plastic; F = Formaldehyde Preserved Glass;
Z = Zinc Acetate Preserved Bottle; E = EDTA Preserved Bottles; ST = Sterile Bottle; ASS = Plastic Bag for Acid Sulphate Soils; B = Unpreserved Bag; LI = Lugols Iodine Preserved Bottles; STT = Sterile Sodium Thiosulfate Preserved Bottles.

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CLIENT:	TURNAROUND REQUIREMENTS : (Standard TAT may be longer for some tests e.g. Ultra Trace Organics)	☐ Standard TAT (List due date):	FOR LABORATORY USE ONLY (Circle)
OFFICE:		☐ Non Standard or urgent TAT (List due date):	Custody Seal Intact? Yes No N/A
PROJECT: PROJECT NO.:	ALS QUOTE NO.:	COC SEQUENCE NUMBER (Circle)	Free ice / frozen ice bricks present upon receipt? Yes No N/A
ORDER NUMBER: PURCHASE ORDER NO.:	COUNTRY OF ORIGIN: Australia	COC: 1 2 3 4 5 6 7	Random Sample Temperature on Receipt: °C
PROJECT MANAGER:	CONTACT PH:	OF: 1 2 3 4 5 6 7	Other comment:
SAMPLER: Tristan Rodrigues	SAMPLER MOBILE:	RELINQUISHED BY:	RECEIVED BY:
COC Emailed to ALS? (YES / NO)	EDD FORMAT (or default):		
Email Reports to (will default to PM if no other addresses are listed):		DATE/TIME:	DATE/TIME: 27/1/22 1525
Email Invoice to (will default to PM if no other addresses are listed):			

SEE PAGE 1

COMMENTS/SPECIAL HANDLING/STORAGE OR DISPOSAL: Please issue Preliminary Report.

ALS USE ONLY	SAMPLE DETAILS MATRIX: Solid(S) Water(W)			CONTAINER INFORMATION		ANALYSIS REQUIRED including SUITES (NB. Suite Codes must be listed to attract suite price) Where Metals are required, specify Total (unfiltered bottle required) or Dissolved (field filtered bottle required).								Additional Information
LAB ID	SAMPLE ID	DATE / TIME	MATRIX	TYPE & PRESERVATIVE (refer to codes below)	TOTAL JARS	S16	S23	EA200 G	EP231	BTEX/TRH				Comments on likely contaminant levels, dilutions, or samples requiring specific QC analysis etc.
29	SOP_BH139_1.2_220125		S	JPA	3	X		X	X					
30	SOP_BH139_2.0_220125		S	JA	2	X	X							
31	RIN06_220124	25/1/22	W		6	X								
32	RIN07_220125	25/1/22	W		6	X								
				TOTAL										

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Water Container Codes: P = Unpreserved Plastic; N = Nitric Preserved Plastic; ORC = Nitric Preserved ORC; SH = Sodium Hydroxide/Cd Preserved; S = Sodium Hydroxide Preserved Plastic; AG = Amber Glass Unpreserved; AP - Airfreight Unpreserved Plastic
V = VOA Vial HCl Preserved; VB = VOA Vial Sodium Bisulphate Preserved; VS = VOA Vial Sulfuric Preserved; AV = Airfreight Unpreserved Vial SG = Sulfuric Preserved Amber Glass; H = HCl preserved Plastic; HS = HCl preserved Speciation bottle; SP = Sulfuric Preserved Plastic; F = Formaldehyde Preserved Glass;
Z = Zinc Acetate Preserved Bottle; E = EDTA Preserved Bottles; ST = Sterile Bottle; ASS = Plastic Bag for Acid Sulphate Soils; B = Unpreserved Bag; LI = Lugols Iodine Preserved Bottles; STT = Sterile Sodium Thiosulfate Preserved Bottles.

ALS Environmental

CERTIFICATE OF ANALYSIS

Work Order	: **ES2203937**	Page	: 1 of 9
Client	: **ENVIRONMENTAL RESOURCES MANAGEMENT (ERM)**	Laboratory	: Environmental Division Sydney
Contact	: NICHOLAS GRBICH	Contact	: Customer Services ES
Address	: LEVEL 15 309 KENT STREET SYDNEY NSW AUSTRALIA 2000	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
Telephone	: ----	Telephone	: +61-2-8784 8555
Project	: AFJV SOP 0628507	Date Samples Received	: 04-Feb-2022 17:50
Order number	: ----	Date Analysis Commenced	: 05-Feb-2022
C-O-C number	: ----	Issue Date	: 10-Feb-2022 16:36
Sampler	: Anthony Richard		
Site	: ----		
Quote number	: EN/114		
No. of samples received	: 1		
No. of samples analysed	: 1		

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

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

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results
- Surrogate Control Limits

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

Signatories

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

Signatories	*Position*	*Accreditation Category*
Ankit Joshi	Inorganic Chemist	Sydney Inorganics, Smithfield, NSW
Edwandy Fadjar	Organic Coordinator	Sydney Organics, Smithfield, NSW
Franco Lentini	LCMS Coordinator	Sydney Organics, Smithfield, NSW
Wisam Marassa	Inorganics Coordinator	Sydney Inorganics, Smithfield, NSW

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General Comments

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

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

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

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

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.
- 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.
- 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.
- Sodium Adsorption Ratio (where reported): Where results for Na, Ca or Mg are <LOR, a concentration at half the reported LOR is incorporated into the SAR calculation. This represents a conservative approach for Na relative to the assumption that <LOR = zero concentration and a conservative approach for Ca & Mg relative to the assumption that <LOR is equivalent to the LOR concentration.
- 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.

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Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	SWM_BH032_220204	----	----	----	----
				Sampling date / time	04-Feb-2022 00:00	----	----	---	---
Compound	CAS Number	LOR	Unit		ES2203937-001	--------	--------	------	------
					Result	----	----	---	---
EA015: Total Dissolved Solids dried at 180 ± 5 °C									
Total Dissolved Solids @180°C	----	10	mg/L		**11400**	----	----	---	---
ED037P: Alkalinity by PC Titrator									
Hydroxide Alkalinity as CaCO3	DMO-210-001	1	mg/L		<1	----	----	---	---
Carbonate Alkalinity as CaCO3	3812-32-6	1	mg/L		<1	----	----	---	---
Bicarbonate Alkalinity as CaCO3	71-52-3	1	mg/L		**420**	----	----	---	---
Total Alkalinity as CaCO3	----	1	mg/L		**420**	----	----	---	---
ED041G: Sulfate (Turbidimetric) as SO4 2- by DA									
Sulfate as SO4 - Turbidimetric	14808-79-8	1	mg/L		**758**	----	----	---	---
ED045G: Chloride by Discrete Analyser									
Chloride	16887-00-6	1	mg/L		**5850**	----	----	---	---
ED093F: Dissolved Major Cations									
Calcium	7440-70-2	1	mg/L		**393**	----	----	---	---
Magnesium	7439-95-4	1	mg/L		**320**	----	----	---	---
Sodium	7440-23-5	1	mg/L		**2950**	----	----	---	---
Potassium	7440-09-7	1	mg/L		**40**	----	----	---	---
EG020F: Dissolved Metals by ICP-MS									
Arsenic	7440-38-2	0.001	mg/L		**0.003**	----	----	---	---
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	----	----	---	---
Lead	7439-92-1	0.001	mg/L		<0.001	----	----	---	---
Nickel	7440-02-0	0.001	mg/L		**0.005**	----	----	---	---
Zinc	7440-66-6	0.005	mg/L		**0.013**	----	----	---	---
Iron	7439-89-6	0.05	mg/L		<0.05	----	----	---	---
EG035F: Dissolved Mercury by FIMS									
Mercury	7439-97-6	0.0001	mg/L		<0.0001	----	----	---	---
EK040P: Fluoride by PC Titrator									
Fluoride	16984-48-8	0.1	mg/L		**0.2**	----	----	---	---
EK055G: Ammonia as N by Discrete Analyser									
Ammonia as N	7664-41-7	0.01	mg/L		**1.96**	----	----	---	---
EK057G: Nitrite as N by Discrete Analyser									
Nitrite as N	14797-65-0	0.01	mg/L		<0.01	----	----	---	---
EK058G: Nitrate as N by Discrete Analyser									

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Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	SWM_BH032_220204	----	----	----	----
				Sampling date / time	04-Feb-2022 00:00	----	----	----	----
Compound	CAS Number	LOR	Unit		ES2203937-001	--------	--------	--------	--------
					Result	----	----	----	----
EK058G: Nitrate as N by Discrete Analyser - Continued									
Nitrate as N	14797-55-8	0.01	mg/L		**0.12**	----	----	----	----
EK059G: Nitrite plus Nitrate as N (NOx) by Discrete Analyser									
Nitrite + Nitrate as N	----	0.01	mg/L		**0.12**	----	----	----	----
EK061G: Total Kjeldahl Nitrogen By Discrete Analyser									
Total Kjeldahl Nitrogen as N	----	0.1	mg/L		**2.6**	----	----	----	----
EK062G: Total Nitrogen as N (TKN + NOx) by Discrete Analyser									
^ Total Nitrogen as N	----	0.1	mg/L		**2.7**	----	----	----	----
EK067G: Total Phosphorus as P by Discrete Analyser									
Total Phosphorus as P	----	0.01	mg/L		**0.24**	----	----	----	----
EN055: Ionic Balance									
ø Total Anions	----	0.01	meq/L		**189**	----	----	----	----
ø Total Cations	----	0.01	meq/L		**175**	----	----	----	----
ø Ionic Balance	----	0.01	%		**3.82**	----	----	----	----
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									
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		<5	----	----	----	----
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	----	----	----	----

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Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	SWM_BH032_220204	----	----	----	----
				Sampling date / time	04-Feb-2022 00:00	----	----	---	---
Compound	CAS Number	LOR	Unit		ES2203937-001	--------	--------	-------	-------
					Result	----	----	---	---
EP074D: Fumigants - Continued									
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	----	----	---	---
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	----	----	---	---
Hexachlorobutadiene	87-68-3	5	µg/L		<5	----	----	---	---
EP074F: Halogenated Aromatic Compounds									
Chlorobenzene	108-90-7	5	µg/L		<5	----	----	---	---
Bromobenzene	108-86-1	5	µg/L		<5	----	----	---	---

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Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	SWM_BH032_220204	----	----	----	----
				Sampling date / time	04-Feb-2022 00:00	----	----	---	---
Compound	CAS Number	LOR	Unit		ES2203937-001	--------	--------	-------	-------
					Result	----	----	---	---
EP074F: Halogenated Aromatic Compounds - Continued									
2-Chlorotoluene	95-49-8	5	µg/L		<5	----	----	---	---
4-Chlorotoluene	106-43-4	5	µg/L		<5	----	----	---	---
1.3-Dichlorobenzene	541-73-1	5	µg/L		<5	----	----	---	---
1.4-Dichlorobenzene	106-46-7	5	µg/L		<5	----	----	---	---
1.2-Dichlorobenzene	95-50-1	5	µg/L		<5	----	----	---	---
1.2.4-Trichlorobenzene	120-82-1	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)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	----	----	---	---
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	----	----	---	---

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Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	SWM_BH032_220204	----	----	----	----
				Sampling date / time	04-Feb-2022 00:00	----	----	----	----
Compound	CAS Number	LOR	Unit		ES2203937-001	--------	--------	--------	--------
					Result	----	----	----	----
EP080/071: Total Petroleum Hydrocarbons - Continued									
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	----	----	----	----
EP231A: Perfluoroalkyl Sulfonic Acids									
Perfluorobutane sulfonic acid (PFBS)	375-73-5	0.02	µg/L		<0.02	----	----	----	----
Perfluorohexane sulfonic acid (PFHxS)	355-46-4	0.01	µg/L		<0.01	----	----	----	----
Perfluorooctane sulfonic acid (PFOS)	1763-23-1	0.01	µg/L		<0.01	----	----	----	----
EP231B: Perfluoroalkyl Carboxylic Acids									
Perfluorobutanoic acid (PFBA)	375-22-4	0.1	µg/L		<0.1	----	----	----	----
Perfluoropentanoic acid (PFPeA)	2706-90-3	0.02	µg/L		<0.02	----	----	----	----
Perfluorohexanoic acid (PFHxA)	307-24-4	0.02	µg/L		<0.02	----	----	----	----
Perfluoroheptanoic acid (PFHpA)	375-85-9	0.02	µg/L		<0.02	----	----	----	----
Perfluorooctanoic acid (PFOA)	335-67-1	0.01	µg/L		<0.01	----	----	----	----

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Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	SWM_BH032_220204	----	----	----	----
				Sampling date / time	04-Feb-2022 00:00	----	----	---	---
Compound	CAS Number	LOR	Unit		ES2203937-001	--------	--------	------	------
					Result	----	----	---	---
EP231D: (n:2) Fluorotelomer Sulfonic Acids									
4:2 Fluorotelomer sulfonic acid (4:2 FTS)	757124-72-4	0.05	µg/L		<0.05	----	----	---	---
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	27619-97-2	0.05	µg/L		<0.05	----	----	---	---
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	39108-34-4	0.05	µg/L		<0.05	----	----	---	---
10:2 Fluorotelomer sulfonic acid (10:2 FTS)	120226-60-0	0.05	µg/L		<0.05	----	----	---	---
EP231P: PFAS Sums									
Sum of PFHxS and PFOS	355-46-4/1763-23-1	0.01	µg/L		<0.01	----	----	---	---
Sum of PFAS (WA DER List)	----	0.01	µg/L		<0.01	----	----	---	---
EP074S: VOC Surrogates									
1.2-Dichloroethane-D4	17060-07-0	5	%		131	----	----	---	---
Toluene-D8	2037-26-5	5	%		124	----	----	---	---
4-Bromofluorobenzene	460-00-4	5	%		115	----	----	---	---
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	1.0	%		23.5	----	----	---	---
2-Chlorophenol-D4	93951-73-6	1.0	%		49.1	----	----	---	---
2.4.6-Tribromophenol	118-79-6	1.0	%		64.0	----	----	---	---
EP075(SIM)T: PAH Surrogates									
2-Fluorobiphenyl	321-60-8	1.0	%		62.2	----	----	---	---
Anthracene-d10	1719-06-8	1.0	%		77.4	----	----	---	---
4-Terphenyl-d14	1718-51-0	1.0	%		81.4	----	----	---	---
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	2	%		122	----	----	---	---
Toluene-D8	2037-26-5	2	%		127	----	----	---	---
4-Bromofluorobenzene	460-00-4	2	%		114	----	----	---	---

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Surrogate Control Limits

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

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CHAIN OF CUSTODY

ALS Laboratory: please tick →

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☐WOLLONGONG 99 Kenny Street Wollongong NSW 2500 Ph: 02 4225 3125 E: wollongong@alsglobal.com

CLIENT: ERM

OFFICE: SYDNEY

PROJECT: AFJV SOP 0628507 PROJECT NO.:

ORDER NUMBER: PURCHASE ORDER NO.:

PROJECT MANAGER: Nick Grbich/Jess L CONTACT PH: 0419 833 925

SAMPLER: ~~Tristan Rodrigues~~ Anthony Richard SAMPLER MOBILE: 0427 139 735

COC Emailed to ALS? (YES (NO) EDD FORMAT (or default):

Email Reports to (will default to PM if no other addresses are listed): Nick G + Jess L

Email Invoice to (will default to PM if no other addresses are listed): Standard ERM

TURNAROUND REQUIREMENTS : (Standard TAT may be longer for some tests e.g., Ultra Trace Organics)

☐ Standard TAT (List due date):

☒ Non Standard or urgent TAT (List due date): 72 hr

ALS QUOTE NO.:

COUNTRY OF ORIGIN: Australia

COC SEQUENCE NUMBER (Circle)

COC: (1) 2 3 4 5 6 7

OF: (1) 2 3 4 5 6 7

FOR LABORATORY USE ONLY (Circle)

Custody Seal Intact?	(Yes)	No	N/A
Free ice / frozen ice bricks present upon receipt?	(Yes)	No	N/A
Random Sample Temperature on Receipt:		°C	
Other comment:	4.5		

RELINQUISHED BY:	RECEIVED BY:	RELINQUISHED BY:	RECEIVED BY:
DATE/TIME:	DATE/TIME: 04/2/22 1750	DATE/TIME:	DATE/TIME:

COMMENTS/SPECIAL HANDLING/STORAGE OR DISPOSAL: Please issue Preliminary Report.

ALS USE ONLY	SAMPLE DETAILS MATRIX: Solid(S) Water(W)			CONTAINER INFORMATION		ANALYSIS REQUIRED including SUITES (NB. Suite Codes must be listed to attract suite price) Where Metals are required, specify Total (unfiltered bottle required) or Dissolved (field filtered bottle required).								Additional Information
LAB ID	SAMPLE ID	DATE / TIME	MATRIX	TYPE & PRESERVATIVE (refer to codes below)	TOTAL JARS	TRH, BTEXN	PAH	VOC	M6 + Fe	PFAS	Ammonia, nitrate, total N, total P	Cations + Anions	TDS	Comments on likely contaminant levels, dilutions, or samples requiring specific QC analysis etc.
1	SMW_BH032_220204	4/2/22	water	P, AG, V	13	x	x	x	x	x	x	x	x	

TAT

Environmental Division
Sydney
Work Order Reference
ES2203937

Telephone : +61-2-8784 8555

TOTAL

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Water Container Codes: P = Unpreserved Plastic; N = Nitric Preserved Plastic; ORC = Nitric Preserved ORC; SH = Sodium Hydroxide/Cd Preserved; S = Sodium Hydroxide Preserved Plastic; AG = Amber Glass Unpreserved; AP - Airfreight Unpreserved Plastic
V = VOA Vial HCl Preserved; VB = VOA Vial Sodium Bisulphate Preserved; VS = VOA Vial Sulfuric Preserved; AV = Airfreight Unpreserved Vial SG = Sulfuric Preserved Amber Glass; H = HCl preserved Plastic; HS = HCl preserved Speciation bottle; SP = Sulfuric Preserved Plastic; F = Formaldehyde Preserved Glass;
Z = Zinc Acetate Preserved Bottle; E = EDTA Preserved Bottles; ST = Sterile Bottle; ASS = Plastic Bag for Acid Sulphate Soils; B = Unpreserved Bag; LI = Lugols Iodine Preserved Bottles; STT = Sterile Sodium Thiosulfate Preserved Bottles.

ALS Environmental

CERTIFICATE OF ANALYSIS

Work Order	: **ES2204238**	Page	: 1 of 8
Client	: **ENVIRONMENTAL RESOURCES MANAGEMENT (ERM)**	Laboratory	: Environmental Division Sydney
Contact	: NICHOLAS GRBICH	Contact	: Customer Services ES
Address	: LEVEL 15 309 KENT STREET SYDNEY NSW AUSTRALIA 2000	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
Telephone	: ----	Telephone	: +61-2-8784 8555
Project	: 0628507 SOP	Date Samples Received	: 07-Feb-2022 17:26
Order number	: ----	Date Analysis Commenced	: 09-Feb-2022
C-O-C number	: ----	Issue Date	: 10-Feb-2022 19:59
Sampler	: ----		
Site	: ----		
Quote number	: EN/114		
No. of samples received	: 14		
No. of samples analysed	: 14		

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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*
Ivan Taylor	Analyst	Sydney Inorganics, Smithfield, NSW

DRAFT

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.

- 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.

DRAFT

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	DUP04_220119	SOP_BH108_0.4_220120	SOP_BH110_0.2_220117	SOP_BH113_0.1_220118	SOP_BH115_0.1_220118
			Sampling date / time	19-Jan-2022 00:00	20-Jan-2022 00:00	17-Jan-2022 00:00	18-Jan-2022 00:00	18-Jan-2022 00:00
Compound	CAS Number	LOR	Unit	ES2204238-001	ES2204238-002	ES2204238-003	ES2204238-004	ES2204238-005
				Result	Result	Result	Result	Result
EN33: TCLP Leach - Inorganics/PFAS (Plastic Vessel)								
Initial pH	----	0.1	pH Unit	**7.0**	**8.8**	**9.2**	**9.7**	**9.8**
After HCl pH	----	0.1	pH Unit	**1.7**	**1.6**	**1.6**	**1.8**	**1.8**
Extraction Fluid Number	----	1	-	**1**	**1**	**1**	**1**	**1**
Final pH	----	0.1	pH Unit	**4.9**	**4.9**	**4.9**	**5.0**	**5.0**

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Analytical Results

Sub-Matrix: **SOIL**
(Matrix: **SOIL**)

Compound	CAS Number	LOR	Unit	Sample ID	SOP_BH116_0.2_220117	SOP_BH117_0.2_220117	SOP_BH118_0.1_220117	SOP_BH119_0.2_220117	SOP_BH126_2.0_220121
				Sampling date / time	17-Jan-2022 00:00	17-Jan-2022 00:00	19-Jan-2022 00:00	17-Jan-2022 00:00	21-Jan-2022 00:00
					ES2204238-006	ES2204238-007	ES2204238-008	ES2204238-009	ES2204238-010
					Result	Result	Result	Result	Result
EN33: TCLP Leach - Inorganics/PFAS (Plastic Vessel)									
Initial pH	----	0.1	pH Unit		**9.9**	**9.7**	**10.0**	**9.8**	**7.7**
After HCl pH	----	0.1	pH Unit		**1.7**	**1.7**	**1.8**	**1.7**	**1.7**
Extraction Fluid Number	----	1	-		**1**	**1**	**1**	**1**	**1**
Final pH	----	0.1	pH Unit		**5.0**	**5.0**	**5.2**	**5.0**	**4.9**

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Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	SOP_BH133_0.3_220125	SOP_BH134_2.0_220125	SOP_BH141_0.3_220124	SOP_BH145_5.0_220119	----
			Sampling date / time	25-Jan-2022 00:00	25-Jan-2022 00:00	24-Jan-2022 00:00	19-Jan-2022 00:00	---
Compound	CAS Number	LOR	Unit	ES2204238-011	ES2204238-012	ES2204238-013	ES2204238-014	------
				Result	Result	Result	Result	---
EN33: TCLP Leach - Inorganics/PFAS (Plastic Vessel)								
Initial pH	----	0.1	pH Unit	**9.2**	**6.0**	**9.3**	**7.3**	**---**
After HCl pH	----	0.1	pH Unit	**1.7**	**1.7**	**1.7**	**1.7**	**---**
Extraction Fluid Number	----	1	-	**1**	**1**	**1**	**1**	**---**
Final pH	----	0.1	pH Unit	**5.0**	**4.9**	**5.0**	**5.0**	**---**

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Analytical Results

Sub-Matrix: **TREATED LEACHATE** (Matrix: **WATER**)			Sample ID	DUP04_220119	SOP_BH108_0.4_220120	SOP_BH110_0.2_220117	SOP_BH113_0.1_220118	SOP_BH115_0.1_220118
			Sampling date / time	19-Jan-2022 00:00	20-Jan-2022 00:00	17-Jan-2022 00:00	18-Jan-2022 00:00	18-Jan-2022 00:00
Compound	*CAS Number*	*LOR*	*Unit*	**ES2204238-001**	**ES2204238-002**	**ES2204238-003**	**ES2204238-004**	**ES2204238-005**
				Result	Result	Result	Result	Result
EG005(ED093)C: Leachable Metals by ICPAES								
Nickel	7440-02-0	0.1	mg/L	**0.2**	**0.1**	<0.1	**0.2**	**0.2**

DRAFT

Analytical Results

Sub-Matrix: **TREATED LEACHATE** (Matrix: **WATER**)			Sample ID	SOP_BH116_0.2_220117	SOP_BH117_0.2_220117	SOP_BH118_0.1_220117	SOP_BH119_0.2_220117	SOP_BH126_2.0_220121
			Sampling date / time	17-Jan-2022 00:00	17-Jan-2022 00:00	19-Jan-2022 00:00	17-Jan-2022 00:00	21-Jan-2022 00:00
Compound	*CAS Number*	*LOR*	*Unit*	**ES2204238-006**	**ES2204238-007**	**ES2204238-008**	**ES2204238-009**	**ES2204238-010**
				Result	Result	Result	Result	Result
EG005(ED093)C: Leachable Metals by ICPAES								
Nickel	7440-02-0	0.1	mg/L	<0.1	<0.1	**0.2**	<0.1	<0.1

DRAFT

Analytical Results

Sub-Matrix: **TREATED LEACHATE** (Matrix: **WATER**)				Sample ID	SOP_BH133_0.3_220125	SOP_BH134_2.0_220125	SOP_BH141_0.3_220124	SOP_BH145_5.0_220119	----
				Sampling date / time	25-Jan-2022 00:00	25-Jan-2022 00:00	24-Jan-2022 00:00	19-Jan-2022 00:00	---
Compound	*CAS Number*	*LOR*	*Unit*		**ES2204238-011**	**ES2204238-012**	**ES2204238-013**	**ES2204238-014**	-----
					Result	Result	Result	Result	---
EG005(ED093)C: Leachable Metals by ICPAES									
Nickel	7440-02-0	0.1	mg/L		<0.1	<0.1	<0.1	**0.2**	---

DRAFT

Vishal
07/02/2022
1728

Vishal Patel

From: Tyler Anderson
Sent: Monday, 7 February 2022 6:03 PM
To: rebatches.sydney; Nanthini Coilparampil; Wisam Marassa
Subject: FAST TAT REBATCH - TCLP - job number: 0628507

Hi team,

Are you able to please organise the below rebatch on a 2 day TAT:

Nickel TCLP

	Field_ID	Sampled_Date-Time	Lab_Report_Number
1	DUP04_220119	19/01/2022	ES2202264
2	SOP_BH108_0.4_220120	19/01/2022	ES2202264
3	SOP_BH110_0.2_220117	17/01/2022	ES2201683
4	SOP_BH113_0.1_220118	18/01/2022	ES2201683
5	SOP_BH115_0.1_220118	18/01/2022	ES2201683
6	SOP_BH116_0.2_220117	17/01/2022	ES2201683
7	SOP_BH117_0.2_220117	17/01/2022	ES2201683
8	SOP_BH118_0.1_220119	19/01/2022	ES2202264
9	SOP_BH119_0.2_220117	17/01/2022	ES2201683
10	SOP_BH126_2.0_220121	21/01/2022	ES2202264
11	SOP_BH133_0.3_220125	25/01/2022	ES2202692
12	SOP_BH134_2.0_220125	25/01/2022	ES2202692
13	SOP_BH141_0.3_220124	24/01/2022	ES2202692
14	SOP_BH145_5.0_220119	19/01/2022	ES2202264

Kind regards,

Tyler Anderson

ES2202264 - 20, 26, 1, 49, 16 - 5747-752
ES2201683 - 11, 17, 24, 26, 28, 30 - 5714-716
ES2202692 - 20, 23, 16 - 5817-819

Environmental Division
Sydney
Work Order Reference
ES2204238

Telephone : +61-2-8784 8555

TAT

DRAFT

Client Services Coordinator, Environmental
Sydney

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D +61 2 8784 8501
tyler.anderson@alsglobal.com
277-289 Woodpark Road
Smithfield NSW 2164 AUSTRALIA

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EnviroMail™ 131 - Important Changes to the Australian Standard Leaching Procedures AS4439.2 & AS4439.3

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From: Madushani Bolonghe <Madushani.Bolonghe@erm.com>
Sent: Monday, 7 February 2022 5:28 PM
To: Tyler Anderson <tyler.anderson@alsglobal.com>
Cc: Jessica Lawrence <Jessica.Lawrence@erm.com>; Nicholas Grbich <Nicholas.Grbich@erm.com>; Tristan Rodrigues <Tristan.Rodrigues@erm.com>
Subject: [EXTERNAL] - TCLP - job number: 0628507

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Hi Tyler,

Would I please be able to get the following samples analysed for Nickel TCLP on a 2 day TAT please?

Field_ID	Sampled_Date-Time	Lab_Report_Number
DUP04_220119	19/01/2022	ES2202264
SOP_BH108_0.4_220120	19/01/2022	ES2202264
SOP_BH110_0.2_220117	17/01/2022	ES2201683
SOP_BH113_0.1_220118	18/01/2022	ES2201683
SOP_BH115_0.1_220118	18/01/2022	ES2201683
SOP_BH116_0.2_220117	17/01/2022	ES2201683

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SOP_BH117_0.2_220117	17/01/2022	ES2201683
SOP_BH118_0.1_220119	19/01/2022	ES2202264
SOP_BH119_0.2_220117	17/01/2022	ES2201683
SOP_BH126_2.0_220121	21/01/2022	ES2202264
SOP_BH133_0.3_220125	25/01/2022	ES2202692
SOP_BH134_2.0_220125	25/01/2022	ES2202692
SOP_BH141_0.3_220124	24/01/2022	ES2202692
SOP_BH145_5.0_220119	19/01/2022	ES2202264

Cheers,
Madu

Madushani Bolonghe
Environmental Consultant

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Lumley House | Level 15, 309 Kent Street | Sydney NSW 2000 Australia |
T +61 (0)2 8584 8888| **M** +61 (0)449 091 150
E madushani.bolonghe@erm.com | **W** www.erm.com

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DRAFT

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ALS Environmental

CERTIFICATE OF ANALYSIS

Work Order	: **ES2204305**	Page	: 1 of 2
Client	: **ENVIRONMENTAL RESOURCES MANAGEMENT (ERM)**	Laboratory	: Environmental Division Sydney
Contact	: NICHOLAS GRBICH	Contact	: Customer Services ES
Address	: LEVEL 15 309 KENT STREET SYDNEY NSW AUSTRALIA 2000	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
Telephone	: ----	Telephone	: +61-2-8784 8555
Project	: 0628507 SOP	Date Samples Received	: 08-Feb-2022 12:20
Order number	: ----	Date Analysis Commenced	: 11-Feb-2022
C-O-C number	: ----	Issue Date	: 11-Feb-2022 13:04
Sampler	: ANTHONY RICHARD		
Site	: ----		
Quote number	: EN/114		
No. of samples received	: 5		
No. of samples analysed	: 5		

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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	Inorganic Chemist	Sydney Inorganics, Smithfield, NSW

DRAFT

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.

Analytical Results

Sub-Matrix: **SOIL** (Matrix: **SOIL**)			Sample ID	BH101_1.3	BH105_2.0	BH115_2.0	BH139_1.2	BH143_0.3
			Sampling date / time	20-Jan-2022 00:00	17-Jan-2022 00:00	18-Jan-2022 00:00	25-Jan-2022 00:00	19-Jan-2022 00:00
Compound	*CAS Number*	*LOR*	*Unit*	**ES2204305-001**	**ES2204305-002**	**ES2204305-003**	**ES2204305-004**	**ES2204305-005**
				Result	Result	Result	Result	Result
EP004: Organic Matter								
Total Organic Carbon	----	0.5	%	<0.5	<0.5	<0.5	<0.5	<0.5

DRAFT

Vishal
08/02/2022
1220

Vishal Patel

From: Tyler Anderson
Sent: Tuesday, 8 February 2022 1:33 PM
To: rebatches.sydney; Nanthini Coilparampil
Subject: FW: [EXTERNAL] - SOP - job number: 0628507

Hi team,

Can you please organise the below rebatch on a 3 day TAT? Nanthini, can you please confirm if 3 days is achievable?

Kind regards,

Tyler Anderson
Client Services Coordinator, Environmental
Sydney

T +61 2 8784 8555 F +61 2 8784 8500
D +61 2 8784 8501
tyler.anderson@alsglobal.com
277-289 Woodpark Road
Smithfield NSW 2164 AUSTRALIA

Environmental Division
Sydney
Work Order Reference
ES2204305

Telephone : +61-2-8784 8555

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TAT

From: Madushani Bolonghe <Madushani.Bolonghe@erm.com>
Sent: Tuesday, 8 February 2022 12:20 PM
To: Tyler Anderson <tyler.anderson@alsglobal.com>

DRAFT

Cc: Nicholas Grbich <Nicholas.Grbich@erm.com>
Subject: [EXTERNAL] - SOP - job number: 0628507

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Hi Tyler,

Can I also have the following samples analysed for TOC on a three day TAT please?

1 • BH101_1.3 : ES2202264
2 • BH105_2.0 : ES2201683
3 • BH115_2.0 : ES2201683
4 • BH139_1.2 : ES2202692
5 • BH143_0.3 : ES2202264

ES2202264 - 35, 10 - S 747 - 752
ES2201683 - 8, 25. - S 714 - 716
ES2202692 - 29 - S 817 - 819

Also just following up on the SRN for the TCLP results I requested yesterday.

Thanks,
Madu

Madushani Bolonghe
Environmental Consultant

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E madushani.bolonghe@erm.com | **W** www.erm.com

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Appendix F – Data Validation

Commercial in Confidence

To check the accuracy and validity of soil sampling results, a range of quality assurance and quality control measures were implemented. A summary of the quality assurance / quality control (QA/QC) results for the soil analysis is shown below in **Table 6**. Refer to *Appendix F– QA/QC Calculations* for further information and data analysis.

Table 6. Summary of soil sample QA/QC analysis.

Sample collection & handling measures appropriate?		☒ Yes ☐ No
Field QA/QC samples	Field duplicates of primary samples are presented in relative percentage difference (RPD) tables below. Were the RPD values within acceptable tolerances? Exceedances of contaminants (>30% RPD) are understood to be related to the heterogeneous nature of the soil and the higher value has been used in this assessment. The exceedances are not considered to adversely affect the overall suitability of the data for environmental interpretation.	☒ Yes ☐ No
	'BWN_WAC12_SR' is an interlaboratory duplicates of primary samples BWN_WAC12 TP1 Were the RPD values within acceptable tolerances? Metal exceedances (arsenic, lead, mercury and zinc >30% RPD) are understood to be related to the heterogeneous nature of the soil and the higher value has been used in this assessment. The exceedances are not considered to adversely affect the overall suitability of the data for environmental interpretation.	☒ Yes ☐ No
Laboratory prepared trip spike / trip blank Were the recovery percentages within acceptable recovery ranges?		☒ Yes ☐ No ☐ N/A
Are the laboratory internal QA/QC results acceptable?		☒ Yes ☐ No

Commercial in Confidence

		Lab Report Number	21.2044 (846-857)	21.2044 (846-857)		21.2044 (846-857)	294280	
		Field ID	WAC1_TP4_0.0-0.1	WAC1_TP4_ BRa		WAC1_TP4_0.0-0.1	SOP_WAC1_TP4_SRa	
		Date	29/04/2022	29/04/2022		29/04/2022	21/02/2022	
		Matrix Type	Soil	Soil	RPD	Soil	Soil	RPD
	Unit	EQL						
BTEX								
Naphthalene (VOC)	mg/kg	1					<1	
Benzene	mg/kg	0.2		<0.50			<0.2	
Toluene	mg/kg	0.5		<0.50			<0.5	
Ethylbenzene	mg/kg	0.5		<0.50			<1	
Xylene (m & p)	mg/kg	1		<1.0			<2	
Xylene (o)	mg/kg	0.5		<0.50			<1	
Xylene Total	mg/kg	1		<1.0			<1	
Total BTEX	mg/kg	1		<1.0				
TRH								
C6-C10 Fraction (F1)	mg/kg	25		<35			<25	
C6-C10 (F1 minus BTEX)	mg/kg	25		<35			<25	
>C10-C16 Fraction (F2)	mg/kg	50		<50			<50	
>C10-C16 Fraction (F2 minus Naphthalene)	mg/kg	50					<50	
>C16-C34 Fraction (F3)	mg/kg	100		<100			<100	
>C34-C40 Fraction (F4)	mg/kg	100		<100			<100	
>C10-C40 Fraction (Sum)	mg/kg	50		<50			<50	
Chlorinated Hydrocarbons								
Other chlorinated hydrocarbons EPAVic	mg/kg	0.5		<0.50				
Total Chlorinated Hydrocarbons	mg/kg	0.5		<0.50				
1,1,1,2-tetrachloroethane	mg/kg	0.5		<0.50				
1,1,1-trichloroethane	mg/kg	0.5		<0.50				
1,1,2,2-tetrachloroethane	mg/kg	0.5		<0.50				
1,1,2-trichloroethane	mg/kg	0.5		<0.50				
1,1-dichloroethene	mg/kg	0.5		<0.50				
1,2-dichloroethane	mg/kg	0.5		<0.50				
Bromochloromethane	mg/kg	0.5		<0.50				
Carbon tetrachloride	mg/kg	0.5		<0.50				
Chloroform	mg/kg	0.5		<0.50				
cis-1,2-dichloroethene	mg/kg	0.5		<0.50				
Dichloromethane	mg/kg	0.5		<0.50				
Hexachlorobutadiene	mg/kg	0.5		<0.50				
Trichloroethene	mg/kg	0.5		<0.50				
Tetrachloroethene	mg/kg	0.5		<0.50				
trans-1,2-dichloroethene	mg/kg	0.5		<0.50				
Vinyl chloride	mg/kg	0.5		<0.50				
Halogenated Benzenes								
1,2,4-trichlorobenzene	mg/kg	0.5		<0.50				
1,2-dichlorobenzene	mg/kg	0.5		<0.50				
1,4-dichlorobenzene	mg/kg	0.5		<0.50				
Chlorobenzene	mg/kg	0.5		<0.50				
Hexachlorobenzene	mg/kg	0.1		<0.10			<0.1	
Perfluoroalkane Carboxylic Acids								
Perfluorobutanoic acid (PFBA)	mg/kg	0.005	<0.005			<0.005		
Perfluorohexanoic acid (PFHxA)	mg/kg	0.005	<0.005			<0.005		
Perfluoropentanoic acid (PFPeA)	mg/kg	0.005	<0.005			<0.005		
Perfluoroheptanoic acid (PFHpA)	mg/kg	0.005	<0.005			<0.005		
Perfluorooctanoic acid (PFOA)	mg/kg	0.005	<0.005			<0.005		
Perfluorodecanoic acid (PFDA)	mg/kg	0.005	<0.005			<0.005		
Perfluorododecanoic acid (PFDoDA)	mg/kg	0.005	<0.005			<0.005		
Perfluorononanoic acid (PFNA)	mg/kg	0.005	<0.005			<0.005		
Perfluorotetradecanoic acid (PFTeDA)	mg/kg	0.005	<0.005			<0.005		
Perfluorotridecanoic acid (PFTrDA)	mg/kg	0.005	<0.005			<0.005		
Perfluoroundecanoic acid (PFUnDA)	mg/kg	0.005	<0.005			<0.005		
Perfluoroalkane Sulfonic Acids								
Perfluorobutane sulfonic acid (PFBS)	mg/kg	0.005	<0.005			<0.005		
Perfluoropentane sulfonic acid (PFPeS)	mg/kg	0.005	<0.005			<0.005		
Perfluorohexane sulfonic acid (PFHxS)	mg/kg	0.005	<0.005			<0.005		
Perfluoroheptane sulfonic acid (PFHpS)	mg/kg	0.005	<0.005			<0.005		
Perfluorooctane sulfonic acid (PFOS)	mg/kg	0.005	<0.005			<0.005		
Inorganics								
Moisture Content	%	0.1	8.9	4.2	72	8.9	8.0	11
MAH								
Monocylic aromatic hydrocarbons EPAVic	mg/kg	1		<1.0				
Styrene	mg/kg	0.5		<0.50				
Metals								
Arsenic	mg/kg	4		7.0			<4	
Cadmium	mg/kg	0.3		<0.30			<0.4	
Chromium (III+VI)	mg/kg	1		6.4			4	
Copper	mg/kg	1		9.3			7	
Lead	mg/kg	1		<10.0			5	
Mercury	mg/kg	0.1		<0.20			<0.1	
Nickel	mg/kg	1		<10.0			11	
Zinc	mg/kg	1		11.9			11	
Organochlorine Pesticides								
4,4-DDE	mg/kg	0.1		<0.10			<0.1	
a-BHC	mg/kg	0.1		<0.10			<0.1	
Aldrin	mg/kg	0.1		<0.10			<0.1	
b-BHC	mg/kg	0.1		<0.10			<0.1	
Chlordane (cis)	mg/kg	0.1		<0.10			<0.1	
Chlordane (trans)	mg/kg	0.1		<0.10			<0.1	
d-BHC	mg/kg	0.1		<0.10			<0.1	
DDD	mg/kg	0.1		<0.10			<0.1	
DDT	mg/kg	0.1		<0.10			<0.1	
DDT+DDE+DDD	mg/kg	0.1					<0.1	
Dieldrin	mg/kg	0.1		<0.10			<0.1	

			Lab Report Number	21.2044 (846-857)	21.2044 (846-857)		21.2044 (846-857)	294280	
			Field ID	WAC1_TP4_0.0-0.1	WAC1_TP4_ BRa		WAC1_TP4_0.0-0.1	SOP_WAC1_TP4_SRa	
			Date	29/04/2022	29/04/2022		29/04/2022	21/02/2022	
			Matrix Type	Soil	Soil	RPD	Soil	Soil	RPD
	Unit	EQL							
Endosulfan I	mg/kg	0.1		<0.20			<0.1		
Endosulfan II	mg/kg	0.1		<0.20			<0.1		
Endosulfan sulphate	mg/kg	0.1		<0.10			<0.1		
Endrin	mg/kg	0.1		<0.20			<0.1		
Endrin aldehyde	mg/kg	0.1		<0.10			<0.1		
Endrin ketone	mg/kg	0.1		<0.10					
g-BHC (Lindane)	mg/kg	0.1		<0.10			<0.1		
Heptachlor	mg/kg	0.1		<0.10			<0.1		
Heptachlor epoxide	mg/kg	0.1		<0.10			<0.1		
Methoxychlor	mg/kg	0.1		<0.10			<0.1		
Organophosphorous Pesticides									
Azinophos methyl	mg/kg	0.1					<0.1		
Bromophos-ethyl	mg/kg	0.1					<0.1		
Chlorpyrifos	mg/kg	0.1		<0.10			<0.1		
Chlorpyrifos-methyl	mg/kg	0.1		<0.10			<0.1		
Diazinon	mg/kg	0.1		<0.10			<0.1		
Dichlorvos	mg/kg	0.1					<0.1		
Dimethoate	mg/kg	0.1					<0.1		
Ethion	mg/kg	0.1					<0.1		
Ethoprop	mg/kg	0.1		<0.10					
Fenitrothion	mg/kg	0.1					<0.1		
Malathion	mg/kg	0.1					<0.1		
Methyl parathion	mg/kg	0.1		<0.10					
Ronnel	mg/kg	0.1		<0.10			<0.1		
PAH									
Benzo(b+j+k)fluoranthene	mg/kg	0.2					<0.2		
Acenaphthene	mg/kg	0.1		<0.30			<0.1		
Acenaphthylene	mg/kg	0.1		<0.30			<0.1		
Anthracene	mg/kg	0.1		<0.30			<0.1		
Benz(a)anthracene	mg/kg	0.1		<0.30			<0.1		
Benzo(a) pyrene	mg/kg	0.05		<0.30			<0.05		
Benzo(b)fluoranthene	mg/kg	0.3		<0.30					
Benzo(g,h,i)perylene	mg/kg	0.1		<0.30			<0.1		
Benzo(k)fluoranthene	mg/kg	0.3		<0.30					
Chrysene	mg/kg	0.1		<0.30			<0.1		
Dibenz(a,h)anthracene	mg/kg	0.1		<0.30			<0.1		
Fluoranthene	mg/kg	0.1		<0.30			<0.1		
Fluorene	mg/kg	0.1		<0.30			<0.1		
Indeno(1,2,3-c,d)pyrene	mg/kg	0.1		<0.30			<0.1		
Naphthalene	mg/kg	0.1		<0.30			<0.1		
Phenanthrene	mg/kg	0.1		<0.30			<0.1		
Pyrene	mg/kg	0.1		<0.30			<0.1		
PAHs (Sum of positives)	mg/kg	0.05		<0.30			<0.05		
PCBs									
Arochlor 1016	mg/kg	0.1		<0.50			<0.1		
Arochlor 1221	mg/kg	0.1		<0.50			<0.1		
Arochlor 1232	mg/kg	0.1		<0.50			<0.1		
Arochlor 1242	mg/kg	0.1		<0.50			<0.1		
Arochlor 1248	mg/kg	0.1		<0.50			<0.1		
Arochlor 1254	mg/kg	0.1		<0.50			<0.1		
Arochlor 1260	mg/kg	0.1		<0.50			<0.1		
PCBs (Sum of total)	mg/kg	0.1					<0.1		
Pesticides									
DEF	mg/kg	0.1		<0.10					
Parathion	mg/kg	0.1					<0.1		
TPH									
C6-C9 Fraction	mg/kg	25		<35			<25		
C10-C14 Fraction	mg/kg	50		<50			<50		
C15-C28 Fraction	mg/kg	100		<100			<100		
C29-C36 Fraction	mg/kg	100		<100			<100		
C10-C36 Fraction (Sum)	mg/kg	50		<50			<50		

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

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

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

		21.2044 (846-857)	21.2044 (846-857)		21.2044 (846-857)	294280	
		WAC1_TP6_0.0-0.1	WAC1_TP6_ BRb		WAC1_TP6_0.0-0.1	SOP_WAC1_TP6_SRb	
		29/04/2022	29/04/2022		29/04/2022	21/02/2022	
		Soil	Soil	RPD	Soil	Soil	RPD
	Unit						
BTEX							
Naphthalene (VOC)	mg/kg					<1	
Benzene	mg/kg	<0.50	<0.50	0	<0.50	<0.2	0
Toluene	mg/kg	<0.50	<0.50	0	<0.50	<0.5	0
Ethylbenzene	mg/kg	<0.50	<0.50	0	<0.50	<1	0
Xylene (m & p)	mg/kg	<1.0	<1.0	0	<1.0	<2	0
Xylene (o)	mg/kg	<0.50	<0.50	0	<0.50	<1	0
Xylene Total	mg/kg	<1.0	<1.0	0	<1.0	<1	0
Total BTEX	mg/kg	<1.0	<1.0	0	<1.0		
TRH							
C6-C10 Fraction (F1)	mg/kg	<35	<35	0	<35	<25	0
C6-C10 (F1 minus BTEX)	mg/kg	<35	<35	0	<35	<25	0
>C10-C16 Fraction (F2)	mg/kg	<50	<50	0	<50	<50	0
>C10-C16 Fraction (F2 minus Naphthalene)	mg/kg					<50	
>C16-C34 Fraction (F3)	mg/kg	<100	<100	0	<100	<100	0
>C34-C40 Fraction (F4)	mg/kg	<100	<100	0	<100	<100	0
>C10-C40 Fraction (Sum)	mg/kg	<50	<50	0	<50	<50	0
Chlorinated Hydrocarbons							
Other chlorinated hydrocarbons EPAVic	mg/kg	<0.50	<0.50	0	<0.50		
Total Chlorinated Hydrocarbons	mg/kg	<0.50	<0.50	0	<0.50		
1,1,1,2-tetrachloroethane	mg/kg	<0.50	<0.50	0	<0.50		
1,1,1-trichloroethane	mg/kg	<0.50	<0.50	0	<0.50		
1,1,2,2-tetrachloroethane	mg/kg	<0.50	<0.50	0	<0.50		
1,1,2-trichloroethane	mg/kg	<0.50	<0.50	0	<0.50		
1,1-dichloroethene	mg/kg	<0.50	<0.50	0	<0.50		
1,2-dichloroethane	mg/kg	<0.50	<0.50	0	<0.50		
Bromochloromethane	mg/kg	<0.50	<0.50	0	<0.50		
Carbon tetrachloride	mg/kg	<0.50	<0.50	0	<0.50		
Chloroform	mg/kg	<0.50	<0.50	0	<0.50		
cis-1,2-dichloroethene	mg/kg	<0.50	<0.50	0	<0.50		
Dichloromethane	mg/kg	<0.50	<0.50	0	<0.50		
Hexachlorobutadiene	mg/kg	<0.50	<0.50	0	<0.50		
Trichloroethene	mg/kg	<0.50	<0.50	0	<0.50		
Tetrachloroethene	mg/kg	<0.50	<0.50	0	<0.50		
trans-1,2-dichloroethene	mg/kg	<0.50	<0.50	0	<0.50		
Vinyl chloride	mg/kg	<0.50	<0.50	0	<0.50		
Halogenated Benzenes							
1,2,4-trichlorobenzene	mg/kg	<0.50	<0.50	0	<0.50		
1,2-dichlorobenzene	mg/kg	<0.50	<0.50	0	<0.50		
1,4-dichlorobenzene	mg/kg	<0.50	<0.50	0	<0.50		
Chlorobenzene	mg/kg	<0.50	<0.50	0	<0.50		
Hexachlorobenzene	mg/kg	<0.10	<0.10	0	<0.10	<0.1	0
Perfluoroalkane Carboxylic Acids							
Perfluorobutanoic acid (PFBA)	mg/kg	<0.005			<0.005		
Perfluorohexanoic acid (PFHxA)	mg/kg	<0.005			<0.005		
Perfluoropentanoic acid (PFPeA)	mg/kg	<0.005			<0.005		
Perfluoroheptanoic acid (PFHpA)	mg/kg	<0.005			<0.005		
Perfluorooctanoic acid (PFOA)	mg/kg	<0.005			<0.005		
Perfluorodecanoic acid (PFDA)	mg/kg	<0.005			<0.005		
Perfluorododecanoic acid (PFDoDA)	mg/kg	<0.005			<0.005		
Perfluorononanoic acid (PFNA)	mg/kg	<0.005			<0.005		
Perfluorotetradecanoic acid (PFTeDA)	mg/kg	<0.005			<0.005		
Perfluorotridecanoic acid (PFTrDA)	mg/kg	<0.005			<0.005		
Perfluoroundecanoic acid (PFUnDA)	mg/kg	<0.005			<0.005		
Perfluoroalkane Sulfonic Acids							
Perfluorobutane sulfonic acid (PFBS)	mg/kg	<0.005			<0.005		
Perfluoropentane sulfonic acid (PFPeS)	mg/kg	<0.005			<0.005		
Perfluorohexane sulfonic acid (PFHxS)	mg/kg	<0.005			<0.005		
Perfluoroheptane sulfonic acid (PFHpS)	mg/kg	<0.005			<0.005		
Perfluorooctane sulfonic acid (PFOS)	mg/kg	<0.005			<0.005		
Inorganics							
Moisture Content	%	11.9	10.9	9	11.9	9.6	21
MAH							
Monocylic aromatic hydrocarbons EPAVic	mg/kg	<1.0	<1.0	0	<1.0		
Styrene	mg/kg	<0.50	<0.50	0	<0.50		
Metals							
Arsenic	mg/kg	<5.0	<5.0	0	<5.0	<4	0
Cadmium	mg/kg	<0.30	<0.30	0	<0.30	<0.4	0
Chromium (III+VI)	mg/kg	7.6	<5.0	41	7.6	7	8
Copper	mg/kg	20.8	5.8	113	20.8	13	46
Lead	mg/kg	<10.0	<10.0	0	<10.0	9	0
Mercury	mg/kg	<0.20	<0.20	0	<0.20	<0.1	0
Nickel	mg/kg	13.7	<10.0	31	13.7	8	53
Zinc	mg/kg	40.4	<5.0	156	40.4	15	92
Organochlorine Pesticides							
4,4-DDE	mg/kg	<0.10	<0.10	0	<0.10	<0.1	0
a-BHC	mg/kg	<0.10	<0.10	0	<0.10	<0.1	0
Aldrin	mg/kg	<0.10	<0.10	0	<0.10	0.1	0
b-BHC	mg/kg	<0.10	<0.10	0	<0.10	<0.1	0
Chlordane (cis)	mg/kg	<0.10	<0.10	0	<0.10	<0.1	0
Chlordane (trans)	mg/kg	<0.10	<0.10	0	<0.10	<0.1	0
d-BHC	mg/kg	<0.10	<0.10	0	<0.10	<0.1	0
DDD	mg/kg	<0.10	<0.10	0	<0.10	<0.1	0
DDT	mg/kg	<0.10	<0.10	0	<0.10	<0.1	0
DDT+DDE+DDD	mg/kg					<0.1	
Dieldrin	mg/kg	0.26	<0.10	89	0.26	0.5	63

		21.2044 (846-857)	21.2044 (846-857)		21.2044 (846-857)	294280	
		WAC1_TP6_0.0-0.1	WAC1_TP6_ BRb		WAC1_TP6_0.0-0.1	SOP_WAC1_TP6_SRb	
		29/04/2022	29/04/2022		29/04/2022	21/02/2022	
		Soil	Soil	RPD	Soil	Soil	RPD
	Unit						
Endosulfan I	mg/kg	<0.20	<0.20	0	<0.20	<0.1	0
Endosulfan II	mg/kg	<0.20	<0.20	0	<0.20	<0.1	0
Endosulfan sulphate	mg/kg	<0.10	<0.10	0	<0.10	<0.1	0
Endrin	mg/kg	<0.20	<0.20	0	<0.20	<0.1	0
Endrin aldehyde	mg/kg	<0.10	<0.10	0	<0.10	<0.1	0
Endrin ketone	mg/kg	<0.10	<0.10	0	<0.10		
g-BHC (Lindane)	mg/kg	<0.10	<0.10	0	<0.10	<0.1	0
Heptachlor	mg/kg	<0.10	<0.10	0	<0.10	<0.1	0
Heptachlor epoxide	mg/kg	<0.10	<0.10	0	<0.10	<0.1	0
Methoxychlor	mg/kg	<0.10	<0.10	0	<0.10	<0.1	0
Organophosphorous Pesticides							
Azinophos methyl	mg/kg					<0.1	
Bromophos-ethyl	mg/kg					<0.1	
Chlorpyrifos	mg/kg	<0.10	<0.10	0	<0.10	<0.1	0
Chlorpyrifos-methyl	mg/kg	<0.10	<0.10	0	<0.10	<0.1	0
Diazinon	mg/kg	<0.10	<0.10	0	<0.10	<0.1	0
Dichlorvos	mg/kg					<0.1	
Dimethoate	mg/kg					<0.1	
Ethion	mg/kg					<0.1	
Ethoprop	mg/kg	<0.10	<0.10	0	<0.10		
Fenitrothion	mg/kg					<0.1	
Malathion	mg/kg					<0.1	
Methyl parathion	mg/kg	<0.10	<0.10	0	<0.10		
Ronnel	mg/kg	<0.10	<0.10	0	<0.10	<0.1	0
PAH							
Benzo(b+j+k)fluoranthene	mg/kg					<0.2	
Acenaphthene	mg/kg	<0.30	<0.30	0	<0.30	<0.1	0
Acenaphthylene	mg/kg	<0.30	<0.30	0	<0.30	<0.1	0
Anthracene	mg/kg	<0.30	<0.30	0	<0.30	<0.1	0
Benz(a)anthracene	mg/kg	<0.30	<0.30	0	<0.30	<0.1	0
Benzo(a) pyrene	mg/kg	<0.30	<0.30	0	<0.30	<0.05	0
Benzo(b)fluoranthene	mg/kg	<0.30	<0.30	0	<0.30		
Benzo(g,h,i)perylene	mg/kg	<0.30	<0.30	0	<0.30	<0.1	0
Benzo(k)fluoranthene	mg/kg	<0.30	<0.30	0	<0.30		
Chrysene	mg/kg	<0.30	<0.30	0	<0.30	<0.1	0
Dibenz(a,h)anthracene	mg/kg	<0.30	<0.30	0	<0.30	<0.1	0
Fluoranthene	mg/kg	<0.30	<0.30	0	<0.30	<0.1	0
Fluorene	mg/kg	<0.30	<0.30	0	<0.30	<0.1	0
Indeno(1,2,3-c,d)pyrene	mg/kg	<0.30	<0.30	0	<0.30	<0.1	0
Naphthalene	mg/kg	<0.30	<0.30	0	<0.30	<0.1	0
Phenanthrene	mg/kg	<0.30	<0.30	0	<0.30	<0.1	0
Pyrene	mg/kg	<0.30	<0.30	0	<0.30	<0.1	0
PAHs (Sum of positives)	mg/kg	<0.30	<0.30	0	<0.30	<0.05	0
PCBs							
Arochlor 1016	mg/kg	<0.50	<0.50	0	<0.50	<0.1	0
Arochlor 1221	mg/kg	<0.50	<0.50	0	<0.50	<0.1	0
Arochlor 1232	mg/kg	<0.50	<0.50	0	<0.50	<0.1	0
Arochlor 1242	mg/kg	<0.50	<0.50	0	<0.50	<0.1	0
Arochlor 1248	mg/kg	<0.50	<0.50	0	<0.50	<0.1	0
Arochlor 1254	mg/kg	<0.50	<0.50	0	<0.50	<0.1	0
Arochlor 1260	mg/kg	<0.50	<0.50	0	<0.50	<0.1	0
PCBs (Sum of total)	mg/kg					<0.1	
Pesticides							
DEF	mg/kg	<0.10	<0.10	0	<0.10		
Parathion	mg/kg					<0.1	
TPH							
C6-C9 Fraction	mg/kg	<35	<35	0	<35	<25	0
C10-C14 Fraction	mg/kg	<50	<50	0	<50	<50	0
C15-C28 Fraction	mg/kg	<100	<100	0	<100	<100	0
C29-C36 Fraction	mg/kg	<100	<100	0	<100	<100	0
C10-C36 Fraction (Sum)	mg/kg	<50	<50	0	<50	<50	0

***RPDs have only been considered where a concentration i**

****Elevated RPDs are highlighted as per QAQC Profile setti**

*****Interlab Duplicates are matched on a per compound b**

		21.2044 (878-893) WAC1_TP9_0.0-0.1 29/04/2022 Soil	21.2044 (878-893) WAC1_TP9_BRc 29/04/2022 Soil	RPD
	Unit			
BTEX				
Naphthalene (VOC)	mg/kg			
Benzene	mg/kg	<0.50	<0.50	0
Toluene	mg/kg	<0.50	<0.50	0
Ethylbenzene	mg/kg	<0.50	<0.50	0
Xylene (m & p)	mg/kg	<1.0	<1.0	0
Xylene (o)	mg/kg	<0.50	<0.50	0
Xylene Total	mg/kg	<1.0	<1.0	0
Total BTEX	mg/kg	<1.0	<1.0	0
TRH				
C6-C10 Fraction (F1)	mg/kg	<35	<35	0
C6-C10 (F1 minus BTEX)	mg/kg	<35	<35	0
>C10-C16 Fraction (F2)	mg/kg	<50	<50	0
>C10-C16 Fraction (F2 minus Naphthalene)	mg/kg			
>C16-C34 Fraction (F3)	mg/kg	<100	<100	0
>C34-C40 Fraction (F4)	mg/kg	<100	<100	0
>C10-C40 Fraction (Sum)	mg/kg	<50	<50	0
Chlorinated Hydrocarbons				
Other chlorinated hydrocarbons EPAVic	mg/kg	<0.50	<0.50	0
Total Chlorinated Hydrocarbons	mg/kg	<0.50	<0.50	0
1,1,1,2-tetrachloroethane	mg/kg	<0.50	<0.50	0
1,1,1-trichloroethane	mg/kg	<0.50	<0.50	0
1,1,2,2-tetrachloroethane	mg/kg	<0.50	<0.50	0
1,1,2-trichloroethane	mg/kg	<0.50	<0.50	0
1,1-dichloroethene	mg/kg	<0.50	<0.50	0
1,2-dichloroethane	mg/kg	<0.50	<0.50	0
Bromochloromethane	mg/kg	<0.50	<0.50	0
Carbon tetrachloride	mg/kg	<0.50	<0.50	0
Chloroform	mg/kg	<0.50	<0.50	0
cis-1,2-dichloroethene	mg/kg	<0.50	<0.50	0
Dichloromethane	mg/kg	<0.50	<0.50	0
Hexachlorobutadiene	mg/kg	<0.50	<0.50	0
Trichloroethene	mg/kg	<0.50	<0.50	0
Tetrachloroethene	mg/kg	<0.50	<0.50	0
trans-1,2-dichloroethene	mg/kg	<0.50	<0.50	0
Vinyl chloride	mg/kg	<0.50	<0.50	0
Halogenated Benzenes				
1,2,4-trichlorobenzene	mg/kg	<0.50	<0.50	0
1,2-dichlorobenzene	mg/kg	<0.50	<0.50	0
1,4-dichlorobenzene	mg/kg	<0.50	<0.50	0
Chlorobenzene	mg/kg	<0.50	<0.50	0
Hexachlorobenzene	mg/kg	<0.10	<0.10	0
Perfluoroalkane Carboxylic Acids				
Perfluorobutanoic acid (PFBA)	mg/kg	<0.005		
Perfluorohexanoic acid (PFHxA)	mg/kg	<0.005		
Perfluoropentanoic acid (PFPeA)	mg/kg	<0.005		
Perfluoroheptanoic acid (PFHpA)	mg/kg	<0.005		
Perfluorooctanoic acid (PFOA)	mg/kg	<0.005		
Perfluorodecanoic acid (PFDA)	mg/kg	<0.005		
Perfluorododecanoic acid (PFDoDA)	mg/kg	<0.005		
Perfluorononanoic acid (PFNA)	mg/kg	<0.005		
Perfluorotetradecanoic acid (PFTeDA)	mg/kg	<0.005		
Perfluorotridecanoic acid (PFTrDA)	mg/kg	<0.005		
Perfluoroundecanoic acid (PFUnDA)	mg/kg	<0.005		
Perfluoroalkane Sulfonic Acids				
Perfluorobutane sulfonic acid (PFBS)	mg/kg	<0.005		
Perfluoropentane sulfonic acid (PFPeS)	mg/kg	<0.005		
Perfluorohexane sulfonic acid (PFHxS)	mg/kg	<0.005		
Perfluoroheptane sulfonic acid (PFHpS)	mg/kg	<0.005		
Perfluorooctane sulfonic acid (PFOS)	mg/kg	<0.005		
Inorganics				
Moisture Content	%	16.6	16.4	1
MAH				
Monocylic aromatic hydrocarbons EPAVic	mg/kg	<1.0	<1.0	0
Styrene	mg/kg	<0.50	<0.50	0
Metals				
Arsenic	mg/kg	<5.0	9.2	59
Cadmium	mg/kg	<0.30	<0.30	0
Chromium (III+VI)	mg/kg	5.5	5.4	2
Copper	mg/kg	14.6	11.2	26
Lead	mg/kg	<10.0	<10.0	0
Mercury	mg/kg	<0.20	<0.20	0
Nickel	mg/kg	<10.0	<10.0	0
Zinc	mg/kg	43.8	<5.0	159
Organochlorine Pesticides				
4,4-DDE	mg/kg	<0.10	<0.10	0
a-BHC	mg/kg	<0.10	<0.10	0
Aldrin	mg/kg	<0.10	<0.10	0
b-BHC	mg/kg	<0.10	<0.10	0
Chlordane (cis)	mg/kg	<0.10	<0.10	0
Chlordane (trans)	mg/kg	<0.10	<0.10	0
d-BHC	mg/kg	<0.10	<0.10	0
DDD	mg/kg	<0.10	<0.10	0
DDT	mg/kg	<0.10	<0.10	0
DDT+DDE+DDD	mg/kg			
Dieldrin	mg/kg	<0.10	<0.10	0

		21.2044 (878-893)	21.2044 (878-893)	
		WAC1_TP9_0.0-0.1	WAC1_TP9_BRc	
		29/04/2022	29/04/2022	
		Soil	Soil	RPD
	Unit			
Endosulfan I	mg/kg	<0.20	<0.20	0
Endosulfan II	mg/kg	<0.20	<0.20	0
Endosulfan sulphate	mg/kg	<0.10	<0.10	0
Endrin	mg/kg	<0.20	<0.20	0
Endrin aldehyde	mg/kg	<0.10	<0.10	0
Endrin ketone	mg/kg	<0.10	<0.10	0
g-BHC (Lindane)	mg/kg	<0.10	<0.10	0
Heptachlor	mg/kg	<0.10	<0.10	0
Heptachlor epoxide	mg/kg	<0.10	<0.10	0
Methoxychlor	mg/kg	<0.10	<0.10	0
Organophosphorous Pesticides				
Azinophos methyl	mg/kg			
Bromophos-ethyl	mg/kg			
Chlorpyrifos	mg/kg	<0.10	<0.10	0
Chlorpyrifos-methyl	mg/kg	<0.10	<0.10	0
Diazinon	mg/kg	<0.10	<0.10	0
Dichlorvos	mg/kg			
Dimethoate	mg/kg			
Ethion	mg/kg			
Ethoprop	mg/kg	<0.10	<0.10	0
Fenitrothion	mg/kg			
Malathion	mg/kg			
Methyl parathion	mg/kg	<0.10	<0.10	0
Ronnel	mg/kg	<0.10	<0.10	0
PAH				
Benzo(b+j+k)fluoranthene	mg/kg			
Acenaphthene	mg/kg	<0.30	<0.30	0
Acenaphthylene	mg/kg	<0.30	<0.30	0
Anthracene	mg/kg	<0.30	<0.30	0
Benz(a)anthracene	mg/kg	<0.30	<0.30	0
Benzo(a) pyrene	mg/kg	<0.30	<0.30	0
Benzo(b)fluoranthene	mg/kg	<0.30	<0.30	0
Benzo(g,h,i)perylene	mg/kg	<0.30	<0.30	0
Benzo(k)fluoranthene	mg/kg	<0.30	<0.30	0
Chrysene	mg/kg	<0.30	<0.30	0
Dibenz(a,h)anthracene	mg/kg	<0.30	<0.30	0
Fluoranthene	mg/kg	<0.30	<0.30	0
Fluorene	mg/kg	<0.30	<0.30	0
Indeno(1,2,3-c,d)pyrene	mg/kg	<0.30	<0.30	0
Naphthalene	mg/kg	<0.30	<0.30	0
Phenanthrene	mg/kg	<0.30	<0.30	0
Pyrene	mg/kg	<0.30	<0.30	0
PAHs (Sum of positives)	mg/kg	<0.30	<0.30	0
PCBs				
Arochlor 1016	mg/kg	<0.50	<0.50	0
Arochlor 1221	mg/kg	<0.50	<0.50	0
Arochlor 1232	mg/kg	<0.50	<0.50	0
Arochlor 1242	mg/kg	<0.50	<0.50	0
Arochlor 1248	mg/kg	<0.50	<0.50	0
Arochlor 1254	mg/kg	<0.50	<0.50	0
Arochlor 1260	mg/kg	<0.50	<0.50	0
PCBs (Sum of total)	mg/kg			
Pesticides				
DEF	mg/kg	<0.10	<0.10	0
Parathion	mg/kg			
TPH				
C6-C9 Fraction	mg/kg	<35	<35	0
C10-C14 Fraction	mg/kg	<50	<50	0
C15-C28 Fraction	mg/kg	<100	<100	0
C29-C36 Fraction	mg/kg	<100	<100	0
C10-C36 Fraction (Sum)	mg/kg	<50	<50	0

***RPDs have only been considered where a concentration i**

****Elevated RPDs are highlighted as per QAQC Profile setti**

*****Interlab Duplicates are matched on a per compound b**

			BTEX				
			Benzene	Toluene	Ethylbenzene	Xylene (m & p)	Xylene (o)
			µg/L	µg/L	µg/L	µg/L	µg/L
EQL			1	1	1	2	1
Lab Report Number	**Date**	**Matrix Type**					
21.2044 (958-959)	**29/04/2022**	**Water**	<1	<1	<1	<2	<1

Trip Spikes

Lab Report Number	Matrix Type	Analysis Batch	Field ID	Sampled Date/Time
21.2044 (958-959)	Water	2022-04-29	TS	29/04/2022
21.2044 (958-959)	Water	2022-04-29	TS	29/04/2022
21.2044 (958-959)	Water	2022-04-29	TS	29/04/2022
21.2044 (958-959)	Water	2022-04-29	TS	29/04/2022
21.2044 (958-959)	Water	2022-04-29	TS	29/04/2022

Trip Spike Recoveries. Where no lab LCL and UCL is available, user defined limits between 30% and 150%

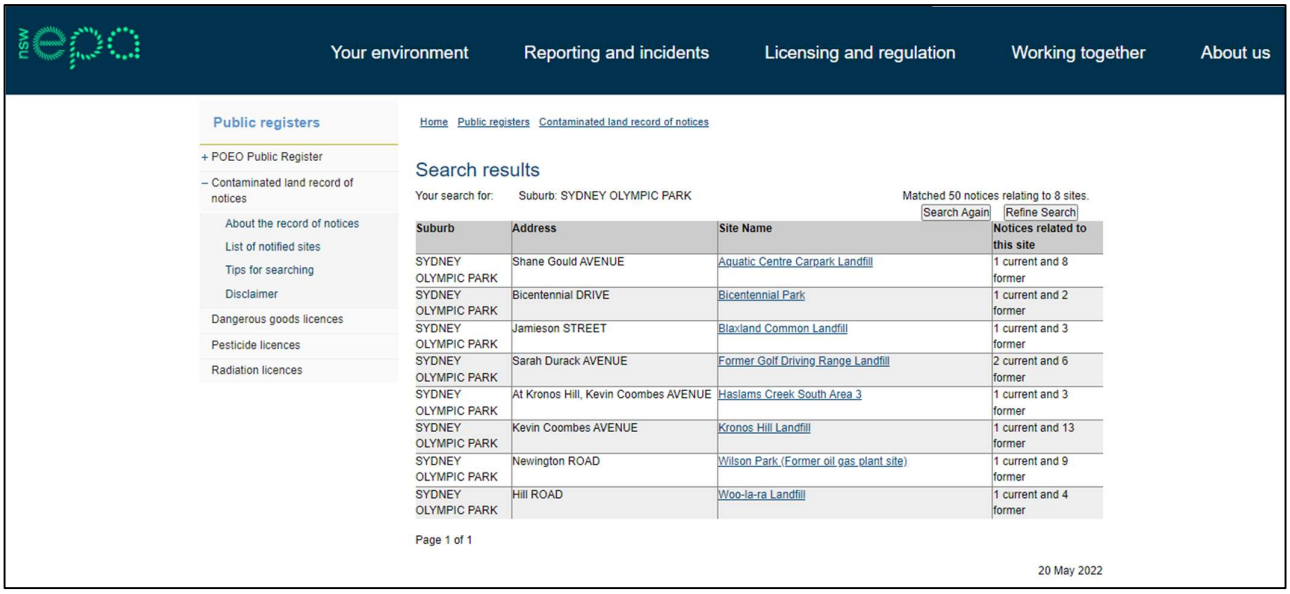
Chem Group	Chem Name	Trip Spike Result	Trip Spike Control	Result Units
	Ethylbenzene	NA	NA	NA
	Xylene (m & p)	NA	NA	NA
	Toluene	NA	NA	NA
	Benzene	NA	NA	NA
	Xylene (o)	NA	NA	NA

have been adopted for non-compliance.

Spike Recovery %	LCL	UCL	Method Name	Lab Sample ID	Sample Type
94			ESA-P-ORG08 & ORG10	2022012959	Trip_S
95			ESA-P-ORG08 & ORG10	2022012959	Trip_S
99			ESA-P-ORG08 & ORG10	2022012959	Trip_S
110			ESA-P-ORG08 & ORG10	2022012959	Trip_S
97			ESA-P-ORG08 & ORG10	2022012959	Trip_S

Appendix G – Supporting Information

Commercial in Confidence



Your environment | Reporting and incidents | Licensing and regulation | Working together | About us

Public registers

+ POEO Public Register
– Contaminated land record of notices
About the record of notices
List of notified sites
Tips for searching
Disclaimer
Dangerous goods licences
Pesticide licences
Radiation licences

Home Public registers Contaminated land record of notices

Search results

Your search for: Suburb: SYDNEY OLYMPIC PARK

Matched 50 notices relating to 8 sites.
Search Again Refine Search

Suburb	Address	Site Name	Notices related to this site
SYDNEY OLYMPIC PARK	Shane Gould AVENUE	Aquatic Centre Carpark Landfill	1 current and 8 former
SYDNEY OLYMPIC PARK	Bicentennial DRIVE	Bicentennial Park	1 current and 2 former
SYDNEY OLYMPIC PARK	Jamieson STREET	Blaxland Common Landfill	1 current and 3 former
SYDNEY OLYMPIC PARK	Sarah Durack AVENUE	Former Golf Driving Range Landfill	2 current and 6 former
SYDNEY OLYMPIC PARK	At Kronos Hill, Kevin Coombes AVENUE	Haslams Creek South Area 3	1 current and 3 former
SYDNEY OLYMPIC PARK	Kevin Coombes AVENUE	Kronos Hill Landfill	1 current and 13 former
SYDNEY OLYMPIC PARK	Newington ROAD	Wilson Park (Former oil gas plant site)	1 current and 9 former
SYDNEY OLYMPIC PARK	Hill ROAD	Woo-la-ra Landfill	1 current and 4 former

Page 1 of 1

20 May 2022

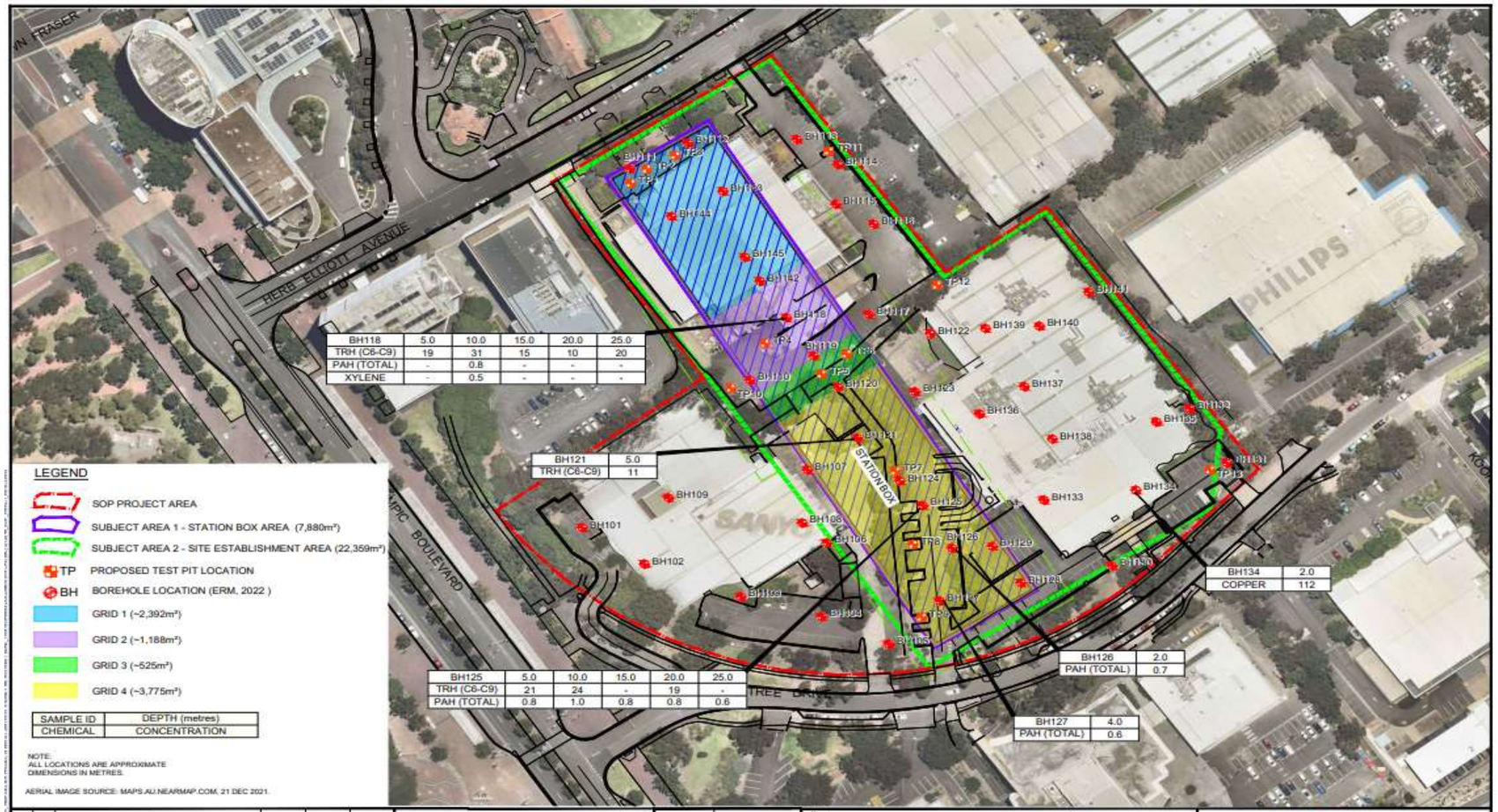
Image 1. Image of the NSW Office of Environment and Heritage (OEH) 'Contaminated Land - Record of Notices' listed by the NSW EPA under the *Contaminated Land Management Act 1997* which identified current and former notices within the suburb of Sydney Olympic Park, NSW (screenshot adapted from *epa.nsw.gov.au*, accessed 20/05/2022).

SYDNEY	Chifley Tower (basement fuel storage area)	2 Chifley SQUARE	Other Petroleum	Under assessment	-33.8659151	151.2117496
SYDNEY OLYMPIC PARK	RMS Western Precinct	14A-14E and 16 Hill ROAD	Other Petroleum	Regulation under CLM Act not required	-33.82239777	151.0758664
SYDNEY OLYMPIC PARK	Haslams Creek South Area 3	At Kronos Hill, Kevin Coombes AVENUE	Landfill	Contamination formerly regulated under the CLM Act	-33.84113059	151.0602966
SYDNEY OLYMPIC PARK	Bicentennial Park	Bicentennial DRIVE	Landfill	Ongoing maintenance required to manage residual contamination (CLM Act)	-33.84456248	151.0788116
SYDNEY OLYMPIC PARK	Former Golf Driving Range Landfill	Sarah Durack AVENUE	Landfill	Ongoing maintenance required to manage residual contamination (CLM Act)	-33.85358517	151.0713987
SYDNEY OLYMPIC PARK	Kronos Hill Landfill	Kevin Coombes AVENUE	Landfill	Ongoing maintenance required to manage residual contamination (CLM Act)	-33.84014442	151.0649521
SYDNEY OLYMPIC PARK	Wilson Park (Former oil gas plant site)	Newington ROAD	Gasworks	Ongoing maintenance required to manage residual contamination (CLM Act)	-33.82623982	151.0536833
SYDNEY OLYMPIC PARK	Woo-la-ra Landfill	Hill ROAD	Landfill	Ongoing maintenance required to manage residual contamination (CLM Act)	-33.82695807	151.07282
SYDNEY OLYMPIC PARK	Aquatic Centre Carpark Landfill	Shane Gould AVENUE	Landfill	Ongoing maintenance required to manage residual contamination (CLM Act)	-33.85153457	151.0678127
SYDNEY OLYMPIC PARK	Blaxland Common Landfill	Jamieson STREET	Landfill	Ongoing maintenance required to manage residual contamination (CLM Act)	-33.82638382	151.05972
SYLVANIA	Caltex Service Station	61 Port Hacking ROAD	Service Station	Regulation under CLM Act not required	-34.0140089	151.104212

Image 2. A review of the 'List of NSW Contaminated Sites Notified to the EPA' identified no notified sites within the suburb of Burwood North, NSW (*epa.nsw.gov.au*; accessed on 23/04/2022).

Station Box Bore Holes

Sample I.D	Fill BGL (m)	SEDIMENT description
GRID 1		
BH111	1.7	Fill
BH112	1.7	Fill
BH142	1.3	Fill
BH143	0.4	Fill
BH144	0.4	Fill
BH145	0.5	Fill
TP1	1.6	Reworked clay
TP2	1.6	Reworked clay
TP3	1.7	Reworked clay
Maximum fill depth	**1.7**	
Average fill depth	**1.2**	
Area	**2350.0**	
Volume	**3995.0**	**Use max value**
GRID 2		
BH110	1.8	Fill
BH118	1.3	Fill
BH119	1.5	Reworked clay
TP4	0.3	Reworked clay
Maximum fill depth	**1.8**	
Average fill depth	**1.2**	
Area	**1418.0**	
Volume	**2552.4**	**Use max value**
Grid 3		
BH120	0.7	Reworked clay
TP5	0.5	Reworked clay
TP6	0.5	Reworked clay
Maximum fill depth	**0.7**	
Average fill depth	**0.6**	
Area	**518.0**	
Volume	**362.6**	**Use max value**
Grid 4		
BH121	0.4	Fill
BH124	0.9	Fill
BH125	1.5	Reworked clay
BH126	1.3	Reworked clay
BH127	1.3	Reworked clay
BH128	1.1	Reworked clay
BH129	1.2	Reworked clay
TP7	0.65	Reworked clay
TP8	0.7	Reworked clay
TP9	1	Reworked clay
Maximum fill depth	**1.5**	
Average fill depth	**1.0**	
Area	**3739.0**	
Volume	**5608.5**	**Use max value**
Total volume	**12518.5**	



revision	no.	description	drawn	approved	date
	A	FIRST ISSUE	MC	SB	29/03/22
	B	SECOND ISSUE	MC	SB	26/04/22
	C	PROPOSED TP LOCATION	MC	SB	04/05/22

0 12 24 36 48 60
SCALE 1:1200 @A3 METRES

drawn	MC
approved	SB
date	04/05/2022
scale	AS SHOWN
original size	A3

client: AFJV

project: PRELIMINARY WASTE ANALYSIS AND CLASSIFICATION REPORT SYDNEY OLYMPIC PARK, NSW

title: SOIL ANALYTICAL RESULTS

project no: 21.2044_PWAC1 | figure no: FIGURE 2 | rev: C

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Nickel concentrations used in 95% UCL calculations

	Fill material (Grid 2 and Grid 3 only) for Ni at LOR (mg/kg)	Values used in generating 95% UCL from this column. Fill material (Grid 2 and Grid 3 only) for Ni at half LOR (mg/kg)
SOP_BH110_0.2_220117	57	57
SOP_BH110_1.3_220118	4	4
SOP_BH118_0.1_220119	109	109
SOP_BH118_1.0_220119	<2	1
SOP_BH119_0.2_220117	99	99
SOP_BH119_1.0_220117	<2	1
WAC1_TP4_0.3	<10.0	5
SOP_BH120_0.5_220120	5	5
SOP_BH120_3.0_220120	32	32
WAC1_TP5_0.0-0.1	98.7	98.7
WAC1_TP5_0.3-0.4	<10.0	5
WAC1_TP6_0.0-0.1	13.7	13.7
WAC1_TP6_0.3-0.4	<10.0	5

Shaded Cells indicate exceedance of CT1 criteria for Nickel.

1	**UCL Statistics for Uncensored Full Data Sets**										
2											
3	User Selected Options										
4	Date/Time of Computation	ProUCL 5.130/05/2022 3:43:10 PM									
5	From File	WorkSheet.xls									
6	Full Precision	OFF									
7	Confidence Coefficient	95%									
8	Number of Bootstrap Operations	2000									
9											
10											
11	**Ni G2 G3 half LOR**										
12											
13	**General Statistics**										
14	Total Number of Observations	13				Number of Distinct Observations	9				
15						Number of Missing Observations	3				
16	Minimum	1				Mean	33.49				
17	Maximum	109				Median	5				
18	SD	42.25				Std. Error of Mean	11.72				
19	Coefficient of Variation	1.261				Skewness	1.054				
20											
21	**Normal GOF Test**										
22	Shapiro Wilk Test Statistic	0.737				**Shapiro Wilk GOF Test**					
23	5% Shapiro Wilk Critical Value	0.866				Data Not Normal at 5% Significance Level					
24	Lilliefors Test Statistic	0.296				**Lilliefors GOF Test**					
25	5% Lilliefors Critical Value	0.234				Data Not Normal at 5% Significance Level					
26	**Data Not Normal at 5% Significance Level**										
27											
28	**Assuming Normal Distribution**										
29	**95% Normal UCL**					**95% UCLs (Adjusted for Skewness)**					
30	95% Student's-t UCL	54.38				95% Adjusted-CLT UCL (Chen-1995)	56.43				
31						95% Modified-t UCL (Johnson-1978)	54.95				
32											
33	**Gamma GOF Test**										
34	A-D Test Statistic	0.809				**Anderson-Darling Gamma GOF Test**					
35	5% A-D Critical Value	0.783				Data Not Gamma Distributed at 5% Significance Level					
36	K-S Test Statistic	0.277				**Kolmogorov-Smirnov Gamma GOF Test**					
37	5% K-S Critical Value	0.248				Data Not Gamma Distributed at 5% Significance Level					
38	**Data Not Gamma Distributed at 5% Significance Level**										
39											
40	**Gamma Statistics**										
41	k hat (MLE)	0.584				k star (bias corrected MLE)	0.5				
42	Theta hat (MLE)	57.38				Theta star (bias corrected MLE)	66.95				
43	nu hat (MLE)	15.18				nu star (bias corrected)	13.01				
44	MLE Mean (bias corrected)	33.49				MLE Sd (bias corrected)	47.35				
45						Approximate Chi Square Value (0.05)	5.897				
46	Adjusted Level of Significance	0.0301				Adjusted Chi Square Value	5.23				
47											
48	**Assuming Gamma Distribution**										
49	95% Approximate Gamma UCL (use when n>=50))	73.87				95% Adjusted Gamma UCL (use when n<50)	83.29				
50											
51	**Lognormal GOF Test**										
52	Shapiro Wilk Test Statistic	0.892				**Shapiro Wilk Lognormal GOF Test**					

53	5% Shapiro Wilk Critical Value					0.866	Data appear Lognormal at 5% Significance Level					
54	Lilliefors Test Statistic					0.23	**Lilliefors Lognormal GOF Test**					
55	5% Lilliefors Critical Value					0.234	Data appear Lognormal at 5% Significance Level					
56	**Data appear Lognormal at 5% Significance Level**											
57												
58	**Lognormal Statistics**											
59	Minimum of Logged Data					0	Mean of logged Data					2.448
60	Maximum of Logged Data					4.691	SD of logged Data					1.678
61												
62	**Assuming Lognormal Distribution**											
63	95% H-UCL					344.8	90% Chebyshev (MVUE) UCL					98.1
64	95% Chebyshev (MVUE) UCL					125.1	97.5% Chebyshev (MVUE) UCL					162.7
65	99% Chebyshev (MVUE) UCL					236.5						
66												
67	**Nonparametric Distribution Free UCL Statistics**											
68	**Data appear to follow a Discernible Distribution at 5% Significance Level**											
69												
70	**Nonparametric Distribution Free UCLs**											
71	95% CLT UCL					52.77	95% Jackknife UCL					54.38
72	95% Standard Bootstrap UCL					51.81	95% Bootstrap-t UCL					60.67
73	95% Hall's Bootstrap UCL					49.58	95% Percentile Bootstrap UCL					53.68
74	95% BCA Bootstrap UCL					55.03						
75	90% Chebyshev(Mean, Sd) UCL					68.65	95% Chebyshev(Mean, Sd) UCL					84.57
76	97.5% Chebyshev(Mean, Sd) UCL					106.7	99% Chebyshev(Mean, Sd) UCL					150.1
77												
78	**Suggested UCL to Use**											
79	99% Chebyshev (Mean, Sd) UCL					150.1						
80												
81	**Recommended UCL exceeds the maximum observation**											
82												
83	Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.											
84	Recommendations are based upon data size, data distribution, and skewness.											
85	These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).											
86	However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician.											
87												



Further details regarding ADE's Services are available via

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